

The Influence of On-site Professional Development on Teacher Practice

Submitted by

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Statement of Sources

This thesis contains no material published elsewhere or extracted in whole or in part from a thesis by which I qualified for or been awarded another degree or diploma. No other person's work has been used without due acknowledgment in the main text of the thesis. This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution. All research procedures reported in this thesis received the approval of the Australian Catholic University Human Research Ethics Committee.

C. Forrester

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Signature

July 23, 2018

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Date

Abstract

The purpose of this research was to explore how on-site professional development (PD) addresses the goal of improved teacher practice. It was conducted within the context of a national educational reform in Australia. This reform, implemented from 2009 to 2012/13, was a *National Partnership Agreement* (NPA) with the Commonwealth Government that included the *Smarter Schools National Partnerships* (SSNP).

This research was a multi-site case study of five Catholic primary schools that implemented on-site PD for four years as part of a system response to a reform agenda. Learning on-site was a change in practice for teachers that involved the establishment of professional learning communities (PLCs) and the appointment in each school of an additional school leader entitled a 'Teacher Educator' (TE).

The interpretative paradigm of research, through the lens of symbolic interactionism and the epistemology of constructionism, was adopted to guide and inform the study. A multi-site case study methodology was chosen as the five schools constituted a single case on multiple sites that shared the phenomenon of interest, i.e., on-site PD (Huberman & Miles, 2002). The data gathering methods were semi-structured interviews, group interviews and a pre-interview self-reflection tool. Findings emerged through qualitative data analysis that utilised the Constant Comparative Method (Merriam, 1998).

The major research question was: How does on-site professional development influence teacher practice?

Findings from this research indicate that on-site PD influenced teacher practice in certain ways. First, underpinning the approach to changing teacher practice was collaboration. School leaders shared the instructional leadership role and worked collaboratively with teachers, primarily in classrooms, to demonstrate how teaching practice could change. The influence of system leaders on teacher practice was a secondary process mediated by school leaders. Due to a perceived lack of strategic direction, teacher consultation, or involvement in schools throughout the reform, system leaders were not seen as having a positive influence on teacher practice. Second, the structure of the in-situ

leadership role of the TE was a key influence on changed teacher practice because it had a singular emphasis on teaching and learning. However, these new roles also led to tension, defensiveness and feelings of vulnerability from teachers; therefore, building trusting relationships and credibility were critical to their influence. Third, because the evolution of PLCs was an organic process, they emerged differently and did not adhere to any set structure. They morphed over time and the guiding principle that drove their creation was the articulated needs of teachers and what the data revealed to be those of the students. The use of data, the deprivatisation of teaching practice and professional dialogue were associated and instrumental in building teacher capacity, and formed the core focus of the PLCs. These three characteristics influenced teacher practice as their data skills were built along with pedagogical content knowledge. Fourth, the construct of on-site PD influenced teacher practice because the learning for teachers was coherent, active, context specific, relevant, timely, accessible and immediate.

Keywords: on-site professional development; teacher practice; professional learning communities; leading for learning; collaboration; reform.

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Contents

Statement of Sources	ii
Abstract	iii
Acknowledgements	v
Contents	vi
List of Tables	xvi
List of Figures	xvii
List of Abbreviations	xviii
CHAPTER ONE - INTRODUCTION AND RESEARCH CONTEXT	1
1.0 Introduction	1
1.1 Context of the Research.....	1
1.1.1 International Context	1
1.1.2 Australian Context	2
1.1.3 National Partnership Agreement (NPA)	3
1.1.4 Diocesan Context.....	4
1.1.5 Background of the Researcher	5
1.2 Definitions and Terminology in the Research	6
1.2.1 Professional Development (PD).....	6
1.2.2 Professional Learning Communities (PLCs).....	6
1.2.3 Teacher Practice	6
1.3 Definition of the Research Problem	7
1.3.1 Research Purpose.....	8
1.4 Major Research Question.....	8
1.5 Significance of the Research.....	9
CHAPTER TWO – REVIEW OF THE LITERATURE	10
2.0 Introduction	10
2.1 Professional Development	10
2.2 Features of Effective Professional Development.....	12
2.2.1 Traditional Structure of Professional Development	14
2.2.2 Reform Structure of Professional Development	15
2.2.3 Duration	17
2.2.4 Collective Participation.....	19
2.2.5 Content Knowledge	20
2.2.6 Active Learning.....	21
2.2.7 Coherence.....	23
2.3 On-site Professional Development.....	24

2.4 Professional Learning Communities	25
2.4.1 Definition	26
2.4.2 Formation of a Professional Learning Community	27
2.4.3 Characteristics of Professional Learning Communities.....	30
2.4.3.1 <i>Collaboration</i>	35
2.4.3.2 <i>Shared Vision and Purpose</i>	36
2.4.3.3 <i>Professional Dialogue</i>	37
2.4.3.4 <i>Deprivatisation of Teaching Practice</i>	41
2.4.3.5 <i>Collective Responsibility for Student Learning</i>	43
2.4.4 Challenges of Professional Learning Communities	46
2.5 Leading for Learning	48
2.6 System Leaders	48
2.7 School Leaders	53
2.7.1 Instructional Leadership.....	55
2.7.1.1 <i>Teacher Educator Role</i>	60
2.7.2 Developing Human and Social Resources	62
2.7.2.1 <i>Building Relational Trust</i>	62
2.7.2.2 <i>Teacher Self-Efficacy</i>	65
2.7.3 Managing Organisational and Structural Resources.....	67
2.7.3.1 <i>Time</i>	68
2.8 Research Sub-questions	71
2.9 Conceptual Framework.....	71
CHAPTER THREE – THE RESEARCH DESIGN	73
3.0 Introduction.....	73
3.1 Research Design.....	73
3.2 Theoretical Framework.....	73
3.2.1 A Qualitative Approach.....	74
3.2.2 Epistemology: Constructionism	74
3.3 Theoretical Perspective.....	76
3.3.1 Interpretivism	76
3.3.2 Symbolic Interactionism	77
3.4 Research Methodology	78
3.4.1 Case Study.....	78
3.4.2 Multi-site Case Study.....	78
3.5 Methods	79
3.5.1 Sample Selection	79
3.5.2 Description of Participants.....	80

3.5.3 Data Collection Methods	80
3.5.3.1 <i>Semi-structured Interviews</i>	81
3.5.3.2 <i>Group Interviews</i>	81
3.5.3.3 <i>Semi-structured and Group Interview Processes</i>	82
3.5.3.4 <i>Pre-interview Self-reflection Tool</i>	82
3.5.3.5 <i>Role of the Research Assistant</i>	83
3.5.3.6 <i>Pilot Test</i>	85
3.6 Analysis of Data	86
3.6.1 Data Coding Process.....	89
3.6.1.1 <i>Phase 1 – Open Coding</i>	91
3.6.1.2 <i>Phase 2A – Axial Coding – Categories</i>	92
3.6.1.3 <i>Phase 2B – Axial Coding – Category Matrices</i>	94
3.6.1.4 <i>Phase 3 – Selective Coding</i>	98
3.6.1.5 <i>Phase 4 – Summary Tables</i>	102
3.6.1.6 <i>Phase 5 – Themes and Theme Component for all Schools per Question</i>	105
3.7 Conclusion	109
CHAPTER FOUR – PRESENTATION OF DATA	111
4.0 Introduction.....	111
4.1 Pre-interview Self-reflection Tool Data	111
4.2 Semi-structured Interviews and Group Interview Data.....	114
CHAPTER FIVE – ANALYSIS AND DISCUSSION OF RESEARCH FINDINGS ...	216
5.0 Introduction.....	216
5.1 Sub-question 1 – Did the exercise of leadership in the school and system influence teacher practice and, if so, how?.....	216
5.1.1 Theme 1 – Collaboration.....	216
5.1.1.1 <i>School Leadership</i>	216
5.1.1.2 <i>System Leadership</i>	220
5.1.2 Theme 2 – Leadership Capabilities	228
5.1.2.1 <i>Openness to Change and the Devolution of Responsibility</i>	228
5.1.2.2 <i>Characteristics of Leaders</i>	229
5.1.2.3 <i>Importance of Individual Capabilities being Interrelated</i>	229
5.1.2.4 <i>Relationships with Teachers</i>	230
5.1.3 Theme 3 – Organisational Restructuring	231
5.1.3.1 <i>Organisational and Structural Changes were Implemented Slowly and Responsively</i>	231
5.1.3.2 <i>Organisational Restructuring that Required Participation</i>	232
5.1.3.3 <i>Structures Heightened the Focus on Teaching and Learning</i>	233

5.1.3.4 <i>Some Roles and Responsibilities Altered along with Structural Changes</i>	233
5.1.3.5 <i>A Strategic Approach to Organising and Mapping out the Direction</i>	234
5.1.4 Theme 4 – Resourcing	234
5.1.4.1 <i>Provision of Resources</i>	234
5.1.4.2 <i>Provision of Time was Considered Inadequate by Teachers</i>	235
5.1.4.3 <i>Use of Resources</i>	235
5.2 Sub-question 2 - Did the experience of a professional learning community influence teacher practice and, if so, how?	236
5.2.1 Theme 1 – Leadership.....	236
5.2.1.1 <i>Leaders were Instructional Leaders in Specific and Direct Ways</i>	237
5.2.1.2 <i>All Leaders, including the Principal, were Instructional Leaders in PLCs</i> ..	238
5.2.1.3 <i>Leaders Initially Facilitated the PLCs</i>	239
5.2.1.4 <i>Leaders Developed Trusting Relationships with Teachers in PLCs</i>	239
5.2.2 Theme 2 – Teacher Capacity.....	240
5.2.2.1 <i>Interrelated Nature of Three PLC Characteristics</i>	240
5.2.2.2 <i>Use of Data – Evidence</i>	241
5.2.2.3 <i>Deprivatisation of Teaching Practice</i>	244
5.2.2.4 <i>Professional Dialogue</i>	246
5.2.2.5 <i>Attitude and Efficacy</i>	249
5.2.2.6 <i>Ownership of the Shared Vision</i>	252
5.2.2.7 <i>Positive and Supportive School Climate</i>	252
5.2.3 Theme 3 – Structure and Organisation	253
5.2.3.1 <i>Organic Development of PLCs</i>	253
5.2.3.2 <i>Structure of PLCs was Contextually Driven</i>	253
5.2.3.3 <i>Growth of PLCs was not Linear</i>	254
5.2.3.4 <i>Evaluation and Monitoring of PLCs</i>	255
5.2.3.5 <i>Difficulties Encountered in the Organic Development of PLCs</i>	255
5.3 Sub-question 3 – What was the particular contribution of the TE role to teacher practice?.....	257
5.3.1 Theme 1 – Structure and Organisation	257
5.3.1.1 <i>Structure of the TE Role</i>	257
5.3.1.2 <i>Focus of the TE Role</i>	258
5.3.1.3 <i>Balancing the TE Role within Existing Leadership Roles</i>	258
5.3.1.4 <i>Sustainability without the Time and Resources that Accompanied a TE Role</i>	259
5.3.1.5 <i>Why the Reforms may be Sustainable</i>	260
5.3.2 Theme 2 – Characteristics and Qualities of the TEs.....	261
5.3.2.1 <i>TEs Built Trusting Relationships with Teachers</i>	261

5.3.2.2 <i>How TEs Established Credibility</i>	265
5.3.3 Theme 3 – Contribution to Teacher Capacity	267
5.3.3.1 <i>Practices of TEs that Influenced Teacher Practice</i>	267
5.3.3.2 <i>TEs had Flexibility to Differentiate the Learning According to the Needs</i> ...	267
5.3.3.3 <i>TEs had Particular Areas of Focus and Utilised Research in their Work</i>	268
5.3.3.4 <i>How TEs Contributed to Teacher Self-efficacy</i>	269
5.3.3.5 <i>Teachers Became More Motivated, Confident, Capable and Less Reliant on TEs</i>	270
5.4 Sub-question 4 – Did the nature of the on-site PD influence teacher practice and, if so, how?	271
5.4.1 Summary of Previous Findings Reinforced in this Sub-question	271
5.4.2 Influence of the Organisational Context: Pedagogical Content Knowledge	271
5.4.3 Coherence in On-site PD.....	272
5.4.4 On-site PD Allowed for Cyclical Learning.....	272
5.4.5 On-site PD Allowed for Context Specific Individualised Learning.....	273
5.4.6 Plans, Beliefs and Goals Underpinned the Coherent Learning in On-site PD.....	273
5.4.7 On-site PD Allowed for Active and Collective Participation in the Learning.....	274
5.4.8 On-site PD Allowed for Duration of the Learning	274
5.4.9 Appeal of the Organisational Aspects of On-site PD	275
5.4.10 Accessibility, Convenience and Immediacy of On-site PD	275
5.4.11 On-site PD was the Preferred Mode of Learning	276
CHAPTER SIX – FINDINGS AND RECOMMENDATIONS	278
6.0 Introduction.....	278
6.1 Summary of Major Findings	278
6.1.1 Theme 1 - Leadership	278
6.1.1.1 <i>School Leadership</i>	278
<i>Finding 1</i>	278
<i>Recommendation 1</i>	279
<i>Finding 2</i>	279
<i>Recommendation 2</i>	279
<i>Finding 3</i>	279
<i>Recommendation 3</i>	279
<i>Finding 4</i>	280
<i>Recommendation 4</i>	280
<i>Finding 5</i>	280
<i>Recommendation 5</i>	280
6.1.1.2 <i>System Leadership</i>	280

<i>Finding 6</i>	280
<i>Recommendation 6</i>	281
<i>Recommendation 7</i>	281
<i>Recommendation 8</i>	281
<i>Finding 7</i>	281
<i>Recommendation 9</i>	281
6.1.2 Theme 2 – Professional Learning Communities	281
<i>Finding 8</i>	282
<i>Recommendation 10</i>	282
<i>Finding 9</i>	282
<i>Recommendation 11</i>	282
<i>Finding 10</i>	282
<i>Recommendation 12</i>	282
<i>Finding 11</i>	282
<i>Recommendation 13</i>	283
<i>Finding 12</i>	283
<i>Recommendation 14</i>	283
<i>Finding 13</i>	283
<i>Finding 14</i>	283
<i>Recommendation 15</i>	284
<i>Finding 15</i>	284
<i>Recommendation 16</i>	284
6.1.3 Theme 3 – The Contribution of an On-site Role in Influencing Teacher Practice	285
<i>Finding 16</i>	285
<i>Recommendation 17</i>	285
<i>Finding 17</i>	286
<i>Finding 18</i>	286
<i>Recommendation 18</i>	287
<i>Finding 19</i>	287
<i>Finding 20</i>	287
<i>Recommendation 19</i>	287
6.1.4 Theme 4 – How the Construct of On-site PD Influences Teacher Practice.....	288
<i>Finding 21</i>	288
<i>Recommendation 20</i>	288
<i>Finding 22</i>	289
<i>Finding 23</i>	289

<i>Recommendation 21</i>	289
6.2 Implications for Conceptual Framework.....	289
6.3 Limitations of the Present Study.....	291
6.4 Suggestions for Further Research.....	292
6.5 Conclusion.....	292
References	293
Appendices	320
Appendix A: Coding Process Data for Schools E, Questions 2-4 and Schools F-I, all questions.....	320
Table 1(b) Open Coding, Question 1 (School F).....	320
Table 1(c) Open Coding, Question 1 (School G).....	321
Table 1(d) Open Coding, Question 1 (School H).....	322
Table 1(e) Open Coding, Question 1 (School I).....	323
Table 2(a) Open Coding, Question 2 (School E).....	324
Table 2(b) Open Coding, Question 2 (School F).....	325
Table 2(c) Open Coding, Question 2 (School G).....	326
Table 2(d) Open Coding, Question 2 (School H).....	327
Table 2(e) Open Coding, Question 2 (School I).....	328
Table 3(a) Open Coding, Question 3 (School E).....	329
Table 3(b) Open Coding, Question 3 (School F).....	330
Table 3(c) Open Coding, Question 3 (School G).....	331
Table 3(d) Open Coding, Question 3 (School H).....	332
Table 3(e) Open Coding, Question 3 (School I).....	333
Table 4(a) Open Coding, Question 4 (School E).....	335
Table 4(b) Open Coding, Question 4 (School F).....	336
Table 4(c) Open Coding, Question 4 (School G).....	337
Table 4(d) Open Coding, Question 4 (School H).....	338
Table 4(e) Open Coding, Question 4 (School I).....	339
Appendix B: Phase 2A Data School E, Questions 2-4 and Schools F-I, all questions.....	341
Table 5(b) Axial Coding- Categories, Question 1 (School F).....	341
Table 5(c) Axial Coding- Categories, Question 1 (School G).....	341
Table 5(d) Axial Coding- Categories, Question 1 (School H).....	341
Table 5(e) Axial Coding- Categories, Question 1 (School I).....	341
Table 6(a) Axial Coding- Categories, Question 2 (School E).....	342
Table 6(b) Axial Coding- Categories, Question 2 (School F).....	342
Table 6(c) Axial Coding- Categories, Question 2 (School G).....	342
Table 6(d) Axial Coding- Categories, Question 2 (School H).....	342

Table 6(e) Axial Coding- Categories, Question 2 (School I)	343
Table 7(a) Axial Coding- Categories, Question 3 (School E)	344
Table 7(b) Axial Coding- Categories, Question 3 (School F)	344
Table 7(c) Axial Coding- Categories, Question 3 (School G).....	344
Table 7(d) Axial Coding- Categories, Question 3 (School H).....	345
Table 7(e) Axial Coding- Categories, Question 3 (School I)	345
Table 8(a) Axial Coding- Categories, Question 4 (School E)	346
Table 8(b) Axial Coding- Categories, Question 4 (School F)	346
Table 8(c) Axial Coding- Categories, Question 4 (School G).....	346
Table 8(d) Axial Coding- Categories, Question 4 (School H).....	347
Table 8(e) Axial Coding- Categories, Question 4 (School I)	347
Appendix C: Phase 2B Data Axial Coding - Category Matrix, Question 2 all schools, Table 9(b)	348
Phase 2B Data Axial Coding - Category Matrix, Question 3 all schools Table 9(c).....	349
Phase 2B Data Axial Coding - Category Matrix, Question 4 all schools Table 9(d)	350
Appendix D: Phase 3 Data- Selective Coding: Themes and Theme Components School E, Questions 2-4 and schools F- I, all questions	351
Table 10(b) Selective Coding: Themes and Theme Components, Question 1 (School F)	351
Table 10(c) Selective Coding: Themes and Theme Components, Question 1 (School G)	353
Table 10(d) Selective Coding: Themes and Theme Components, Question 1 (School H)	355
Table 10(e) Selective Coding: Themes and Theme Components, Question 1 (School I)	357
Table 11(a) Selective Coding: Themes and Theme Components, Question 2 (School E)	359
Table 11(b) Selective Coding: Themes and Theme Components, Question 2 (School F)	360
Table 11(c) Selective Coding: Themes and Theme Components, Question 2 (School G)	361
Table 11(d) Selective Coding: Themes and Theme Components, Question 2 (School H)	362
Table 11(e) Selective Coding: Themes and Theme Components, Question 2 (School I)	363
Table 12(a) Selective Coding: Themes and Theme Components, Question 3 (School E)	364
Table 12(b) Selective Coding: Themes and Theme Components, Question 3 (School F)	365
Table 12(c) Selective Coding: Themes and Theme Components, Question 3 (School G)	366

Table 12(d) Selective Coding: Themes and Theme Components, Question 3 (School H)	367
Table 12(e) Selective Coding: Themes and Theme Components, Question 3 (School I)	368
Table 13(a) Selective Coding: Themes and Theme Components, Question 4 (School E)	369
Table 13(b) Selective Coding: Themes and Theme Components, Question 4 (School F)	370
Table 13(c) Selective Coding: Themes and Theme Components, Question 4 (School G)	371
Table 13(d) Selective Coding: Themes and Theme Components, Question 4 (School H)	372
Table 13(e) Selective Coding: Themes and Theme Components, Question 4 (School I)	373
Appendix E:	374
Phase 4 Data- Summary Tables School E, Questions 2-4 and Schools F-I, all questions	374
Table 14(b): Summary Table, Question 1 (School F)	374
Table 14(c): Summary Table, Question 1 (School G)	375
Table 14(d): Summary Table, Question 1 (School H)	376
Table 14(e): Summary Table, Question 1 (School I)	377
Table 15(a): Summary Table, Question 2 (School E)	378
Table 15(b): Summary Table, Question 2 (School F)	379
Table 15(c): Summary Table, Question 2 (School G)	380
Table 15(d): Summary Table, Question 2 (School H)	381
Table 15(e): Summary Table, Question 2 (School I)	382
Table 16(a): Summary Table, Question 3 (School E)	383
Table 16(b): Summary Table, Question 3 (School F)	384
Table 16(c): Summary Table, Question 3 (School G)	385
Table 16(d): Summary Table, Question 3 (School H)	386
Table 16(e): Summary Table, Question 3 (School I)	387
Table 17(a): Summary Table, Question 4 (School E)	389
Table 17(b): Summary Table, Question 4 (School F)	390
Table 17(c): Summary Table, Question 4 (School G)	391
Table 17(d): Summary Table, Question 4 (School H)	392
Table 17(e): Summary Table, Question 4 (School I)	393
Appendix E: Application to conduct research – conditional approval	395
Appendix F: Application to conduct research	396
Appendix G: Consent Form	397
Appendix H: Information letter to participants - teachers	398

Appendix I: Interviewee consent form - teachers	401
Appendix J: Pilot Interview Process	402
Appendix K: Interview Process for Semi-structured and Group Interviews.....	403
Appendix L: Pre-interview Self-reflection Tool.....	405
Appendix M: Position Description.....	408
Appendix N: ACU approval form.....	410

List of Tables

<i>Table 2.1 Characteristics of PLCs.....</i>	<i>33</i>
<i>Table 3.1 Research Framework.....</i>	<i>74</i>
<i>Table 3.2 Research Participants.....</i>	<i>80</i>
<i>Table 3.3 Open Coding - Question 1 (School E).....</i>	<i>92</i>
<i>Table 3.4 Axial Coding – Categories, Question 1 (School E).....</i>	<i>94</i>
<i>Table 3.5 Axial Coding - Category Matrix, Question 1.....</i>	<i>97</i>
<i>Table 3.6 Selective Coding – Themes and Theme Components, Question 1.....</i>	<i>100</i>
<i>Table 3.7 Summary Table – Question 1 (School E).....</i>	<i>103</i>
<i>Table 3.8 Collated Themes and Theme Components for all schools.....</i>	<i>105</i>
<i>Table 3.9 Collated Themes and Theme Components for all schools.....</i>	<i>106</i>
<i>Table 3.10 Collated Themes and Theme Components for all schools.....</i>	<i>106</i>
<i>Table 3.11 Collated Themes and Theme Components for all schools.....</i>	<i>106</i>
<i>Table 3.12 Collated Themes and Theme Components for all schools.....</i>	<i>107</i>
<i>Table 3.13 Collated Themes and Theme Components for all schools.....</i>	<i>107</i>
<i>Table 3.14 Collated Themes and Theme Components for all schools.....</i>	<i>107</i>
<i>Table 3.15 Collated Themes and Theme Components for all schools.....</i>	<i>108</i>
<i>Table 3.16 Collated Themes and Theme Components for all schools.....</i>	<i>108</i>
<i>Table 3.17 Collated Themes and Theme Components for all schools.....</i>	<i>108</i>
<i>Table 3.18 Collated Themes and Theme Components for all schools.....</i>	<i>108</i>
<i>Table 3.19 Collated Themes and Theme Components for all schools.....</i>	<i>109</i>
<i>Table 3.20 Collated Themes and Theme Components for all schools.....</i>	<i>109</i>
<i>Table 3.21 Final Themes and Theme Components.....</i>	<i>110</i>
<i>Table 4.1 Pre-Interview Self-Reflection Tool Collated Data Question 1.....</i>	<i>112</i>
<i>Table 4.2 Pre-Interview Self-Reflection Tool Collated Data Question 2.....</i>	<i>112</i>
<i>Table 4.3 Pre-Interview Self-Reflection Tool Collated Data Question 3.....</i>	<i>112</i>
<i>Table 4.4 Pre-Interview Self-Reflection Tool Collated Data Question 4.....</i>	<i>113</i>

List of Figures

<i>Figure 2.1 Conceptual Framework</i>	72
<i>Figure 3.1 The Interactive and Iterative Process of Data Analysis</i>	89

List of Abbreviations

AP	Assistant Principal
AITSL	Australian Institute for Teaching and School Leadership
CCM	Constant Comparative Method
COAG	Council of Australian Governments
CPD	Continuing Professional Development
DCK	Disciplinary Content Knowledge
DET	Department of Education and Training
MCEETYA	Ministerial Council on Education, Employment, Training and Youth Affairs
NAPLAN	National Assessment Program for Literacy and Numeracy
NPA	National Partnership Agreement
NSW	New South Wales
OECD	Organisation for Economic Cooperation and Development
OSPD	On-site Professional Development
PCK	Pedagogical Content Knowledge
PD	Professional Development
PLC	Professional Learning Community
REC	Religious Education Co-ordinator
SES	Socio-Economic Status
SMART	Specific Measurable Achievable Realistic and Timely
SSNP	Smarter Schools National Partnership
TALIS	Teaching and Learning International Survey
TE	Teacher Educator

CHAPTER ONE - INTRODUCTION AND RESEARCH CONTEXT

1.0 Introduction

Professional development (PD) for teachers is considered the cornerstone of educational reform as the quality of the teacher is acknowledged as the greatest influence on student learning (Hattie, 2009; McArdle, 2010). This belief has led to an increased emphasis and investment in teacher PD (Dinham, 2013) as well as a range of perspectives on how it most effectively occurs. Educators have had a tradition of externally based deficit driven approaches (Lee, Zhang, & Yin, 2011); however, other models have now emerged that situate people with the responsibility for PD in the school setting for a sustained period of time (Riveros, Newton, & Burgess, 2012). On-site PD represents a changing paradigm for teachers and leaders, and whether learning for teachers best occurs within or beyond the workplace is regularly discussed in the research literature (Webster-Wright, 2009). There is increasing interest in the most effective form of PD, especially as it relates to reform processes, with research by the Organisation for Economic Cooperation and Development (OECD, 2011) now suggesting when the PD is on-site and in close proximity to instructional practice, it is more effective than the off-site equivalent.

1.1 Context of the Research

1.1.1 International Context

Educational reform has become an intensely political activity (Hardy, 2008) that is certainly not confined to Australia, and is the focus of educational systems worldwide. For some time now, the context of teaching has been changing and “schools can no longer pretend that their walls will keep the outside world at bay” (Hargreaves, 2000, p. 172). A range of societal changes influence transformations in education and there is an increasing number of organisations with a view on how schools should function (Hargreaves, 2005).

There is also an international preoccupation with the improved performance of schools and systems (Harris, 2012), which is apparent in various reports (Mourshed, Chijioke, & Barber, 2010). An assumption underpinning what constitutes effective schools and systems is that their success is dependent on the quality of the teachers and the teaching that occurs in each classroom. This view has contributed to a worldwide focus on improving teacher quality (Dinham, 2013). National education policies reflect increased engagement in

reforms targeted at improving teacher practice through a collaborative approach to change (Collinson et al., 2009) and there is general acknowledgement of the need for “a thorough and ongoing commitment to teachers’ development throughout their career” (Barber & Mourshed, 2007, p. 3).

1.1.2 Australian Context

For several decades, there has been increasing government involvement in, and commitment to, educational reform in Australia. Both *The Hobart Declaration on Schooling (1989)* and *The Adelaide Declaration on National Goals for Schooling in the Twenty-First Century (1999)* indicated a shared commitment from all State and Commonwealth Education Ministers to work together to ensure high quality schooling for young Australians. More recently, and of particular relevance to the present study, was the release by the Council of Australian Governments (COAG) of the *Melbourne Declaration on Educational Goals for Young Australians (2008)*. This declaration acknowledges the changes influencing Australian education and committed all governments to working with school sectors and the broader community to achieve the following educational goals for young Australians: Goal 1: Australian schooling promotes equity and excellence; Goal 2: All young Australians become successful learners, confident and creative individuals, and active and informed citizens (Ministerial Council on Education, Employment, Training and Youth Affairs [MCEETYA], 2008). Commitment to these goals was supported by assured action in the eight interrelated areas of developing stronger partnerships; supporting quality teaching and school leadership; strengthening early childhood education; enhancing middle years development; supporting senior years of schooling and youth transitions; promoting world-class curriculum and assessment; improving educational outcomes for Indigenous youth and disadvantaged young Australians, especially those from low socio-economic backgrounds; and strengthening accountability and transparency (MCEETYA, 2008). It is the second of these areas, ‘supporting quality teaching and school leadership’ that is of particular interest to the present study. COAG members shared the objective of raising the overall attainment of all Australian school students; therefore, they established a four-year national education agreement between the Commonwealth of Australia and the States and Territories. This commitment to the *Melbourne Declaration on Educational Goals for Young Australians (2008)* was seen in a public declaration by the then Minister for Education, Ms Julia Gillard, that policy makers would, “focus relentlessly on the quality of teaching in our schools” (Daniels, 2009, p. 1).

1.1.3 National Partnership Agreement (NPA)

Under the broad banner of an educational NPA, the reform that followed the release of the *Melbourne Declaration on Educational Goals for Young Australians* (2008) was the Smarter Schools National Partnership (SSNP). It “represented the largest ever direct school-resourcing intervention by the Australian Commonwealth Government” with a total of approximately \$2.5 billion in funding (National Evaluation for the Low SES National Partnership and the Literacy and Numeracy National Partnership - Impact Stage Final Report, 2014, p. 3). The SSNP was comprised of three areas and each was allocated a proportion of the funds: Literacy and Numeracy—\$540 million; Improving Teacher Quality—\$550 million; and Low Socio-Economic Status (SES) School Communities—\$1.5 billion. The five primary schools in the multi-site case study for the present study were engaged in the SSNP for low SES school communities. The core elements of this partnership were that the teacher is pivotal, literacy and numeracy attainment is a cornerstone of schooling, and the school’s SES is a determinant of student educational outcomes (New South Wales [NSW] Department of Education and Training [DET], 2009).

The SSNP for low SES school communities had strong links to both the Literacy and Numeracy, and Improving Teacher Quality partnerships. It was structured around the six key reform areas of “attracting high performing teachers; adopting best practice performance management and staffing arrangements; school operational arrangements that encourage innovation and flexibility; providing innovative and tailored professional learning opportunities; introducing accountability initiatives to promote a culture of continuous improvement; and building external partnerships” (NSW Education: Centre for Education Statistics & Evaluation, 2015, p. 7). The reforms on ‘providing innovative and tailored professional learning’ and ‘attracting high performing teachers’ were evident in the appointment of Teacher Educators (TEs) in the low SES partnership schools in the present study. Because high quality teaching is considered the means by which schools serving low SES communities can improve, it was envisaged that most of the low SES funding was spent on reforms related to improving teacher quality and the teaching that occurred in those schools. Improving literacy and numeracy was a key objective of all partnerships; therefore, the SSNP for low SES schools also incorporated reforms from the Literacy and Numeracy partnership.

A further influence on the national context during the current study was the *Australian Institute for Teaching and School Leadership* (Australian Institute for Teaching and School Leadership [AITSL], 2011). This body was set up by the Federal Government to validate and finalise the development of the *National Professional Standards for Teachers*, which were endorsed by MCEETYA in 2010. These Standards are a nationally agreed statement in which key elements of quality teaching are described across four career stages and its descriptors represent an analysis of effective contemporary practice by teachers throughout Australia. A number of frameworks by which one might describe teacher practice exist, however, as *The Australian Professional Standards for Teachers* (AITSL, 2011) are now implemented nationally and are the ones that teachers are expected to work towards. They were utilised in the present study to assist teachers in identifying perceived changes in their classroom practice that may have occurred as a result of their on-site PD experience.

1.1.4 Diocesan Context

The five schools in the present study participated in the SSNP for low SES school communities for four years from 2010 to 2013. Two methods were used by the Australian Government to select the schools to be involved in the partnership. The Australian Bureau of Statistics' Index of Relative Socio-economic Disadvantage from the 2006 census first identified schools serving low SES communities. From this list, schools with demonstrated levels of need according to the National Assessment Program for Literacy and Numeracy (NAPLAN) data were then nominated for inclusion in the SSNP for low SES schools. The five schools in the present study are metropolitan Catholic primary schools located in various parts of the diocese¹. They vary in size, with enrolment numbers ranging from 99 to 642 students. The proportion of students in each of these schools with a language background other than English is 68%–95% and three schools have 2%–69% indigenous students.

The Catholic Education Commission received the SSNP funding from the Australian government and managed its periodic distribution to school authorities. Each school sector determined the level of funding to individual schools based on factors such as their remoteness and size, and the minimum resourcing required to effect change. There were

¹ To protect the identity of the diocese and the schools, no specific reference to system documentation is included.

accountability mechanisms for systems and schools attached to the use of the funding, with at least 80% to be used to provide direct classroom interventions. Systems were required to: distribute and monitor the use of the funds; manage school participation; report on milestones and outcomes; utilise and strengthen existing reporting mechanisms such as school plans and annual reports to ensure they were aligned with the reform directions; and attest that schools were implementing the most appropriate reform options. In consultation with stakeholders, principals were required to build strategies into their Annual Improvement Plans that were in accord with the reforms of the SSNP for low SES school communities. These plans and reports were published annually on school websites and principals were expected to be open to visits from Commonwealth Department of Education, Employment and Workplace Relations personnel (NSW Department of Education & Training, 2009).

1.1.5 Background of the Researcher

The researcher is a senior leader in a system of Catholic schools in Australia. This role involves working with others in the diocese to lead curriculum policy formation and its implementation in primary schools. Throughout a career of over 39 years in Catholic education, the researcher has also been a teacher and principal in primary schools, and has held a range of senior leadership positions in the system. While fulfilling these classroom and senior leadership roles, the researcher has experienced much educational reform.

In recent times, as public interest and investment in education has grown, the influence of the international educational agenda has increased. This interest has flowed on to the involvement of governments through national and state reforms, and affected policies in all areas of schooling, particularly those regarding teacher practice. An example of this involvement was seen in the SSNP reform by the federal government. This reform, which led to a heightened focus on improving teacher practice through on-site PD in schools, formed the context of the present study. This approach to learning was new and different for the teachers and leaders engaged in the reform, making it worthy of research. Due to the role of the researcher in the diocese, the identity of the schools is unknown beyond their demographic data, which was gathered by a research assistant.

1.2 Definitions and Terminology in the Research

In the present study, three terms emerged and are referred to regularly. They are PD, PLCs, and teacher practice. Their definitions are outlined below with further justification for their use discussed in Chapter Two, the Literature Review.

1.2.1 Professional Development (PD)

For the purpose of the present study, the accepted definition of PD is: an interactive “chain of formal and informal learning experiences” (Imants, 2002, p. 717) concerned with the interrelationship and reflexivity of theory and practice (Lloyd & Cochrane, 2006; Timperley, Parr, & Bertanees, 2009) in which teachers are fully and respectfully engaged throughout their career.

1.2.2 Professional Learning Communities (PLCs)

PLCs have been described variously in the research literature as a community of practice, a teacher learning community, a networked learning community, a learning network, or simply a learning community (Stoll, Bolam, McMahon, Wallace & Thomas, 2006; Trotman, 2009). Because PD is considered an ongoing process for teachers, and the construct in which the sustained on-site PD occurred in each school was a PLC, the definition adopted for the present study is: “A professional learning community is a group of educators who continuously seek and share learning, and act on their learning” (Hord, 1997, p. 6).

1.2.3 Teacher Practice

Teacher quality is considered a lynchpin for educational reform (McArdle, 2010); however, due to the complexities of teaching, understandings of teacher quality differ and defining it is a controversial task. This has resulted in there being no single agreed definition of a quality teacher with most research defining it indirectly through its effect on student outcomes or through the presence of professional attributes or skills in their practice (Zammit et al., 2007). In Australia, after decades of debate, it seems that “the pieces of the quality teaching puzzle are coming together” (Dinham, 2011, p. 1) with the *National Professional Standards for Teachers* (AITSL, 2011). These Standards describe the required competencies of effective educators (McArdle, 2010) that are observable in professional practice. It is the instructional practices of teachers that indicate quality and how they enact their understandings of professional knowledge (Riveros et al., 2012), some of which have a higher probability of success than others (Hattie, 2015) and inform the effect of the PD in

which teachers engage (Hough et al., 2013). Teacher practice is therefore the term used to describe the focus of this research. It also aligns with the terminology of the *National Professional Standards for Teachers* (AITSL, 2011) that are currently used in Australia to describe the quality of teachers.

1.3 Definition of the Research Problem

It is acknowledged that “the quality of an educational system cannot outperform the quality of its teachers” (Harris & Jones, 2010, p. 174), and teacher quality is considered the single greatest influence on student learning (Robinson, 2007; Timperley, 2008; Hattie, 2009); however, the research associated with long-term improvement in teacher practice is somewhat restricted (Timperley, 2008). PD delivered by outside experts has limitations, partly because providers are unable to offer mentoring support to teachers (Timperley, 2008), and PLCs appear to have had a more positive effect on teacher practice (Harris & Jones, 2010; Hord & Tobia, 2012). Teacher learning facilitated on the school site in PLCs is becoming more prevalent, however, challenges in undertaking this have also been identified, e.g., PLCs break teacher privacy norms and system leader mandates for PD can conflict with the learning needs of teachers (Harris & Jones, 2010; McLaughlin & Talbert, 2001, 2006). Similarly, a consistently noted feature of effective PD is collaborative exchange but teachers can also collaboratively block change (Guskey, 2003; Pancucci, 2007). Therefore, the methods by which improved teacher practice is accomplished through on-site PD remains an elusive matter.

The on-site PD in the present study is one of the alternate approaches to teacher learning that have been strongly advocated (Dinham, 2008); however, it involved a substantial change for teachers who were generally accustomed to leaving school grounds for single, occasional PD sessions and applying their learning upon their return. In Catholic primary schools in the diocese where the present study was situated, the system database indicated that from 2008 to 2011, there were 1,643 off-site PD courses conducted for primary school teachers and no opportunities for them to engage in sustained on-site PD.

An added complexity to this research problem is that principals and leadership teams have traditionally taken responsibility for decisions about PD for teachers in their schools, yet in this reform, the SSNP agreement was externally generated and the form of PD designed to respond to it was developed by the system. Research suggests high performing systems are

prescriptive about what constitutes effective PD, but not on the PD that schools offer such as PLCs and mentoring (Jensen, Sonnemann, Robert-Hull, & Hunter, 2016). However, in the present study, the lead strategy designed by the system was on-site PD and schools were required to establish PLCs, and employ TEs to fulfil a mentoring role with teachers to change their teaching practice. Learning on site called for a significant shift in practice for teachers, particularly as the role of TEs was to provide in school and in classroom learning².

The research problem exists as to whether the on-site PD was embraced and addressed the goal of improved teacher practice, particularly as it was imposed on schools, which can lead to resentment and resistance from teachers (Hargreaves, 2000). On-site PD was a new and different mode of learning for teachers, which also has implications for school leaders.

1.3.1 Research Purpose

The purpose of this research was to explore how on-site PD, through the establishment of PLCs and the support of a TE, contributed to improved teacher practice. This was achieved by studying the experience of teachers and leaders from five primary schools involved in a system strategy to implement on-site PD. While there has been some change in recent years in the nature of PD to situated teacher development, there is limited research about its effectiveness. Specifically, little is known about whether on-site PD achieves its goal of improving teacher practice. The present study aimed to redress this gap by investigating its influence. The contribution of this research is to the wider understanding about the meaning of on-site PD as a generic construct, and what occurred within it that influenced teacher and leader perceptions of its effect on teacher practice.

1.4 Major Research Question

The major research question is: How does on-site professional development influence teacher practice? The research sub-questions, generated from a review of the literature, are presented at the conclusion of Chapter Two.

² To protect the identity of the diocese and the schools, de-identified system documentation on the TE role is available in Appendices E and F.

1.5 Significance of the Research

PD has long been considered a necessary aspect of the teaching profession but particularly so in this current era of ongoing educational reform. An area of research that has not yet been fully investigated is PD that is located within the school environment. The present study is therefore timely and warranted as, through the establishment of PLCs, longer term on-site PD is becoming the preferred mode and context for teacher learning that is central to educational reform.

The experience of on-site PD in the present study presented a noteworthy change in practice for teachers and leaders, making this phenomenon a case of interest (Mabry, 2009) that has the potential to advance the research base in this area. This will be accomplished by extending understandings of what occurred within the on-site PD experience to assist teachers, or not, to improve their practice. Insights gained will add to the existing body of knowledge on teacher PD, particularly that which occurs on-site and within the construct of PLCs. Findings from the present study have the potential to give teachers a voice in influencing the form of PD they experience in the future and may provide the broader community a justification for the level of government funding that was expended in this reform.

CHAPTER TWO – REVIEW OF THE LITERATURE

2.0 Introduction

The context of the present study and the research problem suggest that the following areas of focus form the framework for the literature search: PD, PLCs and Leading for Learning. This literature review is organised according to these areas, and concludes with the research sub-questions and conceptual framework for the study.

2.1 Professional Development

This section reviews the literature to elicit current understandings of PD and its features.

The PD of teachers has long been considered vital to school improvement (Hargreaves, 1994) yet it is still claimed that the literature in this area, “as a whole is partial in its coverage, is fragmented and is under-theorised” (Kennedy, 2014, p. 689). This may be because, as described by Timperley (2011a), views of PD have been shifting for some time. A twelve-month *National Mapping of Teacher Professional Learning Project* by Doecke, Parr, and North (2008) represented the policies and practices of PD in Australia and also identified various interpretations of its meaning.

There is currently a move away from the term ‘PD’, and ‘professional learning’ has now emerged in certain literature and research (Labone & Long, 2016; Stewart, 2014). This shift may be because some consider ‘professional learning’ to be “a better way to epitomise the key characteristics of reflective practice, critical evaluation and continuing learning” (O’Brien & Jones, 2014, p. 684). The difference between the two terms is described by Timperley (2011a) in the following way: “Professional learning requires teachers to be seriously engaged in their learning whereas PD has been seen as merely participation” (p. 5). While this distinction in meaning exists, neither term is used consistently in the literature and it is evident there are various extant interpretations of it. For example, research by Mackay (2017) utilised a two-stage interpretivist approach to analyse journal and focus group data from 80 participants, and investigated PD as employment capital for potential career progression from a human resource perspective. It was concluded that, “educators need to encourage a broad view of continuing professional development– of learning for individual

growth and enlightenment – and in doing so provide a counterbalance to a prevalent discourse that constrains learning to employment use” (p. 152). Another article by Taylor (2017) that draws on insights from study trips and an international collaborative project, presented another interpretation of PD. It proposed a process model for “teacher professional learning and development, together termed professional growth” (p. 87), which includes the three related aspects of purpose, opportunity and response.

Internationally, PD is described differently. Some variations in nomenclature include: ‘Continuing Professional Development’ (CPD) – Scotland (Kennedy, 2011), and more recently, ‘Career-long Professional Learning’ (O’Brien & Jones, 2014); ‘Classroom-level Teacher Professional Development’ – United Arab Emirates (Shawer, 2010); ‘CPD’ – Czech Republic (Brücknerová & Novotný, 2017); ‘Job-Embedded Professional Development’ - Michigan, USA (Owens, Pogodzinski & Hill, 2016); Professional Learning – New Zealand (Timperley, 2011a); and other research discusses ‘professional development and learning’ together – United Kingdom (Evans, 2014). In Australia, the terms Professional Learning (Ambler, 2016), PD (Speering, 2016) and CPD (Stevenson, Hedberg, O’Sullivan & Howe, 2016) are all currently in use. Whether PD, professional learning or a similar term is the most suitable to describe what PD does, or is intended to do, has not yet been determined.

While researchers continue to grapple with the terminology and meaning of PD, O’Brien and Jones (2014) raise a pertinent issue related to the practices associated with it: “The question of whether the terms are used, understood or differentiated in practice is a long way from being answered” (p. 684). This concern is apparent in findings from a large-scale qualitative study by Opfer and Pedder (2011) of 388 primary and secondary schools in England that included survey responses from 1,126 teachers. It concluded that the development of schools as learning organisations required help and guidance to build the systems and supports required to utilise the usefulness of PD as a mechanism for school improvement. More recently, Pedder and Opfer (2013) further examined the survey data from 329 primary and 59 secondary schools and found that “only a minority of teachers are ‘engaged’ learners” (p. 539). A dissonance between teacher values and practice regarding collaborative approaches to PD was apparent, and leaders were challenged to differentiate the learning for teachers. These findings imply that further research about what PD means in practice for teachers is required.

Considering the range of perspectives on what PD actually is, which is reflected in the diverse terminology and practice in place (Bezzina & Kavanagh, 2002), an examination of the features identified in research that contribute to its effectiveness is relevant to the present study. Qualitative research by Priestley, Miller, Barrett, and Wallace (2011) that utilised data from five detailed case studies of curriculum change highlights the importance of considering features of effective PD as “ingredients, not as isolating factors that can be controlled by the implementation of various strategies on the part of individual teachers, schools or policy-makers, but rather as interacting parts” that require deliberate systemic co-ordination (p. 281).

2.2 Features of Effective Professional Development

The effectiveness of PD is linked to its role in facilitating changed practice to enhance the quality of teaching that occurs. However, what constitutes this effectiveness has been the subject of debate for some years and understandings have evolved over time. In 2003, Guskey examined 13 lists of characteristics of effective PD and found they varied widely, the research was inconsistent and different criteria were used to determine effectiveness. Research that has contributed to the increased knowledge of what constitutes effective PD includes that of Garet, Porter, Desimone, Birman and Yoon (2001) who conducted a three-year national evaluative longitudinal study of the U.S. Eisenhower PD Program on ‘What Makes PD Effective’. Prior to this, studies that provided empirical evidence on the relative value of specific features of PD were limited (Desimone, 2009). Using regression modelling, a national probability sample of 1,027 teachers’ self-reports and behaviours across 358 districts was used to examine the relationship between features of PD identified in the literature and changes in teacher knowledge, skills and practice. This research was considered “an important advance within the field” (Penuel, Fishman, Yamaguchi & Gallagher, 2007, p. 924) because it was the first large-scale empirical comparison of the effects of different characteristics of PD.

Garet et al. (2001) identified six features as being effective in improving the learning of teachers, which became known as the ‘Eisenhower model’. Three of these features are structural and pertain to the type of activity—the form, i.e. whether it is a ‘traditional’ or ‘reform’ type, the duration of the activity and the collective participation of teachers. The other three features are referred to as ‘core’ and describe the substance of the PD—a focus on content knowledge, opportunities for active learning and the extent to which coherence is built. While some distinctions between the effects of a reform structure opposed to traditional

PD have been identified, a key finding was that the structural features operate “indirectly through the other design features and dimensions of quality” (Garet et al., 2001, p. 935) and it is through the core features that the structural features can positively influence teacher knowledge, skills and classroom practice. To improve PD, Garet et al. (2001) therefore recommend a focus on the core features of content knowledge, active learning and coherence rather than the type of activity.

The features of effective PD identified by Garet et al. (2001) continue to be used in national research reports (Wei, Darling-Hammond, & Adamson, 2010) and state policies (Owens et al., 2016). They have also been built upon and modified in subsequent research. Using these six key features, Desimone, Porter, Garet, Yoon, and Birman (2002) conducted longitudinal quantitative research. Participants included a purposefully selected sample of 207 teachers from 30 schools who were surveyed three times over three years to examine the effect of these PD features on changing their teaching practice. The findings extend, replicate and generally support the PD features identified in the national study of 2001. Both traditional and reform structures can offer teachers constructive interaction, but because reform PD tends to have a longer duration, it can provide more active learning that is responsive to the needs of teachers. No effects for duration were evident in this research.

Yoon, Koehler Yom, Yang, and Liu (2017) based the PD and implementation framework in their research on the Garet et al. (2001) features to investigate the conditions that can influence science teachers to successfully implement reform. Data from 47 teacher participants and 545 students was gathered over three years from 12 high schools and five middle schools. It revealed that PD “to improve content knowledge and teaching skills—often referred to as *human capital*—may not be enough” (Yoon et al., 2017, p. 3). Social capital, which develops via relationships in social networks, was a stronger predictor of successful implementation. Quick, Holtzman, and Chaney (2009) also utilised the Eisenhower model (Garet et al., 2001) to explore to what extent the characteristics of effective PD align with what happens in schools. As part of a three-year qualitative case study in nine elementary schools with leaders and 100 teachers, they examined data gathered by interviews and PD logs and found these features “held up relatively well” (p. 67). Evidence of the features of effective PD identified by Garet et al. (2001) is also apparent to some extent in *The State of Educators’ Professional Learning in Canada Study* (Campbell, Osmond-Johnson, Faubert, Zeichner, & Hobbs-Johnson, with Brown, DaCosta, Hales, Kuehn, Sohn, &

Steffensen) (2016). The key research-informed components and principles of effective professional learning identified in their review of the literature were: “evidence-informed; subject-specific and pedagogical content knowledge; a focus on student outcomes; a balance of teacher voice and system coherence; active and variable learning; collaborative learning experiences; job-embedded learning; ongoing in duration; resources; supportive and engaged leadership” (p. 5). A multi-method design that included an extensive review of publicly available documents, case studies of school districts and schools, contact with individuals in each province and territory, focus group conference calls, an Advisory Group, responses from 741 survey participants, and four focus groups was used in the Canadian study. Its findings indicate a range of practices that support those promoted in their literature review, particularly evidence-informed, subject-specific and pedagogical content knowledge (PCK), a focus on student outcomes, active and variable learning, collaborative learning experiences, job-embedded learning, and supportive and engaged leadership.

Desimone (2011) claims we now have an established consensus on the features of PD identified by Garet et al. (2001) and recommends they be included in studies about its effectiveness. Wayne, Kwang, Yoon, Cronen, and Garet (2008) considered the status of PD research and agreed with Desimone (2011), but also suggested that we need more empirically valid ways of studying it. They believe these features lack the specificity to guide practice and respond to the practical questions from those that design and fund PD. The features of effective PD identified by Garet et al. (2001) will provide the framework for the following section that reviews the research literature on each of them. The first feature is the structure of the activity that is about whether it is a ‘traditional’ or ‘reform’ type, which Penuel et al. (2007) called the “design” (p. 928). Research pertaining to the other features of duration, collective participation, content knowledge, active learning and coherence will follow.

2.2.1 Traditional Structure of Professional Development

In what has become known as traditional PD, learning occurs outside the classroom or school and focuses on discrete isolated activities such as courses or workshops that teachers undertake to improve their performance (Corcoran, 1995). According to Kennedy (2005), traditional PD works on the premise that teachers have similar needs, therefore, require the same approach to address a perceived knowledge and skills deficit through direct instructional learning. In a review of PD literature across professions, Webster-Wright (2009) argues for a

focus on learning and proposes that traditional PD emanates from a conviction that teachers need development that is best addressed via knowledge being delivered to them in external courses. The literature has mixed responses to the use of external expertise. Hord and Tobia (2012) defend its use and suggest internal “available help that is inadequate” may confirm poor practice (p. 41). Similarly, Mitchell and Sackney (2011) have witnessed “the impoverishment of professional practice that ensues when external ideas are not included in the professional discourse [and suggest] ... the general surrenders to the particular and the same idea is enacted differently in different contexts” (pp. 36–37). However, Speering (2016) warns that the ongoing use of external facilitators “can lead to a situation where imposition of knowledge is the norm, which has little relevance” to the needs of participants (p. 749). A perspective from teachers on the use of external expertise comes from *The State of Educators’ Professional Learning in Canada Study* (Campbell et al., 2016): “Teachers value relevant and practical professional learning that is related to their work; ‘job embedded’ should not mean school-based exclusively as opportunities to engage with external colleagues and learning opportunities matter also” (p. 9.)

There appears to be limited research on traditional forms of PD; however, a research study that engaged over 1,300 stakeholders via interviews and surveys indicated that short-term workshops continue to be the most common delivery structure that teachers experience in the USA. Findings also showed these PD offerings were generally not seen as relevant or connected to the core work of teachers, and were not meeting their needs (Bill & Melinda Gates Foundation, 2014).

2.2.2 Reform Structure of Professional Development

While traditional PD continues to be available for teachers, reform types, or situated models that often take place during the school day, have been emerging for some time. Timperley (2011a) believes reform conceptions of PD place students at the centre, have a focus on the knowledge and skills of teachers and are “an active process of systematic inquiry” (p. 7). The literature on reform types offers many descriptions of it, which generally see teachers as individuals who participate in learning activities embedded in practice within a community of learners (Lustick, 2011). This understanding demonstrates a shift in emphasis from passive development to the active learning and engagement described by Webster-Wright (2009), and reflects the view of Wilson and Berne (1999) who believe “teacher

learning ought not be bound and *delivered* but rather *activated*” (p. 194). Similarly, Shaver (2010) compares PD to a journey comprised of a range of experiences that engage teachers in a change process throughout career-long “ongoing formal and informal learning activities ... to advance their professional competence so that they can improve their practice” (p. 598). Lloyd and Cochrane (2006) extend this metaphor, and liken PD to an iterative loop where a “dynamic process of intersection and interweaving... creates the illusion of complexity” throughout an ongoing social learning experience (p. 16).

Attendance and participation in traditional PD alone may have been considered adequate in the past for the development of teachers; however, research now provides general support for the effectiveness of reform PD in enhancing instructional practice. Studies investigating the effect of classroom-level learning suggest it is more effective than traditional interventions as it is continuous and teachers are required to apply their learning. A four-year longitudinal ethnographic study on a co-teaching model as PD by Gallo-Fox and Scantlebury (2016) identified positive effects of on-site reform PD for teachers. In this research, teacher learning occurred via collaboration and it was strongly linked to their local context, was active, applied in practice, and extended in its duration. Not all teachers learned the same things through co-teaching; however, they all reported that their teaching practice was expanded in some way. Another example of reform type PD research is the Classroom Level Teacher Professional Development study by Shaver (2010) that was a small qualitative study focussing on three language schools in the UK. By the collection, analysis and interpretation of spoken and written data, the effect of classroom-level teacher PD via learning within the context of teaching was examined. Findings reveal that classroom-level curriculum development better contributes to teacher learning than traditional interventions. Teachers increased their skills in subject, pedagogical and curriculum content knowledge, and their professional satisfaction was enhanced. Similarly, Quick et al. (2009) found that in all schools, teachers reported that opportunities to observe instructional strategies, practise techniques and receive feedback made the PD effective. Further research has shown that school-based mentoring and the provision of assistance to teachers in a collaborative environment contributes to the positive influence of on-site PD for teachers. Additionally, a comparative case study involving two urban middle schools by Yost, Vogel, and Liang (2009) compared the effect of teacher leaders on site to collaboratively influence instructional practice with a traditional model of PD. It found “strong preliminary support for the use of teacher leaders as a primary method of enhancing instructional practice” (p. 429).

Gulamhussein (2013) proposes that such favourable findings about on-site reform PD are due to traditional models operating “under a faulty theory of teacher learning” (p. 36); the challenge for teachers is not in acquiring knowledge about new strategies but in its classroom implementation.

However, difficulties have been identified with site-based reform PD as the “decentralization of decision making appear(s) to be undermining the use of knowledge rather than promoting it” (Guskey, 2003, p. 13). Early research showed that only one in five case study schools that carried out classroom observations were seen to improve teaching, questioning the usefulness of peer observations (Little & Bird, 1987). Despite this, of late there is a growing consensus that reform-oriented PD tends to be more effective than traditional PD (Penuel et al., 2007); however, it is an aspect on which total agreement has not yet been reached. This is seen in a descriptive study by Lustick (2011) that surveyed 118 Science teachers from 42 states in the U.S. over three years as well as conducting interviews with each regarding the effectiveness of different PD experiences. It concluded that providers of PD should consider the perspectives of teachers and no one model, traditional or reform, is the most effective as “most professional development opportunities are likely to have elements of both” (p. 220).

2.2.3 Duration

Research investigating the duration of PD in terms of both the time span and total contact hours suggests it is generally associated with its effectiveness as longer activities provide time for in-depth discussion, the opportunity to implement new practices and receive feedback (Garet et al., 2001). Support for this finding is seen in the *Best Evidence Synthesis Iteration* research that included a wide range of qualitative and quantitative studies. To consolidate the international and New Zealand evidence about teacher learning and better understand the “professional learning opportunities and their impact on teacher practice” (p. xxiii), Timperley, Wilson, Barrar, and Fung (2007) developed a theoretical framework with eighty-four characteristics and seven elements that impact positively on the influence of PD. One of these elements is, “providing sufficient time for extended opportunities to learn and using the time effectively” (p. xxvi). Timperley et al. (2007) elaborate on this finding by stressing that time to learn is necessary but not sufficient and how it is used is more important than the nature of its provision. Additionally, a large-scale evaluation study in Australia by Ingvarson, Meiers and Beavis (2005) examined the impact of a wide range of PD programmes

and their effects on the knowledge, practice and efficacy of teachers. A total of 3,250 teachers that had participated in more than 80 PD programmes completed a common survey instrument. The structural features of contact hours and time span were found to have a substantial but indirect effect on the PD outcomes. A longer time span enabled the PD to strengthen the PLC activity, which increased its likelihood of having a positive influence on teacher knowledge and practice. Participants spent time meeting informally with other teachers in related activities such as lesson planning and developing materials. Furthermore, in an examination of the literature on what teachers want in PD by Matherson and Windle (2017), duration is identified as one of their four priorities: “Teachers want professional development learning opportunities that are sustained over time” (p. 31). However, a conflicting position, identified by Quick et al. (2009), is that the amount of time spent in the PD was not a critical feature of its effectiveness.

While most of these PD studies support the importance of sustained PD to provide time for in-depth discussion and the opportunity to implement new practices and receive feedback, there is limited research on exactly how much time is required for it to be effective. As noted by Desimone (2009), “research has not indicated an exact ‘tipping point’ for duration” (p. 184); therefore, it is not currently possible to quantify the number of hours of PD required to achieve an impact on teacher practice. Timperley et al. (2007) found that learning opportunities in the core studies from the *Best Evidence Synthesis* occurred for an extended time so substantive learning could occur. Six months to two years was common, but some extended to five years. In a four-year study by Flowers and Mertens (2003) that involved 3,500 teachers, students, and administrators from 121 middle grade schools, the data collected from a School Improvement Self-Study showed that PD related to other school activities for longer than eight hours improved teaching practice, but shorter unconnected PD did not. Similarly, in a review of the research, Yoon, Duncan, Lee, Scarloss, and Shapley (2007) examined more than 1,300 studies identified as potentially addressing the effect of teacher PD on student achievement. While student achievement is not the focus of the present study, this review worked on the premise that there are links between the PD teachers experience, their learning and practice, and student learning. It is the learning and practice of teachers that is of interest to the present study and teachers reported that anything less than 14 hours of PD had no effect, and a longer duration averaging 49 hours of engagement showed positive and significant effects. Furthermore, both Desimone (2009) who applied recent research to improve the study of PD, and Stewart (2014) in a review of norms of PD as they shift toward

collaborative practices, recommended working as a group for at least a semester or for a minimum of 20 hours contact time.

Longer term PD is gradually becoming more common because an extended timeframe is considered to be needed for substantive learning to occur. This was evident in a two-year longitudinal study by Boyle, Lamprianou, and Boyle (2005) who investigated the influence of PD on teaching practice. Using survey data from 854 primary and secondary teachers in the first year, and 509 in the second from 60 schools across England, it was found that there was an increase in longer term PD. A total of 77% of the sample that participated in longer term PD reported changes in one or more aspects of their teaching and those with no involvement had minimal change to their teaching practice.

2.2.4 Collective Participation

The collective participation of teachers whereby they engage in PD by working together in groups from the same school, department or grade level has been found to generate improved teacher knowledge and skills (Garet et al., 2001). Desimone et al. (2002) also found the influence of PD on instructional practice increased when there was collective participation of teachers, active learning where teachers are not passive but are engaged in reviewing student work and receiving feedback on their practice, and coherent learning linked to other activities that build on prior knowledge. Reform types of PD that focus on high order instructional or assessment practices also had a positive effect.

Collective participation is seen as important due to its contribution to a shared professional culture. Boyle et al. (2005) found the most popular long-term forms of PD for teachers were observation of colleagues and sharing of practice, however, coaching and research inquiry were considered the most effective, which generally involved collective participation. Similarly, Quick et al. (2009) identified teacher collaboration as the area with the greatest alignment between teachers' conceptions of PD and their actual experience of it. Teachers and leaders valued the opportunities for collective participation as they worked together to analyse student data and benefited from the expertise of colleagues when considering how to obtain further improvement. Leaders attributed improvements in teacher practice to the collective collaboration of teachers within and across grades and reported that the times when teachers plan together were often effective, "because the learning is more individualised to the needs of the teachers" (p. 54).

2.2.5 Content Knowledge

Research literature has consistently identified the importance of content knowledge along with instructional practices in PD (Cochran-Smith & Lytle, 1999; Harris & Mujis, 2005) “for without content on which to base deeper understandings and extend teaching skills there is no foundation for change” (Timperley et al., 2007, p. xxxi). Desimone (2009) claims that content “may be the most influential feature” on teacher practice (p. 184). This may be because research has shown a link between a focus on specific teaching strategies, referred to as a “content focus” (Desimone et al., 2002, p. 102), and teachers using those strategies in the classroom. Furthermore, using a nationally representative sample of science teachers, Smith et al. (2007) identified a relatively strong association between reform PD, the majors and degrees that teachers earned, and their participation in content-oriented PD. In a smaller study of 16 Mathematics and Science teachers over the course of an academic year, Yow and Lotter (2016) investigated the role of inquiry PD to assist teachers to become teacher leaders. Content played a role in the growth of these teachers. After attending content sessions with their instructional coaches, and participating in practice teaching then reflection sessions, “teachers gained confidence in their inquiry teaching abilities and found themselves in emerging teacher leadership roles” (Yow & Lotter, 2016, p. 342).

However, there is a level of disagreement in the research regarding the type of content to be included in PD. Some research indicates that a focus on specific content rather than general pedagogical strategies has a larger positive effect on promoting change in teacher practice (Garet et al., 2001). The importance of giving greater priority to the curriculum and content of instruction has been identified by Quick et al. (2009), while Garet et al. (2001) recommended a focus on specific higher-order teaching strategies. A recent programme evaluation, the *Clarion University Project*, which gathered qualitative and quantitative triangulated data from secondary teachers via surveys, interviews and classroom observations highlights the importance of teacher subject knowledge in making changes to classroom practice (Eaton & Carbone, 2008). This study advocates an optimal balance between the three critical areas of pedagogy, research and subject knowledge through a team approach where subject specialists, teacher educators and experienced classroom practitioners work with teachers to transform their practice. In a review of the research on PD by Borko (2004) another similar but slightly different perspective on content is presented. Intensive PD can

help teachers to develop their understandings in three main areas: subject content knowledge, knowledge about instruction and pedagogy, and knowledge about student learning.

PCK is one of the four dimensions of content knowledge identified by Garet et al. (2001). It requires input that is not limited to subject matter and for teachers to enact and reflect individually and collectively on certain instructional strategies. Shulman (1987) describes PCK, which is complex and specific to the context and person, in the following way:

It represents the blending of content and pedagogy into an understanding of how particular topics, problems, or issues are organised, represented, and adapted to the diverse interests and abilities of learners, and presented for instruction. Pedagogical content knowledge is the category most likely to distinguish the understanding of the content specialist from that of the pedagogue. (p. 8)

Based on the theory of Shulman (1986; 1987) on pedagogical knowledge, “the sources of the knowledge base for teaching” (Shulman, 1987, p. 1), Chan and Yung (2015) conducted research with four experienced teachers to examine how PCK is developed through reflection in action during classroom instruction. Teacher subject matter knowledge, pedagogical knowledge, and knowledge of the students’ learning difficulties and the topic assisted the development of on-site PCK. To help teachers retain, consolidate and refine PCK, and nurture the dispositions of teachers to focus on the triggers of PCK, it is recommended that PD focus on PCK. In an article on PCK, Van Driel and Berry (2012) also highlight the importance of PCK in PD. They describe how examples of instructional practice and opportunities in PLCs for teachers to discuss aspects of teaching, learn about a topic and build collective PCK is useful, but individuals also need “to adapt this shared knowledge to complement it with their own situations” (p. 27). In a review of 14 empirical studies on the effect of PLCs on the practices and knowledge of science teachers by Dogan, Pringle, and Mesa (2016), a further delineation of the term PCK into “disciplinary content knowledge (DCK) and pedagogical content knowledge (PCK)” (p. 569) is suggested because increases in these areas may facilitate change in teacher practice.

2.2.6 Active Learning

Occasions to actively engage teachers in their learning through hands-on work that includes meaningful discussions, planning, practice and “the opportunity to observe expert

teachers and to be observed teaching ... [have been found] likely to produce enhanced knowledge and skills” (Garet et al., 2001, p. 935). More recently, in a paper that discusses best practices in PD, Desimone and Garet (2015) indicated, “PD is more successful when it is explicitly linked to classroom lessons” (p. 256). This claim is supported by other research. A two-phase qualitative study by Kwakman (2003) utilised voluntary survey data from 939 secondary teachers across 10 schools to investigate the factors that influence teacher participation in learning at the workplace. From the perspective of teachers, findings reveal that learning is best examined in connection with the daily tasks of teachers; however, the frequency of collaborative activities that include feedback from classroom observations or those that demand more than just discussion is rather low. Additionally, Quick et al. (2009) found active learning appeals to teachers, which is also seen in an examination of the literature of what teachers want from their PD (Matherson & Windle, 2017). The first two priorities identified are, “learning opportunities that are interactive, engaging and relevant for their students” and “learning opportunities that show them a more practical way to deliver content” (p. 30). The desire to learn in this way may be because engagement in learning can assist teachers to remember 90% of what they experience (Tate, 2009).

While there is research to support the importance of active learning in PD and it is valued, it is not necessarily practised to the same extent. In a longitudinal study by Boyle et al. (2005), teachers indicated that observing colleagues and sharing practice were their most popular on-site PD activities; however, a disparity was evident between their value of classroom-based learning and their actual levels of practice. When these two things were compared, clear gaps were apparent. Similar findings were revealed in the research of Pedder, James, and MacBeath (2005). Data from the *Learning How to Learn* project that included 1,018 returned questionnaires from primary and secondary teachers and managers from 32 schools showed teachers valued collaborative classroom-based PD activities that included team teaching, peer observation and feedback; however, their levels of practice for this form of “learning tend to be lower than those for out-of-class learning” (p. 209). Similarly, Kwakman (2003) found that teachers believe learning is best examined in connection with daily tasks but the frequency of collaborative activities, including feedback from classroom observations or those that demand more than just talking or discussion, is rather low.

2.2.7 Coherence

PD that fosters connections within the school and is aligned with larger school and district goals as part of a coherent programme of learning has been found to enhance the knowledge and skills of teachers, and positively influence their practice (Garet et al., 2001). Furthermore, in a quantitative study that used survey results from a sample of 454 teachers and 28 PD providers, Penuel et al. (2007) examined the effects of the features of PD identified by Garet et al. (2001) on teacher knowledge and their influence on the implementation of a Science programme. The six features were modified and extended to reflect the role of context in the learning of teachers and focussed on “the design of the activities within the type” in proximity to classroom practice (Penuel et al., 2007, p. 928). Findings indicated that the coherence of the PD with the goals of teachers, and those of the district, was a strong predictor of implementation. Quick et al. (2009) also recommend some amendments to these features of PD. Active job-embedded learning builds coherence, therefore to clarify its role in PD it is suggested the feature be split into the separate, but related components of relevance for plans, beliefs and goals, and a coherent programme of PD.

In developing an empirically grounded “theory of action for improving the quality of mathematics teaching,” Cobb and Jackson (2011, p. 6) summarised current research findings and collaborated with teachers, and school and district leaders in four districts. One of their findings was that instructional improvement required the coordination of various components for a “Coherent Instructional System” (p. 26).

Research has also identified some other aspects related to the coherence feature of PD. While Penuel et al. (2007) endorse the features of PD identified by Garet et al. (2001) they also highlight the role of context, particularly in relation to coherence. Allowing teachers time to plan within their context was found to be important. When localising PD, they suggest consideration be given to the context of the teachers and the school, the demands of the programme and how they can be met. For PD to be effective, it needs to be tailored so that a “good fit” can be found (Penuel et al., 2007, p. 952). This ‘good fit’ is shaped by the on-site PD activities, the ability of the facilitator to meet the other demands of teachers, and how coherent the learning is for teachers. Support for the findings of Penuel et al. (2007) are seen in the comments of Doecke et al. (2008) who recommended that whether the PD is a system driven initiative or an activity at the local level, it needs to focus on the way in which “it addresses the needs of teachers *within their own professional and school based contexts*”

p. 18). Mitchell and Sackney (2011) also explain, “professional development must be contextually sensitive... Even for ideas that are brought in from outside, time needs to be built in for educators to think about the ideas in relation to their own contexts and to experiment with the ideas.” (p. 45).

2.3 On-site Professional Development

Desimone (2009) contends there is general consensus that it is the aforementioned features of PD identified by Garet et al. (2001) rather than its structure alone that leads to positive outcomes. However, there is some evidence to suggest that the structure does impact on the effect of the PD, both in terms of implementation in the classroom and on teacher efficacy. In a quantitative evaluative study by Bredeson and Scribner (2000) that analysed 299 usable pre and post conference surveys, predominantly from teachers but also from principals and others, it was found that the transfer of knowledge to the classroom was lacking as few participants were confident to disseminate their new knowledge with colleagues back at school. Furthermore, in a large-scale mixed methods study by Bruce, Esmonde, Ross, Dookie, and Beatty (2010) of teachers and students in 46 schools and 15 districts that examined the impact of classroom embedded PD, teacher efficacy was enhanced by collaborative long-term classroom embedded PD. Harrison Berg, Miller, & Souvanna (2011) reviewed the experiences of those involved in the Boston Teacher Leadership Certificate programme that was created by teachers and for teachers and also found benefits when teachers have input into their learning, and when regular contact, support and relationships with others on site are available.

Other research supports the use of on-site PD. Derrington and Kirk (2016) used qualitative methods from interviews with 28 K–12 principals in the third year of a mandated process to explore their views on job-embedded PD. Their findings showed that when PD was implemented on site it can be personalised for teachers, and each of its practices can overlap. This offers certain advantages such as teachers being active learners who demonstrate strategies to others. Other studies have also found that on-site PD can be differentiated to meet the needs of individuals and groups (Doecke et al., 2008; Pedder & Opfer, 2013; Quick et al., 2009).

On-site PD is also coherent, connected with the classroom context and well supported, which is important to teachers as it can meet their immediate instructional needs. Nielsen,

Barry, and Staab (2008) conducted a qualitative study that utilised semi-structured interview data from 41 teachers from five schools engaged in a two-year on-site literacy reform. The conditions that were identified as supporting teachers in their professional growth were: the PD was embedded in the school and classroom context, it was focussed on defined learning goals and there was access to time and resources. A small-scale study by Lloyd, Cochrane, and Beames (2005) that interrogated PD in ICT via surveys from conference attendees showed learning for teachers needs to be timely, just in time and sustained over time. Opportunities for these things, as well as the instant application of learning to build what Klentschy (2005) describes as “practitioner knowledge” (p. 3) for teachers to respond to particular problems of practice are possible in on-site PD.

2.4 Professional Learning Communities

Collaborative PD is currently a high priority for educators, which was seen at the 7th International Summit on the Teaching Profession (2017) where the focus was on more effective approaches to teacher PD, “with a clear recognition that it is collaboration and the power of collective learning which needs to be harnessed” (Stevenson, 2017, p. 315). A body of research has now emerged on the pre-eminence of PLCs as the place where collaborative PD occurs and where learners can be supported within a community (Stoll et al., 2006). An early connection between collaborative learning in PLCs with teaching practice is seen in the research of Seashore Louis and Marks (1998). Using quantitative and qualitative analytic methods in 24 nationally selected schools, it was found that both “professional community and social support for achievement have a positive relationship to student achievement, but the strength of their association with authentic pedagogy accounts for that effect” (p. 532). Organising teachers’ work in PLCs was found to have a constructive influence on their teaching practice. Further research by Bolam, McMahon, Stoll, Thomas, and Wallace (2005) was a large-scale study and the first of its kind in the UK titled *Creating and Sustaining Professional Learning Communities*. Data gathered and analysed over 34-months included survey responses from 393 schools and 16 case studies. The researchers concluded that participants generally responded positively to the notion of a PLC and they were “well worth pursuing as a means of promoting school and system wide capacity building” (p. iii). Growing understandings such as these that demonstrate the potential influence of PLCs on teacher practice have led to an unprecedented call for schools to become one (Vanblaere & Devos, 2016). However, in a review of 11 studies of PLCs that all suggested participation in PLCs leads to changed teacher practice, Vescio, Ross, and Adams (2008) found identifying

these “specific changes was a relatively elusive activity” (p. 83).

The concept of community has its origin in anthropology (Grossman, Wineburg, & Woolworth, 2001) and, in 1916, Dewey proposed that teachers’ reflections on their practice in community settings would bring about benefits to the entire school system (Riveros et al., 2012). Studies of professional communities date back over 70 years (Aiken, 1942) and a fast-growing research base gathered momentum during the 1980s–90s when the term PLC began to be used with the notion of situated learning (Lave & Wenger, 1991). A three-year study by Cochran-Smith and Lytle (1999) that was part of a much larger one, involved university-based teachers and researchers working with student teachers and experienced teachers over 20 years on the relationships of inquiry, knowledge and professional practice across the professional teaching life span. Findings from this research challenged the assumption that PD should be delivered by outside experts and proposed a new direction for teacher learning in the 21st century: “Teachers learn when they generate knowledge of practice by working within the contexts of inquiry communities” (Cochran-Smith & Lytle, 1999, p. 250). This thinking has been influential in subsequent practice, which is becoming a reality through PLCs.

2.4.1 Definition

Although referred to as a community of practice, a teacher learning community, a networked learning community, a learning network, or a learning community (Kennedy, 2016; Nehring & Fitzsimons, 2011; Stoll et al. 2006; Trotman, 2009), ‘PLC’ is the term most used in educational contexts to describe this construct. The function of PLCs has also been interpreted a little differently. They are viewed as a structure/strategy (Hord & Tobia, 2012), a process (Cranston, 2009), or a context for teacher PD (Popp & Goldman, 2016) that is a “means to an end” of improved teacher practice and ultimately student learning (Nehring & Fitzsimons, 2011, p. 527).

Stoll et al. (2006) believe “there is no universal definition of a PLC” (p. 222) and unpack the concept through the three words within its title – Professional Learning Community. Its broad purpose is to promote and sustain the learning of professionals within the school with a collective purpose of improving student learning (Bolam et al., 2005). The definition accepted for the present study is: a PLC is a group of educators who “continuously seek and share learning, and act on their learning” (Hord, 1997, p. 6). The rationale for this

selection is that it is concise, consistent with the continuous nature of PD discussed earlier and has an associated framework that reflects its key dimensions.

2.4.2 Formation of a Professional Learning Community

The notion that a PLC evolves, goes through different stages over time and is fluid rather than fixed is supported in the literature; however, there is increasing agreement that “less is known about the rare transformation from fledgling to mature learning community” (Aubusson, Steele, Dinham, & Brady, 2007, p. 147).

Research has identified difficulties but also stages of maturation that occur throughout the process of becoming a mature PLC. *The Community of Teacher Learners Project* by Grossman et al. (2001) was an intensive three-year study that focused on a single large secondary school where 22 English and History teachers joined with university-based educators to develop an interdisciplinary curriculum through a community of practice. The group experienced stages of growth and three different phases were identified. PLCs begin as a “pseudocommunity” (p. 955) where members behave as if they all agree, which is maintained through “the suppression of conflict” (p. 955). This stage is followed by “cracks in the pseudocommunity” (Grossman et al., 2001, p. 957) through an acknowledgement of conflict, which can lead to multiple factions and alliances. Members can then persist to eventually reach the point where they are prepared to take communal responsibility for colleagues’ growth and development. This conversion through which Grossman et al. (2001) identified as the “beginning, evolving and mature” phases of “community formation” (p. 988) is a process that does not occur if challenges are not successfully addressed. A lack of capacity to establish a community was identified, demonstrating that more than time and resources are required to build a PLC, and ongoing guidance, intervention and support are essential.

The concept of identified stages in the evolution of a PLC is further supported by the findings of McLaughlin and Talbert (2006). A cross-analysis of five years of data from ten primary schools revealed three broad stages of a developmental trajectory of learning through which PLCs move entitled “novice, intermediate and advanced” stages (p. 30). Additionally, in an article reporting on the experiences of a facilitator of a PLC of nine schools over a two-year period, Edwards (2012) identified three phases in the life of the community as it moved from establishing to converging phases, and then to the diverging phase.

Another perspective regarding common stages or phases in the formation of PLCs is that the idea of three stages of development has provided some useful insights; however, they require modification if they are to be of real use to practitioners and researchers (Bolam et al., 2005). Hipp, Huffman, Pankake, and Olivier (2008) also have a view about the formation of PLCs based on a qualitative case study of two schools, one pre-K–8 and a middle school of grades 6–8 that examined the similarities and differences as they evolved as PLCs “and the effects of meaningful collaboration on teacher learning” (p. 175). Various methods were used that included interviews with principals and teachers as part of the Southwest Educational Development Project from 1998 to 2000. After the conclusion of that project, in 2003 approximately 50 further individual and small group interviews with principals, assistant principals, teachers, support staff and parents took place. Staff also completed measures on teacher beliefs about certain aspects of the school environment. The findings show both schools had similar processes and relationships among adults even though they served very different communities. Each school was unique, the cultures developed organically, and for the change to influence learning they needed to focus on the instructional practice of teachers. It was found that many things happened in both schools at similar or different times that influenced the evolution of their PLCs, but their development “seems so complex that to be able to describe discreet steps or stages is unlikely” (p. 194).

Findings from the experiences of Kruse and Seashore Louis (2008), as well as case materials that included notes and interviews over a 5-year period from a district reform where 5,250 students were enrolled in 7 primary and secondary schools, indicate that PLCs are “a long-term proposition” and extended time for their development is essential (p. 115). Little and Horn (2008) endorse this proposition and suggest the process of building PLCs cannot be rushed and effort is essential. Derived from four Australian case studies of learning communities in practice, Dinham (2008) identified some commonalities with respect to building PLCs. In describing the findings, he notes that organisations can act as learning communities at all levels and that PLCs cannot be mandated, or built and operated in a mechanistic sense. PLCs “need to be encouraged, nourished and sustained in the manner of an organic system” (p. 114). Found to be most effective overall in building PLCs was “a combination of external understanding, advice, assistance and recognition (‘top-down’) coupled with a focus on internal solutions, with teacher and group learning to address these through empowerment and with internal action and accountability (‘bottom-up’)” (p. 113).

In a yearlong collaborative research project with 82 schools that participated in 50 action-learning projects, Aubusson et al. (2007) identified certain factors as important in all stages of PLC transformation. Data obtained from teacher surveys and journals, school or cluster project reports, nine case studies, and questionnaires from approximately 160 teacher conference attendees, revealed that dedicated time to converse, a shared pedagogy, an enquiry focus, and shared ownership and leadership can promote community interaction in the development of a PLC. Consistent with other research findings already discussed, it was also found that peer observations were opposed. While teachers acknowledged that to reach maturity as a learning community they needed to open their classrooms to others, a tension was apparent between developing trust incrementally and “taking a leap in the dark” (p. 146).

Research and literature on how effective PLCs should or can develop represent a range of views. After generating a list of 10 characteristics of a ‘learning community’ from research and literature from 1985 to 2007, a small-scale qualitative study in one elementary school over a year with five-sixths of the staff showed that PLCs could begin with a top-down mindset if school leaders take the lead with the reform (Clausen, Aquino, & Wideman, 2009). Kruse and Seashore Louis (2008) also support top-down initiatives to create PLCs and challenge “a deep-seated belief that they emerge organically in schools with effective principal and teacher leadership” (p. 116). Bolam et al. (2005) advocate for monitoring and evaluation processes, and some articles and publications recommend that PLC implementation be undertaken in a certain way. For example, DuFour, DuFour, and Eaker (2009) claim PLCs require a setup of certain underlying structures through the establishment of “four pillars” for their foundation (p. 93). DuFour and DuFour (2012) believe group norms are essential to building collective commitment because they help to determine whether the PLC “functions as a high performing team or becomes simply a loose collection of people” (p. 27). Additionally, Hord and Tobia (2012) modified the characteristics of PLCs to be more specific about the steps involved in their formation and developed a structured protocol for meetings and a map to specify what members do in a PLC. They acknowledge that variations “evolve as the PLC has been introduced and efforts are made to implement the structure/strategy” (p. 39). Grossman et al. (2001), however, see PLC formation a little differently and suggest: “A model of community developed for one population of teachers may not work for others. In community as in clothing, one size does not fit all” (pp. 961–962).

2.4.3 Characteristics of Professional Learning Communities

Research on the characteristics of PLCs has been undertaken for over two decades. In a study by Bryk, Camburn, and Seashore Louis (1999), empirical data from an urban school district was used to examine some proposals about PLCs in a large sample of elementary schools. They claim reflective dialogue, deprivatised practice and peer collaboration/shared work, underpinned by a set of shared norms that focus on student learning and deliberate processes to socialise new professional members to the norms, create “a distinctive workplace for teachers” (p. 754).

The research underpinning the work of Hord (2004) on PLCs was a multiple methods study from 1995 to 2000. After an extensive review of the educational and corporate literature in 1997, Hord developed a conceptualisation of five interrelated dimensions of a PLC. From 1998–2000, as Senior Researcher at Southwest Educational Development Laboratory, she led a federal project, *Creating Communities of Continuous Inquiry and Improvement* in K–12 schools from all demographic and socio-economic areas “to create schools that continuously inquire and seek to foster both student and adult learning” (Hipp et al., 2008, p. 121). In 2004, Hord developed a revised list of six research-based dimensions of PLCs. Key differences between the 1997 and 2004 lists are that ‘supportive conditions’ has been split into the separate areas of structural and organisational, and ‘collective learning’ has had ‘intentional’ and ‘application’ added.

The characteristics of PLCs “serve to explicate the identity of effective PLCs” (Hord, 2004, p. 38). They are well documented and have been emerging, trialled and modified over time. The PLC framework developed by Hord (1997; 2004) has been used by other researchers (Hipp et al., 2008; Wells & Feun, 2008), and the research of Bolam et al. (2005) added three additional characteristics, i.e., mutual trust, respect and support, and openness to networks and beyond-school partnerships, as well as four core processes. In reviewing seven lists of PLC characteristics, dimensions and practices (Bolam et al., 2005; Bryk et al., 1999; Hord, 1997; 2004; Lieberman & Miller, 2011; Newmann & Associates, 1996; Seashore Louis & Kruse, 1995), it appears there are five common interconnected elements that broadly describe what characterises a PLC: collaboration, a shared vision and purpose, reflective dialogue, the deprivatisation of practice, and collective responsibility for student learning (see Table 2.1).

However, PLCs are far more than their definition or characteristics, and it cannot be assumed that when all of the characteristics are present they are effective (Bolam et al., 2005). According to the *Teaching Practices and Pedagogical Innovation* report, Teaching and Learning International Survey (TALIS) (Vieluf, Kaplan, Klieme, & Bayer, 2012), some of the practices that are said to characterise PLCs are used infrequently. Furthermore, the research of Clausen et al. (2009) found that the characteristics of PD in the literature, which intersect with PLCs, do not need to be in place at the outset for it to be successful. An evaluation of teacher PD in an urban school district over two years by Doppelt et al. (2009) revealed that three features were particularly powerful: distributing workshops throughout implementation, engaging teachers in active learning situated in the curriculum, and facilitating a collaborative community of teachers.

PLCs differ in form and context and their practical implications can only be comprehended and worked out within the particular contexts (Bolam et al., 2005). Harris and Jones (2010) suggest it is the role of leaders to “actively build a context for PLCs to work” (p. 179). What also needs to be kept in mind is that PLCs are “a school organisational structure with an intellectually directed culture” (Seashore Louis & Marks, 1998, p. 539). Using the research and practitioner literature, Nehring and Fitzsimons (2011) elaborated on the Hord (1997; 2004) dimensions of PLCs to develop an agreed upon set of characteristics that reflect the adult culture of a school. In adopting these features for a small study of an urban/suburban high school after one year of school-wide PD introducing the PLC as a school-wide custom, findings indicate that their practices are countercultural to mainstream practices. The task must therefore be approached as one of cultural transformation.

Harris and Jones (2010) also identified the cultural dimension of PLCs. The pilot phase of the *Leading Learning for School Effectiveness* project in Wales that commenced with six schools in 2009 is premised upon the following key principles. School improvement works best when it is internally generated and externally supported; there is a central and non-negotiable focus on pedagogical improvement to reduce within-school variation and improve learning outcomes; and the PLC model utilises action enquiry approaches as a driver for change to focus on issues and work across schools and sectors (p. 176). Both the qualitative and quantitative early evidence collected from the pilot schools demonstrated that PLCs could be a catalyst for changing teaching and learning practices within and across schools, supporting a move from individual to collective professionalism that has the capacity to make

a substantial difference to teacher practice. One of the key challenges identified in this project was that the PLCs were met with resistance and suspicion from teachers (Harris & Jones, 2010). The change to working in this way was a cultural one, and the dominant culture could either support or undermine it.

The literature pertaining to the five common characteristics of PLCs identified earlier, and seen in Table 2.1, including collaboration, a shared vision and purpose, reflective dialogue, the deprivatisation of practice, and collective responsibility for student learning, will be considered separately in the next section of this review. It is important to be aware that similar to the features of PD, these characteristics are interactive elements that can influence one another (Hord & Tobia, 2012).

Table 2.1 Characteristics of PLCs

Kruse, Louis & Bryk (1995): Five elements of practice	Newmann & Associates (1996): Five essential characteristics	Hord (1997): Five dimensions	Bryk, Camburn, & Seashore Louis (1999): Three core practices that characterise adult behaviour in a PLC	Hord (2004): Six research-based dimensions	Bolam et al. (2005): Twelve dimensions of a PLC	Lieberman & Miller (2011): Eight essential practices
Shared values	Shared values and norms	Shared values and vision focusing on pupil learning	Reflective dialogue among teachers about instructional practices	Shared beliefs, values and vision	Eight characteristics: Shared values and vision	Meet regularly and take the time to build collegial relationships based on trust and openness
Focus on student learning	A clear and consistent focus on student learning	Supportive and shared leadership	A deprivatisation of practice in which teachers observe each other's practices and joint problem solving is modal	Shared and supportive leadership	Collective responsibility for pupils' learning	Work hard to develop a clear purpose and a collective focus on problems of practice
Collaboration	Reflective dialogue	Supportive conditions	Peer collaboration in which teachers engage in actual shared work	Supportive structural conditions	Collaboration focused on learning	Create routines and rituals that support honest talk and disclosure
Deprivatised practice	De-privatising practice			Supportive relational conditions	Professional learning: individual and collective	Engage in observation, problem solving, mutual support, advice giving, and peer teaching and learning
Reflective dialogue	Collaboration	Collective learning		Intentional collective learning and application of that learning	Reflective professional inquiry	Purposefully organise and focus on activities that will enhance learning for both the adults and students
		Shared personal practice		Peers sharing practice to gain feedback and assistance	Inclusive membership	Use collaborative inquiry to stimulate evidence-informed conversations
					Mutual trust, respect and	

support

Four Processes: Develop a theory of action

Optimising resources and structures

Develop a core set of

Promoting individual and collective professional learning

strategies for connecting their learning to student learning

Evaluating and sustaining a PLC

Leading and managing

an effective PLC

2.4.3.1 Collaboration

Collaboration is the fundamental principle that underpins the process of people working together. Its importance is evident in the findings of a qualitative study of 36 NSW primary and secondary schools between 2010 and 2014 to identify effective practices in ‘High Value Add’ schools (Centre for Education Statistics and Evaluation, 2015). Effective collaboration among staff was found to be “vital to driving whole school improvement” (p. 2). Roberts and Pruitt (2009) in their publication on PLCs also describe collaboration as the vital factor in developing and maintaining them. Without collaboration, PLCs would not exist. Furthermore, in a report by Walter and Briggs (2012) that analysed 35 evidence-based studies on PD, collaboration with peers is listed as one of the seven aspects that make the most difference to teacher skills and learning.

Despite the prominence of collaboration in the literature, Hord and Tobia (2012) view it as “one rib... not the whole umbrella” (p. 23). They suggest it cannot be assumed that people know how to collaborate, which may be why there is a call for greater knowledge of what it actually means in practice. The importance of collaboration has been broadly described and it is acknowledged as a key characteristic of PLCs; however, there is limited research on the role of collaboration in the cultivation and transformation processes of PLCs and their impact on teacher practice (Aubusson et al., 2007; Nehring & Fitzsimons, 2011). Vescio et al. (2008) suggest that what leads to changed teacher practice has been a gap in the empirical research for some time.

In a study by Wayman and Jimerson (2014), qualitative data were collected via focus groups and interviews from 110 participants in three diverse volunteer study group districts and district documentation, to examine what skills teachers need to effectively use data and how they should receive data related PD. Among other findings, much of the PD occurred via some form of collaboration and participants enjoyed learning in groups, but it rarely resulted in common understandings or shared knowledge throughout a school. While collaboration is expected of teachers in PLCs, the value they place on it is not necessarily a given. In a study by Ruys, Van Keer, and Aelterman (2010), collaborative learning in teacher education was examined from survey data from 120 teacher educators and 369 student teachers. The findings show that student teachers do not value collaborative learning as much as other strategies in their learning. Other research found teachers claim to value collaboration but their practice levels for classroom-based collaboration are low (Pedder et al., 2005). Mitchell and Sackney (2011) suggest this joint work, identified by Little (1990) as the strongest form of collaboration in schools, is rare because of their structures and “most schools embrace a culture of isolation” (p. 71). Hargreaves (1994) claims it is

a challenge to shift teachers from “contrived collegiality... a safe administrative simulation of collaboration” (p. 196), to “collaborative cultures” where working relationships are spontaneous, voluntary, development-oriented, pervasive across time and space, and unpredictable (p. 192).

In research on the *Networked Learning Communities* programme, Katz and Earl (2010) used a large-scale teacher survey of 662 schools to examine how the key features of networked learning communities work with regard to changed teacher thinking, practice and student learning within schools and the network. Relationships and collaboration were identified as important in building teacher capacity; however, if these were limited to teachers routinely supporting each other and not challenging the status quo, it might not be particularly influential. It is suggested these features may not be as powerful in changing the way teachers think and act as some others. Because collaboration requires “intensive interaction that engages educators in opening up their beliefs and practices to investigation and debate” (p. 30), relationships of trust and mutual challenge can be influential. Similarly, a research study by Cranston (2009) that used a naturalistic enquiry and thematic analysis to examine 12 principals’ conceptions of PLCs via focus groups and individual interviews over six months, concluded that if PLCs are to become a reality, “principals need to move beyond conceptions of collaboration as comfortable” to become places of risk taking (p. 17).

2.4.3.2 Shared Vision and Purpose

Central to the concept of a PLC is the notion of community where collaboration is essential. In 1994, Hargreaves claimed, “the responsibility for vision building should be a collective, not an individual one” (p. 250). This view is reinforced by the findings of a qualitative case study by Beck, Kosnik and Cleovoulou (2008). In one elementary school engaged in reform, which involved observations for 18 months, individual interviews with the principal and 13 teachers, and two focus groups of teachers, found that collaboration within a shared vision was essential for success so everyone is “pulling in the same direction” (p. 78).

While the need for a shared vision and purpose is widespread in the literature, a paper that examines the attributes of effective PLCs suggests there is a ubiquitous belief in its importance, which raises questions about what is shared and how this is accomplished (Watson, 2014). The Ontario Principals’ Council (2009) also claim there is limited research on how shared values and a vision can be developed to ensure the key word, shared, is apparent in the culture, values and goals of the PLC. Bellibas, Bulut, and Gedik (2017) investigated the capacity of schools to support

PLCs and examined the factors that account for their variation in level of development. Data for the present study were collected from 492 school staff, teachers, principals and assistant principals working at 27 schools. While a shared vision, leadership and personal practice, collective learning and application, and positive relations existed among staff, it was acknowledged that this can be difficult to achieve if the vision is enforced through a top-down approach.

Beck et al. (2008) also believe there is no need for a shared vision to be developed in a strict top-down way; however, Roberts and Pruitt (2009) recommend that leaders implement a more structured approach via a collaborative strategy across a range of scheduled meetings with teachers. Thoonen, Slegers, Oort, Peetsma, and Geijsel (2011) gathered data from a survey of 502 teachers in elementary schools to examine the influence of transformational leadership, organisational conditions, motivational factors and teacher learning on their practice. It was found that producing a shared vision can stimulate teacher motivation and it is important that they are co-constructors of it. This finding may explain the imperative of Hord and Sommers (2009) for school leaders to develop and communicate shared understandings and a vision for the future. An identified risk in whatever process is adopted to develop that vision in leaders may not involve teachers in the vision building process, which can lead to a lack of ownership, responsibility and cohesion between teachers' own goals and those of the school (Thoonen et al., 2011).

2.4.3.3 Professional Dialogue

Seashore Louis and Kruse (1995) highlighted the need for professional dialogue to be focused on students, teachers and learning, including the identification of related issues and problems. Since then, reflective or professional dialogue has continued to be named as an essential characteristic of PLCs.

In a quantitative study by De Neve, Devos, and Tuytens (2015), the interplay between teacher autonomy, the characteristics of PLCs, and teacher self-efficacy was investigated as determinants of differentiated instruction. In total, 746 teachers from 65 primary schools, which included a sample of 227 beginning teachers, completed a questionnaire. Findings indicated that reflective dialogue had a predictive role on changed teacher practice in relation to differentiated instruction. Further evidence of the influence of professional dialogue on teacher practice is seen in a paper that draws upon empirical data from a three-year qualitative project on developing in-depth descriptive case studies in Australian primary schools on the interconnection between PD, student learning, teaching and leading (Edwards-Groves & Hardy, 2013). It was found that

“engaging in professional learning conversations enabled a culture of collaboration as a professional learning practice to emerge... These [conversations] also proved to be a pivotal factor for the changing practices which were occurring in classrooms” (p. 123). Because dialogue in PLCs requires teachers to go beyond reflection, the term professional dialogue will be used in the present study to describe such conversations.

While research acknowledges positive effects of constructive professional dialogue in PLCs, Little (2003) identified the danger of teacher led discussions and problems with locating teacher learning in the context of everyday work. In a multi-level intensive case study analysis of audio- and video-taped transcripts examining the specific interactions and dynamics of secondary teachers from two schools engaged in situated learning in a PLC, the discourse revealed a number of difficulties. Teachers can construct visions of teaching and learning that are structured by their position as teachers and create paradigms that privilege certain voices based on preconceived notions, limiting the solutions they develop. Timperley et al. (2007) also recognised difficulties with professional dialogue; “it is possible for teachers to be given generous amounts of time to collaborate and talk together, only to have the status quo reinforced with change messages misunderstood, misrepresented, or resisted” (p. 201). Additionally, a study by Horn and Little (2010) that involved an analysis of the professional dialogue of two teacher groups within subject departments of the same school found they differed in three ways:

“The degree to which they could rely on a shared language and frame of reference... for interpreting problems of practice; the stage they had reached in the development of a common curriculum reflective of their goals and their views of teaching and learning in their subject area; and the norms and practices of group leadership and initiative on matters of practice”. (p. 212)

One frame of reference that has since been developed to give teachers knowledge, a structure for thinking and a specialised language for talking about teaching is the *Quality Teaching Framework* (NSW DET, 2003). Gore and Bowe (2015) describe this specialised language as “discursive effects” (p. 81) that are critical to the quality of professional dialogue generated because it enables teachers to speak about their work with clarity and direction.

Collaboration is not seen as an end in itself (Katz & Earl, 2010) and research has shown that teachers collaborating through professional dialogue in PLCs can either afford or constrain the learning. In an ethnographic study that utilised data from a year of observations and meetings of teachers at a large diverse urban school, Louie (2016) found that although this group appeared to

be the ideal PLC, tensions and limitations in the conversations were apparent. Navigating the conflicts was an important part of the learning for these teachers. As highlighted in an article that discusses factors influencing the creation of professional collaborative communities in urban school districts, participants can easily “become stalled at the stage of collegial discussions about improving teacher practice” (Smith, Wilson, & Corbett, 2009, p. 20). Research supports this claim. In a descriptive study, Wells and Feun (2008) investigated the level of implementation of PLC principles at six high schools over three years. Surveys that included qualitative and quantitative components were administered. After one year, 32 administrators and teacher leaders that engaged in nine days of PLC training were interviewed. After three years, 33 interviews with either the same people or those who had replaced someone occurred. Findings point to the inherent challenges of implementing PLCs. While collaboration increased, the dialogue remained superficial, particularly in relation to analysing data to improve learning. This length of time may have been because, as Bezzina (2010) found from a case study that used teacher interviews, there are potential difficulties because “individual and group learning is a slow process” and group decisions can take longer than unilateral ones (p. 163).

Collaboration is important in building teacher capacity; however, if it is limited to teachers routinely supporting each other and not challenging the status quo, it may not be particularly influential (Katz & Earl, 2010). Grossman et al. (2001) suggest a critical dimension to the dialogue in PLCs is challenge so that the “fault lines” of difference can be navigated (p. 989). Similarly, Earl and Timperley (2009) state that it is the element of challenge that can shift conversations from “superficial talk to exploring deeper meanings for the purpose of improvement” (p. 124). As teacher learning increases, they can question the practices of their colleagues through critical questioning. This can enable a culture of collaboration and create the conditions for critical and reflexive dialogue, which is a key factor in changing teacher practice (Edwards-Groves & Hardy, 2013). Transitioning professional dialogue from polite congenial conversations, which are superficially focused (Nelson, Deuel, Slavit, & Kennedy, 2010) to open and forthright ones has been identified by Dooner, Mandzuk, and Clifton (2008). In their study of middle years teachers over two years that included data from journal entries, focus groups and individual interviews on the stages of collaboration and realities of PLCs, teachers indicated the “forthright nature of the focus-group discussions essential in realigning individual behaviour to the group’s goals” (p. 572). A phenomenological case study that aimed to understand the experience of teacher inquiry for Professional Development Schools found that PLCs create opportunities for professional dialogue, and make it safe for teachers to ask questions and be uncertain (Snow-Gerono, 2005). Further

evidence of the importance of challenge within professional dialogue is seen in the *Data Informed Practice Improvement Project*. Brodie and Shalem (2011) examined how PLCs supported teachers to externalise and reflect on thinking about their practice and the thinking of learners. A total of 45 to 50 teachers from grades 3–9 were involved in the study over three years, which drew on data from the programme sessions where teachers engaged in ongoing long-term professional dialogue on the design of their lessons and reflections on their teaching with others. Brodie and Shalem (2011) argue that the constructs of challenge, solidarity and accountability can describe the learning that PLCs can support. Challenge and solidarity can be developed through what are described as “accountability conversations” among teachers whereby they “develop accountability to each other and the profession for their practices and their learning” (p. 419).

Based on work with approximately 30 PLCs engaged in professional enquiry, Nelson et al. (2010) suggest professional dialogue has the potential to be powerful because the collaborative work of PLCs can be “expanded or limited by the nature of teachers’ conversations” (p. 175). The type of ‘talk’ matters (Horn & Little, 2010) as it is considered essential to growth in teacher learning and changed practice (Little, 2004). Yet the potential of these deep conversations about teaching practice may not have been fully investigated. In a research study to identify the elements of effective PLCs in the literature that were evident in focus group discussions, Scott, Clarkson, and McDonough (2011) reviewed four lists of effective elements of PLCs. Engaging in reflective dialogue was identified in them all (Bolam et al., 2005; Coburn & Russell, 2008; Darling-Hammond & Richardson, 2009; Johnson, 2009); however, high depth interactions are evident in only one (Coburn & Russell, 2008). However, their findings showed that teachers could engage in high depth interactions “about student learning and pedagogical knowledge” (p. 14). Lomos, Hofman, and Bosker (2011) also found that by analysing the effects of past teaching practice via high depth interactions in PLCs, a focus of professional dialogue can be on making changes for future teaching practice.

The differences in the norms, practices and initiative of group leaders on matters of practice identified by Horn and Little (2010) highlight the need for leader guidance and support with professional dialogue in PLCs as the way in which discussions are facilitated can play an important role in their effective cultivation (Nehring & Fitzsimons, 2011). In a mixed methods case study that developed indicators of knowledge building discourse to investigate their prevalence over the course of a year in three teacher teams at the same school, Popp and Goldman (2016) also found that the way in which discussions are facilitated could make a difference.

In a small research project that involved six primary school teachers in one school via small group and one-on-one interviews, Ambler (2016) found that beyond the formal gatherings associated with PLCs, teachers need to discuss their everyday experiences of teaching and learning as this can assist them to deepen their understandings. Shulman (2000) describes this process of wrestling with new meaning as making the internal learning external to render it as “*community property*” (p. 133). As teacher learning increases, and openness and trust are established, informal professional dialogue can also change and be conducted in a way that nobody feels intimidated because they know they are “working as a team ... in a climate of learning” (Edwards-Groves & Hardy, 2013 p. 124).

2.4.3.4 Deprivatisation of Teaching Practice

PLCs are based on the principle that “teachers can only really learn once they get outside their own classrooms and connect with other teachers” (Hargreaves, 2009, p. 30). Research supports this belief, which may explain why the deprivatisation of teaching practice that “measures the frequency with which teachers observe each other’s classes to critique their colleagues’ teaching to provide meaningful feedback” (Seashore Louis & Marks, 1998, p. 545) has long been an expected practice in PLCs.

In a study by Leithwood, Harris, and Strauss (2010), a large group of schools was selected from *The Turnaround Teams Project* in Ontario, which was based on a pilot from 2001 to 2003 that involved 43 schools, five authorities and over 8,600 students. A three-stage conception of the schools’ turnaround was adopted and in stage one, the deprivatisation of teaching practice was identified as “one of the most powerful conditions for realising initial improvement” (p. 53). Additionally, in quantitative research by Wahlstrom and Seashore Louis (2008), an analysis of 4,165 surveys from K to 12 schools across the U.S. showed that deprivatised practice, where teachers were provided with opportunities to see others teach, is critical in the use of flexible grouping practices. It has been suggested that this might be because teachers had not previously been exposed to how groups can be used to assist instruction. Furthermore, Lieberman and Pointer Mace (2009) examined five different programmes to investigate how teachers learn by sharing their practice, what supports teacher learning, and how they lead in PLCs. This study identified the deprivatisation of teaching practice that includes sharing practice openly, peer observations and feedback, as a key means by which teachers can get out of their classrooms to learn. According to

Leithwood et al. (2010), these practices reflect current understandings of learning as far more than the transmission of knowledge but as a constructed and social activity.

To reach “maturity” as a PLC, teachers need to open up their classrooms to others (Aubusson et al., 2007, p. 146); however, this requires a cultural shift that challenges the autonomy norms of the past (McLaughlin & Talbert, 2001). Despite the support in the literature for the deprivatisation of teaching practice, there appears to be limited understanding about what occurs for teachers in this process. In a descriptive study that used quantitative and qualitative data to document the progress of eight schools from two districts engaged in implementing the concepts of PLCs, Wells and Feun (2013) recognise it is “a challenge for teachers who have not previously experienced that level of collaboration” and they struggle with the expectation to do so (p. 236). While McLaughlin and Talbert (2001) found teachers are more open to sharing classroom practice once they have involvement in it, other research indicates teachers felt so intimidated it was postponed (Aubusson et al., 2007).

According to a TALIS report published by the OECD, Australian teachers have a latent profile of participation in the deprivatisation of teaching practice and, generally, practices that involve a reduction of teacher autonomy are less common than simpler co-operative tasks (Vieluf et al., 2012). This same reluctance was apparent in a recent quantitative study in the U.S. by Lotter, Smiley, Thompson, and Dickenson (2016) on the influence of a PD model on teacher efficacy and implementation of inquiry. 48 teachers were involved in the PD model yet only 38 allowed researchers to record or observe them teaching a lesson. It seems teachers can feel vulnerable due to a range of causes (Dooner et al., 2008) but those “participating in the deprivatisation process feel more vulnerable to other adults ... than ever before” (Leithwood et al., 2010, p. 53). Margolis and Doring (2012) conducted a qualitative research study over two years with six teacher leaders from four districts and gathered data from on-site observations, as well as individual and group interviews. They found both teachers and leaders were keen to visit the classrooms of others but due to insecurity in their own teaching, they were reluctant to be observed teaching themselves. Bandura (1986) who developed social cognitive theory, believes that behind these fears and the unwillingness to try such tasks, “lie judgments of personal inefficacy to exercise control over risky situations” (p. 366). These fearful expectations and avoidance behaviours are “largely co-effects of perceived coping inefficacy” (Bandura, 1986, p. 366).

There are various ways in which the deprivatisation of teaching practice currently occurs in schools and districts. Some examples in the literature are: “classroom walk-throughs” (Kachur, Stout, & Edwards, 2010), “Quality Teaching Rounds” (Gore & Bowe, 2015, p. 78), “Learning Walks and Talks” (Sharratt & Harild, 2015, p. 49) and “Instructional Rounds” (City, Elmore, Fiarman, & Teitel, 2011, p. 100). The instructional rounds process was used in the present study in all of the schools engaged in the reform as a school improvement strategy. It is an adaption of medical rounds and was nurtured through an executive leadership programme by the Connecticut Centre for School Change that sponsored the work. A network of originally eight superintendents, but in 2011 there were 26, form a community of practice that is engaged in instructional rounds to learn “how to foster and sustain improvements in the quality of instruction and in student learning” (p. ix). City et al. (2011) acknowledge instructional rounds “is scary before it’s energizing” (p. 97) and it is based on the following principles:

1. We learn to do the work by doing the work, reflecting on the work, and critiquing the work.
2. Separate the person from the practice.
3. Learning is an individual and a collective activity.
4. Trust enhances individual and collective learning.
5. Learning enhances individual and collective efficacy (pp. 157–166).

Research by Hatch, Hill, and Roegman (2016) investigated how instructional rounds contributed to a focus on instruction and the improvement of classroom practice in schools across a district from 2010 to 2012. Social network surveys were conducted in three of the 11 districts that had been involved in the superintendents’ group since the beginning. Findings from the present study suggest the current instructional rounds approach, as a broad district strategy “needs to be replaced by a view of rounds as one among several different routines that can be used strategically to influence and manage formal and informal networks” (p. 1048).

2.4.3.5 Collective Responsibility for Student Learning

There is general consensus in the literature that members of PLCs take collective responsibility for student learning (Stoll et al., 2006), but according to Scott et al. (2011), this is not always a given. Research has provided certain insights on collective responsibility for student learning and how it can be built.

As seen in the TALIS (Vieluf et al., 2012), where collective responsibility and working together to improve instruction were found to be key drivers in the advancement of teacher

practice, collective responsibility is not a stand-alone feature of PLCs. In a book that reported on the results from cases in four schools, Whalan (2012) presents a complex set of factors that are dynamic and influence the development of collective responsibility for student learning. These are the coherence between the PD and the school's learning goals, teacher commitment to enact those goals and trust amongst teachers. Furthermore, a study by Sharratt and Fullan (2012) asked over 500 educators in four countries to answer three research questions: "why put FACES on data, how do we do so, and what leadership qualities would be necessary to lead a system that did this well?" (p. xiii). Case studies and narratives from participants contributed to this research and a key finding was collective responsibility for student learning, which Sharratt and Fullan (2012) express as, "ownership by all ... shared responsibility and accountability" (p. 194) was a central component of the work in the case study schools. Having a "results orientation" (DuFour et al., 2009, p. 6) that entails the collective analysis of student data to gauge the effects of teaching practices and guide purposeful improvement is considered central to building collective responsibility. As Hattie (2012) explains, PLCs will merely be "lovely meetings that have little effect other than providing a forum for the talkative to wax lyrical" unless teachers are "open to evidence of their impact on students" (p. 62).

In a paper where Brodie (2013) reviewed the literature and shared some insights from the *Data Informed Practice Improvement Project, 2008–2010* (Brodie & Shalem, 2011), it is suggested that a focus on student needs informs teacher needs. Similarly, in a study by Timperley et al. (2009) on an inquiry approach to designing a PD project in 218 primary schools with 2,440 students, it is recommended that if teachers are to change their practice they need to identify their learning needs through those of their students by collectively analysing data, building their PCK to address the needs, then gather and analyse further data to see whether the changed practices have been effective. Wayman and Jimerson (2014) consider an inclusive approach to this work with data to be a central element of effective data use as it enables teachers to provide a range of perspectives. Stoll et al. (2006) also claims the engagement of classroom teachers, specialist teachers and learning support officers in the shared analysis, interpretation and response to data can allow for "collective knowledge creation" (p. 227). Collective work with data is seen as the "foundation of PLCs" (Hord, 2009, p. 42) for, if real change is to be brought about, data collection and interpretation must be central. Such practices have been found to build collective responsibility for student learning, which Nehring and Fitzsimons (2011) describe as the goal of PLCs. Alternately, without "a focus on the relationship between teaching practice and student

outcomes,” Timperley (2008) says PLCs can merely entrench existing practices and assumptions (p. 19).

While collective responsibility for student learning and teachers translating data skills into action are goals of PLCs, there is evidence that educators more broadly struggle to use data to inform their practice and teachers can be reluctant to use it to focus on the improvement of teaching practice. In a national U.S. Study of Education Data Systems and Decision Making from 2006 to 2008, Means, Chen, DeBarger, and Padilla (2010) gathered data from a national survey of districts that involved site visits over two years to 36 schools in 12 districts that actively used data for instructional improvement, and a secondary analysis of teacher survey responses. Its findings indicate, “school staff provided relatively few examples of teachers using data to diagnose areas in which they could improve the way they teach” (p. xiv) and “the greatest perceived area of need among districts is for models of how to connect student data to instructional practice” (p. xiii). The recommendations from the present study for schools are to: “Set clear expectations around the use of student data as the basis for decisions; integrate collaborative exploration of data into existing structures for joint teacher planning and reflection on teaching; provide a safe environment for teacher examination of their students’ performance; support teachers in making the link between data and alternate instructional strategies” (Means et al., 2010, p. xix).

Further to the findings of Means et al. (2010), a synthesis of articles that identifies key themes on how teachers use data suggests some teachers lack understanding, use only cursory data to inform practice and make interpretive errors due to misunderstandings (Mandinach & Jimerson, 2016). To investigate the combination of conditions associated with different instructional responses to data, Farrell and Marsh (2016) conducted a yearlong qualitative comparative case study that examined 245 cases of data use in five middle schools and found that teachers respond to data but there are few instances where this has resulted in transformed instructional practice. Other research by Van Gasse, Vanlommel, Vanhoof, and Van Petegem (2016) involving a qualitative study where 14 teachers from six schools participated in semi-structured interviews showed limited teacher collaboration and PD regarding data use.

Previous research has some advice to offer regarding the challenges in using data to inform teaching practice and building collective responsibility for student learning. First, the PD to up skill teachers in their understandings of data and its use needs to be ongoing, not reduced to episodic events, and a component of all learning activities (Wayman & Jimerson, 2014). Second, it

is essential for teacher learning in PLCs that the development of data skills is connected with other forms of knowledge on best practice and research (Brodie, 2013). As seen in an article that reports on how a conceptual framework for data literacy for teachers evolved, Mandinach and Gummer (2016) recommend that this knowledge includes developing understandings in both general pedagogical knowledge and PCK. Third, as recommended by Timperley and Earl (2009) in their book about professional learning conversations, because evidence informed practice is not simply about looking at the data but is also about engaging in a highly interpretative process, multiple conversations about possibilities for its use are essential.

2.4.4 Challenges of Professional Learning Communities

While PLCs have been characterised by many, Wells and Feun (2013) believe there is limited research on their specificity and efforts to document them show “productive learning is the exception rather than the rule” (Popp & Goldman, 2016, p. 347). There is a growing recognition in the literature that use of the term ‘PLC’ has become widespread but their underlying practices have not. A PLC has been described as an “aerosol” (Pancucci, 2007, p. 62) and “buzz” word (Vanblaere & Devos, 2016, p. 26) that is used ubiquitously (DuFour, 2004; Riveros, Newton, & Burgess, 2012). DuFour and Marzano (2011) also claim, “Many of the schools that proudly claim to be PLCs do none of the things PLCs do” (p. 21) and Fullan, Hill, and Crevola (2006) suggest, “A lot of evidence indicates that PLCs ... are not making their way with any substance or continuity inside the classroom” (p. 56). This may be why PLCs have become what Louie (2016) refers to as a “hot topic” (p. 10). Based on reflections and an examination of field notes taken during a year of training and implementation of a PLC in an elementary school, Pancucci (2007) provided a description of this process. It suggests there is a gap between the theory and the practice of PLCs in terms of the expectations of research and their translation in schools, particularly in relation to collaboration because it cannot be mandated. This may be because, according to Aubusson et al. (2007), the process of developing, implementing and sustaining a PLC is a complex one that has been found to be far more than “giving teachers a project and asking them to share a room” (p. 133). Deep and powerful learning can occur in PLCs but it is claimed, “not all are generative in this way” (Brodie, 2013, p. 15).

There is widespread agreement that PLCs are worth the effort required to create and develop them (DuFour et al., 2009; Hord & Sommers, 2009); however, building them is a delicate and complex process with associated challenges and pitfalls (Hord, 2004). Because overcoming the challenges can lead to professional growth, or prevent it, Aubusson et al. (2007) describes this

as a double-edged sword. There are different perspectives on how a PLC is best developed, however, research has shown that simply declaring schools are to become one and offering little clarity about their purpose or function can lead to problems. Wells and Feun (2008) found there was confusion and vagueness about what constitutes a PLC, even with those that had undergone training. Teachers “complained that there was no compelling vision for what the PLC should include,” and administrators did not completely understand the stresses they felt (p. 56). Similarly, Nehring and Fitzsimons (2011) discovered messages from both school and system leaders regarding the purpose of reforms shifted over time and were insufficiently clear, and there was inconsistent communication about the vision and goals, which resulted in confusion, disinterest and discontent. Additionally, based on the experience of a district decision to introduce PLCs in 20 schools over three years, Thessin and Starr (2011) found that teachers during the first year of PLC time sat together confused and, on occasions, frustrated by the new direction. The following question from Hipp et al. (2008) may touch on a reason for the level of confusion experienced in the implementation of PLCs identified in the research: “Can a team truly function as a team without knowledge of the game to be played?” (p. 194).

Researchers and reviewers of literature on PLCs also suggest “little is known about the potential for establishing enduring effective PLCs” (Stoll et al., 2006, p. 247), what teachers actually do as part of their active involvement in them (Scott et al., 2011), or the nature of the relationships and interactions by which PLCs are forged (Borko, 2004; Dooner et al., 2008; Horn & Little, 2010; Katz & Earl, 2010; Little, 2003). Examples of PLC transformation are considered to be rare and evidence of the difficulties experienced in them has been repeatedly noted (Grossman et al., 2001; McLaughlin & Talbert, 2001, 2006; Stoll & Seashore Louis, 2007). The development of PLCs is seen as central to teacher change; however, their establishment can be problematic and time consuming. McLaughlin and Talbert (2001) believe one of the key reasons for these difficulties is that PLCs “break the rule of professional privacy” (p. 91) so it “is fundamentally a problem of reculturating the profession . . . from individualism to collaboration, from conservatism to innovation” (p. 125). Other identified challenges in building and sustaining PLCs include the external environment and its competing demands, and structural changes across the school including time (Harris & Jones, 2010, pp. 178–179). If PLCs are to be positive, effective and durable, it is necessary to deal with concerns throughout each stage of the change process. Based on three case studies from 12 Professional Development Schools, Doolittle, Sudeck and Rattigan (2008) argue that “time up-front to establish the ground roles, clarify the tasks to be undertaken,

identify supports required for successful implementation and ensure that a shared mission and vision exist” (p. 303) are all necessary for the creation of PLCs.

The role leaders play in PLCs has been found to be paramount (Bolam et al., 2005) and certain forms of leadership are required (Harris & Jones, 2010). Leading a PLC requires strong principal leadership as well as utilising the strengths and potential of others. Developing and managing the “social” and “structural resources” (Bolam et al., 2005, pp. 18–19) is also critical to creating and sustaining PLCs, which is a leadership function. These areas, and the role of system leaders, will be discussed in the next section.

2.5 Leading for Learning

The effective features of PD and the characteristics of PLCs share similarities and are in many ways related. An important and common influence on them both is leadership. As the focus of the present study is about teacher learning and how it influenced their practice, this section is entitled Leading for Learning.

2.6 System Leaders

While collaborative learning requires deliberate systematic co-ordination and support from system and school leaders (Brodie, 2013), sustainable improvement has been found to rarely happen in the absence of external intervention (Leithwood et al., 2010). Hopkins (2012) also believes that in most countries, at the beginning of a change process, central direction is required. While much is known about the role of principals in leading reform to change teaching practice, how system leaders contribute to this is less clear.

In a description of two contrasting case studies to demonstrate pathways to give schools greater autonomy to achieve improved performance, Watterston and Caldwell (2011) found alignment of policies and practices between central, regional/district, schools and classrooms is challenging but it contributes to the success of reforms. This has been recognised for some time (Bredeson & Scribner, 2000); however, research also suggests this need for alignment extends beyond system leaders to governments that introduce the educational reform. A gap in broad organisational understandings is identified in a qualitative research study that explored conceptions of teacher quality of 31 executives of organisations, government officials and teachers (Hagerman Pangan, 2008). Its findings show the majority of conceptions of participants did not match the political context and federal policy describing teacher quality, indicating a void exists not only

between teachers and system leaders but also between the political bodies that can instigate educational reform. To provide what Elmore (2004) describes as, “a connection between the big ideas and the fine grain of practice” (p. 39), there is a need to increase the connections between all levels of the educational system to ensure PD for teachers, particularly those engaged in reform, is understood, owned and applied in practice.

Many school reforms have been found to fail due to a conflict between system mandates and the learning needs of those in the school (McLaughlin & Talbert, 2006). Research shows this lack of alignment exists between principals and system leaders. A study by Pyhältö, Soini, and Pietarinen (2011) that was part of a larger national research project from 2004 to 2009, collected data through mixed methods to analyse chief education officers’ and principals’ perceptions about an ongoing national school reform. It revealed variations between the two groups regarding the degree of emphasis on pedagogy as the core to the reform, and how the change could be brought about. The study concludes that a lack of alignment remains a “challenge for district level reform implementation” and these gaps in understanding can “lead to misunderstandings and destructive frictions in district level development work, which may compromise the reform” (p. 57).

According to McLaughlin and Talbert (2006), system leaders are required to have a sound knowledge of the reform work as their decisions can “frustrate teachers’ growth and productive change, as well as principal’s efforts” (p. 82). Teachers can also become frustrated with school and district policies that do not fit with high quality instructional practices. This was evident in a qualitative study by Nielsen et al. (2008). Data was gathered via semi-structured focus group interviews with 41 primary teachers from five schools engaged in a two-year literacy reform to examine the views of teachers about the change process and the PD that supported the reform. As teacher skill levels increased throughout the PD, which in this case was on-site and embedded in school and classroom contexts, the mismatch between some school and district policies and quality instructional practices became apparent and was seen as a hindrance to their learning. It was recommended that reformers at all levels work with teachers to seek PD that matches their individual and collective learning needs.

The nature and speed of reform can be a source of stress for teachers, particularly when it occurs with little consultation (Leithwood, 2007). In a descriptive and analytical paper that draws on international literature and empirical evidence, Harris (2011) also describes how reforms can fail because change can be expected to occur too rapidly. An OECD report that presents evidence

on what can enhance the effectiveness of teacher-oriented reforms indicates that system leaders need to build consensus on their aims “and actively engage stakeholders, especially teachers, in formulating and implementing policy responses” (OECD, 2011, p. 53). Furthermore, to engender widespread ownership, teachers need to be directly involved in the implementation elements of change for without their active and willing engagement, most reforms will fail (OECD, 2011). An article by Harrison Berg et al.(2011) also highlights the necessity for teacher involvement in decisions about their PD to ensure it is relevant and meets their needs. When teachers are actively involved by contributing to both the content and organisational features of the PD, and see it through to its implementation, a positive result is more likely (Smeed & Jetnikoff, 2016).

Gaining teacher support is regarded as the most important element in raising literacy and numeracy standards in schools (OECD, 2011), but for a long time they “have largely been left out of policy discussions,” (Fink & Stoll, 2005, p. 19) with resistance being the natural response. A consequence of not involving teachers in decisions about their PD identified by Lustick (2011) is that if it is system mandated the PD could reduce their intrinsic motivation to participate. Fullan and Quinn (2016) believe innovations can wane due to a lack of teacher involvement and ownership in shaping the strategy, which can lead to an escalation of resistance and pushback. Without any involvement in the direction of the reform, teachers may feel as if they are what Liu, Hallinger, and Feng (2016) describe as “objects” rather than “agents” (p. 88) of educational reforms.

Research also suggests that the health of the organisation is associated with the extent to which it develops alignment and consistency of purpose throughout its PD practices. This was seen in a four-year quantitative and qualitative study embedded within a larger one by Pritchard and Marshall (2002) who analysed over 400 hours of interview data from teachers and administrators on teacher-led PD in 18 districts across 11 states. When considering the role of organisational conditions at the district level in effective PD, the present study found activities in healthy districts were linked by a unified approach and integrated into a district strategic plan. Based on decades of experiences as educational leaders and/or researchers of leadership, Sheppard, Jean Brown, and Dibbon (2009) also recognise that: “School district leaders must think systemically and strategically and enlist leaders from multiple sources to collaboratively engage in strategic thinking and adaptive learning” (p. 129). According to Hopkins (2012), educational reform requires system leaders to lead policy through their practice and “without attention to

proper implementation and associated capacity building they are unlikely to succeed” (Harris, 2011, p. 626).

Central to achieving alignment appears to be clarity (Hord & Sommers, 2009), consistency and communication from system leaders. Fullan (2013) proposes that communication, not just at the pre-implementation stage but also throughout the process, is essential. System leaders can often be explicit about what needs to change, but not necessarily how (Fullan, 2001). The research of Margolis and Doring (2012) concurs with these propositions. It found there were diffused reform efforts because districts were engaged in multiple initiatives that were sometimes contradictory. Administrators could not provide a focus, or there were too many, and goals were unclear and could be convoluted. Furthermore, Wells and Feun (2013) found a lack of clarity can lead to suspicion and resistance arising amongst teachers because requests do not make initial sense. Priestley et al. (2011) suggest one means by which clarity can be reached is to provide a PD structure that gets people together to discuss ideas and build a shared knowledge.

Considering the need for alignment, clarity, consistency and communication from system leaders, what is of particular interest to the present study is how a top-down reform, which imposed change on schools via system leaders, did so through on-site PLCs that call for a strong bottom-up approach to implementation. In a book chapter about policy and change, Darling-Hammond (2005) reminds us that, “Neither a heavy handed view of top-down reform nor a romantic vision of change is plausible” (p. 366). Similarly, Hopkins (2012) describes how these two approaches to change do not work by themselves; rather, “they have to be in balance-in creative tension” (p. 88), which begs the question of how this balance can be achieved and managed productively. In a case study of two different PD programs in one school, Smeed and Jetnikoff (2016) suggest that teachers can “militate against the success of programs implemented in a top-down way” (p. 119). Furthermore, Brady (2010) believes teachers can see innovations as synonymous with top-down initiatives that are an addition to what they already do.

In a four-year qualitative case study by Sanders (2012) to investigate the effect of district factors on reform sustainability in two districts, it was found district leadership, specifically their reform knowledge, contributed to its sustainability. “Reform flexibility” was also identified as important; if they “are too rigid, they are less likely to be sustained in the face of district changes (Sanders, 2012, p. 859) but if they are too flexible, they may lose their core features and diminish their potential to promote positive change” (p. 866). In an article that draws on theoretical and

empirical literature, and original research to offer a conceptualisation of scale and its implications for reform, Coburn (2003) argues that “definitions of scale must include attention to... a shift in ownership such that a reform can become self generative” (p. 3), and enable leaders to provide flexible strategic direction, which “is essential to improvement at the local level” (Watterston & Caldwell, 2011, p. 650). In a paper presented at an American Educational Research Association annual meeting, Thompson and Wiliam (2007) propose a ‘Tight but Loose’ theory for scaling up school reforms. To keep the learning on track, they suggest system leaders be “tight about the essential elements of the professional learning portion of the intervention” (p. 46) but allow for flexibility that enables “the intervention to adapt to different locales” (p. 46). However, they add, “being tight is what ensures that it will work” (p. 47). This notion is supported by DuFour (2003) who advocates that school autonomy should be encouraged by system leaders within defined parameters that are ‘tight’ on the purpose but ‘loose’ on the individual operation of schools.

System leadership is important in linking teacher learning to reform initiatives. They are required to “manage the bad news that data can bring and model candour in discussing student outcomes and implications for practice at all levels of the system” (McLaughlin & Talbert, 2006, p. 117). In a qualitative multi-site case study on the implementation of data driven decision-making, Park and Datnow (2009) gathered data from approximately 70 interviews and classroom observations across four urban systems. They acknowledge that working with student data is a particularly sensitive area because of its potential to attribute blame; however, an ethos of learning and continuous improvement can be created if leaders at all levels focus on this, rather than blame.

Other research indicates system leaders can have a positive impact on the use of data by school leaders and teachers. In a mixed methods study by Anderson, Leithwood, and Strauss (2010) that was part of a five-year project to investigate leadership at the school, district and state level, it was found that principal and teacher use of data is influenced strongly by district leaders within the context of accountability systems. They do this by setting expectations and monitoring the use of data, modelling its use in decision-making, provision of supplementary tools and resources and development of expertise locally or that they access externally. Hord and Tobia (2012) add that when system leaders are involved in schools with teachers learning about data, modelling what is expected with students in classrooms and having conversations about learning, it can make a positive difference to PLC implementation and development. Furthermore, by being instructional specialists in schools with teachers, Hipp et al. (2008) found system leaders can be viewed as a positive influence rather than a barrier to what is happening. Nevertheless, Pancucci

(2007) believes such collaborative practices where system leaders participate directly in closing the gap between PLC theory and practice call for a change of mind-set and a “transformative shift in power structures” (p. 68). A study by Lee, Seashore Louis, and Anderson (2012) presents a different perspective on the influence of system leaders with regard to the use of data. Through a secondary analysis from a five-year study, structural equation modelling was used with survey data from principals and teachers in nearly 150 schools to investigate how school leaders affect student learning. One of the findings is that districts can have a negative effect on the instructional practices of teachers. Their use of targets, and performance and achievement data in decision-making and school improvement planning, seemingly generates negative pressure on teachers. It is recommended that system leaders “may need to do more than emphasise the use of data to drive decisions” (Lee et al., 2012, p. 136).

2.7 School Leaders

As seen in two reviews of the research on successful school leadership, it has been repeatedly claimed that school leadership matters and makes a difference to the learning that occurs (Leithwood, Harris, & Hopkins, 2008; Leithwood, Seashore Louis, Anderson, & Wahlstrom; 2004). It “is second only to classroom teaching as an influence on pupil learning” (Leithwood, Harris, & Hopkins, 2008, p. 27).

The role leaders play in schools is multi-faceted, particularly so for those engaged in reform. They need to understand the change process, be effective instructional leaders, and have the disposition to build relational trust to establish and manage the culture. As Wells and Feun (2013) found, school leaders in one district were credited with the resulting changes from their PLCs, yet in another they were only credited for all the problems (p. 253). Another dimension to the complexity of the role of school leaders is seen in an article, informed by various scholars and the empirical and theoretical literature about data use, by Cosner (2014). This article draws attention to three areas of importance, one of which is particularly relevant to the present study: school leaders need to be the “buffer and filter between the school and the larger district context” (p. 712).

Research has made a strong contribution over the years to the knowledge base about what effective school leaders, particularly principals, do to influence learning. Some of these studies focus on their impact on student learning. While this is not the focus of the present study, the

quality of the teacher is acknowledged as the greatest influence on student learning (Hattie, 2009) and what leaders do can impact on their teaching practice (Wahlstrom & Seashore Louis, 2008).

To examine the influence of different forms of school leadership, Robinson, Lloyd, and Rowe (2008) conducted a meta-analysis of findings from 22 of 27 studies. The first meta-analysis was a comparison of the effects of instructional and transformational leadership on student learning. It found instructional leadership had 3–4 times the effect on student learning as transformational leadership. The five leadership dimensions identified as influential are listed in order of the greatest to the least effect size. They are: promoting and participating in teacher learning and development; planning, co-ordinating and evaluating teaching and the curriculum; establishing goals and expectations; strategic resourcing; and ensuring an orderly and supportive environment exists. A crucial point highlighted in this analysis is that this list does not include the typical distinction between leading through tasks and leading through relationships and people, as relationship skills are embedded in every dimension of leadership (p. 8). The second meta-analysis that used 12 of the 27 studies focused on a comparison of the previously identified dimensions of leadership that make the greatest difference to learning. Strong averaged effects were found for “involving, promoting and participating in teacher learning and development”, whereas moderate effects were found for “goal setting and planning, coordinating, and evaluating teaching and the curriculum” (p. 635).

The focus of the present study necessitated a change in practice for both leaders and teachers, and Fullan (1982) described conflict as an inevitable part of the change process. He claims collective change involves conflict because “any group of people possess multiple realities” (p. 91) and “all changes worth their salt reveal differences” (Fullan, 2005, p. 71). In a recent book based on research and experience in this area since 1988, Fullan and Quinn (2016) suggest change is not an event but a transition process that leaders are required to manage and the best leaders use the change dynamic to improve their organisation. Dinham (2016) endorses this view and also in a current publication proposes leaders should neither ignore nor suppress conflict but seek a win-win resolution. However, change has been found to trigger uncertainty and can lead to resistance from stakeholders (OECD, 2011). Based on the *Best Evidence Synthesis Iteration* research, Timperley (2008) suggests expectations of change can raise teacher sensitivity; they may interpret it as a reflection on their competence or identity as a professional. In 2001, Fullan suggested programme coherence is about “organisational integration” (p. 64) and more recently proposed that leaders in a culture of change must have the ability to build coherence (Fullan, 2014). The role of leaders in

building coherence throughout the change process is important as effective implementation is considered as “a *process of clarification*” (Fullan, 1982, p. 91).

2.7.1 Instructional Leadership

Strong principal instructional leadership has been found to be vital to school improvement as it influences teaching practice (Wahlstrom & Seashore Louis, 2008). The research of Wells and Feun (2008) also identified the importance of the principal in leading the learning of teachers, particularly in PLCs, “while effectively utilising the strengths of teacher leadership (p. 59).

Due to the role of principals in the culture of the school, which has previously been named as key to changing teacher practice and school improvement, particularly in PLCs, McLaughlin and Talbert (2006) claim they “arguably are the most important players affecting the character and consequence of teachers’ school-site professional communities” (p. 80). Additionally, in a meta-analysis of 69 studies, Marzano, Waters, and McNulty (2005) found that principal leadership had a positive influence on student achievement, and that influence is mediated via teachers’ actions in the classrooms (Dufour & Marzano, 2011). Based on a cross-case analysis of three cases of instructional leadership in different schools and districts, Stein and Nelson (2003) suggest, “principals must not only be capable of providing PD for their teachers, but also have the knowledge, skills and strength of character to hold teachers accountable for integrating what they have learned in PD into their ongoing practice” (p. 425). The importance of the principal being focused on classroom practice has been further highlighted through an examination of the factors responsible for AESOP (An Exceptional Schooling Outcomes Project) that focused on faculties and teams responsible for exceptional student outcomes in NSW public schools (Dinham, 2009). It revealed principals were a key influence in their success and possessed two broad qualities: they were aware of and responsive to people and events around them, and were demanding both of themselves and others. In this study, Dinham (2009) noted that, “The more leaders focus their influence, their learning, and their relationships with teachers on the core business of teaching and learning, the greater their influence on student outcomes” (p. 408).

However, leading the learning requires not simply the existence of a principal but strong principal leadership that effectively utilises the strengths of others. In a book that describes essential leadership dimensions to guide change, Fullan (2014) warns against positioning the principal as the only leader responsible for instructional leadership in the school. Mulford (2008) also raises this as a concern. In a review of issues currently facing leaders, he claims, “there is still

a tendency to equate school leadership with the actions of the principal” but “the task of leading a school is too complex and demanding a job for one person” (p. 43). Robinson (2006) supports this claim in a paper on educational leadership. She suggests a reality check is needed about the current role of principals and warns against advocating approaches without considering the existing demands on them.

It seems that, in some cases, the principal is not the only, or most appropriate, person to be the instructional leader. In a quantitative study of instructional leadership of secondary principals where 651 teachers from 29 schools returned usable questionnaires on principal leadership, the least used instructional leadership behaviour of principals was ensuring quality teaching (Bendikson, Robinson, & Hattie, 2012). As McLaughlin and Talbert (2006) found, not all principals have sufficient knowledge of content and pedagogy to be effective instructional leaders; therefore, it could be a risk if the responsibility for instructional leadership is confined to one person. In a study over two years in one school that used a co-operative inquiry research methodology and mixed methods of data collection, positional and non-positional leaders contributed effectively to leading inquiry in PLCs (Coulson, 2008). It seems that instructional leadership is not necessarily about what Hargreaves and Fink (2006) refer to as “the primacy of the principal” (p. 101). Fullan et al. (2006) advocate for others to work with the principal to lead the learning in schools and a suitable alternative to the principal as ‘the’ instructional leader, suggested by Leithwood et al. (2008), is a shared model whereby other leaders, and teachers, can gain experience and increase their influence by distributing leadership widely. Dinham (2008) also believes that when aligned with teacher learning, distributed leadership has the capacity to foster the phenomenon of the PLC. Harris (2009) suggests there is now increasing consensus in the literature that distributed leadership has a positive influence on teacher practice.

A team of researchers, Knapp, Copland, Honig, Plecki, and Portin (2010), undertook an intensive qualitative mixed methods study with overlapping samples over 1.5 years to investigate leadership in 15 urban schools that were seeking to improve learning and leadership. This team assumed, “instructional leadership is *inherently distributed*” (p. 5). What resulted was that many principals came to a new understanding of what instructional leadership meant for them as Teacher Leaders, who operated between the principal and classrooms, and in so doing developed their leadership in many areas. In other research, Camburn and Han (2009) investigated the association between distributed leadership and teachers’ instructional change. They drew upon extensive evidence from a large-scale study of 31 schools engaged in a literacy reform and 26 comparison

schools. Data was obtained from 981 teacher surveys in 2001–2002 and 1,019 in 2003–2004. Multi-level statistical models were used for analysis. Evidence found fairly widespread adoption of instructional practices advocated by the reform programme, which persisted for some time. The more time teachers spent working with an instructional leader, the more likely they were to use these practices. This finding is consistent with the reform strategy of “supporting instructional change by distributing responsibility for teacher development to teacher leaders” (Camburn & Han, 2009, p. 43). Spillane (2006) proposes leadership, as a distributed practice is a framework for thinking about leadership and a tool for how it is distributed, but it is not an end in itself. It is a means to an end goal of improving teacher effectiveness to improve learning outcomes.

When identifying the dimensions of leadership that make the greatest difference, Robinson et al. (2008) point out that the impact of school leaders depends on what it is that they do. Effective leaders are focussed on teaching and learning, are a strong instructional resource for teachers and “active participants in and leaders of teacher learning and development” (p. 658). The influence of transformational leadership is considered limited and what is required is a greater focus on developing professional knowledge about teaching and learning, as relationships alone are unlikely to change practice (Robinson, 2006).

Robinson (2010) used the available evidence with relevant theoretical analyses to propose a model of leadership capabilities for instructional leadership. She defines it as, “sets of leadership practices that involve the planning, evaluation, coordination, and improvement of teaching and learning” (p. 2). Fullan (2010) contributes to this definition by suggesting, “the only route to success is to be more specific about the instructional practices that are most effective” (p. 1). Bendikson et al. (2012) describe these specific practices as “direct” instructional leadership because they “focus on the quality of teacher practice” (p. 4). Despite this and other research about instructional leadership, Leithwood et al. (2004) suggest the term is “more a slogan than a well-defined set of leadership practices” (p. 6). Furthermore, a recent article about instructional leadership by Farwell (2016) suggests that a clear understanding of what it is, and what it looks like for school leaders, is a gap in the literature.

Other research provides some further insights about instructional leadership. In a study where Brandmo (2016) examined whether instructional and transformational leadership could be traced empirically or not, a sample of 149 new principals responded to a self-report survey. Estimations were obtained by principal component and confirmatory factor analyses. While the

findings indicate the leadership preferences of these school leaders are complex, and the structure of both instructional and transformational leadership could not be replicated, a more complex cross model was identified. A relevant recommendation from the present study is that the PD activities of schools must be grounded in their own specific strengths and challenges. Another study by Vanblaere and Devos (2016) used multilevel analyses of survey data from 495 teachers in 48 primary schools to investigate how transformational and instructional leadership enables the interpersonal PLC characteristics of collective responsibility, deprivatised teaching practice and reflective dialogue. According to teacher perceptions, the transformational leadership of school leaders was found to be significant for collective responsibility, yet instructional leadership was for the deprivatisation of teacher practice. Both forms of leadership were significantly related to reflective dialogue. Additionally, a phenomenological qualitative study by Reitzug, West, and Angel (2008) used grounded methods to examine how 20 principals understand the association between their daily work and improving instructional practice in their schools. Various conceptions of instructional leadership were identified, one of which is “organic instructional leadership” (p. 702). This form of leadership, where instructional improvement is a result of ongoing teacher learning about their practice based on identified needs, “starts with the examination and discussion of whatever issues emerge from the school or societal context as most pressing” (p. 703).

Sharing power and authority is recommended as a condition for promoting learning in the workplace and is described as, “the heart of a positive organisational culture” (Leithwood, Harris & Strauss, 2013, p. 265). In a qualitative study by Park, Oliver, Johnson, Graham, and Oppong (2007), 14 teachers were interviewed to investigate the nature of interaction between them and how it influenced their PD. It recommended that school hierarchy be flattened to adopt a non-hierarchical style to sharing leadership between leaders and teachers. Harris (2009) endorses this notion and suggests “more fluid patterns of interaction” in relationships between leaders and teachers (p. 17) are needed. Unleashing “professional power” is also considered to establish conditions for sustainability (Fullan, 2010, p. 40).

In a paper that examined five different programmes involving PLCs, Lieberman and Pointer Mace (2009) found lasting PD for teachers that influences educational reform needs to happen from within classrooms. This requires leaders to go “public with their teaching” (p. 464). By assuming the mindset of, “leadership is in the learning, not in perfection” (Margolis & Doring, 2012, p. 878), principals can be what Fullan and Quinn (2016) describe as “lead learners” (p. 54),

leading and learning together with teachers in building a shared commitment and making progress “a collective endeavour” (p. 55). In order to do so, genuine collaboration is required from leaders through common goals and accountability to the ideals that are valued, transmitted and made coherent through the common culture. This was evident in a research project by Bezzina and Burford (2010), *Leaders Transforming Learning and Learners*, which began in nine case study schools and was designed to understand the nature of leadership to learning. This research highlights the importance of everyone involved in leading the learning operating from a set of principles that drive the agenda, made explicit through an obvious commitment to the values and ethics underpinning them, resulting in a shared moral purpose. Such collaborative work can also develop teacher leadership, which is a “core imperative for school change ... that contribute[s] to the successful linking of learning and leading” (Bezzina & Burford, 2010, p. 266).

According to Robinson (2013) in a book on educational leadership, the three capabilities required of effective instructional leaders are: “Applying relevant knowledge, solving complex problems and building relational trust” (p. 297). The second capability, solving complex problems, is not a solitary process and requires what Levin (2012) refers to as the “slog work” that gets little attention in educational change literature but “makes the difference in the end” (p. 6). Leithwood et al. (2008) have identified the personal traits that explain a high proportion of variation in leader effectiveness related to school improvement. In challenging circumstances, successful school leaders are open-minded, willing to learn from others, flexible in their thinking within core values, persistent, resilient and optimistic. Effective leaders of learning are also credible and humble, demonstrating what Collins (2005) describes as “a compelling modesty” (p. 6) where “personal humility blends with intense professional will” (p. 1). To manage the complexities of reform, “innovation *resilience*” (Kruse & Seashore Louis, 2008, p. 116) is also required of leaders. Due to their considerable interdependence, the separate capabilities of leaders are considered far less important than their skilful integration (Robinson, 2010).

A further key aspect of instructional leadership is group facilitation skills, particularly in PLCs (Borko, 2004; Brodie, 2013). These skills have been found to be a crucial leadership attribute for the effective cultivation of a PLC (Nehring & Fitzsimons, 2011) and are critical to the group’s success (Smith et al., 2009) as their absence can impact negatively on an initiative, the facilitator needs to guide the collective examination and discussion of evidence to determine the needs of individual and overall practice and have “the skills and knowledge to design appropriate activities for teachers” (Brodie, 2013, p. 15).

2.7.1.1 Teacher Educator Role

An intensive qualitative retrospective and contemporaneous study by Hargreaves and Goodson (2006) used archival, observational data and over 200 interviews of teachers and leaders in eight secondary schools to examine change over a 30-year period. One of its findings is that changes of leaders and leadership are what most directly provoke change in schools, which may explain why the last decade or so has seen an increasing trend in the provision of on-site PD for teachers through the creation of job-embedded leadership roles (Stosich, 2016). Generally, these roles exist for effective teachers to work directly with peers within the school as instructional leaders to structure the learning according to the context (Borko, 2004). A range of titles can be given to these roles. Some are ‘coach’ (Totterdell, Hathaway, & La Velle, 2010); ‘literacy coach’ (Vanderburg & Stephens, 2010); ‘teacher leader’ (Harrison Berg et al., 2011; Ross et al., 2011; Yost et al., 2009); and ‘mentor teacher’ (Cheng & Yeung, 2010; Domitrovich et al., 2009). ‘Teacher Educator’ is the title given to such a role in the present study, which current research describes as teachers who “teach others how to teach” (Becuwe, Tondeur, Roblin, Thys & Castelein, 2016, p. 3).

Research has shown that problems can be encountered in the implementation of these roles and, in some instances they have been overcome. In a case study of a reform initiative, Chrispeels, Andrews, and González (2007) describe the results of work over three years with grade level teams. The teacher leaders that helped to get the teams functioning were met with some resistance as they were seen as “outsiders” coming into the school (p. 800). In addition, in a descriptive case study that used focus groups and semi-structured interviews to investigate the role of facilitators in teacher design teams, it was found that questions arose when the facilitators had a different role to the teachers (Becuwe et al., 2016). To better understand how context can influence the implementation of teacher leader roles, Mangin (2009) conducted an exploratory study in 20 districts during the first of a three-year study using semi-structured interviews. It concluded that the implementation of literacy coaches is a fundamental change to the way teachers work. The challenge should not be underestimated and, without effort, new educational initiatives cannot be inserted into existing contexts. Additionally, Pancucci (2007) found that when teacher leaders were appointed to leadership positions resistors used “their interpersonal capacity to subvert change” (p. 67). However, in the second phase of *The Turnaround Teams Project*, Leithwood et al. (2010) saw the initial rigidity of teachers diminish and replaced with increased confidence. Vanderburg and Stephens (2010) also identified some positive effects of literacy coaches. In a study that used interview data from 35 teachers engaged in a statewide literacy reform, teachers

valued the support of their coaches who worked with them in their schools for three years. The coaches did not evaluate teachers but facilitated their growth by being supportive, encouraging, accessible, demonstrating teaching practices and helping with various tasks.

Research and literature present a range of insights and recommendations on how these on-site roles can be effective. To be credible instructional leaders, Sharratt and Fullan (2012) found that “know-ability,” a “knowledge and understanding of best practice,” (p. 40) is essential. In a paper that presents a design initiative for a hybrid Master’s degree, Totterdell et al. (2010) describe such coaches as expert teachers who need to make their thinking and practice explicit to teachers. An evaluation study by Taylor, Yates, Meyer, and Kinsella (2010) investigated the effect of a PD initiative for subject specialists to work in teacher leader roles. Data from semi-structured interviews with 22 teacher leaders and six regional advisory support personnel, as well as pre and post surveys from 171 teachers, were analysed. Findings from the present study show support for the opportunity for teachers to fulfil these teacher leader roles as it enhanced their skills, and teachers described them as “a credible reform savvy source of PD” (Taylor et al., 2010, p. 93). Similarly, in the research of Nielsen et al. (2008), the literacy coaches were “found to be profoundly effective ... through their encouragement, support, modelling, observations and feedback” (p. 1299).

However, other research by Becuwe et al. (2016) indicated these leaders provided limited support and expertise to teachers in designing the curriculum, which led to teachers feeling they did not need it. A further learning came from a three-year randomised control study by Campbell and Malkus (2011) that broadly addressed the impact of mathematics coaches in 36 schools in five districts. It found that as the coaches became experienced, and leaders and teachers learned and worked together, a positive effect was seen; however, coaches had limited time to coach teachers because their role also included assessment, teaching, managing materials and attending meetings.

Yost et al. (2009) offer a number of recommendations about on-site PD for teachers via job-embedded roles from a site-based teacher leader project. They suggest there is a need for a collaborative, stress free environment and encourage other school leaders to let the teacher leaders “do their jobs with undue interference” (p. 431). They also named the importance of adequate preparation for the role of teacher leader. Harrison Berg et al. (2011) support this recommendation and suggest, “effective teachers are not necessarily effective in formal teacher leadership roles”, and thus require training to strengthen their knowledge and skills before undertaking the position

(p. 33). Yost et al. (2009) also identified that an important feature of the role of teacher leaders was the work they did with teachers on data analysis to develop PD and instructional practices. The research of Brown and Zhang (2016) supports this view. In their quantitative study, survey data was analysed from 696 practitioners in 79 schools to apply a model of rational behaviour to the notion of evidence in practice. Findings suggest if school leaders wish to increase evidence in practice, they need to actively encourage its use, demonstrate how research and evidence can enhance instructional practice, and establish a learning environment where conversations on its use are able to flourish. Furthermore, in a year-long study by Farrell and Marsh (2016) that used qualitative comparative analysis to investigate 245 cases of data use by teachers in five schools, findings revealed, “the important influence of certain types of data, the involvement of a coach or peer group, and the school culture can have on teachers’ instructional practices” (p. 1).

2.7.2 Developing Human and Social Resources

Bolam et al. (2005) found that developing “human and social resources” is a vital element of creating and sustaining PLCs (p. 18) and there are two aspects within it; building relational trust and teacher self-efficacy.

2.7.2.1 Building Relational Trust

School reform requires a foundation of trust (Bullough, 2007) and a strong commitment to building this trust is considered essential to every reform context (OECD, 2011). Katz and Earl (2010) claim trust is a vital condition of productive relationships and Yost et al. (2009) identified it as essential between teacher leaders and the teachers with whom they work. In a national report on teacher development in the United States and abroad, Wei, Darling-Hammond, Andree, Richardson, and Orphanos (2009) suggest, “collective work in trusting environments provides a basis for inquiry and reflection into teachers’ own practice, allowing teachers to take risks, solve problems and attend to dilemmas in their practice” (p. 7).

For some time, the importance of trust has been recognised in research. The following example is from the business domain; however, it is of relevance to the present study as it is about the implications of the level of trust people have in their leaders. In a paper that presents an experiment based on a model of trust, Zand (1972) found leaders in high trust conditions had more influence on members of the group than those in low trust conditions. This research also showed, “There were highly significant differences in effectiveness between the high-trust groups and the low-trust groups in the clarification of goals, the reality of information exchanged, the scope of

search for solutions, and the commitment of managers to implement solutions” (p. 229). Further research from an educational context by Bryk and Schneider (2002) investigated how relational trust in schools can influence reform efforts. This research was a 10-year longitudinal case study with statistical analyses in 400 elementary schools. It included a four-year field study in 12 schools to observe meetings, events and classroom practice; conduct focus groups and interviews; and speak to teachers about their reform efforts. Additionally, over six years of surveys from teachers, principals and students were analysed along with trends in the reading and mathematics achievement of students. A theory of relational trust that resulted from reflections on the data from this study claims there is a dynamic interplay between the following four aspects of relational trust: “respect, competence, personal regard for others, and integrity” (p. 23). A deficiency in one of these can undermine trust and the relationship. Robinson (2007) adds that as judgments about trustworthiness are made on the basis of trust, the interpersonal characteristics of leaders that help build trust are important.

Some large-scale research suggests building relational trust is central to the work of influencing teacher practice. A quantitative study by Liu et al. (2016) used confirmatory factor analysis and structural equation modelling to analyse data collected from 1,259 teacher surveys in 41 schools to examine the influence of the effects of teacher trust and teacher agency on PD. Relational trust was identified as the mechanism that links leadership and teacher learning. Additionally, in identifying the “actions that principals can take to encourage teacher use of data,” as well as regularly designing and implementing activities that involve its examination, Means et al. (2010) recommend the importance of “the establishment of an organisational climate of trust and mutual respect” (p. xvii). Furthermore, Timperley (2011b) conducted an empirical study based on the extent to which the dimensions of instructional leadership identified by Robinson et al. (2008) were evident in the practices of five principals where the gains in student achievement were three times the expected rate. A deep knowledge of teaching and learning was apparent in the activities of these principals, which formed the basis of “learning relationships” with staff that were based on mutual respect and personal regard (Timperley, 2011b, p. 166).

Other research has recognised the necessity of positive relationships in schools as they can make a difference to teacher practice (Harrison Berg et al., 2011). Liu et al. (2016) found, “when teachers perceive a climate of trust in the school they may feel it is safer and more productive to exercise initiative (i.e. agency) with respect to their professional learning” (p. 87). A different study by Lee et al. (2011) used an exploratory factor analysis with data from 480 teachers in 33

schools to investigate the relationship between a PLC, faculty trust and the collective efficacy of teachers to influence their commitment to students. Among other findings, trust in colleagues positively accounted for the school variation of the commitment of teachers to students and a trusting school culture and strong collegial relationships can lead to teachers feeling “interdependent in community” (p. 827) and not professionally isolated. In addition, through a naturalistic inquiry approach study of 12 principals, Cranston (2011) examined the relationships and presence of relational trust between teachers, and with the principal, from their daily interaction in schools. It was concluded that nurturing trust requires “an increased focus on and visibility of the adult social relationships in schools” (p. 70) that have to be built, sustained and active. Anderson and Cawsey (2008) suggest it is the role of leaders to develop these relationships and a positive learning culture; however, as Cranston (2011) discovered, nurturing trust “takes time, commitment and effective communication” (p. 70).

Bryk et al. (1999) believe a base level of trust is necessary for a PLC to emerge and by working together it can be expanded and strengthened. Trust is, as Cranston (2011) describes, the glue that binds PLCs together. In a review of the learning community concept, Clausen et al. (2009) identified one of its essential characteristics as, “a culture of trust and respect exists among stakeholders” (p. 445). This characteristic may be necessary because social trust is seen as a vital condition of the relationships that support collaboration, professional dialogue and the deprivatisation of practice, which Bryk et al. (1999) identified as central to the work of PLCs.

Research has also shown that on-site PD including learning with colleagues in each other’s classrooms is perceived as “high risk” and the challenges are considerable (Pedder et al., 2005, p. 236). Similarly, Margolis and Doring (2012) found a lack of trust made teachers uncomfortable with classroom visits and cultural barriers such as fear, distrust and privacy pervaded. Yendol-Hoppey, Dana, and Hirsh (2010) claim that, as PLCs become the norm, resistance can diminish and Pedder et al. (2005) believe teachers need to develop resilience and self-confidence to take the risks associated with on-site PD. However, according to Leithwood et al. (2010), being able to do this is dependent upon the establishment of trusting relations between teachers and leaders. Both trust and mutual challenge are considered essential to productive, professional relationships (Katz & Earl, 2010) and Robinson (2013) believes building trust requires leaders to manage “perceived breaches of trust” (p. 309). Research provides some advice on how to create the conditions that enable trust. In a mixed methods quantitative multiple case study with 14 teachers from two schools, Snyder (2010) examined the conditions that foster and support productive collaboration

that is student focussed and promotes teacher engagement and learning. Supportive leadership, seen in the interpersonal skills and approach to relationship building of leaders, was found to foster trust in collaborative work. Similarly, in a randomised controlled trial with 84 teachers from 44 classrooms, Domitrovich et al. (2009) found the interpersonal skills of the mentor, and being available and present to teachers, enhanced their relationships with teachers, which was important to an effective mentoring program.

Exploring dissent is considered vital to fostering a PLC and conflict can be experienced because changing teacher practice “is as much about the emotions as it is about knowledge and skills” (Timperely, 2008, pp. 15–16). PLCs name mutual trust as one of their characteristics yet, as Watson (2014) highlights, conflict is not mentioned. In a case study within two middle schools that incorporated ethnographic methods, Achinstein (2002) collected data via interviews, observations, document analysis and a teacher survey to examine conflict in two PLCs. Findings show that community building generates conflict from a number of sources and the way it is addressed helps delineate the boundaries of the PLC. Dooner et al. (2008) has also identified the essential nature of conflict and the importance of “taking the time to gradually stimulate cognitive conflict” (p. 572).

2.7.2.2 Teacher Self-Efficacy

Educational reform depends on teacher efficacy due to its link with school-wide capacity for promoting student learning (Lee et al., 2011) and research has consistently identified its importance. Thoonen et al. (2011) found, “teachers’ sense of self-efficacy appears to be the most important motivational factor for explaining teacher learning and teaching practices” (p. 517). The research of Bruce et al. (2010) indicates improvements in teacher efficacy are reciprocal with changed actions. While teacher efficacy alone has minimal impact, it can operate indirectly by influencing teacher goal setting and persistence to use challenging strategies in their teaching. Leithwood et al. (2010) support this view and propose PD focuses as much on teacher efficacy as improving capacity because “continuous improvement depends on persistent instructional problem solving of its teachers” (p. 59) and efficacy can lead to such persistence. This continuous improvement, where it has been found that not all teachers learn the same things or modify their practice in exactly the same ways (Gallo-Fox & Scantlebury, 2016), can be for those with many years of experience (Holzberger, Philipp, & Kunter, 2013) as well as new and middle level teachers (Yost et al., 2009). Correspondingly, Liu et al. (2016) identified the connection between teacher self-efficacy, autonomy and engagement in PD. The more teachers engage in professional learning

to improve their practice, the better the quality of instruction (Thoonen et al., 2011) and PD in an environment that supports implementation can increase teacher self-efficacy (Lotter et al., 2016).

Two other studies provide further insights into the influence of teacher efficacy on teacher practice. In a quantitative non-experimental study with 129 teachers by Washington (2016), a hierarchical multiple regression analysis was used to examine the degree to which content-focused, active based-learning in PD and teacher self-efficacy can predict student performance. Its findings show that teachers' self-efficacy is linked to their instructional practices and how they view the students, which "can be influenced by the poverty level as well as the historically poor academic achievement levels of the students and the school as a whole" (Washington, 2016, p. 74). Furthermore, a quantitative longitudinal study by Holzberger et al. (2013) where data were gathered from 155 secondary teachers and 3,483 students at two measurement points in 2003–2004, explored the reciprocal effects of the self-efficacy of teachers and their instructional quality. A positive relationship between the two was confirmed and the importance of studying teacher "self-efficacy not only as a cause but also as a consequence of educational processes" (p. 774) was named.

Bandura (1997) identified the main sources of teacher efficacy as mastery and vicarious experiences, the physiological and emotional state of teachers regarding their confidence and feelings of success, and the social and verbal persuasion they receive from positive feedback. Teachers can feel positive about their work when they are involved in quality PD (Leithwood, 2007) and research suggests PLC practices can offer a relevant source for teachers to modify their beliefs about self-efficacy. Thoonen et al. (2011) found that internalising school goals into personal goals influences teacher motivation and commitment. To examine the link between organisational practices and behaviours of schools with teachers' physiological sources of efficacy, Kennedy and Smith (2013) used a quantitative approach to their comparative analysis of survey data from 661 teachers in 42 schools. Findings indicate that the use of data that centres on teacher learning and invites reflection can result in more efficacious teachers. As Bruce et al. (2010) found, collaborative learning can benefit teachers because it allows them to engage in vicarious learning through observing peers, which can improve their efficacy. The subsequent sharing sessions provide opportunities for teachers to speak frankly and recognise they experienced success due to their instructional choices that resulted in mastery experiences. Those teachers involved in the deprivatisation of their practice regularly have been found to have high self-efficacy but "it remains open in which direction this effect operates" (Vieluf et al. 2012, p. 119). Other aspects of

what occurs in PLCs such as co-planning, co-teaching, opportunities to receive feedback and sharing their experiences with others are also practices that can contribute to teachers' feelings of confidence and success (Bruce et al., 2010), which Bandura (1997) identified as important to self-efficacy.

2.7.3 Managing Organisational and Structural Resources

Organisational conditions are important in reform and Leithwood et al. (2013) believe “there are few examples of school turnaround without some fundamental change in organisational behaviour” (p. 265). At the school level, organisational conditions have been shown to influence what happens in classrooms through the mediation of teacher learning, particularly that which has a clear basis in classroom activity (Pedder, 2006). If learning in the workplace is to be effective, it requires an adequate infrastructure to stimulate and allow it to take place and conditions must be built into the context and culture of the school (Kwakman, 2003). Optimising time and resources is considered to be one of the vital structural preconditions (Cranston, 2009) and key operational processes that support and sustain the work of PLCs (Bolam et al., 2005).

Based on school leadership research in three large urban school districts where 800 principals, 1,100 assistant principals and 32,00 teachers completed surveys, plus 250 days of classroom observations, Horng and Loeb (2010) claim organisational management for instructional improvement is of greater significance than the time principals spend on instructional activities, such as observing and coaching teachers. Yet in the literature, it is more consistently suggested, “structure is not enough” (Fullan, 2005, p. 69). While changing structures has been identified as an important leadership function, it is not considered to have a greater influence than working directly with teachers (Timperley et al., 2007). Grossman et al. (2001) describes them as the “necessary but insufficient ingredients for building community ... [as] structural arrangements alone cannot teach people how to interact differently” (p. 990). Sparks (2005) also proposes that structural changes are necessary but on their own are insufficient to bring about meaningful change. Similarly, Leithwood et al. (2013) believe structures create the conditions for collaboration but it is what leaders do within those conditions that make the difference.

When moving to a collaborative approach to teacher learning, Sheppard et al. (2009) recommend the first step is to replace inhibiting structures with facilitating ones. Hattie (2012) elaborates on this point saying, “schools must create the structures and culture that foster effective educator collaboration” (p. 62); however, different contexts and specific situations can lead to

different organisational responses for school improvement. This was apparent in a case study by Jacobson, Johnson, Ylimaki, and Giles (2005) who examined seven challenging schools and the practices of principals in leading their improvement. The principle of learning centred the schools and one of their shared characteristics was redesigning the organisation, which required leaders to reshape the school's culture and structure. In challenging conditions, each context required a context specific response.

While it is generally agreed that structural conditions can facilitate learning, but not independently, Wayman and Jimerson (2014) found few structures ensured consistent collaboration amongst teachers. This finding led them to suggest data related PD requires leaders to establish “specific structures to ensure that knowledge is shared and preserved through a variety of collaborative learning opportunities” (p. 32). Furthermore, Harris (2009) proposes, “structures can be inflexible and their cultures resistant” to different ways of operating so structural barriers to improvement need to be removed (p. 7). Clausen et al. (2009) suggests leaders need to be flexible and seek input from others to identify what is needed if they are to do what Leithwood et al. (2013) recommend, and “create the organisational conditions ... where a different way of working is not only possible but absolutely required” (p. 265). DuFour and Eaker (2009) support the view that collaboration is required and claim, “collaboration by invitation does not work” (p. 82). Conversely, Timperley (2008) found, “both voluntary and mandatory teacher participation have co-occurred with positive and negative outcomes” (p. 16).

2.7.3.1 Time

Time is a resource that can enable or hinder collaboration in schools and a key limitation to engaging in PD is said to be a lack of time. Coulson (2008) identified the challenge of managing the competing demands on time in schools, particularly during times of continual change, and suggest that engagement in such things as collaborative inquiry is “not another add-on for teachers” (p. 224). Leithwood et al. (2004) also point out that those who “decentralize more decision making to the schools, increase the hours that teachers work” (p. 57). A quantitative study by Bellibas et al. (2017) that used data from 492 school staff members (principals, teachers and assistant principals) at 27 schools found a culture of collaboration was present; however, a lack of material and human resources to support them as effective learning communities jeopardised their progress. Additionally, based on evidence from structured interviews with eight teachers involved in a collaborative project between three different schools and their institute of education, Cheng and Yeung (2010) found teachers requested a reduction in their workload because of time. There are

three aspects of time identified in the literature that leaders are required to manage: its allocation and use to support the learning, how much time is required for teacher change, and sustainability over time.

Having the time for teachers to collaborate with colleagues is considered to be one of the most important aspects of effective PD (Quick et al., 2009) and a prerequisite for effective learning (Darling-Hammond & Richardson, 2009). Priestley et al. (2011) found that time for teachers to analyse data, plan and discuss pedagogy is appreciated and seen as vital to teacher learning. Similarly, Clausen et al. (2009) identified that leaders scheduling time for such practices showed teachers the value leaders place on this work. Time has also been found as important to leaders but in a different sense. Becuwe et al. (2016) suggests they need to delicately balance the time given to teachers to provide them with the required support so their learning is relevant and just in time.

Teachers' interpretations of time are central to learning and school change. They have been identified as one of the greatest constraints to school reform and are an important aspect of effective PD due to the need to provide teachers time to plan and collaborate (Penuel et al., 2007). A qualitative study by Collinson and Cook (2000) that was part of a five-year project conducted in three middle schools and involved voluntary interviews and surveys with 10 teachers, investigated forces that foster or inhibit learning. The issue of time was so prominent that it warranted separate consideration. Teachers' interpretations of time were found to be one of the greatest constraints to school reform. Consistent with this finding, in a small qualitative case study by Brady (2010) that drew on experiences of a project between a high school English staff and a university department, evidence from teacher involvement, interviews, document analysis and classroom observations, and semi-structured interviews showed lack of time was an issue "that can be seen as a monologic force" (p. 345).

The research of Nielsen et al. (2008) found that because teachers are often given more to do in a day than they can achieve, the increased use of data is considered onerous for them. Similarly, Wells and Feun (2013) detected frustration and resistance from teachers when they were required to analyse student data as teams in order to improve it, which was partly due to the demands on their time. Likewise, a finding by Means et al. (2010) is that "school staffs' perceptions of barriers to greater use of data include a sense of lack of time" (p. xvii). They recommend that "support time within the work week for teachers to meet with colleagues for planning, informal professional development, and data use" (p. xix) be provided.

Time must be given to teachers to work collaboratively in PLCs but we are cautioned, as time can be hijacked if it is not focused and aligned with district and school goals (Doolittle et al., 2008). Timperley et al. (2007) found teachers can “be given generous amounts of time to collaborate and talk together, only to have the status quo reinforced with change messages misunderstood, misrepresented, or resisted” (p. 201). Furthermore, Harris (2008) claims, “teachers who do not want to work together often find the barriers of time, competing tasks and physical geography difficult to overcome” (p. 137).

According to Lindberg (1995), changed beliefs usually follow changed behaviours and the length of time teachers may need to do this is raised in the research (Bezzina, 2010). Wells and Feun (2008) investigated the level of implementation of PLC principles over three years and found teachers had changed behaviours in that they were meeting together regularly, but no other substantive change had occurred and resisters were creating significant frustration. Furthermore, the elements described as central to PLC work were those most resisted, i.e. intentionality of purpose, collaboration, results driven process, action plans, shared practice and collective enquiry.

Part of the resistance was defined by the construct of time and the need for continued learning, both guided and teacher generated. These findings raise the question of, ‘how much time is really necessary to implement PLCs?’ Similarly, in a four-year longitudinal case study that used qualitative data from more than 300 interviews and observations to investigate the sustainability of reform models in 13 elementary schools, Datnow (2005) found that after three years reform efforts had ended in six schools, two had implemented them at very low levels, and only five had implemented them at moderate to high levels. Considering that meaningful learning for teachers is described as a slow and uncertain process (Borko, 2004), and time is needed for them to integrate theory with practice (Jaquith, Mindich, Wei, & Darling-Hammond, 2010), it is suggested that changing teacher practice requires some time (Yendol-Hoppey et al., 2010). Timperley (2008) found it “takes one to two years for teachers to understand how existing beliefs and practice are different from those being promoted” and “build the required pedagogical content knowledge to change practice” (p. 15).

Hargreaves (2005) identified one of the difficulties of educational change as it being poorly resourced or withdrawn after “the first flush of innovation” (p. 1) and Smith et al. (2009) believe opportunities for collaborative learning can diminish after the funded initiative ends. According to

Wenger (1998), sustainable improvement is when there is outbound knowledge, i.e. the knowledge required to preserve successes of the past, maintain improvement and leave a legacy when one has gone. As Datnow (2005) found, “reform sustainability does not come easily; it takes extensive time and effort” (p. 148) and their ability to adapt to the needs of the local context affects their longevity. In schools that sustain reforms, key stakeholders demonstrate commitment to them, which is evident in their culture and structure (Datnow, 2005). Their practices are indicative of their level of commitment to continuous improvement as they become, “the way we do things around here” (DuFour & Fullan, 2013, p. 64).

2.8 Research Sub-questions

Four research sub-questions emerged from this critical analysis and examination of the academic literature pertinent to the major research question. They are:

- Did the exercise of leadership in the school and system influence teacher practice and, if so, how?
- Did the experience of a PLC influence teacher practice and, if so, how?
- What was the particular contribution of the TE to teacher practice?
- Did the nature of the on-site PD influence teacher practice and, if so, how?

2.9 Conceptual Framework

The conceptual framework diagrammatically represents the three interrelated themes that are relevant to the major research question (Figure 2.1). The design of this framework indicates that these themes, as evident in the scholarly literature, can contribute to improved teacher practice. The overlapping representation of each of these themes reflects their interrelatedness and the common element linking them is their shared purpose, i.e. to improve teacher practice. The contextual variables to these themes are the mission of Catholic Education that strives for excellence and equity, the reform agenda and system accountability. A high degree of reciprocity and influence between these three themes is reflected in the overlapping circles in the framework. On-site PD is represented as a form of PD within the broader theme, as it is the area of interest for the present study. Similarly, the TE role is depicted as one form of leadership within the Leading for Learning theme, but has applications more broadly and therefore is not confined to this theme. This role is embedded within the other themes as well, hence overlapping with PLCs and PD.

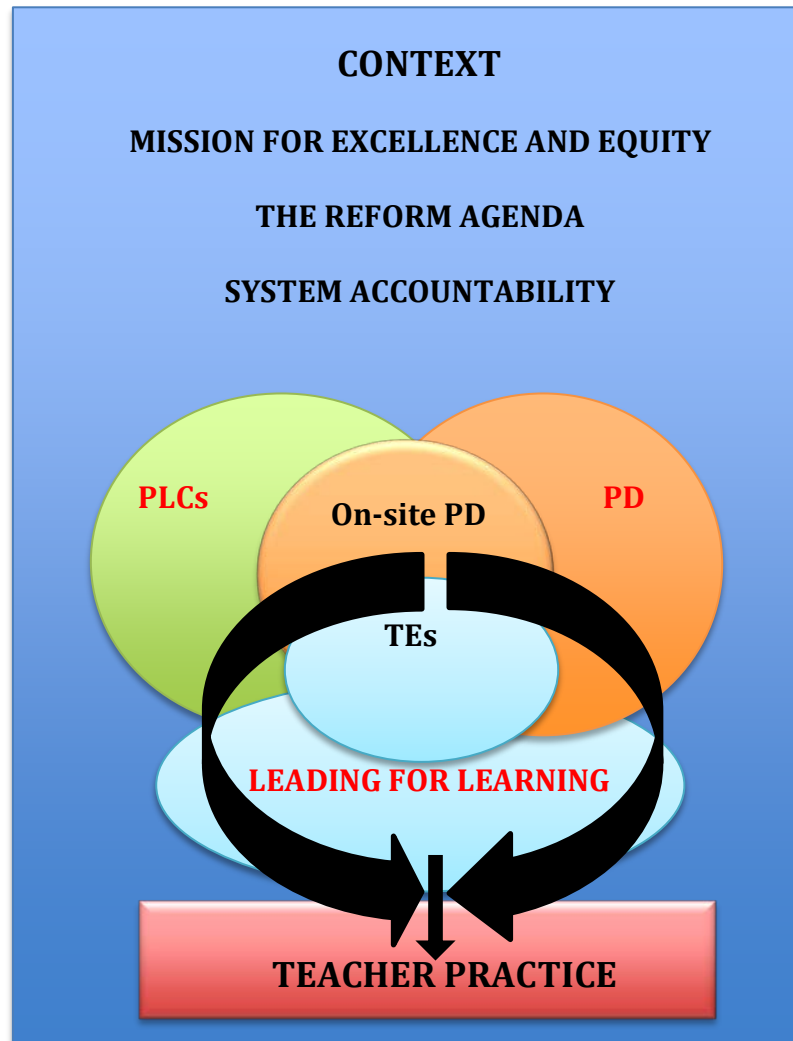


Figure 2.1 Conceptual Framework

CHAPTER THREE – THE RESEARCH DESIGN

3.0 Introduction

Chapter One identified and described the research context, problem and purpose. A search of the literature in Chapter Two resulted in the three key themes of Professional Development (PD), Professional Learning Communities (PLCs) and Leading for Learning as they are currently understood in the context of education. Four research sub-questions evolved from an exploration of the literature. These questions were utilised to answer the major research question, “How does on-site PD influence teacher practice?” The research sub-questions are:

1. Did the exercise of leadership in the school and system influence teacher practice and, if so, how?
2. Did the experience of a PLC influence teacher practice and, if so, how?
3. What was the particular contribution of the Teacher Educator (TE) to teacher practice?
4. Did the nature of the on-site PD influence teacher practice and, if so, how?

The focus of the present study was the experiences of participants involved in on-site PD through a particular construct that involved TEs and other leaders working with teachers in schools to influence their practice. Given this, a qualitative data analysis approach that strives to describe and understand human behaviour was chosen as the most appropriate approach (Lichtman, 2006). In this chapter, the research design that includes the theoretical framework framing the research process, i.e. its epistemology, theoretical perspective, methodology and methods, will be discussed.

3.1 Research Design

The research design forms the foundation of the research methodology and includes the theoretical framework in which the research is situated. It emanates from and is directed by the research purpose and its ensuing research sub-questions.

3.2 Theoretical Framework

The theoretical framework is the over-arching term that describes and justifies the theoretical tradition from which the researcher comes and the theories embedded within it. The researcher accepts that knowledge is viewed as the outcome or consequence of human activity “that is problematic and ever-changing” (Guba, 1990, p. 26). As the research problem has an interpretivist stance in general and a symbolic interactionist lens in particular, constructionism and symbolic interactionism are the research orientations that guided the present study within the

interpretivist paradigm. It was through the perceptions of participants, interpreted through their words, that the constructed meaning of their experiences was understood. A multi-site case study is the methodology that directed the use of the data gathering strategies as it complements both the epistemology and the theoretical perspective of the research, enabling a deep understanding of the data to enhance the credibility of the findings. The design elements of this research framework represented in Table 3.1 will now be described and justified.

Table 3.1 Research Framework

Epistemology	Constructionism
Theoretical Perspective	Interpretivism
	Symbolic Interactionism
Methodology	Case Study (multi-site)
Methods	Semi-structured interviews
	Group interviews
	Pre-interview Self-reflection Tools

3.2.1 A Qualitative Approach

A qualitative approach was chosen for the present study because it is recognised as being, “focused on discovery, insight and understanding” and “offers the greatest promise of making significant contributions to the knowledge base and practice of education” (Merriam, 1998, p. 1). As the researcher interpreted how participants created their individual and collective meaning of their experience of on-site PD, this qualitative study sought, “answers to questions that stress how social experience is created and given meaning” (Denzin & Lincoln, 2003, p. 13).

3.2.2 Epistemology: Constructionism

In the research literature, epistemology is described as, “the study of how knowledge is generated and accepted as valid” (O’Donoghue, 2007, p. 9); a theory of what knowledge is, and how we know what we know and consider legitimate. The purpose of the present study was to interpret the personal, subjective and unique meaning created by participants as a consequence of the context in which their experiences occurred (Darlaston-Jones, 2007), i.e. their perceptions of a lived experience of on-site PD within their context; therefore, use of the epistemological framework of constructionism was considered appropriate. In the present study, the term constructionism refers to a view of the world that sees learning as socially mediated with meaning

constructed between and amongst individuals as they engage with the world they are experiencing and interpreting (Crotty, 1998).

The research problem from which the present study emanated acknowledges that on-site PD was a shift in how teachers were accustomed to learning. Previously, teachers had engaged in off-site decontextualised PD experiences but they were now learning on-site with and from their leaders over a sustained period of time with the intention of changing their practice. The epistemology of constructionism, which recognises meaning as socially constructed, supports this research problem as teacher learning was situated within the school in knowledge-based social constructs that formed the structure in which the on-site PD occurred. In an educational context, these social constructs are described as PLCs and are based on a social theory that acknowledges learning as, “an integral part of our everyday lives ... knowing involves primarily active participation in social communities” (Wenger, 2006, pp. 9–10). The underpinning philosophy of PLCs is consistent with the epistemological framework of constructionism that accepts social interaction as the basis for knowledge and views reality as constructed by individuals interacting with their social world (Merriam, 1998).

A position of constructionism for the participants of the present study accepted that they interpreted their individual experiences in particular contexts, which led to a depth of understanding that they constructed and mediated through the research assistant. Constructionism rejects the view that there is an objective truth waiting to be discovered. Rather, meaning is constructed from the engagement of our minds with the world and is an ever-changing human construction that is the outcome of human activity (Guba, 1990). The basic principles of constructionism also maintain that different people may construct meaning in different ways in relation to the same phenomenon. Thus, multiple realities are presumed to make many constructions possible (Guba, 1990), which contribute to the depth of meaning revealed. The different participants involved in the present study (principals, assistant principals (APs), TEs and teachers) constructed various individual meanings within their social world through interaction with others involved in the experience. To preserve these “multiple realities” (Stake, 1995, p. 12) that emerged from an interaction with the same phenomenon, i.e. the case under study, numerous perspectives were offered that called on the researcher to be “alert to patterns of activities and the variety of meanings” (Mabry, 2009, p. 217) ascribed to the experiences of participants.

3.3 Theoretical Perspective

The theoretical perspective reflects the theoretical position of the researcher. It connects the theory with the practice and guides the structure of the research design, and the methods used to generate and analyse the data.

3.3.1 Interpretivism

Because the purpose of this research was to capture the understandings of participants from their lived experience of on-site PD, an interpretivist approach, which is a way of interpreting and understanding the world from the perspective of lived experience, was adopted. Interpretivists are interested in understanding from the inside rather than explaining from the outside (Outhwaite, 2005); therefore, the interpretivist theoretical perspective utilised in the present study provided a means of reaching this understanding. Furthermore, because individuals in interaction with one another construct their understandings, a symbolic interactionist theoretical viewpoint, which stems from the philosophy that we construct our meaning socially using shared signs and symbols, was also considered appropriate.

There were theoretical constructs behind the design of the on-site PD that included the appointment of TEs and the introduction of PLCs in schools. This research analysed these theoretical constructs that underpinned the approach to on-site PD by allowing those involved in the experience an opportunity to explain from their perspective how they influenced teacher practice. These theoretical constructs were then interrogated via an interpretivist paradigm based on the following assumptions about interpretivist knowledge: It is a context-specific working hypothesis that is both discovered and justified from the field; it represents *emic* or insider understanding of those in the settings that come from their words and shared experiences; it reflects holistic webs of mutual and plausible influence, and a view of knowledge that is more circular than hierarchical and pyramid like; it aims for internal consistency and coherence; and it is value-bound hence problematic, contested and locally situated (Greene, 1990). These assumptions about interpretivist knowledge were evident in the present study in the following ways. The knowledge generated regarding shifts in teacher practice was drawn from a field that was locally situated (teachers and leaders within their schools); it represented insider understandings (from individual participants in various roles) that were shared through their words in interviews; and these understandings were contested, because it was a significant change for teachers, within a web of mutual influence, i.e. a PLC.

3.3.2 Symbolic Interactionism

The particular theoretical lens or position within the interpretivist research paradigm that informed the present study was symbolic interactionism. There are many theoretical variants of this position (Schwandt, 1998); however, because the theoretical perspective must be congruent with the purpose of the research, the Blumer-Mead version of symbolic interaction was adopted (Blumer, 1969). This approach regards human beings as purposive agents who act towards their environment on the basis of the meanings these things have for them, which was critical in portraying and understanding the process of meaning making for the participants in the present study. Their meanings, derived from the social interaction between and amongst individuals described as ‘actors’, were established, modified and constructed via an interpretative process (Schwandt, 1998) that was reflexive and deliberate. This process was uniquely human in that it required “the definition and interpretation of language ... and the determination of the meaning of others as well” (Farganis, 2011, p. 297). Put simply, humans act the way they do because of how they define situations. Symbolic interactionism views such processes as confronting a world and interpreting it in order to act, since “knowledge and truth are created, not discovered by mind” (Schwandt, 1998, p. 236). This “truth is the result of perspective” (Schwandt, 1998, p. 236) and it was these perspectives of participants that were fundamental to the present study.

Central to the position of symbolic interactionism taken by the researcher is that perspectives are “dynamic and changing guides to interpretation” (O’Donoghue, 2007, p. 31) and unpredictable products of the social experience. To understand the responses of participants regarding how the on-site PD experience influenced teacher practice it was important to recognise that their perspectives were also situational (Charon, 2001), selective and ongoing, and that no object could be understood from one perspective. This process is described as “joint action” that views social life “as a complex web of collaborative actions in which participants are constantly reflecting, negotiating and fitting their actions to others in order to achieve common objectives” (Farganis, 2011, p. 297). It was therefore important that various participants in different roles, who had a shared experience, could contribute to the present study as they constructed their own meaning. This meaning was influenced by their interaction with others and created through their experience of a particular place, time and situation. Providing an opportunity for these perspectives to be heard contributed different understandings of the overall experience, which added a rich and “thick description” (Merriam, 1998, p. 29) to the phenomenon under study.

3.4 Research Methodology

The research methodology shapes the selection of research methods and offers a theoretical justification for the choice and orchestration of these methods. Referred to as a method by some (Crotty, 1998; Stake, 1995), the present study accepts the case study as a methodology (Berg, 2004; Creswell, 2008; Merriam, 1998; Yin, 2009a), which is a research process that is focused on a case (Creswell, 2013).

3.4.1 Case Study

Within the interpretivist framework, which acknowledges that all research depends upon interpretation, the case study methodology was considered to be the most appropriate as it focussed on one particular instance of experience and attempted “to gain theoretical and professional insight from a full documentation of that instance” (Freebody, 2003, p. 81). This methodology also provided a basis for what Stake (1995) describes as “naturalistic generalisations” (p. 85) to be formed. These ‘generalisations’ contributed to the case becoming understandable by allowing conclusions to be drawn and tacit knowledge to be constructed through the vicarious communication of the natural experiences of participants.

3.4.2 Multi-site Case Study

The present study is a single case located across multiple sites, described as the multi-site case study methodology (Creswell, 2013). This methodology is considered appropriate for this interpretivist research, as it is a study of a particular construct that was generated across five different schools. What linked the perspectives of participants across the sites was the case under study; a single, bounded unit (May, 2011; Merriam, 1998), which was the principals, APs, TEs and teachers engaged in an on-site PD experience. Since within every case there may be numerous sites, events or activities (Merriam, 2009), the rationale for the single multi-site case study methodology is that it was not a random sampling of schools in which this particular phenomenon may have emerged, but rather a sample from a group of schools in which it occurred for the first time. The individual sites made up the collective single case that was united by the common construct, the unit of analysis to be studied and offered an occasion to view a range of contexts within the one study. The selection of schools in this multi-site case study was informed by the methodology literature (Huberman & Miles, 2002, p. 334) that argues case selection using multiple sites or examples is dependent on the theoretical framework that specifies the phenomenon of interest found in these sites. The phenomenon, or the case in the present study, was congruent with the research purpose and the focus of the major research question (Yin, 2003). As the sample

schools were selected from those in which on-site PD of this nature occurred for the first time, this forms the criteria for the boundaries of the case.

3.5 Methods

This chapter has positioned the study in an epistemology of constructionism. It has also recognised that an interpretative theoretical perspective using a multi-site case study methodology leads to greater insight. The next section will provide details of the selection of the sample schools, participants, the methods used in the study, the role of the research assistant and the pilot test.

3.5.1 Sample Selection

This multi-site case study focussed on five of the 14 metropolitan Catholic primary schools in an Australian diocese that were identified by the Federal Government to participate in the SSNP reform programme for low SES status communities. A key component of this system's response to the national reform was to introduce the concept of a TE to work within the leadership team in each school for a period of four years to build the skills, knowledge and practice of teachers. Schools of various sizes and locations were represented in this group of schools. Because the selection of "unusual cases in collective case studies" is recommended (Creswell, 2013, p. 156), a maximum variation purposeful sampling strategy (Glaser & Strauss, 1967) was employed to assist with the identification of schools that would provide the greatest variation to inform the case. This strategy allowed for the inclusion of diverse cases, the most "information rich" (Patton, 1990, p. 169) that could fully describe the multiple perspectives of the case, to strengthen the findings while protecting against self-selecting biases. By identifying criteria that differentiated the school sites then choosing those that were quite different (Creswell, 2013), purposeful sampling guided the selection of the sample of schools on the basis of diversity, i.e. site variation, which increased the likelihood that the findings would reflect the different perspectives sought in the present study.

Because it is widely recommended that the sample size be kept relatively small in a study such as this (Denscombe, 2007), only five sites were selected to constitute the multi-site case study. To test and inform the research methods, an additional school was selected as a pilot test case. The five schools that formed the sample for the present study, and the pilot school, are Catholic metropolitan primary schools of various sizes located in different geographical areas of the diocese. This selection provided an opportunity for a deep understanding about the specific instance of the case via the breadth and depth of the experiences of participants (Mabry, 2009), which allowed for

conclusions to be drawn about how the same reform strategy took shape in different settings. These schools formed an *atypical case* (Mabry, 2009) that conflicted with the ordinary as it illustrated a contrasting approach to teacher PD. Contextuality is considered “an aspect of the dynamism and complexity of a case” (Mabry, 2009, p. 217); therefore, the different contexts in the present study provided an opportunity for the researcher to gain insight into the experience of on-site PD and its influence on teacher practice from participants at various schools.

3.5.2 Description of Participants

The boundaries of the case also formed the boundaries for the selection of participants and the unit of sampling was the school. Because case studies are multi-perspectival analyses that consider “not just the voice and perspective of the actors but also the relevant groups of actors and the interaction between them” (Tellis, 1997, p. 5), the participants in the present study included leaders, i.e. principals, APs and TEs, and teachers from the five schools in the multi-site case study.

3.5.3 Data Collection Methods

A case study is an investigation of a contemporary social phenomenon within its real-life context using multiple data sources to make the case study evidence stronger (Yin, 1984). Three data sources were used in the present study. They were semi-structured interviews for leaders, group interviews for teachers and a Pre-interview Self-reflection Tool for all participants. A summary of these methods and participants are shown below in Table 3.2.

Table 3.2 Research Participants

Participants	Methods: Data Collection Strategies			
	No. of semi-structured interviews with leaders	No. of group interviews with teachers	No. of teachers in group interviews	Pre-interview self-reflection tools completed
Principals	5	0		4
APs	4	0		4
TEs	5	0		5
Teachers	0	8	30	28
Total	14	8	30	41

The following sections describe and justify the selection of each of the methods.

3.5.3.1 Semi-structured Interviews

An essential source of case study data is the interview (Merriam, 1998) because it allows the researcher to enter into the personal perspective of the participant (Merriam, 1988), which was required in this research. As the symbolic interactionist lens within the interpretivist research paradigm that guided the present study requires the interpretation of language and gestures in the determination of meaning, it was essential that opportunities be included to capture the voices of the individuals involved. Semi-structured interviews provided such an opportunity as the questions were open-ended and provision was made for the participants to develop ideas and speak widely, while they elaborated on points of interest (Denscombe, 2007).

Because the unit of sampling was the school, leaders from each (principals, APs and TEs) were invited to partake in individual semi-structured interviews. (One AP was not available. Religious Education Co-ordinators (RECs) were leaders but they were also class teachers so if they participated it was in the group interviews with teachers). People in leadership roles were selected as participants because they held positions that offered a relevant and vital perspective to the study.

3.5.3.2 Group Interviews

A disadvantage “of the one-to-one interview is that it limits the number of opinions available to the researcher” (Denscombe, 2007, p. 177). As the group interview is a research technique that collects data through group interaction, it provided a solution to the limits of the one-to-one interviews by increasing the number and range of participants involved. Guided by the interviewer and relevant questions, teachers together discussed the topic, which allowed the researcher “to explore group norms and dynamics around issues” (May, 2011, p. 137), giving voice to the socially constructed meaning while refining emerging themes and categories. The advantage of group interviews was that they allowed for the identification of a rich and extensive range of experiences and perspectives from a variety of participants.

Group interviews in the present study were conducted with a cross section of teachers in the five schools selected, which gave the researcher comprehensive data to analyse. Group sizes ranged from 3 to 6 volunteer participants from various stage groups in K–6. As recommended in the literature (Smithson, 2008), participants were grouped for the interviews in a relatively homogenous way in that they taught similar grades—Kindergarten to Year 2 teachers were

together as were Years 3 to 6 teachers. Specialist teachers were also invited to attend these interviews. For one-stream schools where the number of teachers in each stage was small, one group of 3–6 teachers was randomly selected. In larger schools, two groups of 3–6 teachers from each school were again randomly selected with about half the teachers from K to 2 and the other half from Years 3 to 6.

3.5.3.3 *Semi-structured and Group Interview Processes*

In the interviews, participants were asked to speak of their perceptions of the influence of on-site PD on their teaching practice, or in the case of non-teaching leaders, that of others. To give the interviewer the scope to explore areas further and provide rich information about the phenomenon (Patton, 1990), some flexibility was allowed to let related information emerge as participants shared their perspective of the on-site PD experience.

To maintain standardisation of the scope of information provided, participants in both the semi-structured and group interviews were asked the same questions, i.e. the four research sub-questions. Participants were requested to refer to examples or evidence from their experience that supported their responses. The interviews concluded with an open-ended question about the influence of on-site PD on teaching practice. Details of the Interview Process can be found in the appendices.

Although it was intended that group and semi-structured interviews would last for approximately 30 minutes, they ranged in duration from 25 to 55 minutes. With permission, interviews were digitally recorded, transcribed and de-identified for analysis.

3.5.3.4 *Pre-interview Self-reflection Tool*

An interpretative study is about how people view their world; therefore, this research was interested in the perceptions of participants regarding any changes in teacher practice as a result of their on-site PD experience. A vehicle relevant to the Australian context that currently assists teachers to describe their teaching, or that of others, is the *Australian Professional Standards for Teachers* (AITSL, 2011). These standards publicly define and describe the work of teachers, and make explicit the elements of effective teaching practice. Due to its generic acceptance in the Australian educational context, this research utilised the *Australian Professional Standards for Teachers* (AITSL, 2011) as its practice measure in the pre-interview self-reflection tool.

In response to the four research sub-questions, each participant was asked to complete a Pre-interview Self-reflection Tool regarding the influence of on-site PD on teacher practice in relation to each of the seven *Australian Professional Standards for Teachers* (AITSL, 2011). A three-point scale of ‘diminished’; stayed the same, i.e. there was ‘no change’; or ‘improved’ was provided. Because principals, TEs and non-teaching APs did not teach a class they were asked to respond in relation to the teaching practice of others in their school. It was explained to participants that this tool was not designed to assess the teaching practice of individuals but to gather overall perceptions from participants of the influence of on-site PD on teacher practice. It was explained to participants that there was no expectation of change or growth; if improvement was not evident it was considered a reflection on the effectiveness of the on-site PD rather than the teachers and leaders. A copy of the Pre-interview Self-reflection Tool and a preamble that explained its purpose can be found in the appendices.

With permission, the de-identified completed self-reflection tools were given to the research assistant at the conclusion of the interview for analysis by the researcher. For participant information, a copy of the *Australian Professional Standards for Teachers* (AITSL, 2011) was sent as an attachment to the Pre-interview Self-reflection Tool.

3.5.3.5 Role of the Research Assistant

Because of the senior leadership position of the researcher in the diocese, it was important that the identity of the schools and participants was protected and remained confidential. Therefore, a condition of ethics for this study was that a research assistant be appointed to select the sample schools, arrange for the school visits to gather documentation and conduct the interviews, and have the data transcribed and de-identified prior to its analysis by the researcher.

As the research assistant was required to fulfil some essential tasks on behalf of the researcher, recruitment of the right person was critical. This process took some time because it was necessary to identify someone with extensive experience in this kind of research position as well as having a sound understanding of the life of teachers in schools. The researcher consulted a number of senior university academics with experience in the research field. This resulted in the identification of an experienced and skilled research assistant who had contributed to research studies in educational contexts in the past for these academics and who was highly recommended. The research assistant was contacted by email and telephone to ascertain his interest in undertaking

the work. A meeting was then arranged where his suitability for the role was considered. The selection of this person was determined by his strong interpersonal skills and his knowledge about the conduct of such qualitative research studies, especially those involving group and semi-structured interviews. This conversation also included what the role would entail, how the sample was to be selected and the planned time frame for the study. Issues such as the hourly rate of payment including travel time, the setting up of school visits, and arranging for the interviews to be transcribed and data being de-identified were also resolved at this meeting. The costs for the employment of the research assistant and the transcription of interviews were funded from a system scholarship granted to the researcher for expenses incurred while undertaking part-time doctoral study.

Upon appointment, a second interview occurred that clarified how contact details for the participants would be accessed, documentation and consent forms, the Pre-interview Self-reflection Tool to be used, and the duration and process for the interviews. A time frame for the pilot testing and the gathering of data from the sample schools was also established. Documents given to the research assistant that detail information about the interviews and the use of the Pre-interview Self-reflection Tool can be found in Appendices J-L.

After the pilot test data had been analysed by the researcher, a third meeting occurred with the research assistant. The purpose of this meeting was to consider the outcomes of the pilot interviews and what, if any, adjustments to the interview process were required in light of both the interviewer's experience and what the data analysis showed. Details of these modifications made in light of the pilot interviews are described in the following section, 3.5.3.6 The Pilot Test. Two further meetings occurred during the course of the data gathering process to again discuss how the interviews were progressing. The researcher and assistant were also in regular contact via telephone and email to discuss any logistical matters such as delays due to participant availability. The research assistant sent the de-identified transcribed data in electronic form as it became available so the researcher could undertake its analysis.

The research assistant was also contracted to conduct interviews with the principal and TE of each of the participant schools prior to the interview process. These meetings were of about two hours duration. The purpose of these visits was to familiarise participants with the research purpose; explain all documentation that would be provided to participants i.e. information and consent forms, Pre-interview Self-reflection Tools and the AITSL Standards for Teachers; and to

set dates and times for participants at their school to be interviewed. This communication was undertaken face to face rather than by email or phone as it was seen as important for the research assistant to establish some relationship with participants and obtain an understanding of the school context.

From the perspective of the researcher, while it would have been ideal to conduct the interviews personally so as to observe the participants and hear their responses first hand, having a research assistant conduct the process was found to be a positive experience with clear benefits related to the quality and quantity of the data gathered. These benefits were attributed to the skill and experience of the research assistant in creating an environment where participants obviously felt safe and free to contribute openly and honestly to the questions asked. Many frank responses were gathered from participants, which may have been due to the research assistant's distance from anyone in the system and his background in education. The transcripts also indicated that he had the capacity to ask probing questions by providing prompts or seeking examples of evidence that elaborated on the comments of participants. The only down side that was apparent to the researcher during the data analysis process was that on occasions some interviews went well beyond the expected time, which appeared to be because some participants digressed from the questions. Despite this impediment being discussed with the research assistant, the digressions continued in some instances. This led to additional data analysis, some of which was not relevant to the research question, but it did not lead to a lack of appropriate data in any way.

On reflection, the use of the research assistant in this research highlighted the importance of selecting an experienced, credible person who understands and communicates well with educators. It was also important for the researcher to establish a strong pattern of communication and feedback with the assistant. Given such parameters, the use of a research assistant was found to be an extending and enriching source of analysis.

3.5.3.6 Pilot Test

Pilot testing is recommended to refine the research questions (Creswell, 2013) so problematic areas can be uncovered and corrected. Before commencing the research in the five selected schools, a pilot test using the data gathering methods was undertaken in a primary school that was involved in the same reform. The data from this pilot test was analysed and revealed some things that warranted attention.

In the pilot test interviews, participants were asked to use their Pre-interview Self-reflection Tool to explain, give examples and describe evidence to support the ratings they assigned to their changed practice, or in the case of non-teaching leaders the practice of their teachers, under the four research sub-questions. At the conclusion of the discussion they were asked if there was anything else they would like to say about the influence of leadership (in the school or system), PLCs, the TE role or the nature of the on-site PD on teacher practice. The interview concluded with an open-ended question: “What is your overall response to on-site PD in influencing teacher practice?” Details of this process are provided in Appendix J, the ‘Pilot Interview Process’.

While the four research sub-questions were asked in the pilot test interviews, the discussion focussed on the rankings given on the Pre-interview Self-reflection Tools. According to the research assistant, both leaders and teachers spoke generally and did not specifically refer to evidence that supported their statements with regard to each of the questions. In response, the researcher made some changes to the interview process. The sub-questions were still asked one by one. To support their answers, participants were then requested to refer to particular evidence that they may have recorded on their Pre-interview Self-reflection Tool, or other examples they could recall. Similar to the pilot test, participants were also asked if there was anything else they would like to say about the influence of leadership (in the school or system), PLCs, the TE role or the nature of the on-site PD on teacher practice. The final open-ended question was no longer required because it was similar to the fourth research sub-question about the nature of on-site PD. Further details of this interview process can be found in the appendices under ‘Interview Process for Semi-structured and Group Interviews’.

3.6 Analysis of Data

The design of the present study adopted a data gathering process that assisted the researcher to progressively focus on the features that appeared to be most significant. The last stage of the design was dedicated to the final analysis and report writing. Below is a general description of the data analysis process undertaken in the study. Due to the complexity of the coding process, details of this will be explained in the final section of this chapter titled ‘The Coding Process’.

Case study methodology uses multiple data collection and analytical procedures with data collection, analysis and report writing considered as one evolving process (Miles & Hubermann, 1994). True to the interpretivist paradigm in which the present study was situated, it was in an ongoing iterative spiralling process of gathering and analysing the data, in a sense rebuilding it,

that interpretation occurred. Meaning was constructed allowing, “What a study is ‘a case of,’” (May, 2011, p. 230) to emerge over time. Flexibility was both a prerequisite and an advantage of the approach (May, 2011); however, this does not suggest that the research was undertaken haphazardly. Rather, new themes emerged as data was analysed and interpreted throughout all phases of the process. The different forms of data coding along with the processes of data reduction and display, were not distinct steps but were interrelated and often occurred simultaneously (Creswell, 2013).

It is generally agreed that, “the goal of analyzing the text and words collected is to arrive at common themes” (Lichtman, 2006, p. 164). The type of analysis chosen for the present study, which does as its name suggests, i.e. constantly compares within and between levels of conceptualization (Merriam, 1998), is known as the Constant Comparative Method (CCM). This involved an inductive process, “from specific to broad” (Creswell, 2008, p. 443) of slowly developing categories and comparing the new information with emerging categories. Since the present study involved more than one unit of embedded analysis (Yin, 2009b), i.e. the different sites in which this case occurred, multiple levels of analysis were required (Freebody, 2003). CCM facilitated this process as data comparisons were made within and across the schools, and provided a means by which the large amount of data was systematically managed. A within-case analysis that provided a detailed description of each site and its themes occurred. This was followed by a thematic analysis across the sites called a “cross case analysis” (Miles & Hubermann, 1994, p. 173; Creswell, 2013, p. 101). The data from the individual sites was prepared for analysis by aggregating it so it could be organised into categories using a coding system, which involves sifting and sorting to put similar pieces together into data groups. A title/label was assigned to each of these to create an organisational framework that allowed the researcher to arrange the raw data into broad units of information; categories consisting of several codes under which the data was analysed (Creswell, 2013, p. 186). This led to the creation of themes and theme components. The three types of coding that assisted with this process of data reduction, “the process of selecting, focusing, simplifying, abstracting, and transforming the data” (Miles & Hubermann, 1994, p. 10) were open, axial and selective coding, each of which built upon the other.

Open coding was employed during the initial phase of data analysis to assist the researcher to bring to the surface relevant themes, always mindful of the importance of being open to additional ones emerging (Creswell, 2013). Axial coding, that focuses more on the initial codes of the data than the data itself, assisted in putting the data back together through the construction of a

data display. This analytical activity, which is considered “a major avenue to valid qualitative analysis” (Miles & Huberman, 1994, p. 11) involved the data reduction process and took the form of matrices to organise the information into an accessible compact form. Selective coding, “the process of selecting the core category and relating it to other categories, validating those relationships and filling in categories that need further refinement and development” (O’Donoghue, 2007, p. 97) then built upon the results of the open and axial coding to generate the themes and theme components.

The systematic coding of data had an integral role to play in this interpretivist research. Guided by the research sub-questions, the categorising of data in this way allowed for relationships to be detected and synthesised, and led to the formation of generalisations that were used to group data together. Interpretation commenced with the codes, then the categories. However, it went well beyond this and involved abstracting out to make sense of the data (Creswell, 2013). Major ideas that were ultimately displayed as themes and theme components were generated through the identification of patterns and correspondences that emerged through the continuous comparison and interplay within the interrelated processes of data display and data reduction. As reflected in the connected nature of Figure 3.1 below, data reduction and data display operated simultaneously and formed part of the analysis that utilised open, axial and selective coding to produce themes and theme components and progress to the third stream of analysis activity, conclusion drawing and verification. A demonstration and further explanation of how the data analysis process occurred in this study will now be presented. As the four research sub-questions were also the interview questions, the tables represent the data under Questions 1-4.

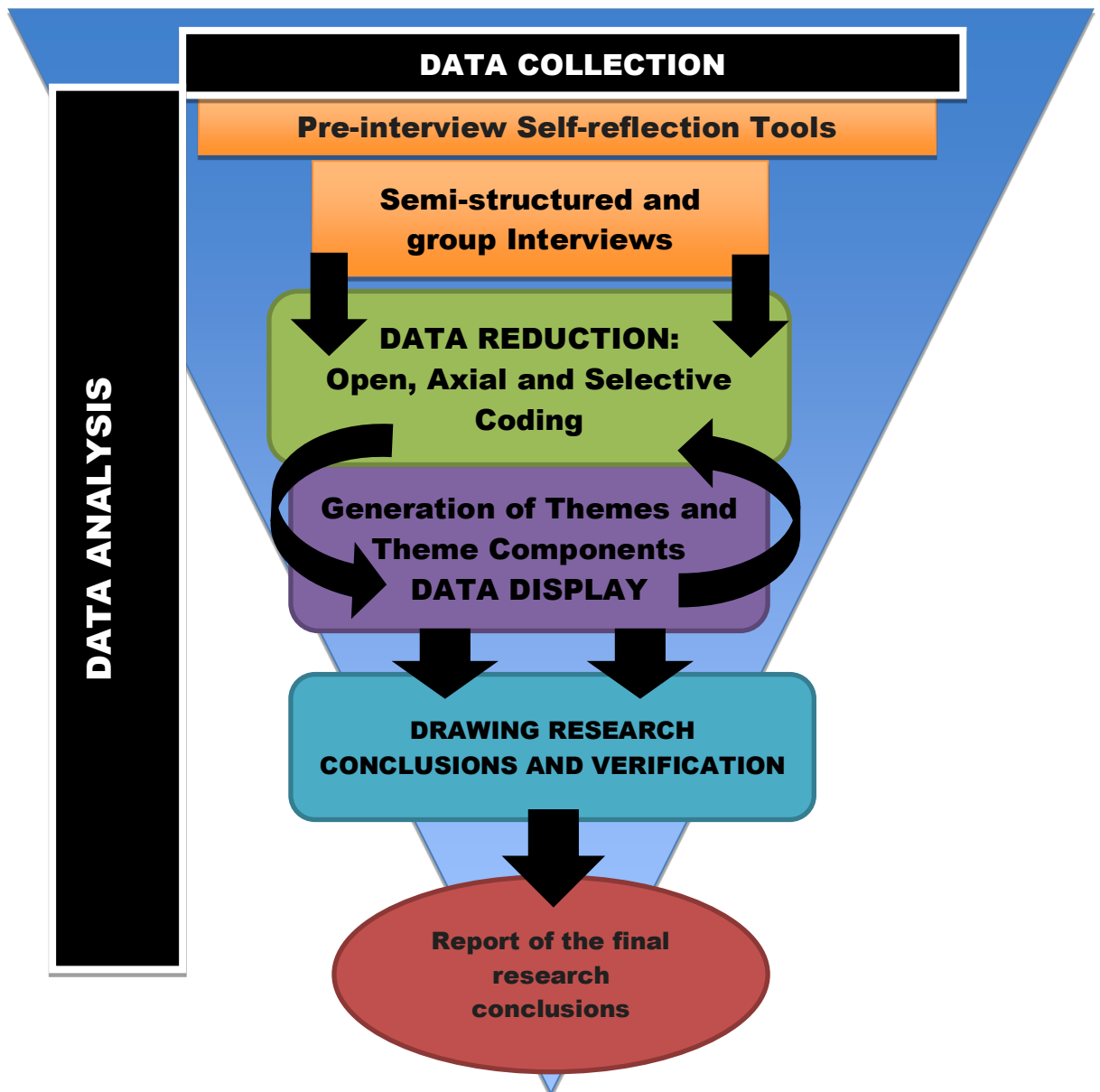


Figure 3.1 Interactive and Iterative Processes of Data Analysis

3.6.1 Data Coding Process

A data coding process was undertaken for the semi-structured and group interview data from the five schools (identified as schools E, F, G, H and I) that form this multi-site case study. To facilitate this process, data reduction occurred over a series of phases - open, axial and selective coding. Interpretation commenced with coding the raw data, followed by the development of categories, which ultimately led to the emergence of themes and theme components. The following section will explain and illustrate how the data was analysed for each of the four research questions via a coding process that led to the generation of themes and theme components.

Data frequencies were recorded throughout the different phases of the coding process to serve a range of purposes. The data set was large and the frequency of similar comments within and across the sites guided the researcher throughout the continuous reinterpretation and reorganisation of codes and categories to determine how widespread certain perspectives actually were. As this research is a multi-site case study, it was important to consider whether perspectives were those of many across the sites, or only those of a few in a particular context. There was no set number that identified a theme or theme component. The frequencies were generated through a circular looping process of rechecking the similarities in the comments to find the greatest number of statements to form a category that led to an acceptance of what the important themes were. The actual frequencies that determined the existence of themes were continually checked but varied according to the nature of the individual participant comments. The important part of the coding process was the identification of similarities in the comments to lead to a general understanding of the frequencies that led to the themes and theme components. The frequency tallies facilitated this interpretation of the data to occur.

The way in which the frequencies were coded also allowed for ready access back to the school and the participant's role, so the researcher was able to determine whether certain perspectives were important to leaders, teachers, or both. As the comments were reinterpreted, many were recoded and shifted to different categories, which was reflected in their altered frequency. These frequencies of comments in themes and theme components will be used as an organiser when presenting the data in Chapter 4.

For the purpose of demonstrating how the coding process occurred for each of the four research questions, the Question 1 data from School E has been presented as an example in this chapter. Data from Questions 2-4 from this school can be found in the appendices. The same process was undertaken with the data from the other four schools. For the phases where the data was analysed per school, it can be found in the appendices A-D. It appears as 'Coding Process Data for Schools E, Questions 2-4 and Schools F-I, all questions: Phase 1 – Open Coding; Phase 2A Axial Coding – Categories; Phase 3 Selective Coding – Themes and Theme Components; and Phase 4 – Summary Tables'. Phases 1–3 include the tri-level coding process, Phase 4 includes summary tables and Phase 5 is an amalgam of the data from all five schools. The development of categories in Phase 2A and 2B is described as part of the same phase because they both deal with the development of categories through axial coding. The coding process was an iterative one whereby the raw data and emergent categories were repeatedly interrogated and revisited. Themes

therefore remained in draft until all interview data sets were coded. Below is an explanation of what occurred in each phase of the coding process:

- **Phase 1** - Open coding of raw interview transcript data;
- **Phase 2** - is comprised of two parts. Phase 2A is the axial coding of the raw data into broad units of information, linked by colour codes, to represent similar categories from each of the five schools. Phase 2B is a cross-school comparison within and across the schools of the categories that emerged from Phase 2A through the development of a category matrix for each question. Titles/labels were assigned to each group of similar categories;
- **Phase 3** - Selective coding, guided by the category matrices, resulted in the development of themes and theme components for each research question;
- **Phase 4** - Summary tables that demonstrate how the different phases of coding brought together the process into an integrated whole;
- **Phase 5** - All the schools' Collated Themes and Theme Component tables that quantifiably represent the number of comments per participant and group of participants across the five schools for each of the four research questions.

Further detail regarding what was undertaken during these phases is outlined at the commencement of each section. Examples of shifts that occurred as part this process in Phases 2–3 are also given. This chapter concludes with a presentation of the themes and theme components that emerged from the coding process for each research sub-question.

3.6.1.1 Phase 1 – Open Coding

This initial phase of open coding involved collating and aggregating the ideas represented in the raw interview data provided by participants, or group of participants, in response to the four questions. A coding system was gradually created that used numbers to link repeated ideas from different participants and colours to group common or related ones. This process allowed similar ideas and their frequency to be identified. The responses and their subsequent groupings for question 1 of the sample school, School E, can be seen in Table 3.3 below. The data tables for the Open Coding of questions 2-4 School E, and the other four schools are shown in Appendix A.

Question 1: Did the exercise of leadership in the school and system influence teacher practice and, if so, how? There are two elements to this question: the exercise of school leadership and the exercise of system leadership. Data relating to both aspects is presented together in Phases 1 and 2, but separated within the question 1 data from Phase 3 onwards.

Phase 1 Open Coding – Data

Table 3.3 Open Coding - Question 1 (School E)

Q1: Did the exercise of leadership in the school and system influence teacher practice and, if so, how?	IDEAS	FREQUENCY	
Principal	1. The role of the TE and LT has influenced teacher practice by working together as a team	4	
	2. Shift from isolated independent teaching practice to collaborative approach and planning with leadership team	3	
	3. PD was previously a 'top-down' model that was delivered by leadership team members	1	
	4. Professional conversations and dialogue more prevalent	4	
	5. Structures within the school have been changed	1	
	6. System influence has allowed leadership team to have a more contemporary view of learning	1	
	7. Role of LT engaging in on-site professional learning and in classroom modelling important	2	
	10. Teacher leadership beyond the LT has been established	1	
	11. Members of the LT are now confident to lead PD themselves	2	
	Assistant Principal	8. Strong Principal and LT is the driving force behind the change	2
		9. Building capacity of LT members important	2
1. Collaborative approach of LT		1	
6. Collaborative approach of system		1	
1. Common goals and common understandings as a LT		1	
5. Staffing is now organised to strategically support learning across the school		1	
6. PD at system and school level has influenced the importance of leadership		1	
Teacher Educator	5. Strategic approach by LT adopted	4	
	10. Leadership capacity of teachers has been built	1	
	13. Time and money provided so LT can focus together at off-site PD	2	
	12. Connections with other schools valued	1	
	13. Time is an issue in schools-time provided to reflect	1	
	14. Importance of leaders being leaders of pedagogy recognised	1	
	15. Leaders need to establish relationships with teachers-build social capital	1	
	7. The role of leadership in modelling and valuing what is expected	1	
	13. Time to work with parents and know the community	3	
	8. The passion of the LT has driven the change	1	
6. System leadership has been invaluable; non-judgmental	1		
Teachers	5. PD is strategically provided within and outside of school then shared with others	3	
	1. Everyone is on board and working towards the same goal	1	
	14. It took some time before people knew what they were doing and developed a plan	3	
	13. Time was provided for teachers to work with other teachers and the TE	1	
	15. A lot of work was expected of teachers out of school hours-very difficult	5	
	10. Teacher leadership has grown	1	
	6. LT shared learnings from external (system) PD with teachers	1	
	10. LT identified teachers' strengths and allowed them to take leadership of PD	2	
	6. Some system support offered within the school	1	

3.6.1.2 Phase 2A – Axial Coding – Categories

This phase focused primarily on the initial number and colour codes developed through the Phase 1 open coding process. During this phase, it was often necessary to return to the raw data to reinterpret the meaning of participants and gather accurate detail. Cross checking and recoding of

the original transcripts assisted in putting the data together into an accessible compact form through the construction of data display tables. This analytical process of axial coding involved utilising the colours and numbers to sift, sort, group and organise the information according to similarities. A category, or in some cases categories, were created to capture the related ideas. They were assigned a title/label and their frequency was presented for all participants per school under each of the questions. This process allowed the researcher to arrange the raw data into broad units of information, linked by colour codes, under which they were reinterpreted. The coloured numbers in brackets under the category titles in the Phase 2A –Axial Coding–Categories tables, indicate their original number code from Phase 1 where the detail of what was reported can be located. The numbers in the columns represent the combined frequency of related comments in that category by each participant, or group of participants, and the total number of comments for all participants from that school.

Throughout this phase of coding, shifts repeatedly occurred as similar ideas were grouped and regrouped. Some examples of this process are described below. School E, questions 2-4 and school F-I tables are located in the appendices.

- Table 5(b) Axial Coding – Categories Question 1 (School F): As there was no reference to ‘Community Engagement’ by the other four schools under this question it was apparent it would not become a theme. It was therefore relocated to become part of the ‘Collaboration’ category as it was about collaborating with other members of the school community.
- Throughout responses to almost all of the questions ‘Time’, ‘Sustainability’, or the ‘PLC evolves over time’ emerged. ‘Time’ was sometimes linked to the ‘System Contribution’ as the system provided funds for time. This can be seen in Table 3.4 Axial Coding – Categories, Question 1 (School E), in the importance of time being provided and its link with sustainability in Table 7(e) Axial Coding – Categories, Question 3 (School I). Significant shifts occurred in this category as the comments were reinterpreted to determine what it was about ‘Time’ that was considered important.
- Table 8(b) Axial Coding – Categories, Question 4 (School F): ‘Data, Assessing Together, Understanding and Use of Data that led to Shared Ownership’ was originally placed in its own category and considered separately. However, as the process reached Table 8(c) Axial Coding – Categories, Question 4 (School G), it was apparent that the ‘use of data’ was part of what teachers did to improve their knowledge and practice; therefore, it became incorporated into the ‘Teacher Knowledge and Practice’ category.

The Phase 2A –Axial Coding – Categories table for School E, question 1, is shown below for each question in Table 3.4.

Phase 2A – Axial Coding – Data

Table 3.4 Axial Coding – Categories, Question 1 (School E)

Q1: Did the exercise of leadership in the school and system influence teacher practice and, if so, how?	CATEGORY TITLE/S:				
	TEAM; COLLABORATION ; COMMON GOALS (1) (2) (8) (14)	BUILDING CAPACITY- LEADERSHIP TEAM & TEACHER LEADERSHIP (4) (7) (9) (10) (14)	SYSTEM CONTRIBUTION (Time) (6) (12) (13)	STRATEGIC APPROACH; CHANGE OF STRUCTURES (3)(5)	RELATIONSHIPS (15)
Principal	7	9	1	2	0
Assistant Principal	4	2	2	1	0
Teacher Educator	4	3	8	3	1
Teachers	4	9	8	3	0
TOTAL:	19	23	18	9	1

Through interpretation and further synthesis, the categories across the five schools were then amalgamated in Phase 2B to gradually develop the themes and theme components.

3.6.1.3 Phase 2B – Axial Coding – Category Matrices

This phase demonstrates how the CCM of analysis that constantly compares within and between levels of conceptualisation from specific to broad was utilised to guide the generation of themes and theme components. To allow for a cross-school comparison of the categories that emerged from Phase 2A, a category matrix was developed for each question. All schools' Phase 2A data sets were collated and compared within and across the schools for each question as a means of systematically managing the large amount of data generated whilst ensuring that the emerging themes captured all related categories. After this data was added to each category matrix, broader category titles were developed for each group. These titles represent concepts that capture the range of similar categories across the five schools under which the related categories were organised. Viewed horizontally, the total number of comments under each school's compilation of related categories can be seen. This gives an indication of the strength of responses in each area per school. All schools related comments were then combined vertically and can be seen in the 'overall total'.

As this process was a cumulative and iterative one, an important feature to note is that although the data is presented here as occurring after Phase 2A, and immediately before Phase 3, it was actually in process across the phases. The Phase 2B tables were generated as each school data set was coded and constantly revised as additional Phase 2A sets data became available. This involved a process of selecting the core categories for each school from the axial coding data tables,

comparing them to other relevant categories across schools, validating those relationships by returning to the raw data, and then modifying categories that needed further refinement before presenting them in the Phase 2B Category Matrix Tables. Apart from the sample shown for question 1, Table 3.5, these tables can be found in Appendix C. When viewing the data across the schools, it became apparent that some of the categories from Phase 2A were fundamental to the broader concepts represented in the Phase 2B categories. Some examples of the way in which these titles were changed to represent a concept that encompassed related elements from Phase 2A are:

- Table 3.5 Axial Coding – Category Matrix, Question 1 (Schools E–I): ‘Strategic Approach and Organisational Leadership’ now includes organisational leadership, strategic approach, change of structures and time (when relevant). In addition, ‘Collaboration, Team, Common Goals’ brought together Team, Community Engagement, Collaboration, Common Goals/Values and Inclusive.
- Table 9(b) Axial Coding – Category Matrix, Question 2 (Schools E–I): Note the shift of ‘PLC evolves over time’ (School E) in a category titled ‘PLC Evolution and Contributors’ that was later captured under ‘Teacher Knowledge and Practices, Learning Culture’ in School G. When the ‘evolution of the PLC’ emerged again it became clear that it was related to the shifts in learning culture that were occurring in the schools.
- Table 9(c) Axial Coding – Category Matrix, Question 3 (Schools E–I): ‘TE qualities’ and ‘practices’ are separated but the way in which these influenced teacher attitude and relationships became apparent. A ‘Learning Culture/Teacher Confidence’ category was created for School E; however, much of the relational aspects and teacher attitude data was being captured under ‘TE qualities that influence teacher practice’ in some other schools. The notion of teacher efficacy was also beginning to emerge.
- Table 9(d) Axial Coding – Category Matrix, Question 4 (Schools E–I): Initially ‘Learning Culture’ and ‘Relationships’ were separated (School E – see separate totals). Learning Culture also captured teacher attitude, resistance, resilience, confidence, and so on. As this process progressed it was evident that these areas were related; therefore, ‘Learning Culture and Relationships’ became a combined category.

The summative Category Matrix Table 3.5 below represents the compilation of categories for each school, for question 1. These categories led to the development of the themes and their components in Phase 3; however, they do not represent the developmental process through which they emerged. The categories where there was a large amount of data

became themes and smaller ones were incorporated into other themes or became theme components.

Phase 2B: Axial Coding - Category Matrices (Schools E-I)
 Table 3.5 Axial Coding - Category Matrix, Question 1

Teacher Leadership	Collaboration; team; common goals	Influence of leadership team practices on teacher knowledge and practice	System contribution	Strategic approach and organisational leadership	Relationships and changes in teacher thinking	Time	Data
School E: TOTAL=0	School E: TEAM: COLLABORATION COMMON GOALS (1) (2) (8) (14) TOTAL=19	School E: BUILDING CAPACITY-LT AND TEACHER LEADERSHIP (4) (7) (9) (10) (14) TOTAL=23	School E: SYSTEM CONTRIBUTION (Time) (6) (12) (13) TOTAL= 18	School E: STRATEGIC APPROACH; CHANGE OF STRUCTURES (3) (5) TOTAL= 9	School E: RELATIONSHIPS (15) TOTAL=1	School E: TOTAL=0	School E: TOTAL=0
School F: TOTAL=0	School F: TEAM: COMMUNITY ENGAGEMENT; COLLABORATION; COMMON GOALS/VALUES INCLUSIVE (5) (11) (10) (8) TOTAL=31	School F: LT PRACTICES INFLUENCING TEACHER PRACTICES (3) (12) (13) TOTAL=17	School F: SYSTEM CONTRIBUTION (1) TOTAL=5	School F: ORGANISATIONAL LEADERSHIP (STRATEGIC APPROACH; CHANGE OF STRUCTURES)(6) TOTAL=5	School F: RELATIONSHIPS, SHIFTS IN TEACHER THINKING (2) (9) TOTAL=5	School F: TIME (4) TOTAL=5	School F: TOTAL=0
School G: TEACHER LEADERSHIP (including increased confidence and capacity-teacher efficacy)(3) (4) TOTAL=8	School G: TOTAL=0	School G: LT PRACTICES (particularly in planning and organising for PD) INFLUENCING TEACHER KNOWLEDGE AND PRACTICES (2) (6) (8) (10) (7) TOTAL=15	School G: SYSTEM CONTRIBUTION (1) TOTAL=8	School G: TOTAL=0	School G: TOTAL=0	School G: TOTAL=0	School G: DATA(5) TOTAL=3
School H: TOTAL=0	School H: TEAM: COLLABORATION (11) (21) TOTAL= 12	School H: LT PRACTICES INFLUENCING TEACHER PRACTICES (1) (3) (5) (14) (17) TOTAL= 16	School H: SYSTEM CONTRIBUTION (2) (4) (8) (19) TOTAL= 19	School H: ORGANISATIONAL LEADERSHIP (STRATEGIC APPROACH; CHANGE OF STRUCTURES; TIME) (7) (9) (10) (12) (15) (16) TOTAL= 21	School H: RELATIONSHIPS, (CHANGE)(6) (13)(16) (18) (20) TOTAL= 11	School H: TOTAL=0	School H: TOTAL=0
School I: TOTAL=0	School I: TEAM: COLLABORATION (1) TOTAL= 20	School I: LT PRACTICES INFLUENCING TEACHER PRACTICES (7) (6) (5) TOTAL= 12	School I: SYSTEM CONTRIBUTION (2) TOTAL= 11	School I: ORGANISATIONAL LEADERSHIP (STRATEGIC APPROACH; CHANGE OF STRUCTURES; TIME)(3) TOTAL= 8	School I: TOTAL=0	School I: TOTAL=0	School I: TOTAL= 0
OVERALL TOTAL=8	OVERALL TOTAL=82	OVERALL TOTAL=83	OVERALL TOTAL=61	OVERALL TOTAL=43	OVERALL TOTAL=17	OVERALL TOTAL=5	OVERALL TOTAL=3

3.6.1.4 Phase 3 – Selective Coding

The selective coding phase built upon the results of the open and axial coding to facilitate the evolution of themes and theme components. Throughout Phases 2A and 2B of this process it became apparent that theme components were required. Elements of themes relating to the overall themes emerged so, due to their relevance to the sub-questions, they required analysis. While the Phase 3 data tables represent the end product of this process, the themes and theme components for each school, every data set was repeatedly recoded and re-categorised. This involved returning to the raw data tables from Phase 1 that had been grouped into categories in Phase 2A under each question. Guided by the category matrices generated during Phase 2B, and the comment frequencies that were tallied throughout each phase of coding to identify the ongoing occurrence of similar concepts and ideas across the five sites, in Phase 3 themes and their associated components were drafted and redrafted while categories were further synthesised. As part of this process, Phase 1 data was relocated to the Phase 3 Tables according to the draft themes and components, which resulted in the development of the final themes and theme components for the four questions. A sample is shown below in Table 3.6 for School E. The corresponding tables for the other four schools and questions are in Appendix D under ‘Phase 3 Data – Selective Coding School E, Questions 2-4 and Schools F-I all questions’.

To explain the results of this tri-level coding process and the relationship between the raw data in Phase 1 and the themes and theme components in Phase 3, an example from Table 3.6 is described below:

Column 1 – Four themes were generated with two to four components in each. As there are two aspects to this question, school leadership and system leadership, the responses have been separated.

Column 2: The idea from Phase 1 coding is listed per participant, beginning with the principal, according to its relevant theme (Theme 1: Collaboration). The theme component (C) number (1), which is C1 in this example, with a frequency (4) and detail of the comment ‘TE and LT worked as a team’ is indicated, and shown in brackets as (C1-4). This form of coding demonstrates that the same or a similar comment related to Component 1, ‘Development of a collaborative team approach’, occurred four times by this principal. The combined frequency of comments related to the entire theme per participant has been collated next to the participant title (e.g. principal = 14). The total number of comments per theme from all participants in each school has been collated and recorded in column 1, in brackets next to each theme title. For example, Theme 1: Collaboration had (39) comments in total from School E participants. In

question 1, sub-totals have also been recorded according to the two aspects of the question, school leadership and system leadership.

Phase 3: Selective Coding – Themes and Theme Components (School E)

Table 3.6 Selective Coding – Themes and Theme Components, Question 1

Q1: DID THE EXERCISE OF LEADERSHIP IN THE SCHOOL AND SYSTEM INFLUENCE TEACHER PRACTICE, AND IF SO HOW?		School Leadership: 20		System Leadership: 19				
Theme One: Collaboration (39)	School Leadership: 14 TE and LT worked as a team (C1-4); shifted to collaborative approach and planning with LT (C2-3); LT engaged in on-site professional learning and classroom modelling (C2-2); professional conversations and dialogue more prevalent (C3-4); engaged with the community (C1-1).	Assistant Principal=2 Collaborative approach of LT (C1-1); developed common goals and understandings as a LT (C3-1).	Teacher Educator=2 Connections with other schools valued (C4-1); leaders modelled and valued what was expected (C2-1).	Teachers=2 Everyone onboard and worked towards the same goal (C3-1); LT shared system PD learning with teachers (C2-1).	Principal=1 System influence allowed LT to have a more contemporary view of learning (C4-1).	Assistant Principal=2 System had a collaborative approach (C4-1); PD at system and school level influenced importance of positive leadership (C4-1).	Teacher Educator=1 System leadership provided was invaluable-non judgmental (C1-1).	Teachers=15 Some system support was offered within the school (C4-1); system caused pressure, stress and confusion for teachers and TE- too much accountability (C4-8); system involvement was a negative experience (C4-6).
Component 1 (C1): Development of a collaborative team approach								
Component 2 (C2): Leaders working with teachers								
Component 3 (C3): Shared vision and understandings								
Component 4 (C4): The role of system leadership								
Theme Two: Leadership Capabilities (17)	School Leadership: 17 Principal=3 LT developed confidence to lead the PD themselves (C4-2); teacher leadership beyond LT established (C4-1).	Assistant Principal=4 Strong Principal and LT the driving force behind the change (C2-2); built capacity of LT members (C4-2).	Teacher Educator=4 Leaders recognised as leaders of pedagogy (C2-1); leaders established relationships with teachers to build social capital (C1-1); passion of the LT drove the change (C3-1); leadership capacity of teachers built (C4-1).	Teachers=6 Time was allowed for people to understand what they were doing and develop a plan (C3-3); teacher leadership has grown (C4-1); LT identified teacher strengths-allowed them to take leadership of PD (C4-2).	Principal=0	Assistant Principal=0	Teacher Educator=0	Teachers=0
Component 1 (C1): Relationships								
Component 2 (C2): Characteristics of leaders								
Component 3 (C3): Openness to change								
Component 4 (C4): Devolution of responsibility								
Theme Three: Organisational	School Leadership: 7							System Leadership: 0

Restructuring (7)	Principal=2 PD previously a 'top-down' model delivered by LT members (C2-1); structures changed (C3-1).	Assistant Principal=1 Staffing reorganised to strategically support learning across the school (C3-1).	Teacher Educator TE=1 Strategic approach by LT adopted (C1-1).	Teachers-3 PD strategically provided by LT within and outside of school then shared with others (C1-3).	Principal=0	Assistant Principal=0	Teacher Educator=0	Teachers=0
Component 1 (C1): Strategic approach								
Component 2 (C2): Roles and responsibilities								
Component 3 (C3): Organisational and structural change								
Theme Four:	School Leadership: 13							
Resourcing (13)	Principal=0	Assistant Principal=0	Teacher Educator=6 Time and money provided (C1-1); LT could focus together uninterrupted at off-site PD (C2-1); time an issue in schools- time provided to reflect (C1-1); time to work with parents and know the community (C2-3)	Teachers=7 Time was provided for teachers C1-1); worked together and with TE (C2-1); a lot of work expected of teachers out of school hours-very difficult (C1-5);	Principal=0	Assistant Principal=0	Teacher Educator=0	Teachers=0
Component 1 (C1): Provision of resources								
Component 2 (C2): Use of resources								
	System Leadership: 0							

3.6.1.5 Phase 4 – Summary Tables

The purpose of this phase is to demonstrate, in summative form, how the different phases of coding brought together the process into an integrated whole. The summary tables amalgamate the results of the coding process to show how the raw data sets from Phase 1 are reflected in, and related to the themes and theme components. By linking the outcome of the coding process back to the original data sets, these tables demonstrate cohesion between Phases 1, 2A/2B and 3, and validate the themes and theme components for each of the four questions.

In a minority of cases the coding process indicated that data gathered in response to one research question had consequences for others. When this occurred, it is shown in the ‘research question’ column of the table with its corresponding theme and component. These comments were relocated accordingly back to the Selective Coding Tables so they could contribute to the most relevant research question. An example of this is seen in Appendix E Table 16(a), Summary Table, School E, Question 3: **18. System caused pressure, stress and confusion for teachers and TE – too much accountability.** As this comment relates to the role of system leadership it was relevant to question 1. It was therefore moved during the selective coding phase to Table 3.6 Selective Coding: Themes and Theme Components, Question 1 under Theme 1 (Collaboration), Component 4 (The role of system leadership). This process was replicated for comments in Table 17(a): Summary Table, Question 4 (School E) **13. System involvement has been a negative experience** and Table 16(e) Summary Table, Question 3 (School I), 2. Substantial PD for TE initially difficult, but good in the long-term. The summary tables for the other questions for school E, schools F – I can be located in the Appendix E.

Table 3.7 Summary Table – Question 1 (School E)

Q1: Did the exercise of leadership in the school and system influence teacher practice and if so, how?	Open coding results:		Selective coding results:			
	IDEAS	FREQUENCY	RESEARCH QUESTION	THEME	THEME COMPONENT	
Principal	1. The role of the TE and LT has influenced teacher practice by working together as a team	4	1	1	1	
	2. Shift from isolated independent teaching practice to collaborative approach and planning with leadership team	3	1	1	2	
	3. PD was previously a 'top-down' model that was delivered by leadership team members	1	1	3	2	
	4. Professional conversations and dialogue more prevalent	4	1	1	3	
	5. Structures within the school have been changed	1	1	3	3	
	6. System influence has allowed leadership team to have a more contemporary view of learning	1	1	1	4	
	7. Role of LT engaging in on-site professional learning and in classroom modelling important	2	1	1	2	
	10. Teacher leadership beyond the LT has been established	1	1	2	4	
	11. Members of the LT are now confident to lead PD themselves	2	1	2	2	
	Assistant Principal	8. Strong Principal and LT is the driving force behind change	2	1	2	2
		9. Building capacity of LT members important	2	1	2	4
1. Collaborative approach of LT		1	1	1	1	
6. Collaborative approach of system		1	1	1	4	
1. Common goals and common understandings as a LT		1	1	1	3	
5. Staffing is now organised to strategically support learning across the school		1	1	3	3	
Teacher Educator	6. PD at system and school level has influenced the importance of positive leadership	1	1	1	4	
	5. Strategic approach by LT adopted	4	1	3	3	
	10. Leadership capacity of teachers has been built	1	1	2	4	
	13. Time and money provided	1	1	4	1	
	13. LT could focus together uninterrupted at off-site PD	1	1	4	2	
	12. Connections with other schools valued	1	1	1	4	
	13. Time is an issue in schools-time provided to reflect	1	1	4	1	
	14. Importance of leaders being leaders of pedagogy recognised	1	1	2	2	
	15. Leaders need to establish relationships with teachers-build social capital	1	1	2	1	
	7. The role of leadership in modelling and valuing what is expected	1	1	1	2	
	13. Time to work with parents and know the community	3	1	4	2	
	8. The passion of the LT has driven the change	1	1	2	3	
	6. System leadership has been invaluable; non-judgmental	1	1	1	4	
	Teachers	5. PD is strategically provided within and outside of school then shared with others	3	1	3	1
1. Everyone is on board and working towards the same goal		1	1	1	3	
14. It took some time before people knew what they were doing and developed a plan-time allowed for this to happen		3	1	2	3	
13. Time provided for teachers		1	1	4	1	
13. Worked with other teachers and TE in the time		1	1	4	2	
15. A lot of work was expected of teachers out of school hours-very difficult		5	1	4	1	
10. Teacher leadership has grown		1	1	2	4	
6. LT shared learnings from external (system) PD with teachers		1	1	1	2	
10. LT identified teachers' strengths and allowed		2	1	2	4	

them to take leadership of PD				
6. Some system support offered within the school	1	1	1	4

3.6.1.6 Phase 5 – Themes and Theme Component for all Schools per Question

As this is a multi-site case study it is important that the final phase of the coding process draws the individual schools' data back together across all five schools. The data has therefore been collated according to each research question under the themes and theme components, and is presented below in Tables 3.8 – 3.20. These tables quantifiably demonstrate the number of comments per participant from each of the schools in each theme and theme component, and the total comments from all five schools. The specific content of each of the comments is available in both the Phase 3 Theme and Theme Component Tables and the Phase 4 Summary Tables. The data relating to the two aspects within the first sub-question, the exercise of school leadership and the exercise of system leadership are presented separately in Table 3.8 and addressed within the relevant theme components. System leadership comments are shown in red. The collated Themes and Theme Component tables below will also be referred to throughout Chapter Four where the data will be presented.

Table 3.8 Collated Themes and Theme Components for all schools

Question 1, Theme 1 – Collaboration

Q1, Theme 1: Collaboration – 156 comments in total (E=39 F=36 G=20 H=28 and I=33)																				
Schools:	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I
Participants:	P	P	P	P	P	A	A	N	A	A	T	T	T	T	T	T	T	T	T	T
	P	P	P	P	P	P	P	A	P	P	E	E	E	E	E	E	E	E	E	E
Comments per participant:	14	3	0	4	3	2	6	-	1	0	1	6	4	4	8	2	15	8	5	9
Component 1: Development of a collaborative team approach (27)	5	3	0	0	0	1	2	-	0	0	0	2	0	0	3	0	7	0	0	4
Component 2: Leaders working with teachers (49)	5	0	0	4	3	0	4	-	0	0	1	1	4	2	2	1	5	7	5	5
Component 3: Shared vision and understandings (19)	4	0	0	0	0	1	0	-	1	0	0	3	0	2	3	1	3	1	0	0
Component 4: The role of system leadership (61)	1	4	2	7	2	2	0	-	0	4	2	1	0	2	2	15	1	6	5	5

Table 3.9 Collated Themes and Theme Components for all schools

Question 1, Theme 2 – Leadership Capabilities

Q1, Theme 2: Leadership Capabilities – 71 comments in total (E=17 F=16 G=11 H=13 and I=14)																				
Schools:	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I
Participants:	P	P	P	P	P	A	A	N	A	A	T	T	T	T	T	T	T	T	T	T
Comments per participant:	3	1	2	0	0	4	2	-	3	7	4	3	3	5	2	6	10	6	5	5
Component 1: Relationships with teachers (11)	0	0	0	0	0	0	0	-	0	0	1	0	0	1	0	0	2	3	0	3
Component 2: Characteristics of leaders (17)	0	1	0	0	0	2	0	-	3	0	1	0	0	0	1	0	5	3	1	0
Component 3: Openness to change (25)	0	0	0	0	0	0	2	-	0	7	1	3	0	2	1	3	3	0	1	0
Component 4: Devolution of responsibility (21)	3	0	2	0	0	2	0	-	0	0	1	0	3	2	0	3	0	0	3	2

Table 3.10 Collated Themes and Theme Components for all schools

Question 1, Theme 3 – Organisational Restructuring

Q1, Theme 3: Organisational Restructuring – 44 comments in total (E=7 F=11 G=5 H=17 and I=4)																					
Schools:	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I	
Participants:	P	P	P	P	P	AP	AP	NA	AP	AP	TE	TE	TE	TE	TE	T	T	T	T	T	
Comments per participant:	2	0	0	0	1	1	2	-	2	3	0	1	8	0	9	3	3	1	5	3	0
Component 1: Strategic approach (9)	0	0	0	0	0	0	0	-	2	0	0	1	0	0	0	1	3	1	1	0	0
Component 2: Roles and responsibilities (10)	1	0	0	0	0	0	0	-	0	0	0	0	8	0	0	0	0	0	0	1	0
Component 3: Organisational and structural change (25)	1	0	0	0	1	1	2	-	0	3	0	0	0	0	9	2	0	0	4	2	0

Table 3.11 Collated Themes and Theme Components for all schools

Question 1, Theme 4 – Resourcing

Q1, Theme 4: Resourcing – 32 comments in total (E=13 F=3 G=0 H=13 and I=3)																					
Schools:	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I	
Participants:	P	P	P	P	P	A	A	A	A	A	T	T	T	T	T	T	T	T	T	T	
Comments per participant:	0	1	0	0	0	0	1	N	4	0	6	0	0	0	7	1	0	2	7	2	1
Component 1: Provision of resources (19)	0	1	0	0	0	0	0	-	2	0	2	0	0	0	6	1	0	0	6	1	0
Component 2: Use of resources (13)	0	0	0	0	0	0	1	-	2	0	4	0	0	0	1	0	0	2	1	1	1

Table 3.12 Collated Themes and Theme Components for all schools**Question 2, Theme 1 – Leadership**

Q2, Theme 1: Leadership – 105 comments in total (E=27 F=24 G=7 H=28 and I=19)																				
Schools:	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I
Participants:	P	P	P	P	P	A	A	N	A	A	T	T	T	T	T	T	T	T	T	T
Comments per participant:	8	1	2	5	1	6	10	-	2	2	3	7	2	6	5	10	6	3	15	11
Component 1: A collaborative approach (68)	0	1	0	3	0	3	8	-	2	0	3	6	2	5	0	10	6	3	10	6
Component 2: The exercise of instructional leadership (22)	5	0	2	0	1	2	0	-	0	2	0	1	0	0	4	0	0	0	5	0
Component 3: Relationships of trust and professionalism (15)	3	0	0	2	0	1	2	-	0	0	0	0	0	1	1	0	0	0	0	5

Table 3.13 Collated Themes and Theme Components for all schools**Question 2, Theme 2 – Teacher Capacity**

Q2, Theme 2: Teacher Capacity – 147 comments in total (E=36 F=28 G=16 H=43 and I=24)																				
Schools:	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I
Participants:	P	P	P	P	P	AP	AP	NA	AP	AP	TE	TE	TE	TE	TE	T	T	T	T	T
Comments per participant:	13	5	3	5	4	2	5	-	5	6	7	2	5	11	1	14	16	8	22	13
Component 1: Knowledge and practices (82)	10	2	2	4	3	2	2	-	3	5	5	2	1	5	1	10	12	2	4	7
Component 2: Attitude and efficacy (65)	3	3	1	1	1	0	3	-	2	1	2	0	4	6	0	4	4	6	18	6

Table 3.14 Collated Themes and Theme Components for all schools**Question 2, Theme 3 – Structure and Organisation**

Q2, Theme 3: Structure and Organisation – 35 comments in total (E=19 F=1 G=3 H=6 and I=6)																				
Schools:	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I
Participants:	P	P	P	P	P	A	A	N	A	A	T	T	T	T	T	T	T	T	T	T
Comments per participant:	1	0	1	0	2	1	0	-	2	1	5	0	0	1	1	12	1	2	3	2
Component 1: Reorganisation of structures and roles (11)	0	0	0	0	0	0	0	-	1	1	5	0	0	0	0	2	0	2	0	0
Component 2: Resourcing (24)	1	0	1	0	2	1	0	-	1	0	0	0	0	1	1	10	1	0	3	2

Table 3.15 Collated Themes and Theme Components for all schools

Question 3, Theme 1 – Structure and Organisation

Q3, Theme 1: Structure and Organisation – 115 comments in total (E=34 F=27 G=12 H=21 and I=21)																				
Schools:	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I
Participants:	P	P	P	P	P	A	A	N	A	A	T	T	T	T	T	T	T	T	T	T
Comments per participant:	9	3	8	6	2	1	9	-	3	6	13	7	3	6	5	11	8	1	6	8
Component 1: The Teacher Educator role (55)	4	3	6	0	2	1	4	-	1	6	7	0	0	4	2	0	3	1	4	7
Component 2: Time and sustainability (60)	5	0	2	6	0	0	5	-	2	0	6	7	3	2	3	11	5	0	2	1

Table 3.16 Collated Themes and Theme Components for all schools

Question 3, Theme 2 – Characteristics and Qualities of the Teacher Educator

Q3, Theme 2: Characteristics and Qualities of the Teacher Educator – 123 comments in total (E=10 F=36 G=2 H=23 and I=33)																				
Schools:	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I
Participants:	P	P	P	P	P	A	A	N	A	A	T	T	T	T	T	T	T	T	T	T
Comments per participant:	0	2	0	9	2	2	2	-	0	10	2	12	16	3	11	6	20	5	11	10
Component 1: Relationships (64)	0	0	0	4	2	2	2	-	0	8	2	8	9	3	6	0	10	2	5	9
Component 2: Credibility (59)	0	2	0	5	0	0	0	-	0	2	0	4	7	0	5	6	10	3	6	1

Table 3.17 Collated Themes and Theme Components for all schools

Question 3, Theme 3 – Contribution to Teacher Capacity

Q3, Theme 3: Contribution to Teacher Capacity – 111 comments in total (E=36 F=11 G=13 H=25 and I=26)																				
Schools:	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I
Participants:	P	P	P	P	P	A	A	N	A	A	T	T	T	T	T	T	T	T	T	T
Comments per participant:	8	4	3	0	2	9	1	-	5	4	2	1	3	5	6	17	5	7	15	14
Component 1: Teacher Practices (93)	6	4	3	0	2	9	1	-	4	4	0	0	3	2	4	14	4	5	14	14
Component 2: Teacher Efficacy (18)	2	0	0	0	0	0	0	-	1	0	2	1	0	3	2	3	1	2	1	0

Table 3.18 Collated Themes and Theme Components for all schools

Question 4, Theme 1 – Leadership

Q4, Theme 1: Leadership – 136 comments in total (E=30 F=20 G=28 H=30 and I=28)																				
Schools:	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I
Participants:	P	P	P	P	P	A	A	N	A	A	T	T	T	T	T	T	T	T	T	T
Comments per participant:	6	1	7	6	4	5	6	-	3	7	8	3	5	2	2	11	10	16	19	15
Component 1: Collaboration (54)	3	1	0	1	2	2	2	-	0	0	3	0	5	2	2	5	4	4	10	8
Component 2: Coherence (82)	3	0	7	5	2	3	4	-	3	7	5	3	0	0	0	6	6	12	9	7

Table 3.19 Collated Themes and Theme Components for all schools

Question 4, Theme 2 – Teacher Capacity

Q4, Theme 2: Teacher Capacity – 141 comments in total (E=27 F=25 G=14 H=35 and I=40)																				
Schools:	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I
Participants:	P	P	P	P	P	A	A	N	A	A	T	T	T	T	T	T	T	T	T	T
Comments per participant:	7	1	2	4	3	4	5	-	8	12	2	3	9	6	13	14	16	3	17	12
Component 1: Teacher Knowledge and Practices (75)	6	1	2	3	2	0	2	-	8	6	1	1	6	6	8	1	10	0	3	9
Component 2: Teacher Attitude, Trust and Relationships (66)	1	0	0	1	1	4	3	-	0	6	1	2	3	0	5	13	6	3	14	3

Table 3.20 Collated Themes and Theme Components for all schools

Question 4, Theme 3 – Resourcing and Sustainability

Q4, Theme 3: Resourcing and Sustainability – 34 comments in total (E=9 F=7 G=4 H=9 and I=5)																				
Schools:	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I	E	F	G	H	I
Participants:	P	P	P	P	P	A	A	N	A	A	T	T	T	T	T	T	T	T	T	T
Comments per participant:	0	1	0	0	0	2	0	-	4	0	3	2	2	0	1	4	4	2	5	4
Component 1: Resourcing and sustainability (34)	0	1	0	0	0	2	0	-	4	0	3	2	2	0	1	4	4	2	5	4

3.7 Conclusion

The tri-level coding process presented in this chapter resulted in themes and theme components for each of the four research sub-questions. As described in Phase 2B, the cross-school analysis occurred continuously until the end of Phase 3 when a final analysis confirmed the themes. The table 3.21 below reflects the final themes and theme components that emerged from the data analysis process for each question across the five schools. In Chapter Four, the data from these themes will be presented.

Table 3.21 Final Themes and Theme Components

Q1: DID THE EXERCISE OF LEADERSHIP IN THE SCHOOL AND SYSTEM INFLUENCE TEACHER PRACTICE AND IF SO HOW?	
Theme One: Collaboration	Component 1 (C1): Development of a collaborative team approach Component 2 (C2): Leaders working with teachers Component 3 (C3): Shared vision and understandings Component 4 (C4): The role of system leadership
Theme Two: Leadership Capabilities	Component 1 (C1): Relationships Component 2 (C2): Characteristics of leaders Component 3 (C3): Openness to change Component 4 (C4): Devolution of responsibility
Theme Three: Organisational Restructuring	Component 1 (C1): Strategic approach Component 2 (C2): Roles and responsibilities Component 3 (C3): Organisational and structural changes
Theme Four: Resourcing	Component 1 (C1): Provision of resources Component 2 (C2): Use of resources
Q2: DID THE EXPERIENCE OF A PROFESSIONAL LEARNING COMMUNITY INFLUENCE TEACHER PRACTICE AND IF SO HOW?	
Theme One: Leadership	Component 1 (C1): A collaborative approach Component 2 (C2): The exercise of instructional leadership Component 3 (C3): Relationships of trust and professionalism
Theme Two: Teacher Capacity	Component 1 (C1): Knowledge and practices Component 2 (C2): Attitude and efficacy
Theme Three: Structure and Organisation	Component 1 (C1): Reorganisation of structures and roles Component 2 (C2): Resourcing
Question 3: WHAT WAS THE PARTICULAR CONTRIBUTION OF THE TEACHER EDUCATOR ROLE TO TEACHER PRACTICE?	
Theme One: Structure and Organisation	Component 1 (C1): The Teacher Educator role Component 2 (C2): Time and sustainability
Theme Two: Characteristics and Qualities of the Teacher Educator	Component 1 (C1): Relationships Component 2 (C2): Credibility
Theme Three: Contribution to Teacher Capacity	Component 1 (C1): Teacher Practices Component 2 (C2): Teacher Efficacy
Q4: DID THE NATURE OF THE ON-SITE PROFESSIONAL DEVELOPMENT INFLUENCE TEACHER PRACTICE AND IF SO HOW?	
Theme One: Leadership	Component 1 (C1): Collaboration Component 2 (C2): Coherence
Theme Two: Teacher Capacity	Component 1 (C1): Teacher Knowledge and Practices Component 2 (C2): Teacher Attitude, Trust and Relationships
Theme Three: Resourcing and Sustainability	Component 1 (C1): Resourcing and sustainability

CHAPTER FOUR – PRESENTATION OF DATA

4.0 Introduction

This chapter will present the data to address the sub-questions outlined in Chapter Three that will provide a foundation for answering the major research question: How does on-site PD influence teacher practice? The sub-questions are:

- Did the exercise of leadership in the school and system influence teacher practice and, if so, how?
- Did the experience of a PLC influence teacher practice and, if so, how?
- What was the particular contribution of the TE to teacher practice?
- Did the nature of the on-site PD influence teacher practice and, if so, how?

The data sources utilised to answer these sub-questions were the pre-interview self-reflection tools, semi-structured interviews and group interviews.

4.1 Pre-interview Self-reflection Tool Data

The Pre-interview Self-reflection Tool was developed using *The Australian Professional Standards for Teachers* (AITSL, 2011) and the four research sub-questions. The seven Standards and their descriptors within this Federal Government document “represent an analysis of effective, contemporary practice by teachers throughout Australia” (AITSL, 2011, p. 1) and describe the expected teaching practice in the five schools involved in this multi-site case study. These Standards were therefore used as the practice measure in the Pre-interview Self-reflection Tool.

Prior to participating in the semi-structured and group interviews, the Self-reflection Tool was given to both leaders and teachers to complete independently. In it, each of the four research sub-questions was provided to the participants. They were asked to indicate whether they thought their teaching practice had ‘diminished’, ‘not changed’ or ‘improved’ in each of the seven Standards. Leaders were requested to complete the Pre-interview Self-reflection Tool in relation to the practice of teachers in their schools. All participants were also asked to record evidence of these changes that was discussed during the interviews.

Tables 4.1– 4.4 show the frequency of responses to the four sub-questions tabulated against the seven Standards. A breakdown of these responses from each leader and teacher per school is also shown in these tables.

Table 4.1 Pre-Interview Self-Reflection Tool Collated Data Question 1

(KEY: DIMINISHED -1; NO CHANGE 0; IMPROVED +1)

Q1: Did the exercise of leadership in the school and system influence teacher practice and, if so, how?

THE NATIONAL PROFESSIONAL STANDARDS FOR TEACHERS		-1	0	Total	+1	Total
1: Know students and how they learn	Leaders	0	H1	1	E3 F3 G2 H2 I2	12
	Teachers	0	H3 I2	5	E8 F6 G5 H3 I1	23
2: Know the content and how to teach it	Leaders	0	H1	1	E3 F3 G2 H2 I2	12
	Teachers	0	0	0	E8 F6 G5 H6 I3	28
3: Plan for and implement effective teaching and learning	Leaders	0	0	0	E3 F3 G2 H3 I2	13
	Teachers	0	H1 I1	2	E8 F6 G5 H5 I2	26
4: Create and maintain supportive and safe learning environments	Leaders	0	F1 G1 H1	3	E3 F2 G1 H2 I2	10
	Teachers	0	E2 H2 I2	6	E6 F6 G5 H4 I1	22
5: Assess, provide feedback and report on student learning	Leaders	0	H1	1	E3 F3 G2 H2 I2	12
	Teachers	0	E1 H1	2	E7 F6 G5 H5 I3	26
6: Engage in professional learning	Leaders	0	I1	1	E3 F3 G2 H3 I1	12
	Teachers	0	0	0	E8 F6 G5 H6 I3	28
7: Engage professionally with colleagues, parents/carers and the community	Leaders	0	I1	1	E3 F3 G2 H3 I1	12
	Teachers	0	E1 I2	3	E7 F6 G5 H6 I1	25

Table 4.2 Pre-Interview Self-Reflection Tool Collated Data Question 2**Q2: Did the experience of a PLC influence teacher practice and, if so, how?**

THE NATIONAL PROFESSIONAL STANDARDS FOR TEACHERS		-1	0	Total	+1	Total
1: Know students and how they learn	Leaders	0	H1	1	E3 F3 G2 H2 I2	12
	Teachers	0	E1 H2	3	E7 F6 G5 H4 I3	25
2: Know the content and how to teach it	Leaders	0	0	0	E3 F3 G2 H3 I2	13
	Teachers	0	E1 H1 I1	3	E7 F6 G5 H5 I2	25
3: Plan for and implement effective teaching and learning	Leaders	0	0	0	E3 F3 G2 H3 I2	13
	Teachers	E1	0	0	E7 F6 G5 H6 I3	27
4: Create and maintain supportive and safe learning environments	Leaders	0	F1 H1	2	E3 F2 G2 H2 I2	11
	Teachers	E1	E1 H3 I2	6	E6 F6 G5 H3 I1	21
6: Engage in professional learning	Leaders	0	I1	1	E3 F3 G2 H3 I1	12
5: Assess, provide feedback and report on student learning	Leaders	0	I1	1	E3 F3 G2 H3 I2	13
	Teachers	0	E2 G1 I1	4	E6 F6 G4 H6 I2	24
6: Engage in professional learning	Leaders	0	I1	1	E3 F3 G2 H3 I1	12
	Teachers	0	E1	0	E7 F6 G5 H6 I3	27
7: Engage professionally with colleagues, parents/carers and the community	Leaders	0	E1 I1	2	E2 F3 G2 H3 I1	11
	Teachers	0	E1 I2	3	E7 F4 G5 H6 I1	23

Table 4.3 Pre-Interview Self-Reflection Tool Collated Data Question 3**Q3: What was the particular contribution of the Teacher Educator role to teacher practice?**

THE NATIONAL PROFESSIONAL STANDARDS FOR TEACHERS		-1	0	Total	+1	Total
1: Know students and how they learn	Leaders	0	H1	1	E3 F3 G2 H2 I2	12
	Teachers	0	E1 I1	2	E7 F6 G5 H6 I2	26
2: Know the content and how to teach it	Leaders	0	H1	1	E3 F3 G2 H2 I2	12
	Teachers	0	I1	1	E8 F6 G5 H6 I2	27
3: Plan for and implement effective teaching and learning	Leaders	0	I1	1	E3 F3 G2 H3 I2	13
	Teachers	E1	E1 I1	2	E6 F6 G5 H6 I2	25
4: Create and maintain supportive and safe learning environments	Leaders	0	F1 H1	2	E3 F2 G2 H2 I2	11
	Teachers	E1	E2 H2 I1	5	E6 F6 G5 H4 I2	23
5: Assess, provide feedback and report on student learning	Leaders	0	0	0	E3 F3 G2 H3 I2	13
	Teachers	0	E1 I1	2	E7 F6 G5 H6 I2	26
6: Engage in professional learning	Leaders	0	I1	1	E3 F3 G2 H3 I1	12
	Teachers	0	0	0	E8 F6 G5 H6 I3	28
7: Engage professionally with colleagues, parents/carers and the community	Leaders	0	I1	1	E3 F3 G2 H3 I1	12
	Teachers	0	E1 I1	2	E7 F6 G5 H6 I2	26

Table 4.4 Pre-Interview Self-Reflection Tool Collated Data Question 4**Q4: Did the nature of the on-site PD influence teacher practice and, if so, how?**

THE NATIONAL PROFESSIONAL STANDARDS FOR TEACHERS		-1	0	Total	+1	Total
1: Know students and how they learn	Leaders	0	H1	1	E3 F3 G2 H2 I2	12
	Teachers	E1	H2 I1	3	E7 F6 G5 H4 I2	24
2: Know the content and how to teach it	Leaders	0	0	0	E3 F3 G2 H3 I2	13
	Teachers	0	F1 H1 I1	3	E7 F6 G5 H4 I2	24
3: Plan for and implement effective teaching and learning	Leaders	0	0	0	E3 F3 G2 H3 I2	13
	Teachers	0	E1 I1	2	E7 F6 G5 H6 I2	26
4: Create and maintain supportive and safe learning environments	Leaders	0	F1 H1	2	E3 F2 G2 H2 I2	11
	Teachers	0	E1 H2 I1	4	E7 F6 G5 H4 I2	24
5: Assess, provide feedback and report on student learning	Leaders	0	0	0	E3 F3 G2 H3 I2	13
	Teachers	0	E1	1	E7 F6 G5 H6 I3	27
6: Engage in professional learning	Leaders	0	I1	1	E3 F3 G2 H3 I1	12
	Teachers	0	I1	1	E8 F6 G5 H6 I2	27
7: Engage professionally with colleagues, parents/carers and the community	Leaders	0	I1	1	E3 F3 G2 H3 I1	12
	Teachers	0	E1 G1 I1	3	E7 F6 G4 H6 I2	25

A total of 28 teachers and 13 leaders submitted Pre-interview Self-reflection Tools. A small minority did not put a ranking against some of the Standards. The collated data showed that according to the perceptions of these participants, on-site PD led to improved teacher practice in each of the areas described in the seven Standards. Out of a possible 164 responses, the total number of ‘improved’ rankings for each ranged from 133 to 158. A breakdown of these responses in order of frequency is provided below:

- Standard 6: (engage in professional learning) – 158 ‘improved’ rankings
- Standard 5: (assess, provide feedback and report on student learning) – 154 ‘improved’ rankings
- Standard 2: (know the content and how to teach it) – 154 ‘improved’ rankings
- Standard 3: (plan for and implement effective teaching and learning) – 146 ‘improved’ rankings
- Standard 1: (know students and how they learn) – 146 ‘improved’ rankings
- Standard 7: (engage professionally with colleagues, parents/carers and the community) – 146 ‘improved’ rankings
- Standard 4: (create and maintain supportive and safe learning environments) – 133 ‘improved’ rankings.

These responses are noteworthy because they indicate that on-site PD influenced teacher practice in a positive way. While there was only a small variance in the frequency of responses about improved practice in each of the seven Standards, what came out of this data was that the three highest scores, Standards 6, 5 and 2, represent each of the three domains of teaching, i.e. professional knowledge, professional practice and professional engagement. *The Australian Professional Standards for Teachers* (AITSL, 2011) describes these three domains as important

because teaching practice draws on all of them (AITSL, 2011) which, according to the data, happened in the present study.

The Pre-interview Self-reflection Tool honoured the perceptions of participants and provided data prior to the analysis of the semi-structured and group interview data. It indicated that on-site PD had an influence on teacher practice, which gives validity to the analysis of the other data sets. While leaders and teachers believe that teacher practice improved, it was important that other data be examined to find out why they felt this way if the major research question, which is about how on-site PD influenced teacher practice, was to be answered.

4.2 Semi-structured Interviews and Group Interview Data

The semi-structured and group interview data will be presented under each of the research sub-questions according to the themes and theme components developed through the coding process described in Chapter Three. The perspectives of leaders and teachers are reported separately. A coding system that identifies the role and school of participants, yet allows them to remain anonymous is used for each quotation. Their role is referred to in the following way: P – Principal, AP – Assistant Principal, TE – Teacher Educator, and T – Teacher. The school of the participant is then shown as E, F, G, H, or I next to their role code. As teacher data was gathered via group interviews, if they are from the same school their identity code is the same e.g. (TF).

Because this was a multi-site case study Tables 3.8 – 3.20 from Chapter 3, which show the cumulative data across all five schools for each question, will be referred to at the commencement of the data presentation for each theme. The frequency of comments in the different themes and components is also shown for each school within the data set. Individual participant comments are available in the Phase 3, Theme and Theme Component Tables and the Phase 4, Summary Tables in Chapter Three. The presentation of comments within each theme and component will occur in frequency order. The themes and their components evolved throughout an iterative coding process so it was not possible to predict their frequency in advance. The sequence of the data presentation in this chapter therefore does not always match the order in which the themes and their components are listed in the corresponding tables in Chapter 3.

Question 1: Did the exercise of leadership in the school and system influence teacher practice and, if so, how? Analysis of the interview transcripts revealed four themes related to this question and within each theme there are two, three or four components. The themes are:

1. Collaboration
2. Leadership Capabilities
3. Organisational Restructuring
4. Resourcing.

Each theme will be discussed in turn. The data relating to the two aspects within the first sub-question, the exercise of school leadership and the exercise of system leadership are presented separately in Table 3.8 and addressed within the relevant theme components.

Question 1, Theme 1 – Collaboration

The theme of Collaboration was the most prevalent in the interview data that related to the first sub-question. As shown in Table 3.8, participants made a total of 156 comments about the role collaboration played in influencing teacher practice through the exercise of leadership. Ninety-five comments refer to school leadership (E=19, F=30, G=12, H=14 and I=20) and 61 relate to system leadership (E=20, F=6, G=8, H=14 and I=13). Data relating to each of these components will now be presented.

Question 1, Theme 1 – Collaboration: The Role of System Leadership

Within the theme of Collaboration, the role of system leadership was the most frequently reported area with 61 comments in total. The coding process revealed this component to be about how system leaders collaborated with leaders and teachers, what they did and what they put in place to influence teacher practice. The majority of comments came from teachers, and some differences between the perceptions of leaders and teachers were apparent.

Leaders:

Leaders generally reported that the exercise of leadership in the system positively influenced teacher practice by providing them with support, building a degree of collaboration between schools, and facilitating PD to help them better understand and influence pedagogical practice. This PD included the introduction of Instructional Rounds, a collaborative process whereby teachers and leaders visit the classrooms of others to gather data and identify a ‘problem of practice’ to be worked on within the school. Reported negative aspects of system involvement include the high expectations placed on teachers, the type of PD provided and the difficulty of managing the amount of time given to it. There was also a perceived need for system personnel to be more involved at the school level.

Some TEs reported that a sense of collaboration across schools was built by the system. This was viewed positively because it helped them to feel that they were not alone; others were having similar experiences: “Knowing that you are not in this by yourself; there are other people out there ... Yes, we are all doing things a bit differently but there’s that connection” (TEE). One principal recognised the guiding role of the system during this period of rapid change and described it in the following way: “The system offered direction and guidance about the directives and directions for the project and had a consistent approach, [but] there was a lot of change coming through at the same time” (PG). Some school leaders acknowledged the system’s contribution through such things as keeping in contact with them and allowing time for reflection: “That has been the success of SSNP ... that constant checking in, the accountability, the support, the time, being able to reflect, that’s the difference” (TEE). Other school leaders reported a different opinion and believe that the system’s actions initially detracted from improved teacher practice. Due to the high expectations placed on teachers a negative view of the system, particularly at the beginning, was reported but benefits from the extra work were later recognised:

The only negative was the demands placed on staff in the early days ... It was a burdensome task. Whilst we all and I say we, I’m included in that, hated the demands placed upon teachers to do it, it’s really been a fabulous investment (PH).

An additional observation was that system personnel organising SSNP should have worked in schools to focus on students and progress the project more quickly:

It would have been really good if as a system, the people who were the organisers spent more time in schools ... If they had spent more time in each of the schools with the TEs and with the staff we would have gotten to the point of it being about our kids a little bit earlier than we did (API).

It was also expressed that more credibility from system personnel was required: “We need credibility from the system people coming in” (TEI).

Leaders consistently reported that the system provided them with PD that included opportunities to increase their understandings of effective pedagogy: “The system influence ... has allowed the leadership team to have a more contemporary view of learning” (PE). One leader reported that this PD had an emphasis on them being positive: “Through the professional learning at the system level we are able to have a better understanding of the influence of positive leadership across the school” (APE). During these sessions there was a focus on Instructional Rounds and it was a system expectation that school leaders implement this process:

This year we have participated in Instructional Rounds ... that was something that came through as a system initiative. It has been very successful ... Once teachers got into the routine and saw it was non-threatening and non-intrusive ... they were able to accept that. They found it worthwhile. So those sorts of things have been influential (PF).

According to this leader, Instructional Rounds had a positive influence on teacher practice once they realised it was a non-threatening experience.

The system led PD for all on the leadership team, but more so for TEs. Leaders suggested that its frequency caused TEs to be out of school too much, initially resulting in a lack of momentum or consistency of practice at the school level. The amount of time given to this PD was reported by some as difficult to manage for both the TEs and other leaders: "They were given very substantial in-servicing which at first was hard for them, and hard for us, but in the long term I think it was the right model" (PI). Another leader supported this notion but described its influence on the daily life of schools:

[At] the beginning ... the TEs were out of the school a lot at PD, which is fine, except that if they had set up a programme that relied on them being in class teaching with the teacher then that programme didn't go ahead that day. That's always a rub for people (API).

A characteristic of the views of most leaders was that they eventually considered the time given to the development of TEs worthwhile. Despite this recognition, one leader expressed an opposing opinion about the PD being focused mainly on one person: "The system went through a train the trainer type model that did not necessarily have the best effect back on the ground ... It depends on the expertise of that person. It was a negative experience" (APH). This leader further elaborated by questioning the content and timing of the PD:

Often, the system provided PD according to their big picture. Not every school was ready for that particular piece of inservicing. Where was that going to fit in the whole scheme of things as far as our own PD here at school? It's this system saying yes, that's got to happen... You want another element in there when we are already full? How much fuller can you be? (APH).

These comments suggest that the system expected too much of schools; they were already fully committed and the PD provided was considered irrelevant.

Teachers:

Teachers reported a different perspective from that of some leaders about the influence of system leadership on their practice. A small minority described them as having a positive

influence on their practice but most reported the experience as negative and stressful. They indicated that more collaboration across schools would have been beneficial, there was a lack of strategic direction, the expectations in relation to data analysis well exceeded the time made available to meet them, and there was an unrealistic level of accountability that influenced learning time for students. The credibility of system personnel was also questioned.

A few teachers indicated that some system support to improve their practice was offered. One teacher described their occasional school involvement in the following way: “Sometimes we have Catholic Education personnel come out and they might work with a group or a grade on a particular subject area” (TE). Many teachers reported that their experience with system personnel was unhelpful: “They're quite judgmental and it was quite negative ... lacking people skills” (TE). Teachers felt that the visits of system leaders lacked purpose and wanted to know why people with expertise in leadership roles did not demonstrate their skills to them:

We also had a number of people from Catholic Education to come into our classrooms ... I don't know what their purpose was. To view, to see, to have a look at what's happening? Now I think that the people that are in system positions would be master educators. They would have a lot of skills that they could share with teachers inside the classroom. I don't think that there was enough modelling or sharing of their expertise at a classroom level (TE).

Many teachers agreed with this view and reported that they felt criticised during these visits. They wanted system leaders to not just talk about their expectations but to model them. The following quotes highlight this point:

They've got all that expertise in there. Don't come out and watch and criticise. Come out and share your expertise and show us. Don't show us from a book, don't show us from an overhead and don't show us from a computer. Come into my classroom... you teach them because they're not out of your textbook (TE).

Others supported this position. A description of a system leader's visit from the perspective of a teacher is described below:

Such and such is coming from the system today in your classroom. What are they coming for? Just to have a look at what's happening in your classroom. So, they're going to watch me again teach, which is fine, and then criticise or say, you could do this or you could do that. Well why don't you come out, bring your bag of tricks, and show us the way it's meant to be (TE)?

These viewpoints were endorsed by other teachers who added that system personnel needed to be more in touch with the reality of schools if they were to support them: “In terms of the system I don’t think they realise what goes in schools, how much is placed on classroom teachers and specialist teachers ... they need to come into the classroom a little bit more and just see what happens” (TH). The credibility of system personnel was questioned: “Do the people that are asking the questions of us actually understand?” (TE). Another teacher reported feeling isolated and unaware of what was happening beyond his or her own school: “I feel like we’ve been in isolation with our TE. I’ve no idea what other schools are doing” (TI). This teacher indicated that they did not experience inter-school collaboration.

Teachers consistently agreed that system leader involvement was a negative experience and they were the subjects of system decisions: “The bullets are getting fired from up above and hitting us way down here” (TE). The question of whether the system was aware of the demands placed on teachers was named as part of this concern: “I wonder sometimes if we get things put on our plate because it’s out there and it’s deemed it’s needed via maybe the Catholic Education or whatever ... Do they look at the big picture and how it is best delivered?” (TI). Teachers questioned whether the broader context and the implications for teachers were considered when system decisions were made.

The pressure on teachers as the system moved from one strategy to the next was identified. Particularly in the initial stages, teachers were confused and believed there was no strategic direction. The following quote exemplifies this view:

There was a lot of pressure from the system and it felt like we would try, be introduced to a strategy, we’d start, it was going well and then we jumped to another strategy. That started, we got on-board, then we were introduced to another strategy and it felt like ... a bit of confusion on top as to what, and in what way, and in what direction ... We just felt we were trying strategy, after strategy, after strategy (TE).

Teachers reported that this confusion continued, as they would start something but the direction constantly changed. It was suggested that a plan emerged by the third or fourth year:

At first nobody knew what they were doing. We were fumbling. There wasn’t a plan. The plan developed as we went along ... by the third or the fourth year people knew what they were doing. For me it changed a lot. We did get a lot of time to plan ... then you would go back and file that to work on, then something else would come in so you’d leave off and start there (TE).

Although teachers consistently reported that they were unsure of what they were meant to be doing, things eventually became clearer for them. As seen in the following quote, this was apparently due to the efforts of school leadership teams:

Towards the end it came together. For me it would have been better if the plan was there at the beginning. This is where we're starting, this is where we're going, this is what we need to do so you could see the whole plan, not just snippets. You've been, like many of us, totally confused for the first couple of years ... By the fourth year we got it down pat ... I would credit the leadership team for that (TE).

School leaders were also given credit for sharing their learning from PD with teachers. As suggested below, one teacher reported that system support was experienced indirectly:

Leadership team seems to be privy to extra PD and courses that the teachers haven't. But what they do is, they have gone off and brought back some of the teaching and learning strategies and included them in a PD afternoon (TE).

Teachers also indicated that they were aware that they were not offered the same learning opportunities from the system as their leaders.

There was strong consensus from teachers that there was too much system accountability for TEs and the demands on both TEs and teachers were excessive, unrealistic and detracted from learning time. Most teachers reported that system expectations were difficult to meet, time consuming and did not have a positive influence on their practice:

From a system perspective rather than a school perspective, the agenda is just heaped on. There are more and more and more things expected ... Some of the things that we do are because the system requires them ... The extras that are tacked on, that are loaded on, have to filter down to us and take away from our learning time, our teaching time (TG).

It was reported that what the system required of teachers was not accompanied with enough time to complete the work:

The tricky thing is when you're a classroom teacher, you might have a system member come in for a day and say you've got to do this for programming and assessment, but they don't give you the time to necessarily finish ... so you're then left with the overwhelming task of it being an add-on (TE).

As well as impinging on their teaching time, teachers reported that these demands encroached on their personal time and the emphasis was not on the students:

There was a lot of planning at home as well. We spent hours and hours after school because we could not finish what was expected of us at school ... It should have been less paperwork and more focusing on the kids (TE).

Some teachers suggested that they understood that data collection and analysis contributed to their effectiveness but, as described by the following teacher, it was still difficult to manage:

We are collecting a lot of data and thinking, OK now we've got to analyse it. But when you look at it, it is leading to effective teaching strategies ... At the moment I think we all feel, oh another thing and another thing. It's just laid on, and laid on, and laid on, and we've got to work through that ... Then we will get to be more effective (TG).

Another teacher acknowledged that the system expectations regarding the use of data were seen as worthwhile in the long run: "It is no longer an onerous burden or a busyness thing; it is just part of what you do as a good teacher to meet the students' needs" (TG). Teacher data reporting this recognition was in the minority and the additional work associated with the use of data was more consistently perceived as a chore.

Question 1, Theme 1 – Collaboration: Leaders Working with Teachers

Within this theme, the second most frequently reported form of collaboration with 49 comments was leaders in schools working with teachers (see Table 3.8). The focus of the data presented in this component is on how these leaders worked directly with teachers to influence their practice.

Leaders:

Leaders reported that they worked with teachers in a variety of ways such as organising and leading collaborative planning and PD, classroom modelling, engaging in ongoing professional dialogue and helping teachers to develop their understanding of data.

Leaders suggested that it was an expectation of principals that everyone on the leadership team be involved in leading the learning: "All of our leaders are involved in classroom practice ... not just supporting, leading" (PI). In doing this, one principal reported that they participated in Instructional Rounds: "This year leadership in the school has participated in Instructional Rounds" (PF). TEs led this process and sometimes other leaders allowed their teaching to be observed: "We instigated instructional rounds this year ... The AP and I both went in and were observed as well. They knew that we were going to throw ourselves into the mix and I was there, up for it warts and all" (TEI). The following TE reported that modelling what was expected of teachers showed the

value leaders placed on it: “You have to do it and value it; that’s how you get change” (TEE). The importance of leaders being willing to demonstrate what teachers were required to do was named.

It was also indicated by leaders that to influence the practice of all teachers it was important to have an inclusive collaborative approach that included specialist teachers. One leader described how this happened: “The data was going nowhere so I made sure our ESL practitioners worked with me. I was always working alongside with everyone showing my presence within the school ... making sure we’re all on the same page” (TEG). Leaders suggested that working and learning together with teachers was a change from previous practice:

There was not a lot of evidence of people working collaboratively, people working as a team ... Teachers more or less did their own thing in their own classrooms. The whole perception of leadership is [now] much more around the idea of it’s a team approach and that we don’t all know everything (PE).

Planning for effective teaching and learning with teachers was also a reported priority for leaders: “We have placed collaborative planning at the end of each term where we work as a team to support and plan for the learning” (PE). Leaders became involved in the collaborative planning and indicated that it made a difference to teaching practice:

This has been a real priority for us, the collaboration between teachers, the planning and programming, and the professional conversations ... It’s made an enormous difference ... to what’s happening in the classrooms. It’s involved all staff members and that’s come from the leadership of the school making it such a priority and an expectation for people (APF).

Another way that leaders indicated that they worked with teachers was to co-facilitate PD: “You can see the confidence that they’ve built. Learning becomes meaningful. They get up and present, others are learning as well. You’re building teacher capacity in becoming leaders of learning” (TEG). Leaders reported that an outcome of this collaborative learning was increased teacher confidence and understanding.

Most leaders suggested that they worked collaboratively with teachers in a variety of ways; however, within one school it was reported to the contrary in the early stages of SSNP. There was resistance from leaders when encouraged by the TE to spend time in classrooms, and leaders beyond the TE were not directly involved with teachers initially. In this setting, one leader indicated that they exercised their leadership with teachers in a supervisory manner: “I have a supervisory role as well and I have two classes that I supervise ... That’s what the supervisor is

there for, not just to supervise but also to assist and develop that particular teacher” (APH). This approach to implementation was confined to one site, and there may have been contextual factors that influenced these reported practices, but it did change over time.

Teachers:

Teachers reported that they noticed a shift in the practices of their leaders, particularly in their willingness to learn with teachers and contribute to the shared learning. Teachers indicated that they valued this approach and it increased leader credibility.

Teachers consistently suggested that it was now apparent that school leaders worked collaboratively with teachers and acknowledged that each brought something different to the learning experience. As seen in the following quote, they valued this approach of leaders: “[There was] a big push to say okay, we are the executive but we’re not the bee’s knees at everything and we’ve got lots of gifts to share through all of our skilled colleagues. That has been really important” (TH). Teachers reported appreciation for the efforts of leaders to improve teaching practice by working collaboratively with them. One teacher expressed this in the following way: “All the leadership team has been incredible and everything we learn, we come together and teach each other. We’d like to thank our team and our principal for being supportive, and most importantly, it’s non-threatening” (TF). It was regularly suggested that teachers valued the willingness of leaders to be co-learners.

Another reported advantage of leaders engaging directly with teachers in the learning process was that it built their credibility. The following quote demonstrates this: “Our leadership here is very hands-on. They are very strong in whatever they pass across, they do themselves” (TI). Teachers affirmed leaders for their collaborative practice.

Question 1, Theme 1 – Collaboration: Development of a Collaborative Team Approach

Within the theme of Collaboration, the development of a collaborative team approach was the third most frequently reported way in which collaboration occurred. As shown in Table 3.8, 27 comments were reported. This component focuses on the collaborative team approach adopted by leaders both within and beyond the leadership team and extended to collaboration with the parent community.

Leaders:

Leaders reported two key points about the development of a collaborative team approach: the importance they placed on it and the difficulty they encountered in collaborating with the wider community.

Leaders indicated that they made a concerted effort to develop a collaborative team approach. The following leader articulated this: “I have worked very hard to develop a more collaborative approach to leadership, more of a team approach” (PE). Therefore, teachers saw that all leaders were in agreement and working together to lead and it was suggested that a team approach was important: “If the leadership team is not on the same page it’s not going to work because that way the whole staff sees that it it’s not just one person leading it. They see it as a whole team approach” (TEF). A reported influence on the building of a collaborative team approach was the influence of a new member of the leadership team, the TE. This will be presented under Question 3 in this chapter.

Some leaders reported that a collaborative team approach was extended to include parents and the wider community. While a few leaders reported an increase in community engagement and regarded parental involvement as a positive experience, it was more consistently suggested that despite many efforts it remained difficult to engage parents: “Parents, carers and the community ... That’s a real struggle. That’s our biggest challenge” (TEI). Leaders described their willingness to work with parents; however, most reported a lack of success in doing so: “An area that wasn’t as strong as others is community engagement” (PH). Generally, the development of a collaborative team approach with parents and the wider community was identified as not improving very much.

Teachers:

Teachers consistently reported that the exercise of leadership in the school developed a collaborative team approach to influencing teacher practice. They also recognised that working collaboratively with the wider community was difficult.

Through the exercise of collaborative leadership many teachers felt that the process of changing teacher practice was one that was done as a team, teachers with leaders. The following quote suggests this: “Implementation wasn’t just put onto the teachers” (TF). Another teacher agreed, and indicated that the work was shared: “It certainly hasn’t been one person sitting and doing it either; it’s been very much a team and shared approach” (TE). It was consistently reported

that all in the school shared the implementation of the reform: “It has been a shared process for all staff” (TH). This collaborative approach of leaders indicated to teachers that there was open communication and their perspectives were valued: “It’s quite collaborative and it also feeds down as well ... you’re heard with open ears” (TI). Teachers reported that leaders were prepared to listen and collaborated with them.

Other teacher comments suggested that an effective element of this collaborative team approach was leaders engaging together in activities such as PD: “It was also quite nice to not just see the leadership team united in the way they were presenting it [PD] ... but they were part of the actual process” (TF). Teachers expressed their appreciation of leaders modelling how to work collaboratively.

Teachers consistently reported that engaging with parents and the wider community was something they did not do at all or did not experience much success in: “I’ve engaged with colleagues; we don’t with parents in the community” (TH). One teacher described a lack of confidence and difficulty in engaging with parents despite having observed various attempts to do so:

I find it difficult to engage with parents ... I’ve seen many things attempted but I feel like I still don’t feel confident to follow up on that engagement with the parent community ... there are lots of challenges with that but not for lack of trying (TF).

Another teacher suggested that lack of progress in this area was because parents did not feel they were able to make a worthwhile contribution:

Our TE runs courses for parents here but the attendance is very, very poor. One, they feel that they’re not smart enough, they don’t have the language and they will let themselves down, so they’re ashamed to come in case they show their shortcomings (TF).

Working collaboratively with parents was regularly reported as problematic.

Question 1, Theme 1 – Collaboration: Shared Vision and Understandings

Within the theme of Collaboration, having a shared vision and understandings was the fourth and least frequently reported way in which collaboration occurred. As seen in Table 3.8, 19 comments were reported. This component is about the importance of the commitment of leaders to building a shared vision, understandings and goals through the development of common understandings.

Leaders:

Leaders reported that developing a shared vision and understandings was a collaborative process that had different dimensions. They indicated it was their responsibility to work with teachers to develop it, and leadership was important. Inclusive PD and professional dialogue reportedly facilitated the emergence of a broad commitment to goals through the building of shared understandings.

It was generally considered that leaders worked with teachers to develop a vision along with shared understandings: “You need to work on common goals, you have to have common understandings” (APE). Leaders indicated that they demonstrated a shared commitment to the vision: “The whole leadership team agreed; it was very agreed upon” (TEF). The process of developing a shared vision and understandings with teachers was not about what individual leaders may have thought but generating a shared belief throughout the school. By focusing on the development of common understandings through various forms of on-site PD, leaders built shared ownership with teachers: “It’s not just, this is what I believe so this is what you’re going to achieve. It’s coming up with a common understanding through that PD” (PF). The involvement of all personnel in building shared understandings and ownership was considered important:

The shared ownership comes from the executive level. But there’s another circle of shared ownership of the whole school where everyone is seen as a practitioner whether they are in the classroom or have a role to sit in the office (APH).

Throughout the process of developing common understandings of what leaders and teachers were hoping to achieve, increased professional dialogue was occurring: “There have been more professional conversations around what’s happening in the classrooms, more of a shared dialogue” (PE). Professional dialogue was named by leaders as important in assisting others to build common understandings and a shared vision.

Teachers:

Teachers consistently reported that leaders collaborated with them when leading the development of shared understandings. They gradually became committed to what they were hoping to achieve, but this took time.

In most instances teachers suggested that everyone began to head in the same direction and take responsibility for the agenda across the school: “Everyone is on board and working towards

the same goal” (TE). One teacher indicated that this was evident in such activities as planning. The classroom teacher, the support teacher and leaders were present and expressing the same view: “But there was also the AP and the TE so they both had a common understanding of what the expectations were” (TF). To ensure that teachers were aware of the expectations, it was reported that leaders together shared and built understandings with all involved.

The collaborative effort of leaders to help teachers develop shared understandings was regularly reported. As described by the following teacher, in order to do this, leaders had to initially establish their own understandings: “It was a collaborative effort but led by the leadership team ... The leadership team had generally made the connections so that we’re not thinking, well where’s this come from, why are we doing this?” (TG). Teachers readily acknowledged that leaders drove the development of shared understandings amongst all teachers but this brought its challenges and was described in the following way:

Some of the things that we’re expected to do at a school level, we roll our eyes and we’re, oh not that again, why do we have to do this? But if you sit and analyse it, well for me anyway, I can see the connection, I can see the necessity, I can see how it is making us more reflective teachers and therefore better teachers... but at the same time it’s a pain sometimes (TG).

Teachers suggested that they could see why certain things needed to be done but they did not always respond positively throughout the process.

Question 1, Theme 2 – Leadership Capabilities

The second theme is about Leadership Capabilities. While the previous theme presented much of ‘what’ leaders did to collaborate with teachers to influence teacher practice, this theme focuses on ‘how’ this was done. As shown in Table 3.9, participants made 71 comments about how school leaders influenced teacher practice. (E=17, F=16, G=11, H=13 and I=14). No data referred to system leadership in this theme.

Within this theme, four components emerged in the following order of prevalence:

1. Openness to Change
2. Devolution of Responsibility
3. Characteristics of Leaders
4. Relationships with Teachers.

Data relating to each of these components will now be presented.

Question 1, Theme 2 – Leadership Capabilities: Openness to Change

Within the theme of leadership capabilities, an openness to change was the most frequently reported area with a total of 25 comments (see Table 3.9).

Leaders:

Leaders reported that they had to change as leaders, show that they valued what they were doing and lead with passion. They utilised student data to assist teachers to see the need for change. It was also suggested that they were working in a negative context due to the perception that they were underperforming schools.

Leaders acknowledged that leading collaboratively called for a change within each leader: “It’s all part of the learning ... even from a personal point of view as a leader I’ve been able to change” (TEE). As expressed in the following quote, leaders valued the changes: “The leadership team see the value of it” (TEF). Leaders believed that they were the driving force behind what was achieved: “Things happened because of the passion of the leadership team and the people in it” (TEE). Change occurred in schools and this was attributed to the passion of leaders.

A feature of the leaders’ comments suggested there was negativity about SSNP. Their schools had a TE because they were considered to be underperforming:

Well, the fact is we are on SSNP and have a TE as we are a poor performing school. And you can’t dress it up any other way, that’s the fact. So, we need to realise it, think about it in a positive framework and move on (API).

In managing this context, it was reported that expectations had to be kept high and not focus on the negative: “We don’t say, oh we’re doing badly. We say no, this is where we want to be” (API).

To allow for both challenge and change in this environment, student data was used as a catalyst to assist teachers to recognise the need to do things differently: “That action, advocacy for the child and the challenge really changed teachers’ viewpoints. Take the personality and the behaviour out of it, particularly at our school. Look at the data, what is the data telling you?” (API). This focus on student data reportedly assisted teachers to identify their learning needs and those of their students.

Teachers:

Teachers reported that leaders worked on analysing data and allowed them time to develop their understandings. The information gleaned from this analysis was used to highlight areas of need.

The work of leaders in analysing data was acknowledged by teachers: “We’ve used NAPLAN results and they’ve gone right through them and worked out where the weaknesses are over the last few years ... That takes a lot of time, a lot of research time” (TF). Leaders apparently dedicated time to these tasks.

Teachers also indicated that leaders gave them time and support to develop their own understandings: “We did get a lot of time ... the coordinators were there. They have been extremely helpful ... By the fourth year it worked okay, it worked fine, everything then came together. We knew what we were doing” (TE). One teacher suggested that when leaders did not demonstrate a commitment to change its absence was apparent:

Something poor on our behalf was that it was almost like a choice. If you wanted to try things you could, if you didn’t, oh well it doesn’t matter ... You do need to make leadership decisions because you are the executive. You do run the school ... It’s got to be expressed throughout the school, not just in one class. That really was a letdown and a letdown for the students (TH).

A lack of whole school implementation in this context was reported as a disappointment, particularly in relation to the students; however, it was overcome.

Question 1, Theme 2 – Leadership Capabilities: Devolution of Responsibility

Within the theme of Leadership Capabilities, devolution of responsibility was the second most frequently reported area with 21 comments (see Table 3.9).

Leaders:

Leaders reported the influence of their willingness and capacity to devolve responsibility for improving teacher practice. To do this, they utilised a range of strategies and focused on the up-skilling of others to lead the learning.

Working with other members of the leadership team as well as teachers to develop the skills of all leaders was seen as important:

Not only was it about me being a leader of learning, it was about the whole of us being leaders of learning as well. Not only was I skilling teachers in their role, I was also skilling people in the leadership team (TEG).

As leaders developed their own understandings and increased in confidence to lead PD, they also identified teacher strengths and encouraged them to lead the learning: “One of the things we have done is we have set this up to be sustained ... We’ve got identified leaders in the school not necessarily on the leadership team” (PE). Most leaders reported that this inclusive approach to focussing on the development of all teachers was a priority:

[Teachers were expected to] come to those professional learning days. They would then need to go back and implement it into the classroom. They would then need to trial it. Then they would need to skill their grade leaders, their grade partners, in that learning. Then they had to present at a staff meeting so they would develop in their leadership of learning (TEG).

It was suggested that leaders made the expectation clear to teachers that they were to lead the learning as well.

Teachers:

Teachers reported noticeable changes as leaders devolved responsibility for leading the learning. They focused on increasing the leadership capacity of all, and that of leaders also increased: “I actually think leadership has grown” (TE). Teachers felt increasingly empowered as leaders devolved responsibility and nurtured their capacity: “Not just from an executive perspective but I actually can see other staff stepping up into roles ... They’re not just the traditional executive” (TE). Another teacher elaborated on this point, indicating that all teachers were included in this devolution process regardless of their expertise:

That whole release of, I guess in some ways power from the leadership team ... it’s really evident ... Everyone on staff, whether you’re here one day a week or you’re here full time, or you have expertise in whatever way, there have been opportunities to develop other skills (TH).

It was generally observed that across the school responsibility and capacity for leading the learning had increased and was more widely shared.

Question 1, Theme 2 – Leadership Capabilities: Characteristics of Leaders

Within the theme of Leadership Capabilities the characteristics of leaders was the third most frequently reported area with a total of 17 comments (see Table 3.9). This component is

about the leadership characteristics that were seen as contributing to leading the learning to influence teacher practice.

Leaders:

Leaders suggested that collaboration was enhanced through the contribution and combination of the different traits of leaders. Characteristics such as being open and knowledgeable were reported to influence teacher practice.

The individual traits and qualities of leaders were described as valuable: “The beauty of our leadership team is we’re all different personalities and we all bring different skills and different gifts to the team” (TEI). While appreciating these differences, leaders indicated that being open, approachable, non-threatening and knowledgeable were also important if they were to influence teaching practice. A principal described this in the following way:

Our leadership team is very open and very, I like to think approachable across the board ...

Our AP and TE, they’re very open, very approachable, and very knowledgeable. Therefore, they’re able to lead the pedagogical thinking of staff and start to influence that and give them ideas in a non-threatening way (PF).

Leaders also indicated that both a strong principal and leadership team were considered essential to drive the change and influence the learning culture. As shown in the following quote, being a credible leader was considered vital:

As we know, leadership is the driving force behind any change in the school, any change in learning culture, change in PD, capacity building of staff. You need to have a strong leadership team and a strong principal who has a good knowledge and understanding of the dimensions of leadership (APE).

Leadership across the team was reported to be a factor in influencing teacher practice.

Teachers:

Teachers identified many characteristics of leaders that influenced their practice. Being cohesive, united, supportive, open, approachable and proactive were all seen as important. One teacher described the significance of leaders working cohesively: “The unit as a whole has really worked together to achieve our goals. I think it comes back to the leadership allowing that to happen” (TF). A second teacher valued the support and openness of leaders: “There are opportunities to approach the leadership team and have them assist you in any way that you deem is needed. It’s supportive ... I treat it like an open-door policy” (TI). Another teacher appreciated the capacity of leaders to manage the change and be across the agenda: “Leadership is very

proactive in moving forward and keeping abreast of changes” (TF). It was observed by a teacher that certain leaders were stronger in some areas than others and brought different skills and abilities to both the teaching and leadership aspects of their roles:

They are just like all of us. The leadership team is not exempt from the fact that they are also on a journey. They’re on the journey of teaching and learning, but they’re also on the journey of leadership. They’re at different stages, have different strengths, different skills in leadership (TG).

Teachers were aware of the various strengths of their leaders and that they too were at different stages of their learning journey.

Question 1, Theme 2 – Leadership Capabilities: Relationships with Teachers

Within the theme of Leadership Capabilities, relationships with teachers were the least frequently reported area with 11 comments (see Table 3.9). This component is about the importance of leaders developing productive professional relationships with teachers.

Leaders:

Leader data reported that building supportive trusting relationships with teachers and respecting individuals were factors influencing teacher practice. They suggested that developing relationships with teachers was essential to their credibility: “You are getting to know the person, you have credibility, you have that relationship; it’s everything you ask every classroom teacher to have ... It’s investing in your social capital” (TEE). In developing these relationships, leaders also acknowledged the importance and challenge of maintaining the respect and dignity of people at all times: “Maintaining respect and dignity of people. It was tough, it was very tough, particularly when it could be someone on the leadership team who perhaps is not displaying good classroom practice” (TEH). The significance of respecting the dignity of others was recognised, which was a difficulty when it involved the teaching practice of another leader.

Teachers:

Teachers reported that leaders developing a mentor relationship with them contributed to their changed practice. As described by the following teacher, experienced leaders who were there to advise and support them influenced them greatly:

It plays a huge influence on teacher practice. Those people you see a lot of the time as your mentors, they are the people that we consider have a lot of experience within both the

school and their teaching career. Their influence is huge in terms of going to them for advice for anything academic or behaviour wise ... they're a huge influence (TI).

One teacher suggested that it was not always easy to establish and maintain positive relationships with leaders:

Yes, they're in leadership but that does not mean that I have to accede to, listen to, believe everything they say. It's also the part of staff members who have to then have the skills to challenge that leader effectively and professionally (TG).

In this instance, when difficulties with relationships arose it was reportedly considered the teacher's responsibility to challenge leaders appropriately.

Question 1, Theme 3 – Organisational Restructuring

The third theme is about Organisational Restructuring. While the previous theme presented ways in which leadership capabilities influenced teacher practice, this theme focuses on the organisational restructuring that leaders did to support the changes. As shown in Table 3.10, participants made 44 comments about the role of organisational restructuring in influencing teacher practice. Forty-one of these refer to school leadership (E=7, F=11, G=5, H=14 and I=4) and three relate to system leadership (E=0, F=0, G=0, H=3 and I=0). These comments will be presented according to the component to which they relate.

Within this theme three components emerged in the following order of prevalence:

1. Organisational and Structural Change
2. Roles and Responsibilities
3. Strategic Approach.

Data relating to each of these components will now be presented.

Question 1, Theme 3 – Organisational Restructuring: Organisational and Structural Change

Within the theme of Organisational Restructuring, organisational and structural change was the most frequently reported area with a total of 25 comments (see Table 3.10). This component focuses on the organisational and structural changes that leaders needed to implement to facilitate different ways of working and learning collaboratively.

Leaders:

Leaders suggested that to enable teaching and learning to be the major priority, organisational and structural changes were required. Such changes included establishing different meetings structures, changing the staffing arrangements, organising for PD, setting up collaborative

planning and timetabling opportunities for teachers to work together. It was perceived by some leaders that the system-provided PD did not support what was needed at the school level.

Many leaders stated that various structures were either changed or created to enable an increased focus on teaching and learning: “The leadership team here put structures in place which have really put this at the forefront of what’s happened in the school” (APF). Different changes occurred over a period of time: “We’ve set up structures within the school over the time of SSNP. Things like the learning support meetings ... there’s a shared dialogue” (PE). Another example of how opportunities for learning were maximised was that leaders reorganised the staffing, which meant specialist teachers were placed in classrooms to support student needs more broadly:

Staffing for example ... looking at how we support learning across the school strategically using the supports like our specialist teachers and the placement of specialist teachers in classrooms ... We now have various models of using teachers in the best possible way to access as many students as possible (APE).

It was suggested that staffing was reimagined to utilise personnel according to their areas of specialty.

Leaders indicated that an important aspect of these changes was that they were flexible enough to realise when they needed to change again. One leader described it in this way: “The principal is flexible enough to say well, this is in our staff timetable, but this is the need. It is changed to fit in with the needs” (TEI). Changes were reported to occur as needs arose but schools were at different stages of readiness. The following leader suggests this:

There was a lot of time spent on how best they can raise teacher capacity so it did change over time. We had to put systems in place. We had to change timetables ... we had to set processes up because they weren’t there ... It was think big, start small with everything.

You had to keep things on an even keel and gradually chip away at it (TEH).

Setting up processes and structures to heighten the focus on learning took time and had to be managed carefully.

As leaders in schools were making these changes, it was reported that system leaders were organising external system-provided PD for them that was not aligned with their school priorities. One leader described this as a source of tension:

Often the system provided, and this is a criticism, in servicing and PD according to their big picture. Not every school was ready for that particular piece of in-servicing or that PD

opportunity at that particular time because they had their own Annual Improvement Plan ... Where is that going to fit in the whole scheme of things as far as our own PD here at school? It's this system saying yes, that's got to happen (APH).

This aspect of system leadership was reported as unhelpful.

Teachers:

Some teachers reported that their leaders put processes in place to support them throughout the change. The following quote indicates that PD was based on their needs according to the data:

The leadership team did take on board what was coming through our data and our evaluations from PD that we were doing and then from our questioning, where to next? It was everything built on from the previous development, which means it's really rich and effective (TG).

Teachers acknowledged the value and worth of this strategy by school leaders.

Question 1, Theme 3 – Organisational Restructuring: Roles and Responsibilities

Within the theme of Organisational Restructuring, roles and responsibilities was the second most frequently reported area with a total of 10 comments. Nine of these comments came from leaders so no teacher data is presented (see Table 3.10). This component is about the roles and responsibilities of leaders that were restructured to respond to the demands of the reform.

Leaders:

Leaders reported that they organised for various roles and responsibilities to be adjusted. These shifts were not the same in every school. The data indicates that these changes included one principal being directly involved in teaching through Instructional Rounds, PD becoming a shared responsibility and APs working closely with TEs.

In a minority of cases, a role variation for the principal was participating in Instructional Rounds. The following leader identified this as a shift, particularly so for the principal who did more than observe others teach but actually taught in front of teachers and engaged in the entire process: "With Instructional Rounds the principal actually was involved, taught a lesson and was fully involved. For a principal that's not usual" (TEF). It was also suggested that previously only leadership team members had led the PD: "It [PD] was more of a top-down model ... a 'delivered' kind of model. To various degrees the teachers would either implement things in the classroom or in some cases they may not" (PE). It was suggested that the previous PD model might not have

been effective. As responsibilities and expectations changed, others became more involved in leading the PD: “All the PD we’ve done, it’s not just me as the TE” (TEF). PD became a more widely shared responsibility in schools.

Another reported role modification was the AP working closely with the TE to support and develop other teachers. A frequently expressed difficulty with this approach was that the AP was also responsible for teaching a class while the TE was not: “All the planning sessions I’ve done, 95% of the time the AP has been there with me as much as they can because they’re also on class” (TEF). Leaders indicated that the way in which the TE role fitted in with other leadership roles led to some initial difficulties. This element reoccurred in the data; therefore, it will be presented later in this chapter under Question 3.

Question 1, Theme 3 – Organisational Restructuring: Strategic Approach

Within the theme of Organisational Restructuring, a strategic approach was the least frequently reported area with a total of nine comments (see Table 3.10). This component focuses on the way leaders worked to organise and restructure strategically.

Leaders:

Leaders consistently reported that they adopted a strategic approach to the implementation of the reform. As described by the following leader, they established a well-defined direction and managed expectations strategically: “You need to have clear direction and focus, and be very strategic in the way that you plan your leadership” (APE). In doing this, leaders indicated that it was their responsibility to manage the agenda strategically and in a timely manner:

That’s where the executive really works and that’s where they earn their money; in working out how it can all happen effectively. It’s a matter of placement and staff readiness. You don’t just come and dump everything. You strategically manage it through and you pace it out throughout the year (APH).

It was suggested that leaders made a strong contribution to the strategic approach taken.

Teachers:

As seen in the following comment, teachers reported that a comprehensive strategic approach at the school level was developed and implemented by leaders:

They identified as a leadership team and were very strategic about what area of curriculum they wanted to focus on to develop in our school. Goals were set, there was data analysis, and they strategically put together a plan and an outline of what we wanted to achieve (TE). An example of this strategic approach was seen in the PD provided for teachers. It was organised by leaders, strategically provided from within and occasionally beyond the school, and there was an expectation that teachers engage in the learning.

Question 1, Theme 4 – Resourcing

The fourth theme is about Resourcing and describes the way in which time and financial resources were provided and deployed through school and system leadership. As shown in Table 3.11, participants made 32 comments about the role of resourcing in influencing teacher practice. 19 of these were in relation to their provision and 13 were about their use. Twenty-four comments referred to school leadership (E=13, F=3, G=0, H=6 and I=2) and eight related to system leadership (E=0, F=0, G=0, H=7 and I=1). The system leadership comments are presented according to their relevant component. Within this theme, two components emerged in the following frequency order:

1. Provision of Resources
2. Use of Resources.

Data relating to each of these components will now be presented.

Question 1, Theme 4 – Resourcing: Provision of Resources

This component is about the provision of resources, both time and financial. Schools were allocated resources by the system to meet certain priorities of the reform. In consultation with system leaders, it was the responsibility of leadership teams to organise for the use of these resources at the school level. While every school was given resources to be used within certain limitations, it was through the exercise of leadership in each school that their deployment occurred.

Leaders:

Leaders consistently reported that each leadership team managed the resources provided at the local level: “We’ve been given a framework to work within. We’ve been given the priorities to work within then we can bring it down to our school annual plan” (TEE). They suggested they were well aware that it was their responsibility to work within certain parameters to organise for the use of resources: “This has been the driving force for us this year and it’s been at the forefront

of everything as far as timetabling, funding and priority of what happens in the school for PD” (APF). Leaders reported that the use of resources to support teacher learning was a high priority.

Resources were reportedly deployed to the work of influencing teacher practice; however, the limited time available in schools was described as a challenge: “Teachers are time poor. Leadership teams in a school like this are on high alert the whole time” (TEE). With the additional resources available, leaders consistently reported that they made a concerted effort to use them to address the problem of being on ‘high alert’ by limiting distractions and remaining focused on the core business of teaching and learning: “We made a conscious decision a number of years ago to try to cut various demands on our time that impact upon us concentrating on, taking us off the main game, which is teaching and learning” (PI). Although leaders prioritised this focus through budget and time, they were also aware that the changes needed to be made gradually and implemented over a sustained period: “Building blocks are an important thing ... it’s not as if it all has to happen in a twelve-month period because that would simply be impossible and futile” (APH). Planning for how these resources were to be used was considered important: “You know you can’t just do things ad hoc and expect them to happen. You have to give that time, you have to invest that money” (TEE). There was consistent recognition by leaders that resources needed to be used to implement change systematically and slowly.

Teachers:

Teachers acknowledged that leaders provided resourcing for time to collaborate and engage in ongoing PD but consistently reported that the amount of time provided, commensurate to the work required of them, was inadequate.

Teachers indicated that they were afforded opportunities for collaboration: “We have a fair amount of collaborative opportunities ... we seem to be resourced quite well” (TI). The following teacher also indicated that PD was provided over a long period of time: “In the last three years previous to this we did have a lot of PD ... We were focusing on English or Maths but we didn’t have resources to go with it” (TH). Teachers felt that of equal importance to the PD, and the time to collaborate, was the provision of resources to support the implementation of what was learned. It was indicated by a minority that on occasions this form of resourcing was overlooked.

The issue of time and the difficulty teachers experienced in doing all that was required of them was consistently named in the data. A characteristic of many teacher responses was that

although time was made available, most indicated that system expectations well exceeded the amount of time they provided: “Even though Catholic Education does give you time, a lot is done in your own time as well” (TH). The amount of time required of teachers outside of school hours was reportedly difficult to manage: “We spent hours and hours after school because we couldn’t finish what was expected of us at school ... I just found the paperwork too much. It should have been less paperwork and more focusing on the kids ... It was quite difficult” (TE). Teachers indicated that the large amount of work expected of them took the focus away from students.

Question 1, Theme 4 – Resourcing: Use of Resources

This component is about how the system and school leaders used the available resources. Apart from those that were distributed to schools, some were retained by the system to provide ongoing meetings and PD for leaders, particularly TEs.

Leaders:

Leaders reported that the system provided time for leadership teams to be involved in system run PD and working together uninterrupted at off-site meetings. This was a new experience for most leaders and they reported its benefits: “Never before this project have we had the time and the money to be able to get together off the site where you haven’t got the interruptions” (TEE). Another leader agreed that this opportunity was a first and it afforded leaders time to work as a team with system support:

We’ve been informed all along. The system has run several, quite a few days, opportunities for us as leadership teams. I can’t recall that being done before where there has been ongoing PD for entire leadership teams to come together at a forum and have support from the head office ... attending those days for me has been very beneficial (PH).

This leader indicated that these experiences were informative and was grateful for the opportunity to be involved.

The key resourcing priorities identified in the data by leaders were PD, and time for planning and working collaboratively. Leaders reported that they strategically provided time and money for themselves and teachers to attend or prepare for PD, work with colleagues both within and beyond the classroom, and plan together: “As a leadership team we develop the strategic resourcing, the strategic release of time, the strategic PD, all of those things” (TEE). Time was provided for teachers to work with the TE and other leaders in an ongoing way: “There’s been the opportunity for the staff through SSNP to sit and plan. That is the planning with the TE and the

AP. They're able to give leadership to that and give direction and advice" (PF). Other reported ways in which resources were deployed was to allow opportunities to work with parents and get to know their community: "We've had time to invest in them, to work with the community" (TEE). The use of resources in these different ways was regularly reported as having occurred but the lack of available resources in the future was a reported concern. This concern reoccurred throughout the data; therefore, it will be presented later in this chapter under Question 3.

Teachers:

Appreciation for the ways in which school leaders used the resources to support teachers in their learning and planning for effective teaching was regularly expressed. One teacher described how this action of leaders indicated to them what was important:

The biggest thing that leadership did was planning for and implementing effective teaching and learning. They gave it a priority. They gave money to it. They timetabled so that time was allocated to it. They showed us that this is what they believe in so that filters down to all of us (TI).

Another teacher suggested that the time leaders gave to teachers to work with their colleagues on-site was of assistance and made the reform more manageable for them:

The leadership has given us time together that has helped us plan for effective teaching and learning. That time on site has been given to us so it has been a lot easier this year. We have been given time to work with our colleagues (TH).

Teachers expressed gratitude for the provision of these opportunities to collaborate and were aware of the financial costs involved in doing so: "Opportunities come with a cost unfortunately" (TH).

One teacher had some questions regarding the 'big picture' use of funds, the way in which the system allocated TEs to schools and the use of the SSNP budget:

Maybe in the process of allocating TEs to certain schools, look at the student body but also the teaching staff ... if you were to split it into dollars, if this was corporate Australia, where would you best spend your dollars? What else could you have done with that money? (TI).

The decision to use the resources to employ TEs was raised as a question in this instance.

Question 2: Did the experience of a PLC influence teacher practice and, if so, how?

As shown in Table 3.12, analysis of the interview transcripts revealed three themes that relate to this question. Within each theme there are either two or three components that emerged in the following order of frequency:

1. Teacher Capacity
2. Leadership
3. Structure and Organisation.

Data relating to each of these components will now be presented.

Question 2, Theme 2 – Teacher Capacity

The second theme, Teacher Capacity, was the most prevalent in the interview data related to the second research sub-question. As shown in Table 3.13, participants made 147 comments about teacher capacity in a PLC and its influence on teacher practice. Within this theme, two components emerged in the following order:

- 1 Knowledge and Practices
- 2 Attitude and Efficacy.

Each of these components will now be presented.

Question 2, Theme 2 – Teacher Capacity: Knowledge and Practices

Within the theme of Teacher Capacity, knowledge and practices was the most frequently reported area with 82 comments in total (see Table 3.13). This component relates to how the knowledge of teachers was built and in what ways their practices changed through their experience of a PLC.

Leaders:

It was consistently reported by leaders that what occurred within PLCs influenced teacher knowledge and practice by increasing their expertise in contemporary pedagogy while developing shared understandings. These improvements occurred through such things as teachers working together in classrooms, participation in Instructional Rounds, professional dialogue, planning together and analysing student data to inform teaching and learning. A reported difficulty was the initial lack of understanding and commitment to PLCs; however, this changed over time.

A frequently suggested benefit of PLCs was that leaders saw teachers working more collaboratively: “It’s really opened up the classrooms” (PE). Teachers were working together to learn: “It is much more of a learning community now rather than doing things in isolation” (APF). Specialist teachers were now in classrooms and leaders noticed that isolated practice had diminished: “Our pedagogy has changed so much. We have opened up the classrooms. The teachers are adapting and are now used to the students moving between the classes with the

specialist teacher there as a third person” (PE). Leaders noticed clear shifts in teacher capacity to modify their practice.

Although teachers were fearful, some leaders reported that the classroom visits in Instructional Rounds strengthened PLCs:

We’ve done Instructional Rounds a couple of times. That was a big thing, but it did strengthen PLCs because people were frightened of them and [then] they went, oh that was OK. I learnt a lot from that. Let’s do it again (TEH).

Leaders indicated that this process had an influence on teacher knowledge and practice.

Leaders agreed that PLCs contributed to consistent understandings and expectations of PCK as well as opportunities to plan for its implementation: “Planning for and implementing effective teaching and learning, the PLCs have been brilliant in that” (PI). Areas such as assessment and differentiation were the focus of some PLCs: “I see our PLCs as very hands-on. It’s about ... the most effective strategies to use, different ways of grouping students, different ways of assessing students, catering for different needs, differentiation” (APE). Understanding various reading practices was the emphasis of another PLC:

Initially there were all sorts of practices in place ... We’re now at a point where teachers sit down regularly to talk about the reading behaviours of the children. That didn’t happen before. We didn’t have professional learning groups. That’s been a big move for our school and our teachers (API).

Developing common understandings across a stage was a third reported way in which PLCs built teacher capacity to influence their practice:

The PLC ... worked effectively ... to ensure that everyone in the stage three situation was working from a common understanding of the content; working from a common understanding of our end product that we wanted to get to for our students (APH).

The PLCs reportedly had different areas of focus but they were all working towards improved teacher knowledge and practice.

Leaders consistently stated that they noticed big differences in the professional dialogue that occurred: “It is a profound shift ... You see it, the conversation just cutting in and out of the education and the wellbeing of these students” (PH). Discussions in PLCs were now about student learning:

I have been really impressed by the professional dialogue that has been part of the discourse in PLCs ... to witness some of the professional dialogue about the reasons why a student would fit into this level or would fit into this phase is certainly reassuring (PI).

The focus of informal conversations also reportedly changed to be about the students:

Our conversations here in the staffroom now have changed further this year; they will be in there talking about students and their learning. I've heard it from staff members that have been here for a long time that twelve months ago they would have been talking about the football, or this or that (PH).

This shift in the purpose and type of professional dialogue was said to be evident in the shared language of teachers: "In our classrooms there's that common language that's being used. You know it's happening" (TEE). It was suggested that teachers were engaged in the PLC and learned from the experience. A common understanding, purpose and vision of collective responsibility for student learning became apparent:

What I saw was the engagement of teachers within that community. They were talking about children within their class, not only learning about their class but about each other's classes as well. They came with a shared purpose. They came with an understanding.

They came to learn. They bounced off each other ... There was a collective responsibility for the students' learning (TEG).

Shared understandings and responsibility for student learning were now reported to be evident in the professional dialogue that occurred in PLCs.

Leaders indicated that an increased emphasis on data and other means by which teachers built their PCK were vehicles through which teacher understandings were deepened in relation to why they did what they did, and how. This tended to support a movement toward the development of expert knowledge, particularly in relation to assessment:

We look at the data, we look at research, we look at team teaching, we look at building the leader within the teacher and then they become an expert in that area and they share that with others ... That influences the teaching ... It's not how we are doing things now; it's why ... That's the change (TEE).

These data informed discussions reportedly led to a culture of enquiry in some schools: "We ask each other. It's not a blank culture; it's an enquiry culture now ... Now we see we are a PLC" (TEE). This 'enquiry culture' was named specifically in a minority of responses; however, it appears there were practices that were enquiry based.

It was consistently reported that one of the greatest changes in teacher knowledge and practice that emanated from the use of data was that they knew the students better and were more focused on their needs: “The teachers have really started to know the students better; who are the learners in their classroom and how they can support them better” (PE). Another leader endorsed this belief: “The whole notion of PLCs has been one that has made all teachers aware ... of the responsibility on them to know the students, to be able to meet the needs of their students” (PH). It was also indicated that this increased focus on data guided the decisions of leaders:

It’s a matter of looking at the data ... weighing it up and saying, well these are the areas of need or challenge so how are we going to address them? If the evidence is there you can’t turn a blind eye to it (PF).

Most leaders saw the increased use of data as a helpful means by which teachers and leaders got to know students and their needs.

Leaders indicated that at the outset there was not a shared understanding of a PLC: “They didn’t understand what a PLC was ... I had to change the mindset of what would happen in a PLC” (TEG). It was suggested that system leaders assumed school leaders knew what PLCs were:

At first when PLCs were being mooted, I wasn’t really sure myself what they were meant to be doing. There was never any clear guideline on that particular concept for principals at principals’ meetings. All of a sudden it was just the term that was being used. I kept thinking what is this ... we were getting readings about it and everyone’s talking about it as if we all knew what it was but we didn’t. So, it took a while for us all to get the hang of it (PG).

It seems that it took time for those in PLCs to understand what they were about but this eventually changed: “The notion of a PLC is now well understood” (PH). Changes were implemented slowly to reach this point: “We took baby steps so we just focused on one small thing well before we went on to the next thing” (APE). It was generally agreed that a shared understanding of PLCs was gradually realised.

As well as initially not understanding PLCs, leaders indicated that there was not a shared commitment to them: “When we first started it was very difficult to get teachers to meet in the sense that they did what they had to do ... There was a different energy in the school. The PLCs weren’t really gelling” (TEI). During this initial period, it was reported that leaders experienced difficulty in keeping conversations focused:

Some of the members wanted to, or maybe not even wanted to but often got side tracked and it took a lot longer to get through tasks that we actually wanted to do which impacted on people's time... many, many times the group had to be brought back to the task (APH). It was consistently suggested that this off task dialogue improved over time and PLCs began to work well. One leader described the positive changes in the following way:

Now the beauty is you might walk around the school on a Monday afternoon and there will be little pockets of discussion happening all the time. They just instigate them ... I have never seen such a change evolve. To see that this is the same school four years down the track is amazing. Amazing. Our PLCs took off. They're fantastic now (TEI).

Another leader endorsed this view: "Now the PLC works very, very effectively ... Every time a group of people meets together for a particular purpose it is a PLC. Meanwhile, our PLC as a whole school has been strengthened" (APH). As time progressed, it was reported that the work of PLCs was not confined to the meeting times set by leaders and the entire school grew as a PLC.

Teachers:

Teachers supported most of the perspectives of leaders in this area. Common areas of agreement were the importance of professional dialogue, improved PCK, an increased use of data, shared understandings and responsibility for student learning and that PLCs were not well understood initially. Teachers added that PLCs were inclusive, goal-oriented and supportive, and they provided opportunities for them to seek advice and receive feedback. Negativity regarding the impact on teachers due to the demands of data analysis was frequently reported.

Teachers regularly stated that the experience of a PLC increased their skills, knowledge and practice: "The skills that we have learnt over the last four years are skills that will stay with me personally forever. Even though I've been teaching twenty nine, nearly thirty years, you think it's never too late to learn" (TH). Teachers believe that improvements in their practice were apparent and PLCs provided opportunities for challenge and growth:

I see huge, positive impact and I can see improvement in all areas. By having PLCs as a teacher yourself, you're continually challenging your own professional thoughts in an environment where it's got to be implemented (TI).

Working together within and across classrooms was an observable feature of these improvements: "It was like an open learning school. No one was behind their closed door ... Even though all the PLCs have their own community, we all still work together as a whole school" (TE). Working together as a whole school was a reported change in practice that occurred through PLCs.

Many other teachers elaborated on these views suggesting that PLCs focused on teaching and learning, which resulted in improved pedagogy. The following comments are examples of how this occurred for different teachers: “They’ve been very beneficial for me ... to be up-skilled and up to date with contemporary pedagogy” (TG). Teachers were offered support and guidance: “It was a great sense of support and guidance as well” (TG). Learning by observing others was also valued: “Professional learning by observation is critical” (TI). It was suggested that PLCs had a positive effect on students due to the different teaching approaches and styles to which they were now exposed: “We’ve created a PLC for teachers and it filters down to the children as well ... I have seen a different style of teaching, a different range of ideas” (TI). PLCs were also said to allow teachers and leaders to develop a collective responsibility for the learning of all students: “In a PLC it’s not a top tier sort of agenda; it’s things that everybody is dealing with” (TH). The learning of students was now seen as the responsibility of all, irrespective of the role.

Professional dialogue in PLCs was consistently reported as a major influence on the development of a common language and understanding of practice. As seen in the following quotes, many teachers expressed this view in a range of ways: “By having discussions with each other on-site about the same issues, we’re continually building our professionalism but also developing better pedagogy ... It enables deeper and more meaningful conversations” (TI). Another teacher agreed, but suggested that for everyone to share the problem it was also important to discuss what did not work as well:

It was having that conversation so everyone was speaking the common language, having that common understanding. Also, it was talking about things that didn’t work. Therefore, it was not just my problem. It was shared amongst the staff. It was shared amongst the leadership team ... We needed to have that common language so we could have useful and purposeful conversations (TF).

A third teacher supported this view and mentioned that these conversations contributed to the development of a common meta-language to discuss learning:

There’s definitely been dialogue, professional dialogue as a result of the PD and the PLCs. We’ve got that shared language, the meta-language so we’re all on the same page in terms of what we’re talking about (TE).

Having a common meta-language for professional dialogue was reported to be of value.

Teachers described other advantages to the ongoing professional conversations that occurred in PLCs. These included such things as seeing different points of view: “You get to look at it through different eyes ... they’re seeing it from a different perspective” (TI). They felt supported through sharing with others: “It’s really critical to have that sort of community to bounce off other colleagues otherwise you’re just running around your own head a lot of the time” (TI). Opportunities to seek advice, receive feedback and discuss their thinking with colleagues were also named by teachers as positive aspects of the sharing that occurred in PLCs: “The PLC is definitely a good avenue to get some feedback but also just to share ideas from a professional point of view” (TI). Multiple occasions for building teacher knowledge and practice in PLCs were reported.

Teachers acknowledged that the purpose of PLCs was to work together to focus on the needs of the students and stressed the advantages of all stakeholders being part of these conversations:

That whole mind shift of coming together, all the stakeholders that are involved in the group of children or a class really sitting down using all the skills they bring and really analysing, looking at data collection and saying, is the data right? Are we using the right tools to assess their learning? A lot of the PLCs that have evolved have really taken that mindset of we’re doing it for the children to plan effective practice for them (TH).

Another teacher supported these views as conversations that included many teachers brought a diversity of views: “When you’ve got four or five experienced teachers bringing their ideas to the table you get such a rich and diverse range of experiences coming through” (TF). The richness of different teachers with a range of experiences contributing to these conversations was considered beneficial.

A further feature of the teacher reported data was that PLCs were dedicated to working on specific goals. These goals were set in response to the data analysis:

We’ve got specific aims. So, it wasn’t OK to get together to just talk about reading. No, we needed to get together and look directly at the data. Where are their weaknesses in reading are where do you go next? It was really focused (TI).

The advantages of a focused approach to teaching and learning through the use of data was generally recognised by teachers but it was also acknowledged how lengthy and difficult the process was:

Now everyone has that understanding of the needs of the children ... It wasn't anything that we picked up and thought I'm just going to use this as my assessment task. It was a very long process but it was really worthwhile (TF).

While teachers agreed that the aforementioned benefits of the use of data were eventually experienced, the time this work required was difficult for them to manage and negativity was consistently reported: "In the beginning it was quite difficult. There were a lot of things we were nutting out all the time ... The ESL scales were a nightmare" (TE). The amount of time the data analysis took was regularly named: "It enables you to go back to that evidence but it is time consuming" (TE). It was suggested that most of the additional time required of teachers was out of school hours: "They were expecting us to do a lot of analysis. You can do your testing at school. You have to go home and analyse it all ... you can't leave it for the next day because your mind is in another direction so you have to go every afternoon and analyse data" (TE). This reported negativity was generally in relation to the amount of additional time required of teachers to do this work rather than the usefulness of the task itself.

Teachers also repeatedly suggested that a shared understanding of PLCs did not exist initially. They indicated it took years for them to understand the purpose of PLCs and realise their benefits: "It's taken a few years for us to see the effects of it ... we are seeing the effects now. It's been three or four years" (TE). The process of becoming a PLC was described as lengthy but valuable: "That was a very long process but it was really worthwhile" (TF). Others indicated that, as PLCs became more widely understood, the role and function of what were previously known as 'committees' changed: "They changed. We were originally calling them committees ... then the actual wording changed to learning teams and then the names of the teams changed again" (TE). This change in terminology along with what happened within PLCs was seen as a big variance for teachers: "It has been a huge shift ... PLCs rather than just the committees who get the brochures. It's been the whole language, the whole focus of these groups that has radically changed" (TH). Teachers attributed these changes to an increased understanding of PLCs: "Because we now have a better understanding of what a PLC is, we've done a lot of PD around that and what it actually is, we've recognised that these are [now] actually a PLC" (TE). Teachers suggested that a common understanding of PLCs developed over time and contributed to their evolution.

Question 2, Theme 2 – Teacher Capacity: Attitude and Efficacy

Within the theme of Teacher Capacity, attitude and efficacy was the second most frequently reported area with 65 comments in total (see Table 3.13). This component is about teacher attitudes and changes to their self-efficacy throughout the experience of a PLC.

Leaders:

Leaders indicated that the attitude and efficacy of most teachers shifted and their confidence grew as shifts in understanding and practice occurred. This increased confidence was reported as apparent in the honest and robust conversations about teaching and learning that took place in PLCs. The introduction of Instructional Rounds was described as a difficult process for most teachers and some leaders.

According to leaders, changes in teacher attitude and efficacy were evident and their support of the work of teachers in their PLCs contributed to this shift: “The teachers knew they had the support ... if you put the time into it and show them that you value it, then they appreciate it” (TEF). Another leader added to this, indicating that they too were able to find and gain support from teachers in PLCs: “Through PLCs I found my buddies, my like-minds in the ESL team. They have been spectacular ... because they’re part of the PLCs ... They’ve done an enormous amount” (TEH). Leaders acknowledged the contribution of teachers to the shared work they were undertaking.

Teachers were described as having increased confidence and leaders suggested risk taking contributed to this change: “The teachers feel more confident. Risk taking has been a great thing” (PE). Leaders observed more energy amongst teachers and a transformation in their attitude to them, and the learning:

Even the teachers; the energy that is there now. There’s this joke. They say, ‘I hated you at the beginning but I like you now’. Our room out the back, they used to call it the torture chamber because that’s where we used to go for PD (TEE).

Consistently, leaders indicated that it took some time for teachers to display a positive attitude. Initially, teachers felt that the need to work with others was a reflection on their capacity: “There was a little resistance and sometimes people feel that if we are working together and collaborating, that’s a statement on my teaching, that I can’t do it myself. But I think we’ve broken that down” (TEH). Leaders suggested that they were aware of how vulnerable teachers were feeling, particularly in relation to the introduction of Instructional Rounds: “The hesitance, I suppose, or

reluctance from staff was certainly palpable” (PF). Teachers were described as feeling threatened and disempowered:

When we first started this model, there would’ve been some very resistant teachers. They were very apprehensive, maybe they felt disempowered or felt perhaps it was a threatening situation that someone was going to come into their classroom (PE).

Some leaders that participated in Instructional Rounds reported that they too felt apprehensive about it:

There was not so much resistance as a bit of apprehension when with Instructional Rounds we said there are going to be opportunities to go and visit other classrooms, and three or four people will come and watch you for 15 minutes and then they’ll go. People were very apprehensive the first time, me included, a bit confronting (APF).

A change in attitude was observed by some leaders after teachers had experienced Instructional Rounds: “Once teachers got into the routine and they saw it was non-threatening and non-intrusive to a great degree, they were actually able to accept that. They found it worthwhile ... There has been a change in thinking since then” (PF). Leaders suggested that fear of the process was reduced and some reported that it set directions for the future: “Those fears were allayed once people had a go at it and were really sure they understood what the process was about. They found it quite affirming but it also provided direction for where we needed to go” (APF). While some leaders reported that teachers eventually found the Instructional Rounds process to be beneficial, they also acknowledged the difficulties it caused.

It was regularly reported that all members of PLCs, regardless of their position on staff, demonstrated honesty and passion when engaging in professional dialogue: “We all sit down and we argue. We argue about it. No. I don’t think they should be in that group. We have good old professional dialogue on it” (API). These conversations were described as lively and energetic: “At school there are conversations in the staffroom. There are fights. Not fights, but you know. It’s alive. That’s what we say; it’s alive I can give you that” (TEE). Leaders consistently described the conviction and passion that teachers exhibited during professional dialogue: “There are no inhibitions about putting your opinion out there. People are often very passionate about expressing their opinion, which I think is vital” (PI). Teachers were now demonstrating the confidence to disagree with certain decisions: “It was actually the teachers themselves that said, this is ineffective, we can’t do this” (TEE). Leaders observed that teachers had increased self-efficacy and commitment to their beliefs throughout the professional dialogue that occurred in PLCs.

Teachers:

Teachers reported that changes in their attitude and efficacy occurred over time as new practices were attempted and experienced in PLCs. They valued the opportunity to learn in a non-competitive environment but classroom visits through Instructional Rounds was a source of anxiety for them. Once teachers had experienced the process, a small minority reported that their confidence increased. They also indicated that they were not positive about PLCs initially.

It was consistently acknowledged by teachers that change in their practice occurred as a result of their involvement in the on-site PD through PLCs. Their thinking, knowledge and practice were now reported to be different: “All staff adopted something new, whether it’s all the things they wanted us to or not. There has been a change in every staff member because of this. That’s where you probably go well, that’s an achievement in itself” (TH). An openness to change became evident and teachers were proud of their professional growth:

It’s never too late to change. You can become very, into the classroom, that whole routine. But to me over the last four years, I’ve really grown professionally and changed my thinking and changed my thoughts. These will be things that I will keep now until I retire (TH).

Other teachers suggested that sharing and working together in a PLC was a positive experience as it built their confidence: “Sharing lets us bring our confidence up too” (TG). They felt that they could now contribute to the learning of others and were keen to share and celebrate this achievement:

It’s allowed people to say that what I’m doing is working and it might work for someone else ... People are stepping up to the plate and saying well, this is a really interesting area that I have or it might be an area of weakness that you’ve actually grown in. It’s a celebration of learning really (TE).

Working toward a shared purpose and common goal also allowed teachers to give and receive feedback:

People are happy to share ideas and give each other feedback and support with resources ... having that environment where people are happy to talk. It’s not competitive; it’s not, look what my class is doing. It’s people actually trying to work together for a common goal (TF).

The honesty and depth of the professional dialogue was also valued: “Just say, this is the crunch. Where do we go? It enables deep and meaningful conversations” (TI). The opportunity to speak openly in a safe environment was reportedly a positive aspect of PLCs.

Teachers regularly stated they were initially negative about PLCs and what occurred within them. The amount of additional work was named as one reason for this opposition: “So the shared reading was good, but I thought why the hell am I doing this, it’s too much work, but it’s something that I had to do” (TE). Another frequently reported reason for the negativity was the classroom visits from peers that occurred during Instructional Rounds. Teachers described how these visits brought feelings of fear, apprehension and threat. “People felt threatened or anxious” (TI). They also indicated that this practice was a big change for them: “No one’s ever come to see what I do with my kids ... To be quite honest, at first I was very apprehensive about having something like that. I felt a bit threatened by it” (TH). Teachers felt they were being watched: “I found it difficult to separate from being watched” (TH). Another suggested they were not resistant but Instructional Rounds was a top-down approach: “I don’t think I had resistance to it. I’m a fairly flexible person but initially there were feelings of Big Brother” (TI). Others described it as a daunting process: “As a younger teacher, I found that quite daunting” (TH). Furthermore, teachers did not understand why they were doing it: “It was daunting ... initially I didn’t want a go. Like a lot of us we were going, why do we have to do this (TH)?” Teachers repeatedly stated that they were not keen to participate in Instructional Rounds; however, some positive aspects were identified. For a small minority, the reluctance dissipated after involvement in it: “After going through the process it was really beneficial. It wasn’t intimidating at all. It was very informal and you know we’ve got a wealth of knowledge in our school. You don’t have to go out” (TH). Observing other teachers was described as a positive experience: “Watching others, I got a lot out of it” (TH). Teachers reported that their attitude and self-efficacy shifted during the experience of a PLC.

Question 2, Theme 1 – Leadership

The first theme about Leadership was the second most prevalent theme in the interview data related to the second sub-question. As shown in Table 3.12, participants made 105 comments about the role of leadership in their experience of a PLC. Within this theme, three components emerged in the following order of prominence:

1. A Collaborative Approach
2. The Exercise of Instructional Leadership
3. Relationships of Trust and Professionalism.

Data relating to each of these components will now be presented.

Question 2, Theme 1 – Leadership: A Collaborative Approach

Within the theme of Leadership, a collaborative approach was the most frequently reported component with 68 comments (see Table 3.12). This component considered how leaders contributed to the collaborative approach within PLCs.

Leaders:

Leaders indicated that PLCs allowed for a collaborative approach. This was a change in practice that was facilitated by leaders. The deprivatisation of classroom practice was a reported feature of the collaboration that occurred.

It was consistently suggested by leaders that PLCs assisted in the development of a collaborative approach to teaching and learning. Leaders and teachers reportedly learned together and contributed to the changed teacher practice: “We now have PLCs, we are a PLC. Before we had committees ... now every teacher knows that they’re a learner and together we make a change” (TEE). This collaborative approach was a shift from previous practice that required leadership and planning: “Those PLCs are headed up by members of the leadership team. So, we’re all involved and it’s a collaborative approach as well ... there’s a lot of forward planning” (APE). Leaders arranged for this planning to occur. One leader also suggested that a collaborative approach in PLCs supported them to lead the change:

It’s really brought down to the nuts and bolts of how I can change, what I will change and who can help me change? I think the PLC has really strengthened collaboration to a point that it would not have been if we didn’t start dabbling in this (PH).

The practical way in which a collaborative approach from leaders assisted change to occur was named as a positive aspect of PLCs.

Leaders indicated that they modelled collaboration and their collaborative practices influenced teacher practice. They consistently reported that teachers no longer worked in isolation and there was a change from traditional teaching approaches to teachers learning with and from each other: “There has been a real shift. One of the biggest things is that good solid teachers, but a little bit insular, I can see are changing. I think wow, that’s fantastic” (TEH). Another leader supported this view and added that teachers were now working more collaboratively with other specialist teachers. This led to reduced ownership of a particular classroom and more sharing:

People are not working in isolation as much as I would have previously encountered. It’s much more of a collaborative venture with specialist teachers involved that’s led to an

openness of teachers to let go of some of that ownership of their classroom and not sharing with people. That's been a major thing, people letting go of that, I close my door and no one sees what happens in here. There's much more collaboration at the school level (APF).

The de-privatisation of classroom practice was frequently identified as a feature of the collaborative approach. Instructional Rounds was a strategy that leaders used to build the collaborative practices within PLCs and was named as influencing teacher practice: "Instructional Rounds is a PLC in itself that has a major influence on teacher practice" (PF). Leaders saw the benefits of learning through this process: "Because of the Instructional Rounds process teachers learnt a lot from each other" (TEF). Despite the difficulty experienced by participants in this process, according to many leaders, the collaborative approach of Instructional Rounds was reported to positively influence teacher practice.

As part of building a whole school collaborative approach to influence teacher practice, leaders reported that they also initiated other means to do this. One of the most frequently reported ways was by building a shared vision of collective responsibility for student learning: "We're now starting to look at children and their progress as a staff, or as a group of people, or as a stage with support people coming in" (APF). The contribution of different expertise, strategies and resources was named as a key way in which this was reportedly achieved: "Having a variety of people in different roles and with different expertise contributing to what's going to be happening in the classroom ... has meant much more for effective teaching and learning" (APF). Through a range of people working together, a collaborative approach to learning and teaching practice reportedly emerged.

Teachers:

Teachers reported that leaders adopted a collaborative approach in PLCs that led to teaching becoming more communal and a shift from traditional practices. Other suggested benefits included purposeful goal setting to keep the work focused and teachers feeling they were now co-learners with leaders.

It was consistently suggested by teachers that PLCs allowed for a collaborative communal approach to teaching and learning: "Before you worked very much on your own. With the introduction of the PLCs teaching and learning became more communal" (TE). Teachers experienced opportunities to shift from a traditional teaching style confined to their own classroom to learning with and from each other: "Before I think traditionally teaching has been, well that's

mine and that's my cocoon" (TE). Leaders ensured that teachers were exposed to the teaching of others: "We've been given opportunities of seeing other teachers and operate within our room. It's taken us from being a single solo teacher in the classroom to being part of a team teaching process" (TI). It was acknowledged by teachers that the implementation of a collaborative approach assisted them to learn and change their practice.

Other teacher identified benefits to the collaborative approach adopted by leaders were that, through the introduction of specific, measurable, achievable, realistic and timely (SMART) goals, PLCs were focused, inclusive, productive and purposeful: "Because you have the SMART goal of that PLC ... it's not ad hoc and it's not passing in corridors. It's a real designated time" (TH). The benefit of working collaboratively when analysing student data was also named: Working in a PLC has helped us with data collection and analysis ... when you can't quite work it out on your own. When we're looking as a team together and you have a few different perspectives, you can see why a child is having a particular difficulty (TH).

Additionally, teachers were now taking on roles that required them to lead: "With our PLCs the people who have actually stepped up into roles ... you wouldn't traditionally see them leading that area" (TE). As a consequence of sharing and working with leaders, teachers suggested that they felt they were now recognised as co-learners, which apparently gave them a sense of equality:

Sitting together and sharing of resources and strategies is an important way in which you build community ... we find that through sharing it acknowledges that everyone is still learning. It kind of puts us all on an equal path. We're all doing this together (TG).

Many positive outcomes from working collaboratively with leaders in PLCs were reported by teachers. In particular, they felt they were equal participants in the learning process, which contributed to the community.

Question 2, Theme 1 – Leadership: The Exercise of Instructional Leadership

Within the theme of Leadership, the exercise of instructional leadership was the second most frequently reported area with 22 comments. Most of this data came from leaders (see Table 3.12). This component relates to how instructional leadership was exercised by leaders to influence teacher practice in PLCs.

Leaders:

Leaders indicated that a key way in which they exercised instructional leadership was by modelling the practices they expected of teachers. The importance of the principal as an instructional leader as well as all leaders teaching in classrooms with teachers was described.

Leaders facilitating PLCs was also identified as an effective instructional leadership practice that occurred.

A different approach to influencing teacher practice in PLCs was reportedly embraced by leaders. Instead of telling teachers what to do they modelled what was expected:

The PLC did change the teaching practice because teachers started to see that there's someone coming in that might have some expertise that can help you, or you can ask questions of, and is prepared to stand up and teach your class ... This person is willing to show me, they're not willing just to tell me what I should be doing. I think the practice did change (PE).

The value and strength of the leaders working, leading and supporting teachers in classrooms was reported as fundamental to the changes in teacher practice: "All of our leaders are involved in actual support in the classroom. But not just supporting, leading; leading lessons in the classroom" (PI). Leaders regularly reported that this practice occurred: "There was a lot of working with teachers, you know modelling, going into classrooms, having the opportunity to team-teach and model, and professionally develop the other members of staff" (APE). Almost all leaders indicated that they were directly involved with teachers in classrooms.

Many leaders suggested that another way in which they exercised instructional leadership was through the facilitation of PLCs: "The leadership has developed the PLC groups in working with other staff members and they facilitate those groups" (TH). Another leader supported this view and emphasised the close role of each leader to the PLCs: "Each executive member plays an intimate role in the PLCs" (PI). Leaders were clear that they initially led these groups: "I led the PLCs" (TEG). Some indicated that a leader facilitated the PLC until teachers were able to do so: "The TE chaired PLCs until they were ready to be handed over" (API). In certain cases, this leadership gradually shifted to teachers: "It was really quite interesting to see the transfer of me leading the meeting to them taking ownership. When I was away ... I'd come back and they'd discussed things ... It was just wonderful to see the change" (TEI). This form of instructional leadership was described as being exercised variously in different contexts but it was leaders that initiated and led the PLCs at the outset.

Leaders observed that as time progressed, PLCs became more focused: "PLCs have become much more specific and goal oriented than they used to be" (PG). Data and research were utilised by leaders to achieve this focus:

With the AP we would sit down and plan things ... we would analyse data and do a lot of research. Then we shared that research and that learning with the rest of the staff. Then as a staff during a lot of staff meetings they would all have an opportunity to speak to the data and share their learnings and opinions ... That gave them ownership too (TEF).

It was reported that having a particular focus in the PLCs engendered shared ownership, which led to a greater consistency of emphasis: “So it’s been great. We’re all working on the same thing this year ... there’s a greater consistency across K-6” (APF). All teachers and leaders were involved in the same work: “Because we are a small school most of the time the PLC is ourselves. So, when we’ve done any professional learning we’ve actually done it across all staff because we wanted a whole school approach” (TEF). An inclusive whole school approach implemented through instructional leadership was reported to contribute to this consistency of focus.

Teachers:

Teachers reported that the exercise of instructional leadership in PLCs occurred through leaders developing and facilitating them: “The leadership has developed the PLCs in working with other staff members and the professional learning groups come together and the leadership team facilitate those groups” (TH). Leaders also implemented SMART goals to maintain the focus: “The leadership team have established SMART goals for that particular meeting so it’s not just a waffly kind of wherever you’re going ... We are then clear where we’re heading as well so we know how to keep on task” (TH). According to the following teacher, the expectation to use SMART goals extended to all meetings that occurred: “When we have meetings without the executive the expectation is also that we have a SMART goal” (TH). Some teachers indicated that leaders expected them to use SMART goals in PLCs to keep the work on track.

Question 2, Theme 1 – Leadership: Relationships of Trust and Professionalism

Within the theme of Leadership relationships of trust and professionalism was the least frequently reported area with 15 comments (see Table 3.12). This component is about how leaders developed trusting relationships with teachers in PLCs. As most of this data came from leaders, no teacher data is presented.

Leaders:

According to leaders, essential to changing teacher practice in a PLC was the development of trusting professional relationships with teachers:

To develop that PLC, we had to really work first of all ... over a period of time on building trusting relationships. By building that relationship of trust, me coming into your room or you discussing an idea with me, is around us building a relationship to support the students' learning (PE).

These relationships were frequently identified as foundational to establishing a PLC. The most consistently suggested way in which relationships were developed, that were seen to contribute to a supportive and safe learning environment for teachers was through leaders developing a 'no blame, no shame' culture:

There's no blame, no shame. That's allowed the sharing of expertise, which is a real group effort... the collaboration we've had this year and the way we've done it creates a safe and supportive environment for teachers. That's been crucial because it's been a big steep learning curve for many of them (APF).

Leaders stated that modelling a no-blame, sharing and learning together culture where risk taking was a feature, allowed teachers to say things based on trust:

If you build that relationship with people then they're willing to take a risk ... it's really important in my role as principal to model that. If someone takes a risk and something doesn't quite work out then we go back and look at it (PE).

To build trusting professional relationships, leaders suggested that they promoted the 'no blame' culture and focused on teaching and learning behaviours rather than individuals or their personalities:

In a PLC where there's no blame we are learning together, we're sharing what we do.

There's a trust there for you to be able to say things as you know them. There's also an understanding in a PLC that the focus is on behaviours and on learning and teaching, not on the person, or the personality (PH).

Leaders also indicated that they were aware of the importance of managing people carefully: "A lot of it depends on how you approach it" (TEH). Because the data suggests that leaders considered relationships as crucial to influencing teacher practice, they appeared to be particularly mindful of approaching teachers with sensitivity.

Question 2, Theme 3 – Structure and Organisation

The third theme, Structure and Organisation, was the least prevalent in the interview data related to the second research sub-question. As seen in Table 3.14, participants made a total of 35 comments about structure and organisation in their experience of a PLC. Within this theme, two components emerged in the following order of prominence:

1. Resourcing
2. Reorganisation of Structures and Roles.

Data relating to each of these components will now be presented.

Question 2, Theme 3 – Structure and Organisation: Resourcing

Within the theme of Structure and Organisation, resourcing was the most frequently reported area with 24 comments (see Table 3.14). This component is about how the available resources were deployed by leaders to support PLCs.

Leaders:

Leaders indicated that the provision of time for the work of PLCs was an important aspect of their leadership of the reform. Managing the balance between teachers actually teaching, and being away from class to fulfil other tasks, was a consideration in the use of resources.

In a range of ways, leaders reportedly arranged time for leaders and teachers to support and facilitate the work of PLCs. Some allocated staff meeting time for this purpose: “We have allocated time in staff meetings where we have PLCs so we’ve respected the teachers” (TEI). Others altered the beginning and end times of their PD sessions: “Our PD time, we allocate some time to start/leaving time for the teachers to be able to meet ... I think we can do it even better” (PI). Different ways of using the time available were implemented but leaders were aware that their practices could be improved upon.

It was indicated by leaders that they were conscious of time constraints: “A lot more time would be good” (PG). There was recognition that time was limited and any additional time had to be given by teachers: “What it did do on a negative side was impact heavily on time because this was extra to our normal staff meetings” (APH). Leaders were aware of the influence of the reform on teachers’ time and the challenge of them being out of class too frequently was identified as something they had to manage: “We have to find the balance between keeping the teachers in the classroom and also giving them the PD, the collaborative planning, all that time that they need” (PG). Leaders realised more time was necessary but teachers were also required to be in class to teach.

Teachers:

Teachers reported that the resourcing to support the work of PLCs, particularly in regard to time, was valued but considered inadequate for all that was required of them.

Many teachers indicated that leaders made time available for a whole range of activities in PLCs. These included such things as professional dialogue: “There was a lot more time for communities to get together, to talk about issues, to nut things out” (TE). Teachers agreed they were given time for reflection: “It’s important to give them time to sit together ... being given the time to do it and relieved from class to do it” (TE). Another teacher agreed that reflection time was provided but also for peer observation: “The PLCs allowed us time. Time’s been critical, time to reflect on what we’re doing, how the kids are engaging with what we’re doing ... Little things like sitting back and watching another teacher teach” (TI). Teachers suggested that this time was valued and appreciated.

Teachers recognised that time was a limited commodity but this did not change the amount of additional work required of them: “Obviously time is limited ... we can’t always be given time for everything that has to happen ... It’s an added thing for everyone in the community” (TE). Teachers were consistent in their comments regarding the burden placed on them due to the extra demands of PLCs:

When it’s done in time, such as when you are given time for it, it is useful. If you’re asked to do a PLC on top of a staff meeting, for example, that becomes draining ... but when it has taken the place of one it is very effective (TH).

The time required of teachers who did not have additional out of class time allocations that leaders had was described as a challenge. Teachers felt overloaded:

The PLC is about teachers being overloaded ... We’re not on the leadership team so we don’t get co-ordinator release and days out, so some of that can be for a classroom teacher a heavy load to carry when you’re meeting after school or before school for the PLC (TE).

While teachers reported that they were grateful for the way in which leaders used the available resources to support them, particularly the provision of time, it was consistently stated that it was insufficient.

Question 2, Theme 3 – Structure and Organisation: Reorganisation of Structures and Roles

Within the theme of Structure and Organisation, the reorganisation of structures and roles was the least frequently reported area with 11 comments (see Table 3.14). This component refers to the way in which some school structures and roles changed to implement and support PLCs.

Leaders:

Leaders reported that the reorganisation of structures and roles led to some of them taking on additional responsibilities and the clarification of some roles. Changes to existing structures were also required.

Leaders reported that they needed to plan and arrange for time to be allocated to PLCs for teachers and others, including themselves, to be available to work together. This required the time for leaders to organise: “It takes planning, takes time” (APE). Another leader endorsed this perspective, adding that they had to arrange for the availability of both human and material resources for PLCs: “The whole organisation; the organisation as regards human resources, the organisation as regards material resources. All of that had to be streamlined and brought into these PLCs” (API). This type of organisation was new or additional to the role of these leaders.

It was also suggested that PLCs helped to clarify leader roles and the purpose of meetings: “What PLCs did, and continue to do, is break down who should be meeting and who should be supporting whom; whose responsibility it is to do A, B, C” (PH). Leaders indicated that different meeting purposes influenced the type of PLC structures that were set up in schools. This was reported to have occurred differently in different contexts. One leader stated that their PLCs were structured around an aspect of the curriculum: “We have PLCs for numeracy, we have PLCs for literacy, we have PLCs for ESL” (APH). Another leader indicated that it was a K–6 approach with a consistent focus in a particular area:

We have a system Kinder–Year 6 that will programme the same way ... We have our comprehension strategies ... We have a common language from Kinder–Year 6 in the teaching of reading ... Each term we have a learning support meeting when we come together (TEE).

Although the PLCs had different areas of focus, leaders indicated that structures to support shared understandings of teacher knowledge and practice through PLCs were created.

Teachers:

Teachers also indicated that leaders established different structures and processes for the operation of PLCs. In one context, it was reported that smaller ‘team’ structures were set up, which strengthened the larger PLC: “All of the professional learning teams, the RE, English, Maths, ICT, Science, have come from the fact that as a whole school we have become a stronger PLC” (TG). To facilitate aspects of the PLC, leaders also generated processes and timetables:

“Timetables were put in place for teachers to go and view another teacher model a shared reading lesson” (TE). Time for the induction of new teachers was another of these processes: “If we have new staff come on board there is time for different people to work with the new staff members ... to introduce them to the documents, to the processes involved in the school and they get that time” (TE). Teachers suggested that leaders facilitated their work through the establishment of these various PLCs structures.

Question 3: What was the particular contribution of the TE role to teacher practice?

Analysis of the interview transcripts revealed three themes that related to this question. Within each of these themes there are two components. While the themes emerged in the following order of prevalence, there was only a small variation in the total comment numbers in each. The themes are:

1. Characteristics and Qualities of the TE
2. Structure and Organisation
3. Contribution to Teacher Capacity.

Data for each theme will now be presented in this order.

Question 3, Theme 2 – Characteristics and Qualities of the TE

Characteristics and qualities of the TE was the most prevalent theme in the interview data related to the third sub-question. As shown in Table 3.16, participants made 123 comments about how the characteristics and qualities of the TE influenced teacher practice. Within this theme, two components emerged in the following order of prominence:

1. Relationships
2. Credibility.

Data relating to each of these components will now be presented.

Question 3, Theme 2 – Characteristics and Qualities of the TE: Relationships

Within the theme of Characteristics and Qualities of the TE, the area of relationships was the most frequently reported one with 64 comments (see Table 3.16). This component is about how and why the relationships TEs developed with teachers influenced their practice.

Leaders:

Leaders indicated that relationships were considered essential to facilitating changed teacher practice; however, building them with teachers was a challenge for TEs. These

relationships took time to develop and various approaches were utilised to do so. The title of the TE role was identified as an obstacle.

Leaders consistently acknowledged the importance of the relationships that TEs built with teachers and how well this was done: “That’s something that the TE did very well; slogging on at those relationships even when they were challenging” (API). Many leaders agreed with this: “All teachers had a relationship, a professional relationship with the TE” (PG). Without a relationship, leaders believed that teachers would not change: “If you don’t have a relationship with staff they’re not going to do very much” (TEF). It was generally agreed that time was necessary for these relationships to be built but the TEs were capable of doing so: “It’s great that it evolved over four years because you have to earn trust before you can have those sorts of conversations. But they were well equipped, the TEs, to be able to fulfil that role” (PI). Leaders indicated that establishing relationships was the first and most important thing TEs had to do: “The first thing that anyone in a role like that has to have is rapport with and the relational trust between them and the colleagues they’re working with. I’ve seen it here” (PH). Building these relationships was considered to be the responsibility of the TE: “Part of the role of the TE is you can get to know the teacher, you can build that trust” (TEE). Leaders regularly reported that TEs did this well.

Within the leader comments, TEs reported that while they were aware of the importance of building relationships with teachers it was not easy: “It was really difficult and still is to this day” (TEI). Another TE supported this view and mentioned the enormity of the challenges involved: “I had to build that capability, those relationships and that relational trust ... There were challenges for me, big challenges I feel” (TEG). An AP described the opposition that their TE faced from teachers when building relationships:

When the TE first came there was a lot of resistance. ‘Oh, we’ve got someone here telling us what to do. You know this person knows it all. I’ve been teaching for 40 years. Why do I need anybody else in here?’ But I know that those people have come on board 100 per cent. You just need to work with people, build their trust (APE).

It seems that within a hostile context, TEs developed relationships with teachers.

TEs described various ways in which they developed relationships with teachers. One was to be positive and affirming:

I'm a very proactive positive person ... so if someone does something fantastic, or just anything, I'll just always make sure I tell them that they're doing a great job or I love the way they do this, or thank you (TEI).

Another reported approach was to have a 'no blame' approach and focus on teacher strengths:

You're there for that relationship ... it's vital ... You're working with teachers, there's an authentic relationship, there's that no blame ... you can see what their strengths are, you can build on their strengths, you can establish that relationship and that's when change happens (TEE).

A third strategy was to listen to people informally and find opportunities for coaching and mentoring:

Coaching and mentoring, listening to people and being an active listener are in my role.

They laugh now but one teacher said to me ... what do you call that coaching as we walk to the car? I said oh, my cappuccino coaching? So, we have cappuccino coaching, that's the walk to the car or at the sink (TEG).

While leaders reported that TEs utilised different strategies to develop relationships with teachers, many described how long this process took. This is seen in the following comments: "That first couple of years, it would have taken two years to build relationships with a lot of these teachers" (TEI). Another leader supported this opinion: "The TE ... took a while to gain the respect of the staff. It may have taken six months, may have taken 12 months" (PF). A third view was that relationship building took a long time because TEs needed to get to know teachers personally as well as professionally: "It took a good term, two terms to develop relationships with staff, not just as professionals but to ask them how their day is going, get to know their families. We developed that trusting relationship" (TEF). One TE described how slowly and persistently they did this: "I'm one of these people that don't go in and go bang. I do it slowly, very slowly, but I never give up and they know that" (TEI). This view was endorsed by an AP: "She was able to build up that trusting relationship where a teacher can ask for the fourth time, the same question, knowing that he or she will not be belittled by asking it the fourth time. That takes and says a lot" (API). Some leaders suggested that establishing relationships with teachers was easier for TEs that were not new to the school: "There are no qualms between her and the staff. She did work here beforehand at the school so there was a relationship ... that made a big difference, a big positive difference" (PH). It was suggested that an unknown person would have more difficulty doing this: "Probably couldn't happen if the TE was someone we didn't know or an outside person coming in" (APF). A TE new to their school agreed with this position and described how difficult it was when you were

unknown: “I was new to the role and I came new to the school and that was quite difficult” (TEI). A TE having a prior relationship with teachers was considered by some to be an advantage.

Showing respect for teachers as professionals was named as essential to the development of relationships: “One thing I was told when I came was, you respect us as professional people. I think that’s very, very important ... that we treated them as professionals as well” (TEG). Another leader endorsed this comment, adding that respect for teachers who were dealing with challenging students was important: “I can’t stress this enough. It’s all around respect. You have got to respect what they do because they’re in there with those kids and some of the kids are difficult. You’ve got to remember that” (TEH). As well as respect, maintaining teachers’ privacy and dignity in a sensitive and supportive environment was reported as fundamental to developing positive relationships:

[It’s] about the privacy and dignity involved. Because you’re in and out of that room all the time, you can see that that person hasn’t quite got it yet so you quietly spend a little bit more time ... So those sorts of subtle things instead of a big sledgehammer ... maintained dignity but made significant changes (API).

Leaders also suggested that while building relationships to facilitate change they needed to be flexible: “There was a lot of give and take in that which gave people room to change” (API). Relationships were established to enable change and challenging teachers was reported to be part of that process: “Teacher practice has changed so much. It’s amazing the teacher practice, and I’ve challenged them because teachers can become very complacent ... I’m always challenging them” (TEI). Challenging teachers as well as allowing them to challenge leaders were described as having occurred:

I suppose it’s like the elastic band. I’ve got to treat them as professionals. You’ve got to let go of a bit of the elastic. Let them go, let them fly. Let them make mistakes, then pull it in again ... let them challenge, let them question” (TEG).

The importance of TEs being nurturing and having a non-threatening manner was seen as essential to building productive relationships: “It’s the type of person that she is ... non-confrontational, very supportive, very nurturing of people regardless of where they’re at in their own PD. That’s made an enormous difference. I think the right person is in the job” (APF). Multiple attributes and qualities were reportedly required of TEs when building relationships.

Some leaders reported that an obstacle to TEs developing relationships with teachers was their title: “When I first came to this school I thought, I can’t do this because of this label TE; TE

was not a good label” (TEI). It was suggested that teachers interpreted the role to mean that TEs were in their classrooms because there was a need for them to be educated:

The name, TE ... that was not a good name and I’m pretty confident that other schools thought this at the time. It was well you’re the TE and you’re in my room. What does that say about me? That was a really big hurdle that took a lot of relationship building ... The name itself was a major hurdle ... I’m here to educate you (API).

It was reported that the TE title impeded the development of positive relationships.

Teachers:

Teachers indicated that by TEs being approachable, supportive, non-threatening and accessible they developed relationships with them slowly. It was suggested teachers were challenged, coached and mentored by TEs, and they found their gentle style and personality encouraging. TEs situated on-site were considered conducive to the establishment of relationships.

Teachers identified the importance of building trusting relationships with TEs if they were to learn from them: “If the trust isn’t there, she could tell me whatever she wants, but I’m not going to take it on board” (TI). They also recognised that while TEs were building relationships they were challenging, coaching, and mentoring them to guide the changes in their teaching practice: “You know it’s challenging, it’s planning, it’s asking that big why question, it’s coaching teachers, it’s mentoring, it’s supporting. So, all of those things have been part of that role” (TG). To build trust, TEs took things slowly, got to know teachers and did not overwhelm them: “She looked at us as a staff and realised there was no point overloading us, overburdening us all in one go ... The way she’s introduced things as small steps, learning skills, developing over time has worked really well” (TF). A further way that TEs built relationships was by spending time with teachers before suggesting that they go into their classrooms:

She did a lot with us out of the room before she came into our rooms if we didn’t feel comfortable. She’d meet with us and talk ... She would offer suggestions ... Then if she felt the invite was there or was ready, she’d say, ‘Well how about I come and work with you in your room?’ (TI).

Teachers reported that this slow and moderate approach of TEs was effective.

Teachers consistently indicated that TEs built relationships with them at the outset: “She was very good at building the relationship first” (TI). These relationships reportedly helped teachers to feel valued and capable: “She is able to make you feel competent and confident ... even

me when I don't feel so confident" (TE). TEs did many things to build teacher confidence. Their non-judgmental style was described as effective: "Having already built a rapport with the TE and her not being condescending or anything, you could go to her with questions no matter how stupid they sounded and get the answers right then and there. She's very accessible" (TF). They were gentle and affirming: "That gentleness, that stepping in without making you feel oh gosh, you're just going to become a disastrous teacher" (TH). They were approachable, fair, available, and got to know the needs of teachers: "She's so approachable ... She knows exactly where I stand and I find she's always just, she's always available for people" (TH). Teachers reported that they valued these attributes of TEs as well as their willingness to give them time in the classroom: "She's always been approachable. She's always been supportive ... she's always taken the time to come into the classroom and model it. Getting to know where we are as teachers, that was very important" (TF). Teachers felt safe and supported by TEs as they were affirmed in their work, regardless of their learning needs:

It's also safe and supportive, especially with our TE in that she does recognise the good things you're doing. She recognises and supports where you're at. It's not, 'Sorry, look you're stupid, you should be doing it that way.' She'll find the things in there that are good, the gems and say, 'That's really good, you're doing that well. What about we try?' (TG).

TEs were reported to be non-threatening as they guided teachers collaboratively: "It's not like a hierarchy. She's working side-by-side and that was really key to it all to make whatever we were doing successful. She was supporting us ... She was always there" (TF). TEs showed teachers that they too were learners and were open to new ideas: "The model that she's given us; she's never given the impression that she has all the answers" (TF). It was suggested that TEs were willing to admit when they needed to find answers and were on a learning journey with teachers:

It's not saying 'I'm the expert'. She's quite happy to say, 'I don't know but I'll find out or let's find out'. So, it's dragging people along the journey with her, or taking people along the journey with her, both of those things. She's happy for people to come and give her new ideas (TG).

Along with the availability and approachability of TEs, teachers consistently indicated that aspects of their personalities contributed to their effectiveness in building relationships. The following three quotes from different teachers reflect this: "Our TE is a very personable person" (TI); "She's so available. She's so good ... with anything. It's her personality as well" (TH); "The role of TE has been very effective with me but I think it's especially the person that is taking on that role"

(TH). Teachers regularly stated that TEs demonstrated positive qualities while building relationships with them.

Teachers also reported that TEs located on the school site contributed to effective working relationships: “It's been really excellent to have that TE within the school because they're so experienced and you know that they've always got time for you” (TI). Being on-site allowed them to work with teachers and jointly experience the everyday challenges of school life:

You could build that when they're on-site and over time because they're seeing the issues we're dealing with daily ... they're part of it. It's not like a one-off where we go and meet her and then come back here to the real world. She's part of our little world (TI).

Teachers recognised that having a TE situated in the school was a shift in practice but appreciated the opportunity it gave them to build relationships and learn together.

Question 3, Theme 2 – Characteristics and Qualities of the TE: Credibility

Within the theme of Characteristics and Qualities of the TE, credibility was the second most frequently reported area with 59 comments (see Table 3.16). This component is about how the TEs established their credibility and what they experienced while doing so.

Leaders:

Leaders reported that the credibility of TEs was essential to their effectiveness. Credibility was built over time through modelling in classrooms and supporting teachers while demonstrating sound knowledge and understandings. Leaders indicated that credibility had to be earned and, as with relationships, this was a lengthy and difficult process.

Leaders consistently suggested that TEs established credibility. The following leader described how the credibility of the TE assisted teachers to trust her: “It emanates from you when you know what you're doing ... She knows her stuff ... that on its own allows people to trust her to take them to the next place” (PH). The credibility of TEs was achieved in a range of ways. One leader suggested that supporting teachers in their various stages of learning was effective: “She's very willing to meet any colleague exactly where they are and to put the support in place at the level that it's required until it can be slowly removed and have people more autonomous and independent” (PH). Being in classrooms competently demonstrating their PCK was another way that credibility was reportedly built by TEs:

I've helped them with their programming. I've done the modelling, the team teaching so I've proved to them that I know what I'm talking about, that I'm competent ... I know it sounds little but I do playground duty. That for teachers is a big thing because I'm not just sitting in my office ... I'm fully involved in all aspects of school life (TEF).

A willingness to support teachers in all facets of their work and be involved in every part of school life was seen to enhance the credibility of TEs.

TEs described the struggle they had to establish credibility and resistance from teachers was experienced for a long time. Some did not feel respected:

There was a lack of respect for quite a while from some people in that you haven't done the hard yards on class. You haven't done this; you haven't done that ... It still is hard with some of these teachers. They take and take and take and if I get from them, oh that's a great idea, or I really like the way you did that, it's like they're trying to say I'm doing a good job (TEI).

It was felt by TEs that teachers took much from them but did not give much in return. They had a difficult time as they were tested, felt that they were on trial and began to doubt their own capacity:

There have been a few challenges for me. At first when I started I doubted myself a bit, that I didn't know my stuff. Then I went no, you know your stuff ... that was a challenge for me ... People were trialling me, trying me out ... they were testing the waters to see whether I knew my stuff (TEG).

TEs indicated that they were challenged but persevered to establish their credibility. They worked persistently with teachers while remaining true to the needs of the students:

I'm an educator that believes that the student voice and the child's needs have to be met ... I'll fight it and fight it until it's done ... Whereas before they used to just dismiss it and I'd be still pushing. Now they know if I want something done they'll do it because they know I won't give up (TEI).

Leaders suggested that determination and patience were required of TEs as their credibility was being established.

As time progressed, leaders observed that teachers gradually came to value TEs and saw them as credible educators:

I heard on the grapevine, oh my God she does know her stuff and does she know it ... it took nearly six months. It took about five months for them to start saying ... she does know what she's talking about (TEG).

Some teachers continued to have an issue with TEs not having their own class but they were gradually respected by teachers for their hard work, skills and knowledge: “Suddenly I’ve earned this respect that I’m on the same playing field ... they still can’t get over the fact that ... you’re not responsible for a class, but they actually see how much work I do” (TEI). Over time, as TEs taught in classrooms, teachers became curious and keen to learn more about the practices they observed: “We’ve injected ourselves into the classes and modelled. It’s beautiful because the teachers are saying, ‘Oh, what were you doing today? I was watching you’. So that whole modelling has come through” (TEI). Eventually, teachers were grateful for the TE working with them: “I injected myself out of stage two and stage three. You should have heard the hoo-hah. The teachers said, ‘How are we going to do this without you?’”(TEI). Leaders reported that over time the credibility of TEs was established.

Teachers:

Teachers indicated that the credibility of TEs was built by them being co-learners with teachers within and beyond the classroom. They also reported that while TEs established credibility through teaching with them, this was a source of stress for teachers and TEs bore the brunt of this.

Teachers regularly reported that TEs were credible: “She is so knowledgeable ... an amazing leader of pedagogy” (TE). Some teachers claimed they recognised this competence immediately: “From the start it was quite obvious that our TE had good knowledge of pedagogy, she had experience and kept us up to date with ideal teaching strategies ... That was really important from the beginning” (TE). They were considered an asset to the school: “I find her an invaluable resource to the school” (TG). The TE not having a set class was eventually considered beneficial: “I’ve found it really useful. It’s someone who is provided to a school who isn’t on class. You see that person. A lot of the time your APs and principals will be quite busy” (TI). Teachers valued the availability of the TE to support them, as their other leaders were not as accessible.

Teachers consistently reported that TEs did a range of things within the school to earn credibility. They planned with teachers: “It’s even having collaborative planning sessions with the TE where you sit as a grade and you’ve got the TE sitting there with you” (TG). They provided on-site PD: “I don’t go to as many in-services because a lot of the PD is happening here at school. The TE was one of the key people who was providing ... that PD” (TF). They modelled and provided feedback to teachers on their practice: “I’ve had her in my room multiple times to come

and watch lessons and provide feedback ... She's modelled different things for me in my classroom as well" (TG). It was seen as an advantage that TEs worked closely with teachers in a range of ways to build their credibility.

The credibility of TEs was reportedly established through working with teachers in classrooms; however, this brought a range of challenges for both teachers and TEs. Teachers were aware that TEs experienced difficulty when building credibility and attributed this to the stress they were feeling at the time: "In the first two years I said, I like you but I don't like your job because it was so stressful ... it wasn't her fault. It was what she was supposed to have done" (TE). As TEs were simply doing their job, teachers reported that they did not blame them for their stress but were aware that TEs suffered because of how teachers were feeling: "Our TE ... copped a lot for it" (TE). Some teachers reported that they felt threatened by the TE coming into their classroom: "Because of the nature of the shift it's understandable that some more experienced teachers will feel some anxiety ... threatened because of having been the sole one in charge of the classroom" (TI). However, teachers also reported that by TEs and other leaders teaching with them, a shift from isolated practice to working together across the whole school occurred: "Because they made us open up, now there wouldn't be a lesson taught in the school throughout the day that there's just one adult in there" (TI). Despite the challenges encountered, there were reported benefits of TEs working in classrooms with teachers, particularly in relation to the deprivatisation of teaching practice.

Question 3, Theme 1 – Structure and Organisation

The first theme, Structure and Organisation, was the second most prevalent in the interview data related to the third sub-question. As shown in Table 3.15, participants made 115 comments about how the structure and organisation of the TE role influenced teacher practice. Within this theme two components emerged in the following order of prominence:

1. Time and Sustainability
2. The TE Role.

Data relating to each of these components will now be presented.

Question 3, Theme 1 – Structure and Organisation: Time and Sustainability

Within the theme of Structure and Organisation, the area of time and sustainability was the most frequently reported with 60 comments (see Table 3.15). This component is about how change required time and whether sustainability was possible without the TE, the additional funding and the release time.

Leaders:

Leaders described the value they placed on the changes that occurred during SSNP and some thought they would be sustainable due to a shared commitment to them. It was recognised that the TE and all the resourcing that came with this role allowed for dedicated time to influence teacher practice. However, many leaders indicated that without the time and the TE role, they did not know how sustainable the changes would be.

Because leaders knew the SSNP funding was ending after four years, some suggested that procedures for sustainability were established:

One of the things that we've done is set up a lot of the processes, procedures, practices. We have set it up to be sustained because I was always very clear that at the end of the four years we were going to lose the TE (PE).

Some leaders suggested reasons why the changes would be sustained. One stated that the practices were now embedded: "These teachers will continue with the skills and the knowledge and things. This year, that's become quite embedded in programmes. I don't think we will lose that" (APF). Another indicated that there was a commitment to maintain the changes and processes were now documented for new staff: "It's sustainable. That's what it has to be. The practices that are here are sustainable and when new people come in it's, this is how we do things around here. It's documented" (TEE). A third leader agreed with the previous two, adding that the new knowledge and skills of teachers would remain with them: "Practices will continue, I'm positive about that. As teachers you don't lose your knowledge, so the knowledge and the skills that they've built and developed over the period of time will remain with them" (PH). An additional view from a TE was that they had built sustainability through the teachers: "They'll be fine without us; that sustainability was a big thing ... I've up skilled them" (TEI). Teachers were considered to be the ones that could make the changes sustainable:

I'm not suggesting that as soon as the TE finishes we're all going to fall apart, most definitely not. Part of the TE's role was to build sustainability. I think there is an opportunity at this particular school as that sustainability is there. It sits with the teachers because they have better, greater ownership of what they're doing in class, greater responsibility (APH).

Due to increased teacher ownership of the reforms, it was suggested by some that sustainability was possible.

Leaders also indicated that TEs had time to work in classrooms with teachers, which was considered important as changing teacher practice required time: “She has the time to go into people’s classrooms to show them things ... it has taken time. I’m not saying that one day you do this and the next day you change” (PE). TEs worked with teachers to change their practice; however, it was acknowledged that making these changes sustainable was difficult:

The most challenging thing is ... to ensure that it becomes part of their everyday practice, that’s the challenge. It’s not that teachers don’t value the changes that have happened. I think they do. But making sure that it’s sustained. That’s been a huge challenge (TEF).

Leaders regularly identified keeping the new practices going without the resourcing as a concern:

My biggest concern at the moment is ... all the generous funding that came with SSNP won’t be here. So, releasing teachers to work with the TE, releasing teachers to work together on a particular area of need, that’s going to stop (PG).

While some leaders suggested that the practices would continue, concern for how this would occur with limited time was consistently reported: “Now we actually release teachers. What we’ll do next year, I don’t know because we won’t have the money” (TEH). The resourcing, particularly in relation to time, was described as essential: “The resources that have been available, in particular the time resource to be able to release teachers to do these things that have been needed, that’s going to be a tragedy because that’s the key to it all” (PH). Leaders were aware that they would need to be creative to find ways for teachers to collaborate that were not dependent on release time:

This is where sustainability is going to fail, I believe. I don’t want it to, but it looks like happening ... It is going to be extremely difficult and executives are going to have to be particularly creative in the continuation (APH).

As well as creativity, leaders suggested that flexibility would be required of them: “That’s going to be where I’ll need to be creative now in how to fund that work ... So, the flexibility of a timetable and the flexibility of release time will be a challenge” (PG). According to many leaders, the lack of release time combined with the absence of a TE would reportedly influence what could be done in the future: “My role is unique. This is an extra person, an extra body on staff that’s not going to be there next year” (TEF). The loss of the extra staff member was repeatedly named as critical:

I’m losing one whole staff member that we’ve all been used to for four years. I’m losing all of that funding to be able to release groups mornings, afternoons ... that on its own is going to make a huge difference (PH).

Such concerns were prominent throughout the leader data and the decision to end SSNP was described by one as “short-sighted” (APH).

Leaders expressed regret that the funding and the role were about to end but not solely because of the reduced money and time. One felt that their work was not yet complete: “There was so much more we wanted to do. So, I don’t know how that will happen now” (APF). Another suggested that it should become an ongoing position in schools: “I just think it should be a permanent role” (TEH). It was also indicated that TEs had experienced a great deal of PD and, as not all wanted to become APs, their learning would not be well utilised in the future:

We’ve had so much training. What are they doing with it? I think they particularly want you to go into AP roles ... From my point of view, I don’t want to be an AP. What do you do with all that training and expertise? I think it’s a waste” (TEH).

TEs themselves wanted the role to continue: “Just to keep the TE role going would be lovely” (TEF). Overall, leaders reported disappointment that SSNP was coming to an end.

Leaders had many other concerns about the future. One was the effect of the conclusion of SSNP on students:

It saddens me that the meat in the sandwich and those that don’t benefit are our children again and that’s our core purpose. We should be trying to do everything possible to ensure that those children get the very, very best available (APH).

It was also suggested that leadership in the school would be reduced without a TE: “I have genuine concerns about where to from here ... the one FTE of a brilliant operator is going to reduce the leadership here significantly” (PH). An AP indicated that all the work of TEs might now become their responsibility, which would not be as effective, particularly in relation to PD:

My worry is that such good things have been happening and such driving PD that if it falls back to me it won’t solely be me; it will be a watered-down version. I don’t think we can possibly sustain the level of PD that we’ve had ... without someone in that position (APF).

A further risk identified by leaders was the potential for teachers to think that without a role dedicated to work with them on their practice, they may consider their learning to be complete:

I’m also wary that without someone driving it like that, what classroom teachers will do, whether they’ll think my learning is finished, the programme is finished, I can stay where I am. I don’t really need to learn any more without somebody pushing me a bit (APF).

Leaders also reported that they were worried for teachers and all that would be expected of them without support: “They’ll be expected to do a lot on their own in their own time. Teachers are busy, especially if they’ve got families, so they won’t necessarily put in as much; they can’t put in as much time” (TEF). Leaders suggested they could not expect teachers to dedicate their own time to do more work: “The teachers can’t give up every afternoon after school to work ... or give up

their lunchtimes or before school” (PG). Without the additional support, leaders indicated that teachers would not be able to do as much work.

Teachers:

Teachers described time and sustainability as matters of concern. They recognised that it took them a long time to change their teaching practice, which was now valued, but were worried about how much time would be required of them to sustain the changes. They were also unsure of why SSNP was ending and raised many questions about the future.

The learning journey of teachers reportedly took time and some felt that system personnel might not have realised how much work was actually being done in schools:

We were learning and that’s a process that doesn’t happen overnight. I think there were some people who might, up above ... may not have understood what was going on at the ground level because there was a lot of work being done ... we were trying a lot of new things and a lot of new strategies (TE).

Teachers indicated that they valued the learning that occurred and believe it will remain with them: “I feel that the strategies I’ve learned ... will always stay with me and it doesn’t really matter where I go because they are valuable strategies that we’ve learnt” (TE). Teachers wanted the new practices to be maintained: “It would be a shame for things to stop and things to continue the way they were” (TF). Even though there would be staff turnover, teachers expressed a desire to progress further: “As new staff come in and others go you wouldn’t want to go back, you want to go forwards” (TE). They were concerned that all teachers may not maintain the new practices: “It would be a pity for all these wonderful, all these good things that we’re doing in the classroom, all these classroom practices to stop, or cease, or only a few teachers keep implementing them” (TF). It was consistently suggested by teachers that they would be disappointed if their changed practices were not sustained.

It was regularly reported that the absence of a TE would create a void: “It’s a huge loss to lose our TE this year” (TE). Teachers asked many questions and the lack of a TE in the future was described as problematic for many reasons: “It’s going to leave a big void ... who’s going to fill that gap? Who’s going to keep maintaining programmes that we’ve started? I guess these are all the questions that we’re asking” (TF). Teachers asked a number of questions, such as, who would now provide the leadership? “If there’s not still someone driving the ship, that could be an issue” (TE). Who would mentor and guide new staff? “We need to look at who’s going to keep track of all of

that and also if we get new staff, who's going to be the mentor for them?" (TF). Who would provide the PD? "We need to look at also our own PD and how will that be sustained" (TF). Teachers also expressed a general concern regarding the direction in the future as personnel changed: "As people move on to new roles, where does it go from here? Someone's still going to have to keep maintaining the leadership for it to continue and to grow" (TE). Teachers had questions about the sustainability of the work without the personnel to do so.

Another consistently reported teacher concern was time. They said that while they now have the capacity to do the work required, with time no longer available during the school day they would be expected to do more in their own time:

A lot of the systems are in place ... but I feel it's the time ... we are better equipped to do it independently but we won't have the school time to do that and that's going to fall on us if it's going to continue, to do it in our own time (TF).

Teachers suggested that they were now more independent but were not sure whether that was why SSNP was concluding: "TEs came in with funding ... so when the TE funding goes and the TE goes, is that because it's now not necessary or it's just not affordable?" (TI). Teachers indicated that they were still keen to learn and felt let down:

That's the thing that worries me. They set up a fabulous programme and then pull these resources when it's right at the climax of working. I just find it really quite confronting ... we all still want to grow, we all still want to learn and then it's sort of like pull the plug and okay, good luck now (TH).

Teachers reported that they were keen to understand why SSNP was ending. They were disappointed and could not comprehend why a successful programme would conclude.

Question 3, Theme 1 – Structure and Organisation: The TE Role

Within the theme of Structure and Organisation, the TE role was the second most frequently reported area with 55 comments (see Table 3.15). This component is about the role and how it was structured and organised to influence teacher practice.

Leaders:

Leaders reported that the structure of the TE role was effective as it influenced teacher practice. Suggested reasons for this impact were that the role was dedicated solely to curriculum, it called for direct classroom involvement and it allowed for flexibility to respond to the different learning needs of teachers. Balancing the TE role within existing leadership roles, particularly that of the AP, was described as a difficulty.

Consistently leaders identified the TE role as having a positive influence on teacher practice: “It’s been very effective ... the TE role had an impact on all teachers ... As a result, their teaching practice would have improved” (PG). It was agreed that the role was worthwhile: “The influence that they have and the work that they’re doing... they’re doing a wonderful job. The role is certainly very valuable” (PF). The effectiveness of TEs was seen to be linked to their quality: “The role of TE has been outstanding ... that can come down to a couple of factors. One is the quality of the TE” (PF). TEs were on the leadership team and it was suggested that their success relied heavily on their capacity to lead: “Its success was largely dependent on the person ... the leadership qualities of the TE” (PH). TEs were reported to be good leaders: “Our TE is easily seen and easily accepted as a leader” (PH). They were also described as being dedicated to assisting teachers until the conclusion of their role:

At any time on any day right up until now, when she knows it’s as good as over, she’s still meeting nearly all day, every day ... taking them somewhere new or different. She really is an absolutely outstanding leader and I’m blessed (PG).

Other leaders expressed appreciation for the leadership skills, dedication and commitment of TEs.

The singular focus of the TE role on teaching and learning was consistently reported as a major contributor to its success: “To have someone in a role that’s focused purely and solely on teaching and learning is fantastic. That has supported the teaching practice” (PE). Having an expert on staff dedicated entirely to teacher PCK was considered an asset: “To be given that sole job of being a pedagogical expert in the school in a particular area which we chose has been an incredible success. Other members of our executive have multi-faceted roles but the TE’s was focused” (PI). Many leaders supported this view. One highlighted the benefit of having an additional person to resource the work: “It would be about having another expert on staff ... having another person in the pool to be able to organise and resource things in a different manner” (API). Another leader stressed the value of a position that allowed for their energy to focus entirely in one direction: “Having a person, or the right person, in a position where their energies go, and not spread so thinly so that focus is lost” (APF). It was observed that this was the first time that leaders had experienced a role dedicated specifically to this purpose:

I had never been in the position where we’ve had a person who’s dedicated solely to the PD of teachers. It’s usually been somebody else trying to do it ... me, or somebody else trying to do it as an extra (APF).

Having a role with one particular pedagogical focus was seen as a benefit.

Central to the singular focus of the role on teaching and learning was TEs working in classrooms with teachers. This was reported to influence teacher practice: “The model of the TE focused on supporting teachers in the classroom has enabled that change to pedagogy ... A lot of teaching practice has changed as a result of having that person” (PE). Having a person readily available for in-class work and the required follow-up was considered effective:

It’s been very effective ... you’ve got somebody ... who can work with teachers, who can follow-up with things. With the TE, that person is on the ground. They can come in; they can model lessons, observe lessons ... then do the necessary follow-up for it to be really effective (PG).

As well as doing in-class work with teachers, the TE role was described as the key person that kept the broader focus on teaching and learning. An AP described this in the following way: “It’s the someone who’s there organising, driving, researching and teaching, and teaching us as well, and modelling in the classrooms” (APF). TEs reportedly drove the work and, with other leaders, provided direction: “I can’t imagine how the programme would work without that because she’s provided direction. No, we have provided direction but she’s been the backbone of all this, of driving the programme” (APF). It was also suggested that the TE role provided positive energy while maintaining the motivation for the work: “It would be around having someone positive to drive and keep the energy around the project” (API). TEs were seen as key to maintaining the focus and commitment to the reform.

Both flexibility and freedom in the TE role were reportedly allowed: “I had the freedom to organise my timetable. Nobody has ever said to me, “What are you doing between 9:00 and 10:00 today’ ... Therefore, I could say, ‘This teacher needs this’ ... so it was very much needs based” (TEH). TEs were able to vary the type and form of support required for teachers: “It would be about giving support to people as they needed and required it. Not a blanket approach ... with one person having the focus, there was opportunity to bring people along” (API). It was also suggested that because the role allowed for time and energy to be dedicated to teaching and learning there was a positive influence on the learning culture of schools: “I’ve heard and I’ve seen that there has been a change in the learning culture of the school” (APE). Changes in the learning culture were observed.

While leaders repeatedly agreed that the TE role was successful, another consistent feature of the data was the difficulty experienced in managing the new position within existing leadership

roles. It was reported that the point of tension was between the APs, who had traditionally looked after curriculum as well as a multitude of other things, and the TEs, whose role was focused entirely on teaching and learning: “The TE doesn’t have the AP’s role where you’ve got a hundred other things happening; it is focused on learning” (PE). Principals, APs and TEs described the situation from different perspectives.

Principals regularly reported that restructuring the leadership team with an additional member was complex, which had to be managed with sensitivity:

The balance between the TE and the AP ... it’s a fine line that you have to tread gently at all times. From my understanding in other schools, there has been the perception of the TE coming in over the top or gazumping the AP (PF).

The TE role was new. It had to be established and it was reported that there was overlap with what had previously been largely the role of the AP:

[They] had to build up the role, establish it in the school. That was full of challenges too, a new role on the leadership team. A new role that often was related to curriculum and curriculum decisions, which had always been the responsibility of the AP (PG).

The support given to TEs by other leaders was named as a factor in its eventual success: “The TE role has been very successful in our school. One of the key reasons for that is around the support of the leadership team for the TE and her role, that was initially a bit hard getting started” (PE). It was suggested that other leaders were aware of what was occurring at the time for APs: “The principal has been very conscious and we have all been very conscious of involving me in everything that’s happened” (APF). Generally, principals agreed that the greatest difficulties occurred in the early stages of SSNP.

APs indicated that they were unsure of their role in relation to that of the TEs: “One of the biggest challenges for me ... has been trying to find where I fit. I was a bit unsure” (APF). They described the challenges of their AP role with its many and varied responsibilities: “It’s very difficult to be all of those roles; to nurture, to demand, to challenge, to support” (API). In comparing the two roles, the benefit of the TEs with a single focus on teaching and learning was again acknowledged:

If you’re doing a myriad of roles ... there are times when you can get a little bit sledgehammering in that you’re trying to drive something forward. You’ve got a range of things you’re also driving. But with one person having the focus there was the opportunity to bring people along as they needed and required (API).

A TE who had previously held an AP position supported this perspective:

I have been an AP who traditionally has been handed the banner of the person that's in charge of, besides garbage bins, the curriculum ... you had so many other things you had to do. This role is the ideal role because your concentration is on learning ... you can concentrate on that and make a difference (TEE).

Leaders reported that in light of the new TE role, some APs were not sure of their position.

TEs indicated that they did not feel part of the leadership team at the beginning and it did not work well at that time: "It was very much the leadership group and I didn't feel part of it at the beginning ... it was hard to fit somebody new into the school ... It didn't gel quite right in the first couple of years" (TEI). Even the small minority of leaders that were not encountering these problems were aware that many leadership teams experienced tension at the outset: "I know some places where they've gone in and there may have been a bit of head butting between APs and TEs" (TEE). These tensions reportedly improved over time for TEs: "I really think it is quite significant because I've seen the change and just the way your voice is now heard. You just had to feel the waters so as to speak in a new school" (TEI). The new role took some time to function effectively within existing leader roles. It was suggested that if ever the system was to introduce TEs again, the way in which that person transitioned into the role would require consideration:

If we were ever to go down this track again then I think what would certainly be a big influence, a big factor that we would have to look at is how that person comes into the role... how they manage the role (PF).

Almost all leaders agreed that the new role brought with it some challenges.

Despite the reported difficulties, TEs indicated that they appreciated their role being focused on teaching and learning as they did not have other responsibilities: "You've got someone dedicated to curriculum. That's all we do ... I didn't have to do the bins. I actually was privileged ... I could read up. I could come back. I could go into classrooms" (TEH). TEs did however describe it as a demanding role: "So it is a challenging role. There are days when I go, what have I done to myself?" (TEG). The difficulties of the role were recognised but so too was the professional growth that resulted from the TE experience:

I have never worked so hard in my life but I have grown as a person so much. I'm a different person than I was four years ago professionally ... there have been times, I tell you there have been times. But looking back ... I think wow that was, they hate you to use the word journey but boy it was, and I just think it's been a privilege. I really do (TEH).

Notwithstanding the demands and challenges of the TE role, it was acknowledged that they learned and grew from the experience. TEs reported that were grateful for the opportunity.

Teachers:

Teachers indicated that they did not understand the TE role and were uncertain about them, mainly because they were feeling under-valued. Due to the dedicated focus of the role on teaching and learning, it was suggested that over time teachers developed a positive view of TEs.

Teachers reported that they did not understand why the TE role was established: “I don’t know that we all understood the end view of putting in a TE or changing the model within the school, how that was going to look at the end of the day” (TI). As seen in the following comments, teachers recognised the enormity of the role: “It actually has been a big role” (TH). They realised it was a daunting experience for TEs to take on: “She came into the role, it was a new role and to start with it must have been very daunting” (TG). The following comment explains how teachers were initially negative; they felt having a TE was a reflection on them:

It’s not because we weren’t effective teachers in the first place and we want to make that clear. When SSNP came in it was like the focus was blame the teachers, blame the teachers ... It really hurts teachers who work their ring off to get somewhere with these kids. You know ... we’ve got the hardest kids in these schools and to be blamed because you’re not good enough teachers and that’s why they’re not performing. Yeah, it’s very hurtful (TH).

It was suggested by some teachers that they were offended and felt they were being blamed for the underperformance of their students. However, these feelings slowly dissipated and teacher resistance diminished. Some staff changes reportedly contributed to this shift:

Initially there was probably some resistance but I think we’ve had a change in some of the staff and certainly I would probably say that for younger staff coming in it’s just a model that they embrace quite happily. At the moment I don’t think there’s any negativity surrounding that role at all (TI).

Teachers indicated that they became more positive: “We’ve realised how important the TE role is in a school; how vital it is” (TF). They recognised the TE as one of the key leaders who built teacher capacity and allowed them to learn: “The role of TE was in the heart of the school working with everybody and building the teacher capacity so that we could lead others as well and that we were learning from each other” (TE). They also came to understand the big picture through this role: “Without that role that kind of bigger picture would have been overlooked” (TE). Teachers valued the role’s deliberate focus on learning and indicated that it required a full-time position:

“It’s good having that extra person within a school whose whole psyche and whole focus is on teacher learning because that is one role that takes a full-time role to do that” (TG). One teacher reported that there was potential in this role for TEs to not work hard, not spend time in classrooms and put unrealistic expectations on teachers; however, that was not their experience of it:

You can have someone in that role as TE and you can either sink or swim with it. Someone could be very lazy and just stay in the office and not come into the classroom ... or put unrealistic expectations on teachers. Whereas I think [de-identified] has just been really supportive and reasonable (TH).

This teacher reported that, regardless of the potential for TEs not to work with teachers, they did.

It was regularly suggested that TEs became known as experienced leaders that teachers could go to for support with their students and their own teaching practice: “It’s having another professional in your classroom with you, having another set of eyes looking at your children with a different lens so that the outcome is the best program, the best pedagogy” (TI). Despite the initial negativity about the TE role, teachers consistently reported they were now positive and were disappointed that it was ending: “She’s been wonderful and I think it will be sad that her role is coming to an end. She models good practice” (TH). The following teacher speculated on what it would have been like without the TE: “I wonder what would have happened if we didn’t have the role ... she’s so good” (TH). Teachers also suggested that when the role ends it will not be possible for the AP to do all that the TE does: “It’s huge. You can’t just say then, the AP is going to take on that responsibility because the AP already has her other roles or responsibilities as well” (TF). Teachers were aware that APs already had a role and to take on more would be too much for them.

Question 3, Theme 3 – Contribution to Teacher Capacity

The third theme, Contribution to Teacher Capacity was the least frequently reported area in the interview data related to the third sub-question. As shown in Table 3.17, participants made 111 comments about the contribution of the TE role to teacher capacity. Within this theme, two components emerged in the following order of prominence:

1. Teacher Practice
2. Teacher Efficacy.

Data relating to each of these components will now be presented.

Question 3, Theme 3 – Contribution to Teacher Capacity: Teacher Practice

Within the theme of Contribution to Teacher Capacity, teacher practice was the most frequently reported area with 93 comments (see Table 3.17). A previous component in this research question focused on the structure and organisation of the TE role but this one looks at what occurred within that role to influence teacher practice more broadly.

Leaders:

Leaders reported that what TEs did in their role made a contribution to teacher practice. Active involvement in classrooms, leading PD and professional dialogue, and utilising research were all identified as influential practices of TEs. Reported areas of focus were assessment, the use of data and Instructional Rounds.

The most consistent feature of this data was that TEs worked closely with teachers to model effective teaching strategies, team teach, observe, give feedback, provide links with current theory, and support them in classrooms to change their practice:

The TE's role was getting into classrooms and being that good model of teaching, of best practice, what good sound pedagogy looks like, going in and working in the classrooms modelling, team teaching. Also, giving some theory behind teaching and 21st century pedagogy (APE).

By engaging with teachers in such ways in classrooms, TEs got to know teachers and students: "I've been very fortunate to work with every teacher in this school. I know every child very well" (TEI). Along with modelling, the coaching and mentoring of teachers was reported to be important. Teachers were able to name an area in which they required support and TEs demonstrated it for them. One TE reported that, on occasions, teachers recorded them modelling:

The coaching and mentoring, modelling in class was so important ... They [would say to me] I don't understand how to do this. I said, 'Okay I'll come and show you'. So, I modelled and then they would do it. Some of them would actually video me sometimes. I didn't realise they were doing it (TEG).

It was reported that opening up classrooms and getting teachers to observe each other was another practice TEs undertook. This resulted in the deprivatisation of teacher practice. The implementation of Instructional Rounds was part of this process and the following principal comment describes its impact:

Actually, being in the classroom and working with the teacher and breaking down the barriers of, 'These are my four walls ... nobody else comes in'. That model has gone

completely ... they're very open and I think that is a direct result of the work of the school and of the TE over the last few years (PF).

This principal also suggested that as well as leading Instructional Rounds, other work of TEs prompted teachers to think deeply about their practice when planning and programming:

“Instructional Rounds ... providing a lot of leadership in terms of planning and programming, and really getting the teachers thinking has been a major part of her role” (PF). Opportunities for the PD of teachers also reportedly occurred beyond the in-class experiences: “We've had lots of different models of PD too: some in the classroom, some observing others, some working as a team, so there's been a whole range of opportunities” (PE). TEs also built teacher capacity through resourcing teachers with professional readings: “Having the TE has just been one extra person to draw our attention to lots of other resources, readings and so on” (PE). Leading professional dialogue with teachers was another suggested way TEs built their capacity:

We've released teachers to talk to the TE. That helps change people's practice if they have dialogue or dialogue as a team with people. It could be a stage ... That also helps change teaching practice because people go, why are we doing this, what are we doing? (PE).

As a consequence of this professional dialogue it was reported that teachers began to question their own practices.

Many leaders stated that teaching practice was also changed through TEs working with teachers on data analysis and assessment. The focus of this work was quality learning experiences, assessment and the use of data: “What the TE has facilitated ... is the opportunity for teachers to more effectively assess, more comprehensively assess because when you're working as a teacher alone you assess the way you know how to assess” (APH). This work also included feedback and student reporting: “The assessment, providing feedback and reporting on student learning; the TE has had an integral role” (PI). Through this focus on assessment it was suggested that TEs assisted teachers to look at the student learning experiences to ensure they had a set purpose: “Teachers have greater purpose in what they do ... The TE has been quite active in making sure that those tasks that we're doing aren't just busy tasks. They are tasks that are purposeful” (APH). Some leaders indicated that teachers initially had low expectations of students but because the TE challenged some assumptions, this reportedly changed:

Teacher practice has changed so much. I'm always challenging them ... to give the students a voice, to realise that they're under-achieving and to lift the bar for them. Whereas before it was almost, oh they can't do that. They come from... (TEI).

These challenges from TEs apparently occurred within classrooms with teachers as well: “The TEs were able to confidently visit classrooms to challenge practice, to be able to be a partner with teachers” (PI). Questioning existing practices and beliefs of teachers was a reported feature of the TE role.

Teachers:

Teachers regularly suggested that what TEs did within their role contributed positively to their practice. Due to a consistent emphasis on teaching and learning, teachers acknowledged that their teaching practice improved. The use of data and assessment were particular areas in which this reportedly occurred.

Teachers frequently indicated that TEs worked with them in classrooms: “I’ve had the TE working in my classroom with me quite often” (TI). They modelled and supported teachers: “She’s been able to model, and impart, and scaffold for teachers” (TE). Teachers knew they could seek further information if required:

Coming in, being almost like a literacy mentor in a way, specifically teaching, showing me and modelling what a literacy block looks like in the early years. If I do need feedback or more information about how to structure something she’s more than happy to come in and show me that as well (TG).

Teachers consistently agreed that what TEs did within their role influenced their capacity to change their practice. What appeared to be central to this learning for teachers was the experience of actually being shown how things are done: “The role has certainly enhanced my teaching practice in that I’ve seen very good pedagogy that I’ve been able to take on board, try out and move with” (TI). Teachers were also aware that the strategies being recommended were current and based on research: “The strategies we were using were contemporary and research-based just to make sure that we were in line with current research and we were offering the best for our students” (TG). The in-class support provided to teachers was a prominent feature of the teacher data. One teacher indicated that what now happens in schools is more professional and focused on curriculum, pedagogy and good practice. It was suggested that the drive to change teacher practice noticeably improved through the work of TEs:

Things are just so much more professional, more focused, more directed ... The TE just took ownership of pedagogy and practice. The last four years have been so guided and so organised whereas before ... there wasn’t that drive on how we used our skills and

strategies to most benefit the students. It was almost like before the TE role here it was we had the curriculum, we had to teach, and that was it (TH).

An increased attention on teachers using their skills to cater for the needs of students was identified.

It was suggested by teachers that TEs also contributed to their capacity in other ways. They provided PD within the school: “In terms of our PD during staff development days or our staff meetings, the TE has certainly taken on quite a dynamic role” (TI). This on-site PD was considered a change in practice for teachers: “Previously I used to go on a lot more in-services” (TF). TEs also frequently assisted teachers to develop their understanding of assessment: “She had an agenda. Our focus was reading; very data driven which is hard to do and you know we’ve managed to do it. It’s been effective and it has impacted our teaching too” (TG). It was consistently acknowledged that TEs were also able to show teachers how to use the data to inform their practice: “She actually helped and guided. She showed me lots of mandatory documents that we were using and she taught me how to assess effectively and analyse the data” (TE). The data analysis was then translated into practical teaching practices: “She’s good at finding strategies that work with the kids. Assessments are good” (TI). Teacher capacity in this area reportedly increased.

Increased accountabilities with data were apparently put in place. To assist teachers to understand their purpose, TEs challenged their thinking and welcomed questions:

One of the big things she’s done too is that one of her bywords has been accountability, accountability and data ... you have to be accountable. She’s challenged a lot of people in their thinking. She’s always up for a robust debate so that you don’t feel that it’s been imposed down (TG).

TEs attempted to make the use of data as manageable as possible for teachers: “She has made that as easy for us as possible, made the process really workable” (TH). They ensured there was clear and timely communication for teachers: “Communication has been very clear; the expectations. Obviously, there’s been a lot that we’ve had to do with the data, assessments, getting those in ... the communication whether it’s been via email or orally it’s always been well in advance” (TF). Teachers generally agreed that TEs supported them well in this process: “Over the years, it’s developed to be not a big deal, just part of good teaching practice to have that data ... [The TE] has been constantly trying to make it easier for teachers” (TE). While the increased use of data was

reported to add to teacher workload, some suggested that they now felt more accountable for the decisions they made about students:

It has helped, it has yes. It's given us a bit more work to do as far as pencil and paper testing and things like that. But it also makes you accountable for the decisions that you are making and the grading (TI).

Some teachers eventually reported that they found the data informed approaches effective.

It was consistently named that building capacity was what TEs did: "Having a TE is around building teacher capacity and that's exactly what happened here ... When she goes into a classroom, if she really wants to develop that teacher she'll be looking and finding things they're strong in" (TE). Identifying the strengths of teachers was a strategy adopted by TEs to build their capacity as they were taught to take risks and attempt different things: "The TE taught us and helped us along our journey with taking risks, trying new strategies ... it felt like professional learning" (TE). One teacher described that they became a better observer and more reflective from teaching with the TE:

I became a very good observer and a more reflective teacher in terms of what I've heard. I've seen what is going on there in this twin teaching role and that's something that I'm going to slot into my kitbag ... it brings freshness to you (TI).

Teachers regularly agreed that their capacity increased as a result of working with TEs.

Question 3, Theme 3 – Contribution to Teacher Capacity: Teacher Efficacy

Within the theme of Contribution to Teacher Capacity, Teacher Efficacy was the least frequently reported area with 18 comments (see Table 3.17). This component is about how the self-efficacy of teachers changed along with their increased capacity.

Leaders:

Leaders reported that TEs contributed to the self-efficacy of teachers. They suggested that teachers now saw themselves as competent; they know their students and were less reliant on the TE.

According to leaders, changes in teacher practice occurred due to an increase in their confidence, which was attributed to what TEs did: "Change of teaching practice also took place because one thing that happened. The TE was able to see people in their classrooms that were modelling great things and got them to share with other people to help people's self-esteem" (PE).

It was reported that teachers had grown in sureness and now saw themselves as competent:

“Whether it’s our first year out teacher or our experienced teacher, they see themselves as leaders now. They see themselves as competent people” (TEE). Leaders noticed that most teachers, irrespective of their level of experience, had increased sufficiently in confidence to lead the PD for others:

It means that teacher capacity has grown because they’re standing up there. The literacy/numeracy person gave some yesterday, the Reading Recovery, ESL, class teachers, everybody. Not all the teachers but a bulk of them have run PD. We’ve got less people coming in from outside. I think that’s a good thing (TEH).

One principal also suggested that teachers were now demonstrating confidence and competence in broader forums. The following quote describes how this was observed at a PD experience that involved other schools:

We’ve had a cluster of schools working on the Australian Curriculum modules together... We were able to show that the [de-identified] people could cut it with any other local or nearby primary school as far as leading PD, as far as teaching practices, and as far as the general capabilities of our staff (PI).

This principal indicated that their teachers were functioning at a high level of capacity.

Leaders observed that teachers were far less reliant on the TEs now: “We did it together; now they are doing it on their own” (TEH). TEs felt that they were not required to do as much modelling: “I’m doing less teacher modelling now. I’m doing more planning, programming that’s effective, so that’s the change” (TEH). The level and type of support teachers required was said to have reduced: “Now I don’t think I sit with anyone” (TEI). TEs were also no longer relied upon to support teachers as much and facilitate all the PD:

I often pulled people out in groups or ones or wherever the need is ... I’ve been coordinating the instructional rounds and stage meetings. The first two years I did most of the PD. That’s changed now ... I’ve run two PD sessions this year ... I did most of it and now I don’t. The staff do it (TEH).

It was suggested that through the support and guidance of TEs, and other leaders, over a sustained period, responsibility for leading the learning gradually shifted to teachers who were now more confident and willing to accept responsibility for it.

Teachers:

Teachers consistently reported that the TEs contributed to their self-efficacy. They indicated that they are now more self-assured and competent: “I have noticed that she’s made me feel a lot more confident and capable, and has just really helped” (TH). Teachers also reported that they now see themselves and others as leaders: “All teachers are leaders so it’s giving them the capacity and confidence to do that. That’s been very strong, something that’s been beneficial” (TE). As well as being leaders, teachers described themselves as more independent: “It’s made us more independent, more of a leader. I think our ideas are coming forward now” (TE). Teachers attribute the growth in their capacity to TEs:

She’s formed and guided me in my teaching ... With her guidance I now have ... a really, really good guided reading programme and the students are benefiting so much from it and it’s engaging and it’s just fantastic. I wouldn’t have known how to do it to this standard without her help (TF).

While the TE was originally a key driver of the reform, teachers indicated that they were now more confident and capable: “Initially it was TE driven ... but as the years went on and people become more confident there was less modelling ... Over time it’s not got rid of her job but it’s actually ... made us more independent” (TE). By working with TEs, teacher self-efficacy was reported to increase; teachers now described themselves as more independent, competent and able to lead the learning.

Question 4: Did the nature of the on-site PD influence teacher practice and, if so, how?

Analysis of the interview transcripts revealed three themes that relate to this question and within each theme there are one or two components. The themes emerged in the following order of prevalence:

1. Teacher Capacity
2. Leadership
3. Resourcing and Sustainability.

The data from these themes will now be presented.

Question 4, Theme 2 – Teacher Capacity

Teacher Capacity was the most prevalent theme in the interview data related to the fourth sub-question. As shown in Table 3.19, participants made 141 comments about the role of leadership in on-site PD to influence teacher practice. Within this theme two components emerged in the following order:

1. Teacher Knowledge and Practice
2. Teacher Attitude, Trust and Relationships.

Data relating to each of these components will now be presented.

Question 4, Theme 2 – Teacher Capacity: Teacher Knowledge and Practice

Component One, Teacher Knowledge and Practice, was the most frequently reported area with 75 comments (see Table 3.19). This component is about how and in what ways on-site PD influenced teacher knowledge and practices.

Leaders:

Leaders reported that on-site PD influenced teacher capacity particularly in regard to how well they knew the needs of their students and how to respond to them. It was suggested that this improved teacher capacity occurred through a focus on developing teacher knowledge and practice in the use of data while increasing their ability to plan and implement appropriate learning experiences for students.

It was consistently indicated by leaders that teachers' knowledge and practice developed: "I truly believe the teaching practice here has changed for every single teacher. Maybe at different rates but I believe it has changed for everyone" (PE). Teachers seemed to increase their capacity over time: "We've come such a long way ... so it's just fantastic" (TEI). A prominent aspect of the leader data was that these changes were particularly evident in the capacity of teachers to use data to guide their practice: "The analysis of data that's happened this year ... is really evidence of the PD teachers have engaged in. They're becoming much more proficient at analysing the student work samples against set criteria" (APF). Learning for teachers was described by leaders as an ongoing process that included using data to look at the effect of the on-site PD on teacher practice: "We looked at a whole lot of pre-baseline data and then after all this professional learning we've looked at the post data" (TEF). To enable teachers to respond to the data, it appears that on-site PD about teaching practice accompanied the development of their capacity to analyse data.

To share responsibility for student learning, it was reported that the data analysis included all teachers:

We get together as a data team; myself, the ESL practitioners, the Special Ed. teachers, the literacy support teachers and we put the data on the table. 'So, what's this data telling us about our children...?' Now it's their responsibility (TEG).

The collaborative data analysis and interrogation was complemented by teachers planning together, which was reported to influence their practice: “It has greatly influenced teacher practice ... because we’ve been planning together and planning programmes which teachers go away and teach, then they bring back assessment. We all assess together” (APF). Teachers were given time for this work: “The planning has been evident in that there’s been opportunity made available to the teachers to be able to plan” (PH). It was suggested that assessment was a priority; it was deliberately planned for and dedicated professional learning time was allocated to it:

The assessment has been evident because we even timetable now in our staff meeting times three times a term for staff to talk about the assessment of students and the data they’ve collected. It’s more about assessment. The professional learning, that’s really when we talk about these (PH).

Leaders indicated that the emphasis on assessment and planning resulted in teachers using the data as an impetus to discuss and provide relevant learning experiences for students that reflected syllabus outcomes:

It’s a huge shift. You would be hard pressed to find a teacher that is not going back to that outcome and saying, ‘Does that activity actually attend?’ It’s more than an activity now ... it’s a learning experience. Does that learning experience address that outcome? How do I know? That assessment tells me so (APH).

It was consistently acknowledged by leaders that on-site PD assisted teachers to know their students and how best to support them in their learning: “It really does help the teachers to know the students and how they learn. It helps us to really look at different styles of learning, different types of learners and how to support the students” (PE). While leaders accepted that this was an area in which they could always improve further, through the use of data, teaching practice was now considered to be more evidence-informed:

Teachers ... really know their students. They can still improve because nothing is perfect but my goodness, they really, really know those students and how they learn ... Evidence, where’s the data...? Instead of those gut feelings you once had, it’s very much evidence-based (TEI).

Student progress was monitored and it was suggested that this led to teachers being less concerned about getting through the content and more focused on their needs:

Information about children is passed on. The on-site PD ... it obviously influences their practice... It freed them up from that whole idea of content; we’ve got to get through the content. Because realistically you’ve got to look at where your kids are at. If they are here, you can’t do that (TEH).

It was suggested that the regular monitoring of student progress, accompanied with teacher learning opportunities, led to more flexible groupings to cater for student needs: “The groups change every week so through the PLCs and the PD of what reading looks like, everything has been changed” (TEI). While ongoing learning about student data and how teachers could modify their practice to meet their needs was happening, many leaders observed conversations amongst teachers about student progress that had not previously been apparent: “In our staffroom we would not have had conversations around learning, I can assure you. Now we have conversations around learning ... about students, about their progress, about how we can support them. There’s definitely a big shift” (PE). These discussions about student learning included classroom and specialist teachers as well as learning support officers:

Knowing students and the content; that really is evident now ... You’ve got teachers in the staffroom talking about this freely between learning support officers and the classroom teacher. The specialist jumps in there. We all now know more students and know students better (PH).

It was indicated by leaders that teachers became keen to seek their advice about what the data was telling them:

I walk in the door of a morning and I don’t even put my bag down. ‘Can I catch you for a minute? I just want to tell you what I’ve done with my data and I’ve put it here. Now what do you think?’ That happens all the time (TEH).

Teachers wanted to discuss what their data was revealing and what they were doing with it. Leaders also reported that because the PD occurred on-site they were able to directly discuss students with their teachers: “You have the opportunity to feed back directly to that person about their students... That I think is huge and led to a great change in school” (API). It was also suggested that the professional dialogue influenced the changed teacher practice as it led to teachers requesting that they visit other classrooms to see colleagues teach and learn from it:

Learning teams share with one another. If teachers are interested in what they’ve seen or heard they will go and approach teachers and ask, ‘Could I come and sit in on your classroom? How do I do that? What did you mean by that?’ So, there are those discussions ... that’s good conversation (PF).

Classroom doors were opened and team teaching commenced, which was reported to be a change in practice: “The doors have opened. Our stage three, the doors have opened so now they’re team teaching. These teachers would never have team taught before. The children are now used to anybody coming into the classroom” (TEI). Team teaching and feedback through the Instructional Rounds process also occurred:

Team teaching and feedback from the teachers, that was with Instructional Rounds but it really wasn't feedback on them personally. It's difficult to try to take the person out of it. We were all in it together, including me. I put myself up there too. I was in there teaching and they were looking at me ... It has opened the rooms up (TEH).

According to the following quote, Instructional Rounds occurred regularly in some schools to facilitate changed teacher practice:

Our instructional rounds process. We decided ... that if you wanted real change you had to have it every week. The timetabling made for really effective teaching and learning ... that really worked. So, in implementing effective teaching and learning strategies, Instructional Rounds really made a difference (API).

Leaders reported that the Instructional Rounds process influenced teacher knowledge and practice, but increased teacher engagement in the on-site PD was also described as influencing all in the school. For example, on one site it was suggested that the school became calmer as students were more interested in their learning: "We're a much calmer place now. Everything else came into place and the children are much more focused on their learning; much more interested in being academic" (API). Student conversations and aspirations about their achievements were also seen to change:

They're feeling really empowered where they haven't felt empowered before ... they're really thinking and you can hear the conversation amongst kids saying, 'I'd really love to go for a B. I don't think I can get there but I'm going to try; I'm really going to try'" (TEI).

In another school, teacher expectations of students were described as shifting:

The teachers said, 'Our kids can't write creatively'. It was dreadful, so it was good that we planned from that. I know it's working. I've been in classrooms and I've seen kids' work samples. They have changed the way they've been teaching kids. That's how I know it's worked ... We've changed the way we read and write ... so we've really moved. It's a huge shift (TEG).

Leaders observed that teacher practice changed in response to the higher expectations of students.

Teachers:

Teachers reported that on-site PD contributed to their capacity to utilise data to know their students better. They believed that the PD they experienced was relevant to their learning needs and assisted them to adapt their planning and teaching practices in light of what the data indicated.

Teachers admitted that they were initially not good at using data: “We weren’t very good at looking at data in the early days” (TH). They recognised that data was a sensitive area for teachers and realised that they had not used it effectively in the past:

That word, oh that word ... Before we were collecting data for the sake of collecting data and what were we going to do with it? It looked good on paper ... it wasn’t looked at.

Whereas now we are looking at it through a different lens, in a different way and we realise the importance of it (TF).

The importance of data was identified as it informed teachers of the learning needs of their students and the necessity to differentiate their teaching practice:

The whole process has really made us aware of the needs of the children and the impact of teaching practices that I implement [to] support and assist them ... It’s also made me more aware of ... how my programs are differentiated to meet those needs (TF).

It was also suggested by teachers that through the increased use of data, conversations changed to be more about the needs of students: “Conversation is different. It’s more precise. It’s more targeted to the needs of the children in my class” (TF). Teachers now had shared understandings, which enabled them to converse and consider how data could inform their teaching practice:

We can all talk about it and know what each other is saying and understand ... data has taken on a different light ... Before it was, here I am collecting all this information. What are we going to use it for? Whereas now it’s, we need to be able to collect it to see where I need to go, what we need to do (TF).

Teachers reported that previously their teaching progressed without looking thoroughly at what students had learned. The following quote describes how teachers now spend more time assessing the student learning that has occurred than use the data to plan for what needs to happen next:

It’s a lot more focused now. We would do assessment, do the unit and finish it off. Most children can do it ... move on to the next topic. I have slowed down a little bit ... now it’s actually the quality of what we’re doing. The scores are important but then analysing where are we going next, why are we moving that way, why aren’t we going this way; that’s really been a focus for me (TH).

This view was supported by another teacher who indicated that the way in which the teaching occurs needs to be constantly reviewed in light of areas that need to be addressed: “When you talk about curriculum ... Don’t just keep doing the same thing. Look at it, see what you need to change, what’s the problem and then address it” (TH). A desire for student data to be used to track progress throughout their primary education was also expressed: “It’s finally come to me that I can see that this data, hopefully if it’s sustained, will follow the child all the way to Year 6” (TF). This

teacher was aware that the current data practices would need to continue if this ongoing monitoring was to occur.

The on-site PD in which teachers engaged was reported to influence classroom practice: “Through engaging in PD it leads into other things. The planning and implementation and then the impact it has in the classroom” (TF). It was suggested that the sustained on-site PD provided direction: “With the PD in terms of teacher practice, it’s been a lot more. The last four years have given a bit more direction” (TH). Teachers indicated that the PD was based on their needs, which contributed to their engagement in it: “The PD being quite focused on what our needs are as a staff has enabled us to engage in it. Because it’s targeted to us we understand that it’s what we need and it’s what we need to do for the children” (TF). They also suggested that the on-site PD increased the capacity of teachers to better provide appropriate learning experiences for the students: “By the teachers becoming better equipped to teach in different ways then it’s flowed on; the students are learning better” (TF). One teacher described how they moved from whole class teaching to individualised instruction:

We’ve made a shift from a whole class model to very much the individual students.

We’re not working with a class of 20, we’re working with 20 individual students so that’s certainly changed ... It’s certainly catering more on that individual basis (TI).

Teaching programs and practices also reportedly improved: “The planning and the implementation of programs have improved. Everything is linked really closely but we needed to start at the beginning to let everything else develop” (TF). Because assessment, planning and teaching practice were all related, teachers realised that their learning needed to begin with assessment data and develop from there.

Teachers recognised that the opportunity to learn on-site contributed to changes in their knowledge and practices in a variety of ways. They appreciated the opportunity to learn collaboratively: “There are so many things ... when you can work collaboratively with wonderful people in the school. It’s certainly great to be able to do that” (TH). Working with a range of different teachers in the school was named as an advantage:

The PLCs and the professional learning that’s taken place ... is bringing the specialist teachers, ESL, special needs and Reading Recovery in to support our reading programme.

It’s not just all on me getting the best out of the children (TH).

Teachers felt that by combining their knowledge and working together the responsibility for providing the best possible learning opportunities for students was shared.

Question 4, Theme 2 – Teacher Capacity: Teacher Attitude, Trust and Relationships

Component Two, Teacher Attitude, Trust and Relationships, was the second most frequently reported area with 66 comments (see Table 3.19). This component is about how teacher attitudes, trust and relationships contributed to the building of their capacity through on-site PD.

Leaders:

Leaders indicated they were aware that teachers were unhappy about their school being selected to be involved in the reform. They worked carefully with them to build and strengthen relationships, increase their confidence and support them in their learning. Over time, they observed improvements in teacher attitudes to their learning.

Leaders reported that they understood and realised that there was sensitivity amongst teachers regarding their school being part of SSNP: “The fact that we were on this program, even though you knew in your head it was because of poor performance, it’s still a bit of in your face ... our teachers were in a sensitive place” (API). Although eventually the on-site PD was reported to be effective, leaders were aware that teachers were feeling vulnerable. This was apparent in their attitude to the changes that came with the on-site reform. The following leader defended the teachers, describing them as capable, committed and working from a position of strength when SSNP commenced:

The process ended up being much more effective, ultimately ... but we weren’t working from a deficit model. I want to make that very clear. It was from a fairly good position. The teachers were ripe for the picking. They were well-educated people ... prepared and committed to our students ... No one was just here collecting a pay cheque (APH).

Leaders suggested that they had to be cautious when working with teachers at this time and ensure that they did not create too much additional stress for them:

I have been very careful too. I’ve made sure I haven’t impacted too much to stress them out ... You’ve got to be careful what you do to them ... Lots of things are happening and I’ve got to be aware of that (TEG).

Throughout this time, leaders encountered teachers that were openly resistant to what was being asked of them:

The challenges are that you have staff who could be resistant to having people come into the room ... There was a staff member who, not that they couldn’t see the value of it, but just didn’t want to be an overall part of it ... it was just another thing to do. You do get

some resistance from some staff members ... Just leave me alone and let me do the teaching (APE).

According to this leader, some teachers claimed they valued the deprivatisation of teaching practice but resisted it.

It was suggested that leaders were aware that on-site PD challenged teachers as they were being asked to commit to changing their practice: “The on-site, in house has made a significant difference to taking teachers out of their comfort zone and having them really improve or think about and then commit to improving their practice” (PH). Due to all that was required of teachers in the reform, leaders were conscious of the potential for the approach to fracture; however, over time things improved and ultimately many benefits were reported:

It could have fragmented because there was too much pressure on us from all this feedback and projects ... That didn't happen ... [We] nurtured them and kept everyone thinking that it's okay not to know something. It's okay to ask questions (API).

Leaders reportedly reassured teachers. They were able to ask questions and were not expected to know everything. Unlike external PD, the changes were happening on-site; therefore, leaders were able to nurture relationships with teachers: “Whereas someone coming in doesn't have that relationship and so the teachers aren't necessarily going to be as open” (TEF). Leaders supported teachers to learn: “They know they're supported, they're getting help” (TEF). Over time, teacher attitudes gradually shifted. They knew they could ask questions repeatedly and receive an answer:

Teachers felt they could come and ask whatever it was. Even if they were asking for the fourth time and needed the fourth explanation ... That's a very big change to, 'I don't want you in my room because you might see things I don't want you to see' (API).

Leaders observed a positive change in the outlook of teachers. Once they saw and accepted that everyone had learning needs, teachers were willing to be open and work with others to address them:

They're very, very good here. Most of the time they will come straight out with, 'I don't know how to do that. Can you help me do that?' But that's a place we've arrived at now after they learned that everybody doesn't know something. It doesn't mean we know it either but we'll sit down and help you with it (API).

Neither leaders nor teachers indicated that they had all the answers but together they reached a point where they supported each other in their learning.

Leaders attributed the changed attitude of teachers to the PD being on-site. It was a safe environment where risks could be taken and the support of colleagues was readily available:

Having it on-site has allowed us to experiment, to be more confident that we can have a go... We're taking a risk, a leap of faith. Having the secure and safe environment of our colleagues we know has allowed for a lot of that to happen ... having it on-site has made it much easier for people to embrace (APF).

Many improvements were observed: "There has been lots of improvement" (APH). It was suggested that this occurred because teachers were seeing for themselves that their changed teaching practice was influencing student learning: "They can see themselves the impact and the difference and improvement. All teachers want their children to learn, so if they can see a value in it then they'll continue it" (TEF). Leaders felt that having opportunities to plan for effective learning contributed to increased teacher confidence: "Planning for and implementing effective teaching and learning with PD gives teachers the confidence to be enabled to do that" (PE). The following leader quote describes how teachers reached the point in their learning whereby they had the confidence to present PD both within and beyond the school:

We've had many of our teachers do some excellent PD here within school [and] outside of school and have been almost targeted by other organisations for the expertise that has been developed. That's a credit to them but it's also a credit to the opportunities that they've been able to grab here (APH).

Leaders indicated that the opportunities for teacher learning were experienced within the school and their increased expertise was now being recognised more broadly. Teachers were also seen to value learning more as an increased number were engaged in external post-graduate studies:

We've got four teachers doing their Masters and one doing their PhD so if you're talking about a change in attitude, professional attitude to learning and to wanting to know more about their students and their learning, I don't think you could get a better example (API).

It was indicated that the attitude of teachers to learning changed, as did their teaching practice.

Teachers:

Teachers consistently reported that their attitude to on-site PD shifted although this was a difficult time for them. Working closely with other teachers provided support and assistance throughout this process and trusting relationships were built.

Some teachers felt that they were already competent and these new expectations were just an extension to some of their existing practices: "We were very competent before but it's just now

a different way of assessing and collecting the data really. Well, we did that anyway. It just has to be more documented in a uniform standardised way” (TH). Other teachers described how challenging and difficult the changes were:

You have to retrain ... you've got all the knowledge and know what you have to do but now you have to do it differently and you are totally confused. You question yourself all the time and it was a big massive change (TE).

Teachers also indicated that they had the knowledge but were perplexed because they were required to use it in a different way. Many experienced teachers reportedly struggled: “There are a lot of teachers my age that can't cope with that and it's so hard for them ... It's horrible” (TE). Teachers had great difficulty adjusting to what was expected of them: “It's the worst ever. The first time they said someone's coming in to teach with me I nearly died. I didn't sleep the night before and I don't think they realised the anxiety” (TE). The concerns that some teachers had about team teaching were not confined to the experienced ones. A new teacher also expressed this feeling:

The nature of the team teaching and me being a younger teacher as well I just went, oh my goodness I'm being assessed. I need to make sure I've ticked all the boxes. That was just our thing to get over and that was really difficult (TE).

Teachers suggested that these concerns somehow had to be managed. “You've got to get over it. It's very hard at times because I think we're very critical of ourselves” (TE). They accepted that they were hard on themselves during this change process.

Having to learn from leaders that were younger than some teachers was also described as a challenge: “That's why I found this programme extremely difficult because it just threw you in there and it was the younger ... she had to come into it, but to re-train an old dog was hard” (TE). Another teacher reported that they did what the younger leader modelled; however, it was still a struggle:

That was absolutely horrible because little madam comes over here, takes up the computer and goes tick, tick, tick, and I sit there for two hours and do the same thing she does ... It was a big turnaround the last four years (TE).

Teachers reported that they changed over the four-year period, but with difficulty.

Despite its many challenges, teachers gradually recognised the benefits of learning with and from others through on-site PD:

It was really hard, the hardest thing ever to change my way of teaching from the old style to now where people are walking in and out of the classroom ... I had to open up my doors, I had to teach with a person next door and learn to learn from them and it was a total turnaround. I can see it's a turnaround for the better. The kids are getting better results and it's not my way or the highway (TE).

Teachers realised that they needed to develop a better understanding of some of the proposed teaching practices before they could use them to improve student learning: "It was more about educating the staff before we could do anything to improve the children's learning. There was no point going in and showing us all these amazing different ways of teaching if we didn't understand it ourselves" (TF). These changes also called on teachers to think more about their practice: "You have to now change and think, I'm doing this and why I am doing this ... now it's totally changed" (TE). There were many reported changes to which teachers had to respond during the reform.

Trusting relationships amongst teachers were reportedly built: "You have a relationship with that person ... it's about relationships" (TE). When working together in classrooms, teachers indicated that they taught from common beliefs: "Team teaching ... you are teaching as a team from the same sort of core beliefs ... working together for the children and so we can support each other" (TH). Teachers suggested that these trusting relationships based on shared beliefs allowed them to rely on each other for support and guidance: "It really built up the trust relationships amongst the staff ... trusting that when you are teaching together, if you're struggling with that moment where you're not quite sure ... another teacher would jump in to support you" (TE). Due to these relationships, teachers indicated that they experienced assistance and offers of support from others:

When people can see that someone is overloaded with something, there is that support there. You always have someone saying, 'I will help you with that, what can I do?' We are very lucky to have that relationship with each other (TE).

Teachers consistently indicated that they were mutually supportive while making changes to their teaching practice.

A number of advantages to working closely with colleagues in on-site PD were described by teachers. Its personal nature was appreciated: "You can never replace or you can never beat the person resource compared to a computer or a book or an article." (TI). Being in a smaller group where they were known made teachers feel more at ease to ask questions: "You've got that security and that safety of asking them personal, or personalised concerns about our group and you're not in

a big forum and just a number, one of a hundred in a room off-site” (TE). The familiarity of knowing their colleagues allowed teachers greater confidence and freedom to speak openly: “On-site PD; you are among your colleagues. You are among people who you work with all the time and ... you know the personalities ... You also have that freedom to speak more about what’s happening in your school” (TG). Teachers also suggested they could discuss the needs of the students within their own school more freely: “If you’re out at a public PD, I’m not going to say ... It’s safe to air your difficulties about children” (TG). The following quote exemplifies this view and describes how teachers were more cautious in their conversations at off-site PD:

Offsite, everyone is a bit guarded. No one wants to appear to be the teacher who is not using the latest technology or whose class is not working at national standards ... you’ve got your guard up a little bit, which is human nature. But when you do it on-site, we’re like no; this is what’s really happening. This is where our gaps are. This is what we really need as professionals and what we really need for our students (TI).

It was suggested that learning on-site allowed teachers to be open and honest about their learning needs, and those of their students.

Working with others, sharing knowledge and collectively developing understandings was described by teachers as beneficial in on-site PD:

As an individual you may think, I don’t know where to start. I know I did this previously but now it seems like it’s all gone out the window. You’re not feeling embarrassed by the fact that you’re not on top of it because you’re sharing it with other people who are going, ‘I’ve got this bit, can you help me out with that?’(TI).

Teachers reported that they became comfortable knowing that they were not expected to be able to do everything or know all the answers. They accepted that they were learning together and reached the point where there was no such thing as an inappropriate question: “We have less of the, ‘this might be a dumb question but’ ... They don’t say that much anymore ... Nobody’s dumb here; we’re all learning” (TE). Teacher confidence in naming areas of need without fear of criticism was observed: “People have been developed in areas where they can just say, ‘You know, I have no idea’, without feeling criticised” (TH). Teachers saw being able to make such statements as growth. It was reported that, in time, the on-site PD also focused on recognising the amount of learning that had occurred: “To celebrate with other people what you’ve done; a lot of the PD involved showcasing later. You show people what you learned so it was a celebration of the fact that I know how to do this” (TG). Teachers realised that their practice had changed and were willing to share and celebrate this achievement with others.

Question 4, Theme 1 – Leadership

Leadership was the second most prevalent theme in the interview data related to the fourth sub-question. As shown in Table 3.18, participants made 136 comments about the role of leadership in on-site PD to influence teacher practice. Within this theme, two components emerged in the following order:

1. Coherence
2. Collaboration.

Data relating to each of these components will now be presented.

Question 4, Theme 1 – Leadership: Coherence

Component Two, Coherence, was the most frequently reported area in this theme with 82 comments (see Table 3.18). This component is about the connectedness and relevance of the on-site PD and how leaders developed a coherent approach to it.

Leaders:

Leaders indicated that the school context allowed for connections to be made and learning to be applied. Because the PD was on-site it was reported that it could be sustained and adapted to meet the needs of both teachers and students. Leaders worked to ensure that the PD was coherent.

They consistently reported that the coherence and relevance of on-site PD to each school context influenced changes in teacher practice: “That word coherence. Because it’s in your place, interpreted for you at the time you need it, you have greater coherence ... That I think led to a great change in the school” (API). It was agreed that the availability of leaders and in-class support contributed to its effectiveness:

It’s changed here because of that person physically in the room on-site and available as opposed to going out, hearing an expert and coming back and thinking, what did that person say, what does that look like? Whereas this is what it looks like in our school (PE).

The opportunity to follow up and apply the learning in context was seen as a positive feature: “Whoever was leading the PD, they’re on the ground all the time. Follow-up, check in on, check out, meet again, availability and knows the local context because it’s our own context” (PF). The timing of the learning and having a leader available to provide support were described as valuable features of the on-site PD:

You learn better at the point of need. So, if you have someone there on the spot when you want to know it and you are ready to hear it you will learn it much better. Often ... you go

off to something and you don't use that bit of knowledge immediately. Then, you've got to sit down and either teach yourself all over again or, what most people do, is forget about it ... The model where the professional educator was in the school was far more effective (API).

The on-site PD was reported to allow for the immediate application of the learning as well as ongoing support from leaders.

Leaders also indicated that coherent on-site PD influenced teacher practice because they knew the needs of their teachers and students so could adapt the learning accordingly: "With the on-site I know the teachers. I know their needs ... I know what the children's needs are ... All teachers are different" (TEF). Multiple approaches were utilised to respond to the needs of teachers in context:

It was moulded to suit the learner, that learner being the teacher. The nature of the practice was multi-natured. It was face to face with them in an office, in a staffroom, face to face with groups, hands on in the classroom ... It was varied very well ... It's not one size fits all (PH).

Leaders exercised flexibility when responding to the various needs of teachers: "The on-site did help because of the flexibility, the availability, the familiarity with the school context and so on" (PF). The difficulty of having ongoing work and the required follow-up from outside people was described as limited:

When you have Advisers coming in from the office they're good too. But when there's one RE Adviser or perhaps two, or one English Adviser it's almost impossible to have ongoing work with them. It's a visit to the school and then it might be a follow-up sometime later or an email (PG).

Due to inadequate time and unfamiliar contexts, leaders reported that PD from external providers was not as relevant as what they could provide on-site: "I can tailor their professional learning specifically to their needs whereas someone coming in can't. They don't have the time" (TEF). When comparing off-site PD with on-site, leaders reported the former was expensive and, despite their attempts to have teachers share their learning back at school, this often did not occur:

A lot of teachers went to the one-off day in-services, came back, might have done something in the classroom. You probably never had to present it back to the staff. A lot of money was invested in trying to replace them (TEE).

For those teachers that had tried to share their learning, there was a lack of interest from others as they had not experienced it: "You go back to school all enthusiastic and you're the only one

enthusiastic about it because no one else saw it” (TEF). Receiving second-hand advice was not seen as effective: “The reality was, people weren’t really interested. Unless you went, getting it second- and third-hand is not the same as being involved and part of it, and learning, and making your own mistakes, and having another go” (APF). It was also suggested that on-site PD allowed for continuity:

It also meant that we got a flow on ... Whereas if one person had gone off and only brought back one thing and that one thing didn’t appeal to the person next door, then you got nothing out of it ... This is a strong model (API).

On-site PD was reported to be coherent as it was a shared experience and related to other things that were occurring within the school.

Leaders consistently indicated that on-site PD was able to be applied immediately and was connected to first-hand experiences of teachers in their own situation: “It was a more personal, more school-based, local level of PD” (PF). It could be implemented and tested where it was most relevant:

With the professional readings, professional learning, we have the dialogue amongst our staff. People might go no, I don’t think that would work in my room and people think well have you thought of this? You can’t buy it; you buy it here when it’s happening on the site (PE).

The opportunity to discuss, question and contribute to the learning of others locally was seen as advantageous.

As well as the importance of context, relevance and the timely application of on-site PD, leaders regularly reported that its duration influenced its effectiveness:

There are two things that have had a significant influence on me as a leader and as a teacher. I had been trained as a Reading Recovery teacher and as a TE. Both included a long period of time, not a one-off in-service. It was taking the context you're in, going back out, making the connections ... That has been the success (TEE).

Because the learning was on-site it was suggested that it allowed for the learning to be built upon and tested over time.

Most leaders reported that they ensured the on-site PD was strategically coherent: “There was that opportunity to map it all out and plot it so that it was done in a way that wasn’t haphazard but it was very deliberate” (APH). The PD was planned intentionally for certain groups in the

school: “Also stages, working in stages and you know attending PD that would be strategic or appropriate to that stage” (APE). It was suggested that linking the PD to other system processes also brought coherence to the work:

Because we strategically linked the priorities to our five-year plan, to our annual plan, to our active role description, to our triple PR ... every member of the school, depending on what is our main focus, was [involved] ... We haven't gone as one off to things but we've done a lot in the school context (TEE).

Leaders planning the PD strategically and involving everyone in it was reported to facilitate shared ownership and understanding: “There's that shared understanding that we all are in this together and we're all working for the singular purpose” (APH). The whole school approach adopted by leaders provided an opportunity for all teachers to be part of the learning on-site and connected with the work of others:

PD has been in context; it's de-personalised because it's not just me in this little classroom, it's me as part of a team with the support staff, with the ESL teacher, with the Special Ed. teacher, with the librarian, with the whatever (TEE).

Greater cohesion between the practices of classroom teachers and specialist teachers was described:

The conscious decision to timetable the specialist teachers in ... now they are keen to join. They're saying, ‘What group can I join now? When are we planning? What day? I'll organise my timetable around that so that I can be free to come and join that group’. I've seen that shift ... now they're actually quite keen and eager because it's impacting upon what they're doing too. They're following up and picking up from what the classroom teacher is doing (APF).

It was suggested that the inclusion of specialist teachers was a change in practice that resulted in their enthusiastic and committed involvement.

Leaders regularly reported that on-site PD was effective: “So I'm just seeing this as brilliant, brilliant, brilliant” (PH). Isolated off-site learning experiences were not considered by leaders as successful: “We know the one-off in-services that we used to go to in so many different KLAs just didn't work” (TEF). The following leader indicated that off-site could still have a place but not as the primary form of PD: “It was a very poor model of PD, that one-off in-service that we were part of not so long ago. There are times of course when it is necessary but not as the main form of PD” (API). A small minority of leaders indicated that external PD continued to have a place on some occasions.

Teachers:

Teachers indicated that they were positive about on-site PD. They found it to be practical, timely, relevant and contextualised, which were reported to add to the coherence of the learning.

Teachers believed that the on-site PD was coherent and good quality: “The professional learning, we would put it into the realm of it’s quality learning and it’s more trackable if that’s a word” (TI). They indicated that the learning was strategic, planned and connected:

It was measured, planned, thought out, showing teachers why we are doing this. It was also cohesive in that most of the PD was around a central theme and then it just built out from that theme. There might have been little offshoots in different directions for teachers’ interests or particular teacher needs, but generally it was cohesive (TG).

Leaders were responsible for the planning that allowed for teachers to understand why they were engaging in the learning.

The practical nature of the on-site PD was reported to contribute to its effectiveness: “The practical, that’s how I learn successfully. So, it definitely is very beneficial and timely” (TG). Being both practical and observable suited the way some teachers learn. Associated with this was its relevance to the needs of the teacher and the school. Some off-site learning reportedly did not provide this for teachers:

When you go to normal PD sometimes you can go, this isn’t what I actually signed up for. Whereas if it’s on-site PD it’s someone who’s catered for a need and it’s very practical and you can see it in action. That’s probably been a real key area, the practical nature of it (TE).

Being active in the learning rather than hearing about things and applying them later appealed to teachers:

On-site PD is better than going out and sitting and listening to somebody because it’s more practical. You’re doing it in a school context rather than listening to somebody saying you’ve got to do this, this, and this, and then come back. It just doesn’t work (TG).

Teachers indicated that while learning on-site was practical, it was richer than strategies alone as it assisted them to deepen their understanding of the underlying theory:

I like the fact that it gave the theory to the practical so it wasn’t just Band-Aids; try these activities. It was here’s the theory. This is what you can do to meet or to implement that

theory. So, we weren't just putting Band-Aids on with fun activities and not knowing why (TG).

Teachers repeatedly named the availability and immediacy of support within the school as instrumental to their learning: “Things like the availability to have that conversation when it happened ... having someone a minute away. I can say quickly, where would I go? What do you think I do next... any suggestions? Having that there and then” (TI). Because the support was on-site, teachers valued that they were able to relate to what teachers were experiencing: “Having someone tapped in twenty-four hours a day where they can relate to you, your experiences” (TH). Personalised, timely access to a leader who could offer relevant advice was regularly described as a positive aspect of on-site PD:

One of the benefits of having on-site PD is that you actually have access, personal access to the person, the professional: the leader is right here where a hundred per cent of the development is relevant to you rather than 50 per cent (TE).

Teachers also repeatedly named the importance of the relevance of on-site PD:

It's made it more relevant to us. We can go to those big conferences that they set up and have these lovely presenters and you're thinking, as if that's going to work at our school ... it's not someone speaking from a podium and saying, 'You can have a go and try doing this'. It's people who are working in our school (TH).

Many teachers referred to the specific nature of their contexts and the way in which on-site PD catered for them:

It's very focused on our specific needs. You can sometimes go to in-services out of school and the teachers who you're sitting with, their school is completely different to yours. At least being at school with us you can really have good conversations about ways to help the children and actually getting in there and following up with them rather than being given ideas which would be great ... but not necessarily in this school (TF).

There was a belief expressed by teachers that no one can truly appreciate each school context and its needs unless they are actually part of that community: “You can't understand something until you walk in their shoes ... Until you come to our little community you have no idea ... By being on-site, by being part of the community, you just understand it” (TI). Teachers indicated that only those working directly with their students truly know their needs. Presentations produced externally for other contexts were not considered appropriate:

The thing about working with your own staff is that we all know what the kids are like ... whereas someone might come and ... it just won't suit our setting. Or they present a

beautiful PowerPoint presentation that they take from one school to the other. It's not really tapping into our needs (TH).

Relevant and timely learning in on-site PD were features that teachers described as valuable:

So, it's on the spot and you remember it. It's fresh in your mind. It's not reading over notes that you've had for weeks prior, thinking how should I be doing this? What does it look like? So, it's very easy to go from learning and being taught the different skills to then implementing it on the spot in the classroom situation (TG).

Teachers were aware that there was an expectation from leaders that they would implement their learning: "There was also the expectation that you've had this PD, you've engaged in this PD, you've worked with colleagues on this PD, now let's see it implemented. But the support was there for the implementation" (TG). Teachers accepted this requirement knowing that support for the implementation was available on site.

Many teachers reported that, based on previous experience, off-site PD was not coherent and teachers generally discussed things of relevance to their particular school only: "When I've gone to off-site PD and I've sat in a room with teachers from other schools ... they'll sit down and start talking about something that's specific to their school" (TE). Meeting other teachers and engaging in the social aspects of external PD were described as a distraction:

You're in the right headspace ... when you're in your own environment opposed to if you're going elsewhere having to meet all these different people. A lot of the time you get bogged down in all of the social things rather than worrying about how this is affecting your professional learning (TI).

It was suggested that teachers learning in their own environment was relevant and coherent: "While ever it's on-site, it's targeted to our needs. You've got that continuity happening" (TE).

There was also general consensus that on-site PD, which included the whole staff, was essential: "With on-site PD you all hear the same things. When you go out, people tend to bring in different things and on-site everyone's heard the same thing" (TG). Everyone receiving the same message was considered important:

It really is important for us to have that on-site rather than a few of us going away to other schools and coming back and maybe reporting. It's important for all of us to be in the one room together a lot of the time (TI).

The notion of reporting back after external PD was not seen as effective: "In terms of staff development away from the site ... one-off. Come back to school. The sharing of that was

minimal” (TI). It was reported that insufficient time was given to reporting back but because other teachers had not shared the same experience, it did not mean much to them:

Often the only opportunity really to share it with your peers was 5 or 10 minutes in a staff meeting ... at the end or rushed through ... Because you didn't have that in-servicing you didn't make head nor tail of it (TI).

Yet when the learning was on-site, teachers reported that they could discuss matters as they arose: “If something pops into our mind when someone's talking we can talk to that point on the spot and get their opinion. It just makes it very real to our situation” (TG). Having these conversations at the point of need rather than a long time after the event was seen as worthwhile: “It's timely, isn't it? Because it's on-site it's there when you need it ... at the point of need, rather than off-site which can be a long time after the event” (TI). It was also suggested that there was greater flexibility and a range of ways in which on-site PD could occur: “Staff meetings, briefings, team teaching, it's been a lot more fluid” (TF). Teachers consistently endorsed on-site PD as a constructive way for them to learn. Its coherence was described as a major contributor to its effectiveness.

Question 4, Theme 1 – Leadership: Collaboration

Component One, Collaboration, was the second most frequently reported area with 54 comments (see Table 3.18). This component is about how on-site PD allowed for all in the school to collaborate and learn together.

Leaders:

Leaders indicated that collaboration in on-site PD influenced teacher practice. Through working together on site, leaders were able to build a range of collaborative practices, collective involvement and shared ownership across the school.

It was regularly reported that on-site PD allowed leaders to work with teachers to build shared understandings, language and practices:

Having it on-site, it's a common professional learning/PD of everybody. So, the practice, things like shared reading, guided reading, there's the shared understanding, the shared language, the shared pedagogy the whole staff are engaged in that ... on-site modelling in rooms working with people enables everyone to develop (PE).

Teacher practice reportedly changed as teachers worked with others: “It changed teacher practice because they saw ... it wasn't as insular” (TEH). The different skills of individuals were identified and practice became more collaborative: “We've made some progress about utilising the skills we

have within” (PI). Along with shared understandings, shared ownership was established: “The basic nature of the PD came from the understanding by everyone that we’re all in this together. It’s a shared ownership therefore we need to share the workload, we need to support each other” (APH). It was suggested that collective responsibility was engendered through working collaboratively: “This is something as a whole school we all had to take responsibility for ... you’re not going to solve the problems of the world. We need to do this together” (TEE). Because the PD was in context, leaders and teachers, regardless of their respective roles, learned collaboratively and shared responsibility for what had to be done. The analysis of data was a suggested example of this:

Analysis of data that’s happened this year is really evidence of the PD teachers have engaged in ... Doing that in a group has been good PD and good ownership of the students ... Involving the specialist teachers has made ownership of learning in the school much broader (APF).

When engaging in such tasks collaboratively, teachers were described as mutually supportive: “It’s been very much two way in terms of the PD on site. Teachers have been very accepting of each other. It’s very much been non-threatening in terms of their attitude towards that peer learning” (PF). Some leaders suggested that through on-site collaboration a flatter structure emerged as everyone had the opportunity to demonstrate leadership and be engaged in the PD:

Everyone is being a leader of learning ... they’ve had to show their learning to their colleagues and then take it on board. That’s been the biggest thing ... we all have to be leaders of learning, all of us. Whether we’re from the bottom or the top (TEG).

All staff were reported to be engaged in the learning:

On-site PD does allow for all staff to be engaged in some level of PD ... Now it’s very much about everyone has an equal opportunity to engage in PD and also to have a say and a choice in their area of interest (APE).

Leaders suggested that all were involved in the on-site PD and contributed to what the learning would entail.

Teachers:

Teachers indicated that collaboration in on-site PD influenced their practice. By working together closely they became aware of the skills of others and engaged in a range of collaborative activities through which skills were shared.

Teachers reported that they worked collaboratively in their schools: “We come together and teach each other. The community is really strong here and there’s a lot of clear, good communication happening” (TF). Consistently teachers described the advantages of on-site PD as it gave them new opportunities to work with others: “For many years that collaboration was undervalued, of you being the person that can collaborate with your colleagues and have the best PD” (TH). A named benefit of collaboration was that the skills of teachers within their school were identified:

Recognising the skills of the teachers that we have here and giving them opportunities to share them ... She was so inspiring to so many on staff who then went off ... and said, I’m going to try that ... So, it’s really motivating ... In our school we have great teachers who all have a lot to share (TE).

By recognising the abilities of those on-site, teachers suggested they were not accessing external PD as they could learn much from each other: “The whole way it’s worked is that a lot of the PD and a lot of the things that we’re doing, we’re not getting outside people in. We’re just using the experience that we’ve got” (TH). Teachers felt that when they worked collaboratively as a group they were able to generate good ideas:

It may not be that anyone is an expert in it but when we all sit around and we talk about it, we do develop something that you look at afterwards and go, that actually sounds like it might work (TH).

As on-site PD allowed for everyone to be involved, teachers indicated that they could work together to implement and build upon their learning:

Because most of your colleagues had the same PD, there was that avenue for professional dialogue, which once again built the professional community but also supported you further in implementing it and bouncing around ideas for what else we could do with this, how else could we do it? (TG).

Teachers named other positive aspects to collaboration in on-site PD. Team teaching and sharing new strategies that had been implemented were two of these:

We have done team teaching and we had the meet and greet where everyone had a five-minute time slot to present something new that they’ve tried in the classroom or a new strategy they’d learned. Everyone got the opportunity to hear about it so sharing our knowledge ... it was active learning (TE).

Visiting the classrooms of others was another way in which teachers learned:

It's something that you don't often get an opportunity to do but there's so much you learn just from spending twenty minutes in someone else's room. They're not things that you need to go off to, there are no experts involved (TH).

As well as visiting other classrooms teachers indicated that they received feedback from colleagues: "With on-site PD you don't only go into your classroom. There was a lot of feedback and sharing with some of the other teachers as well" (TE). The students were seen to benefit from the collaboration in classrooms because they had a number of different teachers working with them: "I also love the fact that there's actually four teachers working with [the children], all bringing out the best in them" (TI). Teachers reported that learning in this way differed from their previous experience of off-site PD where people felt they owned the idea because they had attended it:

You've got a sounding board, you've got a feeling that your colleagues are more open to sharing their ideas [unlike] that sort of feeling, well this is mine, I've developed it and I've been to the in-service, I know it and you don't. It's far more collaborative (TI).

On-site PD was consistently described as collaborative and open.

The convenience of having someone that could help teachers on site was described as an advantage: "I benefited from on-site more, to a greater level ... having them here is so much easier than going to them" (TF). The accessibility of the support was appreciated: "If it's not on-site ... they wouldn't be accessible and she's always good at listening" (TF). The on-site PD also allowed teachers to remain at school: "With off-site PD you're constantly away from your school" (TG). The advantage of not needing to travel was described: "On-site PD has a lot going for it in that you're not wasting time travelling. If you can get what it is that you need or that is needed by you on site, then more power to it" (TI). Another teacher agreed with the convenience of not having to travel to a venue and also suggested they were more disposed to learning on site as they were in the right frame of mind:

It puts you in the right headspace too because having off-site PD, having to drive there and then drive back after you've been sitting and listening to someone speak at you all day is very different to being here, having someone come to you, and it's not so much being spoken at. It's more of a dialogue where it's working both ways (TG).

On-site PD was reported to be interactive and collaborative. One teacher suggested that it was developed in their context and involved their teachers: "From the point of view of a teacher, the whole way this has been set up is that most of the things that we do involve ourselves. It means

that it's a really comfortable professional learning set up" (TH). Collaborative on-site PD was also described as a comfortable context for teachers.

Question 4, Theme 3 – Resourcing and Sustainability

Resourcing and sustainability was the least prevalent theme in the interview data related to the fourth sub-question. As shown in Table 3.20, participants made 34 comments about the resourcing and sustainability of on-site PD. There was only one component in this theme titled resourcing and sustainability, which is about the value and use of the resourcing provided and whether the changed practices could be sustained without it.

Data relating to this component will now be presented.

Leaders:

Leaders reported that as SSNP was nearing its conclusion, continuing the work of improving teacher practice was a consideration: "It's the maintaining now" (TEG). They suggested there was a desire for the achievements of teachers and leaders over the last four years to be sustained:

You want it to be sustainable. You just don't want it to be a quick fix. You know something can come in for 12 months and then it's gone. Really it needs to be a practice that we can sustain and use purposely (APE).

Leaders did not want the changes in teacher practice to be short term.

Throughout SSNP, funds were used to provide material resources, personnel and time. The analysis of data was used to guide the use of resources: "We're putting money into resources, it's valued and we've looked at the data" (TEF). Leaders described the financial investments as vital because they indicated to teachers that their work and their learning was valued:

The money has been the answer ... you're saying you're important, you're worth investing in ... you're a leader, you can share that, you can demonstrate that ... do you need time to plan something that you want to share with the rest of the staff? (TEE).

The difficulty of providing time without the resources was reported: "You've got all these things, all these processes, all these opportunities then all of a sudden you're restricted in your budget, back to a normal budget. Then you've got to try and maintain it" (APH). Leaders on-site working with teachers was also seen as creating accountability for them to respond to the expectations of the reform:

It's not as if I come one day and then walk away and that's it. A bit of it is accountability. They know that I'm here. They know that we've done planning. They know that I know what the planning is and they know I'm coming in (TEF).

Leaders were aware that this accountability, with its accompanying support, may have been an influence on teacher practice.

Another leader suggested that teachers were now willing to put in extra time to continue their learning; however, some additional time would be required:

The only way you're going to get continued PD at the high level that we've had so far is to provide that time. I believe our teachers are in the place where they would be prepared to provide extra time but it has to be purposeful and certainly well planned, not haphazard (APH).

The importance of the learning being well planned and focused was considered essential if teachers were to give time to it in the future.

Teachers:

Teachers indicated that time to fulfil a range of tasks such as planning for teaching and using data was essential: "Time needs to be given ... for you to plan and implement effective teaching and learning" (TE). Sufficient time for both the collection and analysis of data was named as a priority: "Time to analyse the data, not just collect it ... With adequate time to then have that data impact on your planning" (TE). With sufficient time it was considered that the use of data and the subsequent planning influenced teacher practice.

According to teachers, resourcing was based on data and occurred strategically in response to school and teacher identified needs:

Having the TE and the on-site PD is the growth in our resource base ... They're resources that are responding to a need that's school recognised that we have been working on in our PD... contemporary resources that teachers have expressed a need for because of what they've done in PD or what they've seen happening in their data. So, resources address data and teacher need (TG).

Teachers also reported that on-site PD was cost effective:

It's probably saving the system money because we're not all packing up and driving and having to pay casual teachers. It's on-site so it's logical that problems come up ... 'I tried it this way, it's not working, what else can we do?' (TH).

The issue of part-time teachers was identified by a few teachers because including them led to additional costs: "A lot of job shares and it's double the work ... so it's a lot of extra money to release teachers twice for one class instead of one teacher" (TH). Another teacher suggested that part-timers needed to give additional time: "They need to collaborate in their own time to make things gel" (TH). Because part-time teachers added to the amount of resourcing required for on-site PD to be effective it was suggested that they needed to contribute additional time to collaborating with others.

CHAPTER FIVE – ANALYSIS AND DISCUSSION OF RESEARCH FINDINGS

5.0 Introduction

The purpose of this chapter is to analyse and discuss the data presented in Chapter Four. To answer the major research question, “How does on-site PD influence teacher practice?” the following analysis and discussion of findings will occur under each of the four research sub-questions according to the themes identified from the literature and the coding process. These questions were also used as the interview questions in the semi-structured and group interviews.

5.1 Sub-question 1 – Did the exercise of leadership in the school and system influence teacher practice and, if so, how?

This question has two parts to it regarding the exercise of leadership. The first relates to the influence of leaders within the school and the second is about the influence of system leaders responsible for the on-site PD initiative. School leaders were those on the school executive committee who were usually referred to as the leadership team. They included the principal, the AP, the REC and the TE. As shown in the data, the two foci of this question, school and system leadership will be discussed separately in the first section on collaboration.

5.1.1 Theme 1 – Collaboration

5.1.1.1 School Leadership

Within this theme, there were two key ideas that arose about how school leaders collaborated to influence teacher practice. The first was how they clarified their own understandings with other leaders and then developed a vision that became shared and understood by teachers. The second was about how the flattening of organisational structures enabled leaders to become co-learners with each other and the teachers.

Leaders Clarified Understandings and Developed a Collaborative Team Approach

Leaders were the key drivers of the collaboration in schools but to do this they first had to clarify their own understandings of what was expected of them, what it was that they were attempting to do and how they would go about changing teacher practice. To develop these understandings and work together to lead the learning, they adopted a collaborative team approach. This approach was built via the structures of leadership team meetings and the off-site PD sessions provided by the system. Having time away from the school site was a luxury for these leaders.

Uninterrupted time was rare but essential, and these occasions provided the time and space for them to think clearly, develop their understandings and become united in agreement so consistent messages could be conveyed to teachers about the beliefs and practices their leaders were advocating. Fullan (1982) proposed that, “Any significant innovation, if it is to result in change, requires individual implementers to work out their own meaning ... Thus, effective implementation is a *process of clarification*” (p. 91). Consistent with this view, the leaders in the present study were ‘individual implementers’ who needed to make their own meaning but, as they recognised the importance of ‘speaking with one voice’ if they were to have an influence on teachers, they also collaborated to create shared meaning. An example of this is seen in the following comment: “If the leadership team is not on the same page, it’s not going to work because that way the whole staff sees that it’s not just one person leading it. They see it as a whole team approach” (TEF).

Leaders Developed a Vision with Teachers that Became Shared and Understood

Once understandings of leaders had been generated, they then had responsibility for expanding ownership of them to create a shared vision across the entire staff about what they were aspiring to accomplish through SSNP. The collaborative structures, such as meeting times both on- and off-site, assisted leaders to develop their understandings. At the school level, collaboration with teachers was central to how their understandings were developed. The following comment demonstrates the importance leaders placed on shared ownership to include everyone on staff:

The shared ownership comes from the executive level. But there’s another circle of shared ownership of the whole school where everyone is seen as a practitioner whether they are in the classroom or have a role to sit in the office (APH).

Hord and Sommers (2009) identified the necessity for leaders to develop and communicate shared understandings, and a vision for the future; however, there is limited research on how this is actually accomplished. One recommended way (Roberts & Pruitt, 2009) is to implement a collaborative strategy across a range of scheduled meetings with teachers to reach consensus; however, in the present study the development of a shared vision was undertaken quite differently. The process was not so much about leaders communicating the vision but co-constructing it through collaborative learning experiences. Consistent with the research of Beck et al. (2008) where the vision “was not imposed in an overly strict or top down manner” (p. 78), rather than developing a vision through an academic exercise at meetings isolated from classrooms, it was built along with understandings of changed practice. Contrary to the research of Kwakman (2003) where engagement in collaborative activities that demanded more than just discussion was low,

leaders worked with teachers in classrooms to model instructional strategies and used co-operative planning and on-site PD gatherings to deepen understandings. These first-hand experiences demonstrated how and why teacher practice should and could change. Wayman and Jimerson (2014) found collaboration rarely resulted in common understandings or shared knowledge throughout a school, yet in the present study, as teachers became more immersed and confident in their changed practice, a shared vision and belief that by working together they could impact on student learning emerged. An example of this is seen in the following quote:

What I saw was the engagement of teachers within that community. They were talking about children within their class, not only learning about their class but about each other's classes as well. They came with a shared purpose. They came with an understanding. They came to learn. They bounced off each other ... There was a collective responsibility for the students' learning (TEG).

Thoonen et al. (2011) found that vision building accompanied with leader support may "help to link teachers' current needs to the school's goals, to produce a shared vision, and to increase collective cohesion" (p. 520). Likewise, in the present study, the shared vision and changed practices were ultimately evident in a collective commitment and responsibility for student learning. This shift seemed to relate to the issue of attitudinal change of teachers toward learning and how their beliefs altered. This pattern of practices leading attitudinal change is consistent with the work of Lindberg (1995) who showed that changed beliefs usually follow changed behaviours. Similarly, Hord (1997) suggested that getting teachers to learn about and change some of their practices is a good starting point to altering beliefs, which was borne out in the present study. By approaching the development of a shared vision via a practical classroom-centred approach, teacher beliefs shifted gradually and the shared vision emerged concurrently with their changed practice.

Flattening of Organisational Structures – Leaders Became Co-learners with Teachers

The second finding regarding collaboration was that the flattening of organisational structures enabled leaders to become co-learners with teachers. Collaboration was seen as the nexus between and amongst leaders and teachers that was critical to how teaching practice was influenced. The Federal Government determined the schools that were involved in SSNP, which led to some opposition from teachers, and leaders found themselves in a situation where they were leading in a climate that was generally not conducive to collaboration. Despite this opposition, leaders were able to break through it by accepting that although they had a deep knowledge and experience of teaching, they too were learners. School leaders built a similar construct to that

identified by Timperley (2011b) as “learning relationships” (p. 166) by acknowledging the abilities of teachers while leading and learning together. An example of this is seen in the following comment:

Everyone is being a leader of learning ... they've had to show their learning to their colleagues and then take it on board. That's been the biggest thing ... we all have to be leaders of learning, all of us. Whether we're from the bottom or the top (TEG).

It seems leaders adopted the mindset described by Margolis and Doring (2012) that “leadership is in the learning, not in perfection” (p. 878). What appeared to be essential to this approach was that leaders put themselves on an even playing field with teachers, doing what Hord and Tobia (2012) found to be important in sharing the leadership, “and thus, power and authority” (p. 25). While sharing power and authority has long been recommended as a condition for promoting learning in the workplace (Smylie, 1995), there appears to be little research on this actually occurring.

Leaders Adopted a Non-hierarchical Style

Similar to the finding by Coulson (2008) where positional and non-positional leaders contributed effectively to collaborative enquiry, most leaders appeared to adopt a non-hierarchical style. Park et al. (2007) also recommend this approach. Hierarchies were flattened and leaders actively participated in leading the learning as partners with teachers, making progress that Fullan and Quinn (2016) describe as, “A collective endeavour ... collaborative work” (p. 55). By working ‘shoulder to shoulder’ with teachers, leaders demonstrated the value they placed on collaboration and the belief that change could occur if they worked together. Teacher perceptions of leaders shifted. No longer were they seen as the ones that were expected to have all the answers but those who were willing to both contribute to and learn from the collective wisdom of the group. A question arises as to whether leaders purposefully adopted a flat structure or whether it just emerged as they altered their own practices in order to change those of teachers. As almost all leaders worked in this way, it is suggested this approach might have been deliberate. While collaboration as a concept is recognised as essential to influencing teacher practice (Walter & Briggs, 2012), despite its broad prominence in research it has been claimed that people do not necessarily know how to collaborate (Hord & Tobia, 2012). In contrast to this position, collaboration increased as leaders embraced a flat structure and worked as a team to become immersed in the day-to-day work of teachers, suggesting that the present study shows how collaboration can be achieved. It seems that the issue of proximity to the teaching in how leaders lead can have an impact on how teachers perceive their leadership style, suggesting that if collaboration operated as it did in the present study, its benefits may be strengthened.

Initial Reluctance to Embrace a Non-hierarchical Leadership Style

Most leaders shifted to a flat organisational structure; however, there was one school (School H) that was an exception for a while. In this school, the TE embraced the concept of a non-hierarchical approach from the outset and worked collaboratively in classrooms with teachers, but other leaders were reluctant to be involved and described their leadership as ‘supervisory’. Unknown contextual factors might have influenced this decision; however, teachers were aware that leaders beyond the TE were not involved at the classroom level initially. Consistent with previous research that found, “it is changes of leaders and leadership that most directly and dramatically provoke change in individual schools” (Hargreaves & Goodson, 2006, p. 18), these leaders shifted gradually, as did teacher practice, which appeared to be due to some change in leadership. The persistence of the TE to be collaborative also seemed to contribute to these shifts. Being on the leadership team enabled the TE to have a voice in the decisions being made and to be able to act as the change agent by setting up structures and processes to allow for greater collaboration across the school. This finding seems to suggest that the flattening of structures is not necessarily reliant on all leaders driving it simultaneously and different paths can be taken to bring about the change. Based on what occurred in this context, it appears there can be a change in leadership approach driven from the bottom up that is equally effective.

5.1.1.2 System Leadership

System leaders were employees of the diocese who had responsibility for the development and implementation of SSNP according to the Federal Government reform agenda. Through the Catholic Education Commission system, leaders were the link between schools and the Federal Government, and fulfilled what Fullan et al. (2006) refer to as the “mediating role” (p. 97). System leaders were not interviewed as part of this research so without their data to validate this discussion it is hard to know what was behind their approach. However, school leaders and teachers were interviewed and their perceptions became the major source of analysis regarding system leadership. It would appear that system leaders had an impact on school leaders; however, this impact did not reach the teachers in the same way. They liaised directly with school leaders and had minimal contact with classroom teachers, which suggested their influence on teacher practice was a secondary process. Many school leaders, particularly TEs, appreciated the system support but teachers were far less positive. This might have been because they were unaware of the collaboration that was occurring with their leaders and only experienced the effect of system involvement as it filtered through the school leaders to them. The frustration and lack of

connection with teachers is shown in the following quote: “The bullets are getting fired from up above and hitting us way down here” (TE).

Within the area of Collaboration, there were three main issues identified as important to how system leaders were perceived to collaborate that influenced teacher practice. The first of these is in regard to communicating and planning strategically, the second is about the system implementation process, and the third is about the limited collaboration of system personnel within the schools. This section concludes with a discussion about the leadership of the reform.

System Planning and Communication

It was suggested that an overall system plan for SSNP was not in place and understandings at the school level of what was required emerged throughout implementation rather than at its commencement. This finding is contrary to that of Pritchard and Marshall (2002) who found activities in healthy districts were linked through a unified approach and integrated into a district strategic plan. Sheppard et al. (2009) also recommend that successful, meaningful and sustainable educational reform in schools requires system leaders to, “think systemically and strategically and enlist leaders from multiple sources to collaboratively engage in strategic thinking and adaptive learning” (p. 129). However, it seems this did not occur as part of the system planning process in the present study. Unlike previous research that identified the need for system leaders “to build consensus on the aims of education reform and actively engage stakeholders, especially teachers, in formulating and implementing policy responses” (OECD, 2011, p. 53), no reference to a system plan, developed independently or collaboratively with school personnel, was evident in the data. Consistent with the research of Margolis and Doring (2012) where “district and school goals were unclear and sometimes convoluted” (p. 877), the absence of a consistent strategic direction from system leaders may have underpinned the initial confusion experienced by both teachers and leaders. As seen in the following comment, the emphasis changed regularly and it was suggested that the system was also confused:

There was a lot of pressure from the system and it felt like we would try, be introduced to a strategy, we’d start, it was going well and then we jumped to another strategy. That started, we got onboard then we were introduced to another strategy and it felt like ... a bit of confusion on top as to what, and in what way, and in what direction ... We just felt we were trying strategy, after strategy, after strategy (TE).

Nehring and Fitzsimons (2011) also identified confusion as an issue but a little differently from the way it occurred in the present study. They found messages to teachers from school and system

leaders shifted over time, were unclear and led to confusion; however, in this research the source of confusion seemed to emanate from system leaders, not school leaders, suggesting that a lack of clarity and communication continues to provide a challenge for system leader collaboration in reforms. Pyhältö et al. (2011) found that an outcome of these gaps can be, “misunderstandings and destructive frictions in district level development work, which may compromise the reform implementation” (p. 57). Misunderstandings were also apparent in the present study; however, the reform gradually progressed beyond them. School leaders seemed to be the link between system leaders and teachers; they slowly developed school plans that brought increased clarity and collaborated with teachers to implement them. An example of this is described below:

Towards the end it came together. For me, it would have been better if the plan was there at the beginning. This is where we’re starting, this is where we’re going, this is what we need to do so you could see the whole plan not just snippets. You’ve been, like many of us, totally confused for the first couple of years ... By the fourth year we got it down pat ... I would credit the leadership team for that (TE).

Due to the efforts of school leaders, it appears that eventually the direction unfolded, suggesting it was through their leadership and collaboration that the possible downfalls identified by Pyhältö et al. (2011) were overcome.

System Leaders Collaborated with School Leaders, but not Teachers

The focus of system leaders was perceived to be on school leaders and teachers were not directly included in discussions about the implementation of SSNP. It may have been a deliberate decision by the system that collaboration and communication with teachers was the responsibility of school leaders or, their lack of contact with them may have been an omission. However, the outcome was that this communication did not happen clearly enough for teachers. It has been found that at the beginning of a change process more direction is required from system leaders (Hopkins, 2012); however, this did not appear to occur in the present study. Fullan (2013) identified the essential nature of communication, not just at the pre-implementation stage but throughout the implementation process as well. Hord and Sommers (2008) also named the importance of leaders providing clarity; however, findings from this research suggest that this essential communication and clarity are lingering problems at the level of system leadership. The approach adopted by system leaders relied heavily on a second stage of communication from school leaders to teachers, which appears to have left both of them feeling overwhelmed with all that was required as they coped with the ever-changing demands and the rapid rate of change. An example of this was seen in the introduction of PLCs, where it appears system leaders asked school

leaders to implement them and assumed that they knew how to do so. This finding resonates with Fullan's (2001) proposal that system leaders can often be explicit about what needs to change but not necessarily how. The explicitness that Fullan described regarding 'what' needed to change was evident in the expectation that PLCs would be implemented but clear guidelines about the 'how' were not provided by system leaders.

A further suggested consequence of the limited system communication and collaboration with teachers was that they became defensive. Teachers believed they were being blamed for the underperformance of their students, which resulted in a difficult climate for school leaders. While McLaughlin and Talbert (2006) found system leadership to be important in linking teacher learning to reform initiatives and requires them to "manage the bad news that data can bring and model candour in discussing student outcomes and implications for practice at all levels of the system" (p. 117), it appears it was school leaders that communicated with teachers about their data and why they were involved in the reform. Teacher discontent followed, which was unsurprising as working with student data has been found to be a particularly sensitive area because of its potential to attribute blame (Park & Datnow, 2009). It appears this is how teachers interpreted the message about their students' data in the present study.

Key Elements of the System Implementation Process

While there was not a system plan for SSNP of which leaders or teachers seemed to be aware, there was an expectation for certain structures and practices to be introduced in each school. These were having a TE, implementing PLCs and Instructional Rounds, and analysing data to inform instructional practice. As the implementation of these strategies seemed to influence teacher practice, it could be said that system leaders were indirectly responsible for this impact. The TEs were appointed at the commencement of SSNP and the other three areas became the main focus of the PD offered to leaders at different times throughout the four years. Leithwood et al. (2010) claim, "sustainable improvement rarely happens without external intervention" (p. 52) and the 'external intervention' in the present study was the regular gathering of leaders across schools. Consistent with the research of Priestley et al. (2011) who found in an educational change initiative providing a PD structure that brings people together to discuss ideas builds shared knowledge, system leaders worked with school leaders who generally felt adequately supported via the ongoing off-site PD opportunities. What was different in the present study was that teachers were not involved in this PD, which seems to have resulted in them feeling disenfranchised from the learning opportunities that leaders received.

System Collaboration with Teachers

To engender widespread ownership of educational reform, teachers need to be directly involved in the implementation elements of change (OECD, 2011, p. 52). In the present study, these elements were PLCs, Instructional Rounds, and the analysis of data to inform teaching practice. However, contrary to the recommendation of the OECD (2011), it seems that teachers were not involved until these elements were implemented in their schools. One of the priorities of the Improving Teacher Quality Partnership that was part of the SSNP was, “developing and enhancing the skills and knowledge of teachers and school leaders through their careers” (p. 1). A key objective of this reform was to influence teacher practice; therefore, a question emerges as to why collaboration with teachers was not part of the implementation process. However, this is unsurprising because for a long time “teachers have largely been left out of policy discussions” with resistance being the natural response (Fink & Stoll, 2005, p.19). To ensure the learning of teachers meets their needs, their involvement in decisions about it is important (Harrison Berg et al., 2011). Smeed and Jetnikoff (2016) also identified the importance of teachers contributing to both the content and organisational features of PD if they are to see its relevance to their work. In contrast to this previous research, system leaders determined the areas that became the focus of the on-site PD; however, it appears this occurred without teacher input. While gaining teacher support is regarded as the most important element in raising literacy and numeracy standards in schools (OECD, 2011), a lack of forethought about the implementation process to include teacher collaboration seems to be a key downfall of this reform. This may have led to teachers feeling they were being treated as what Liu et al. (2016) refer to as “objects” of the reform rather than “agents” (p. 88) of it. In saying this, it remains unknown as to whether it was an intentional responsibility for school leaders to collaborate with teachers about the elements to be implemented rather than system leaders. Consistent with the work of Fullan and Quinn (2016) who proposed, “When teachers have not been involved in shaping the ideas or the strategy the innovation wanes due to lack of ownership ... resistance and pushback escalate” (p. 26), this innovation did wane temporarily and opposition from teachers occurred. A key reason for this was expectations of system leaders for TEs and teachers that stemmed from the system required practices that were considered unrealistic. As the top-down model of implementation appeared to call for too much work that detracted from student and teacher learning, it was questioned. This is seen in the following comment:

From a system perspective rather than a school perspective, the agenda is just heaped on. There are more and more and more things expected ... Some of the things that we do are

because the system requires them ... The extras that are tacked on, that are loaded on, have to filter down to us and take away from our learning time, our teaching time (TG).

The rate of change was rapid and teachers became stressed, which resonates with the belief of Leithwood (2007) who claims the nature and speed of change can be a source of stress for teachers, particularly when it occurs with little consultation. A further reason for teacher opposition was that they were keenly aware they were not offered the same learning opportunities from the system as their leaders.

Coherence between System, School and Teacher Goals

Although coherence between PD, the goals of teachers and those of the system has long been identified as a feature that can positively influence teacher practice (Porter, Garet, Desimone, Yoon, & Birman, 2002), some leaders and teachers felt the PD focus areas were not aligned to their own and school priorities. Watterston and Caldwell (2011) found a key to success is to align strategies between the system, schools and classrooms; however, this did not apparently occur in the present study, which led to aggravation, particularly for teachers. This mismatch between school and district policies (Nielson et al., 2008) and the lack of alignment between principals and system leaders (Pyhältö et al., 2011) has been a source of frustration for leaders of reform initiatives for some time. Considering the findings from the present study, and others that have shown many school reforms have failed due to the conflict between system mandates and the school's learning needs (McLaughlin & Talbert, 2006), a question emerges as to whether a more collaborative model of implementation that included teacher involvement would have been beneficial. It might have avoided the secondary phase of communication and its ensuing problems regarding teacher opposition and defensiveness. However, another way of viewing this finding is that the top-down approach created a type of disequilibrium that put the spotlight on practice and eventually resulted in change.

A 'Top-down' Approach to 'Bottom-up' Implementation

Reforms such as SSNP come from top-down models that impose change on schools (Pancucci, 2007) but a paradox exists in practice when it comes to implementation at the school level. In the present study, this occurred on-site through the structure of a PLC that called for a strong bottom-up approach. This dual implementation model required school leaders to convert a top-down organisational structure with its required approaches to changing teacher practice, delivered externally only to them, into bottom-up on-site PD. Darling-Hammond (2005) reminds us that, "Neither a heavy handed view of top-down reform nor a romantic vision of change is

plausible” (p. 366), but a question emerges regarding how the balance between a top-down and a bottom-up approach can be achieved seamlessly and inclusively. While this research is not concerned with which approach is most effective, it is concerned with how the “creative tension” between the two can be managed productively (Hopkins, 2012, p. 88). Difficulties arose but this is unsurprising given that it has been previously acknowledged that, “schools can militate against the success of programs implemented in a top-down way” (Smeed & Jetnikoff, 2016, p. 119). In this research, the opposition may have been because, as identified by Brady (2010), teachers often see innovations as synonymous with top-down initiatives that are an addition to what they already do. It appears that largely due to collaboration and the qualities of school leaders, which will be discussed in the following theme, the situation was turned around.

Limited Collaboration of System Personnel within Schools

Although collaborative learning needs to be supported by system and school leaders, and previous research encourages this involvement (Brodie, 2013), the collaboration of system leaders with school personnel in the present study was found to be limited. Teachers and some leaders questioned the credibility of system leaders and thought they needed to be more in touch with classroom realities if they were to support teachers. Similar to the research of McLaughlin and Talbert (2006) who found that system leaders are required to have a sound knowledge of the reform work as their decisions can “frustrate teachers’ growth and productive change, as well as Principal’s efforts” (p. 82), it seems that, perhaps due to a lack of collaboration with teachers, when system leaders did visit classrooms their involvement was considered unhelpful and lacking in purpose. As system leaders had minimal involvement in implementation at the classroom level, it is difficult to understand how the sound knowledge of the reform work described by McLaughlin and Talbert (2006) could have developed. School leaders and teachers both suggested system leaders needed to adopt a more collaborative approach by spending more time in schools if they were to understand the complexities involved in progressing the changes more quickly. The degree of annoyance the visits of system leaders caused teachers is expressed in the following comment:

They’ve got all that expertise in there. Don’t come out and watch and criticise. Come out and share your expertise and show us. Don’t show us from a book, don’t show us from an overhead and don’t show us from a computer. Come into my classroom ... you teach them because they’re not out of your textbook (TE).

Teacher frustration with the lack of system leader involvement at the school level caused tension, which highlights the importance of leaders at all levels of the organisation having what Pancucci (2007) described as a change of mind-set and a “transformative shift in power structures” (p. 68)

by participating directly in closing the gap between PLC theory, to which collaboration is central, and practice. Hord and Tobia (2012) suggest that when system leaders are involved in practices such as participating in “learning about data” (p. 112) sessions in schools, modelling to teachers what is expected with students in classrooms and having conversations with teachers about learning makes a difference to PLC implementation and development. Furthermore, Hipp et al. (2008) found that the views of system leaders that began as neutral shifted to become positive rather than a barrier to what was happening within the school by being instructional specialists. The involvement of system leaders in this previous research is characterised by their focus on the learning of teachers. In the present study, it appears that system leaders were not engaged in such activities with teachers suggesting that as school leaders worked collaboratively with teachers within their schools, system leaders may have advanced the work further if they did so as well.

Leadership of the Reform

Teachers did not believe that the system played a role in changing their practice. It appears it was school leaders who sought clarity, developed a plan and led the change with teachers collaboratively. In terms of this outcome, this finding can be viewed in two ways. Teachers felt ownership of what was achieved and believe they accomplished what they did with their leaders, so if it was the intention of system leaders to get schools to own the reform and do something about it, the strategy was successful. Coburn (2003) found that a shift in ownership so that reforms become “self generative” (p. 3) is important, which may have been what system leaders actually intended to do. If this was their objective, which cannot be said, they were effective. Alternately, if it was important that system leaders were seen as having a leadership role to teachers and show they were in charge of the reform and its progression, they did not succeed. It was perceived at the grass roots level by teachers that system leaders did not lead reform; they actually impeded progress. Whether that was good or bad is unknown, but it may be better than it first appears. Sanders (2012) found that “reform flexibility” (p. 859) is important because if they “are too rigid, they are less likely to be sustained in the face of district changes. However, if reforms are too flexible they may lose their core features and diminish their potential to promote positive change” (p. 866). In the present study, some flexibility was apparent, as schools were able to allow the learning for teachers to be context dependent. What also may have underpinned the approach of system leaders was the ‘Tight but Loose’ theory of Thompson and Wiliam (2007). To keep the learning on track, this theory suggests system leaders be “tight about the essential elements of the professional learning portion of the intervention” but allow for flexibility that enables “the intervention to adapt to different locales” (p. 46). However, “being tight is what ensures that it will work” (p. 47). It

could well be that by system leaders being ‘tight’ on certain aspects of the reform, and ‘loose’ in terms of how school leaders went about the change in their own schools, may have been an advantage that in time contributed to changed teacher practice.

When considering why so much reform fails, Harris (2011) identified the first common denominator as, “Schools and systems are often expected to change too rapidly” (p. 625). While many challenges were experienced in the present study and the rate of implementation may have been a contributor to some of these, this reform did not ‘fail’. There was an expectation that schools met certain accountabilities within timeframes, which may have led to the need for change to occur quickly but this also begs the question of whether anything would have happened without the time pressure. There could have been unknown external pressures on system leaders that did not allow for the degree of collaboration, consultation and communication required to develop alignment between them and the schools. Had sufficient time been given to collaboration with all stakeholders, and the development of a comprehensive communication strategy within a strategic plan for SSNP, the experience of system collaboration may have been entirely different, particularly for teachers. However, despite the obstacles, teacher practice did seemingly alter suggesting that the pace of implementation can be countered if support structures within the on-site PD are in place.

5.1.2 Theme 2 – Leadership Capabilities

Findings from the theme of leadership capabilities only relate to school leaders; therefore, system leaders will not be discussed in this section. Analysis of the data found that the components within this theme that were reported to contribute to the influence of school leaders on teacher practice were leaders’ openness to change, the devolution of responsibility, the characteristics of leaders and their relationships with teachers. These areas were interrelated so will be discussed together.

5.1.2.1 Openness to Change and the Devolution of Responsibility

Working collaboratively required change. Most school leaders were open to this as they realised that the way in which they exercised leadership had to be different. Fullan and Quinn (2016) suggested that, “Change is a process, not an event” and it is the “leader’s role to manage the transition from the current to the future state” (p. 27). In this research, the ‘future state’ was changed teacher practice that was ‘managed’ by leaders adjusting their practices and devolving responsibility to others. Through this devolution, the building of both leader and teacher capacity

seemed to increase as it was more widely shared. Leaders worked closely with each other and the teachers to devolve responsibility and power as they focused on the ‘we’ culture and set goals for the future. As leaders did this, they identified teacher strengths and encouraged them to lead the learning. Teachers indicated that leaders endeavoured to share power and provided opportunities for growth. The following teacher comment describes how this occurred:

That whole release of, I guess in some ways power from the leadership team ... it’s really evident ... Everyone on staff, whether you’re here one day a week or you’re here full time, or you have expertise in whatever way, there have been opportunities to develop other skills (TH).

5.1.2.2 Characteristics of Leaders

To drive the change, it was essential that leaders were strong, but not in a hierarchical sense. It was suggested that their strength was demonstrated by being open, approachable, non-threatening, knowledgeable, credible, flexible, proactive and supportive. In the main, leaders were united and exercised their leadership by utilising these attributes to become co-learners. Leithwood et al. (2008) identified personal traits that explain a high proportion of variation in leader effectiveness related to school improvement. In challenging circumstances, successful school leaders have been found to be open-minded, willing to learn from others, flexible in their thinking within core values, persistent, resilient and optimistic. The schools in the present study were also from low SES challenging contexts and their leaders demonstrated many of the personal traits suggested by Leithwood et al. (2008). However, further to these previous findings, the present study showed that effective leaders of learning were also credible and humble, demonstrating what Collins (2005) describes as “a compelling modesty” (p. 6) where “personal humility blends with intense professional will” (p. 1).

5.1.2.3 Importance of Individual Capabilities being Interrelated

While each of the capabilities of leaders were depicted as important, it seems that it was their combination within a collaborative culture that enabled teacher practice to be influenced. Similar to the research of Robinson (2010) who found that due to their considerable interdependence the separate capabilities of leaders are far less important than their skilful integration, it was through an integrated approach that leaders utilised different capabilities to influence teacher practice. By participating as learners, leaders did what Fullan and Quinn (2016) claim the best leaders do to use the change dynamic to improve their organisation (p. 29). However, by leaders also doing what Lieberman and Pointer Mace (2009) refer to as, “going public

with their teaching” (p. 464), a degree of risk and vulnerability was encountered. Their limitations were exposed yet accepted by teachers who recognised that, like them, their leaders were stronger in some areas than others and brought different abilities to their roles. As seen in the comment below, leaders went on a learning journey with teachers:

They are just like all of us. The leadership team is not exempt from the fact that they are also on a journey. They’re on the journey of teaching and learning, but they’re also on the journey of leadership. They’re at different stages, have different strengths, different skills in leadership (TG).

The actions of most leaders in the present study reflect the three capabilities that Robinson (2013) proposed are required of effective instructional leaders. These are: “Applying relevant knowledge, solving complex problems, and building relational trust” (p. 297). The first, ‘applying relevant knowledge’, calls for leaders to have direct involvement with teachers to improve teaching and learning. This happened as leaders shared their knowledge with teachers and learned with them. The second capability, ‘solving complex problems’ requires what Levin (2012) refers to as the “slog work”, which gets little attention in educational change literature, yet “makes the difference in the end” (p. 6). Consistent with the findings of Robinson (2013), problem solving in the present study was not a solitary process as leaders worked together to ‘apply relevant knowledge’ to ‘solve complex problems’ by utilising data to identify the learning needs of students and teachers. The third capability, ‘building relational trust’ occurred as leaders got to know the teachers and built productive professional relationships with them. Teachers felt that the mentor relationship leaders built with them influenced their practice:

It plays a huge influence on teacher practice. Those people you see a lot of the time as your mentors, they are the people that we consider have a lot of experience within both the school and their teaching career. Their influence is huge in terms of going to them for advice for anything academic or behaviour wise ... they’re a huge influence (TI).

5.1.2.4 Relationships with Teachers

Leaders built relationships that allowed them to trust and be trusted as well as challenge and support other leaders and teachers; however, it appears that these relationships alone did not change practice. Building these relationships appeared to be critical to influencing teacher practice but equally so was the focus of leaders on teaching and learning. This finding resonates with that of Liu et al. (2016) who describes relational trust as the mechanism that links leadership and teacher learning. Similarly, Robinson (2006) found the impact of transformational leadership is limited and what is required is a greater focus on developing professional knowledge about

teaching and learning as relationships alone are unlikely to change practice. The present study supports and builds on this previous research by suggesting that neither the relationships nor the emphasis on teaching and learning should take precedence. It was through leaders working with others on teaching and learning that relationships were built. These relationships provided what Katz and Earl (2010) suggest as the link to enable the support and capacity building to progress the change process. However, due to the negative context in which SSNP commenced, establishing and sustaining these relationships was a challenge. Both the importance and difficulty of upholding the respect and dignity of all throughout the process was named. As Fullan (1982) described, “Since any group of people possess multiple realities, any collective change attempt will necessarily involve conflict” (p. 91) and, “All changes worth their salt reveal differences” (Fullan, 2005, p. 71). Similarly, tensions occurred throughout this reform and they had to be dealt with by leaders.

5.1.3 Theme 3 – Organisational Restructuring

To influence teacher practice, school leaders implemented organisational and structural changes that heightened the focus on teaching and learning. Some roles and responsibilities were altered and a strategic approach by leaders to setting directions was apparent. Again, due to the absence of data about system leaders, they will not be discussed here.

5.1.3.1 Organisational and Structural Changes were Implemented Slowly and Responsively

Leaders made various organisational and structural changes to enable a heightened focus on teaching and learning. These included introducing a range of meetings with different personnel, altering the staffing and timetabling arrangements, organising for PD based on what the analysis of data indicated, collaboratively planning, and providing opportunities for teachers and leaders to work together. Consistent with research of Sheppard et al. (2009) who found that when moving to a collaborative approach the first step is to replace inhibiting structures with facilitating ones, structures changed to enable collaboration. What was different in the present study was that these structures were introduced gradually, not all at the beginning or as a first step, and continued to evolve throughout the four years of SSNP. As seen in the comment below, leaders found they had to put processes in place but needed to proceed carefully within the tenuous environment:

We had to put systems in place. We had to change timetables ... We had to set processes up because they weren't there ... It was think big, start small with everything. You had to keep things on an even keel and gradually chip away at it (TEH).

Contrary to the belief of Harris (2009) who states school “structures can be inflexible” (p. 7), leaders implemented these changes by being flexible and realising when they needed to change again. Consistent with the finding of Clausen et al. (2009) who identified the importance of principal flexibility as they looked to others to identify what was needed, leaders in the present study listened to teachers to determine what structures were effective. This was possibly because they adopted what Leithwood et al. (2013) described as, “The heart of a positive organizational culture... a power redistribution within the schools that moves from hierarchical control to peer control” (p. 265). Schools were at different stages of readiness and their contexts were different; therefore, change occurred as required. Similar to the findings of Jacobson et al. (2005) where context specific situations led to different organisational responses for school improvement, school leaders made structural changes according to need. An example of this is seen in the following comment: “The principal is flexible enough to say well, this is in our staff timetable, but this is the need. It is changed to fit in with the needs” (TEI). Many of these organisational structures served as opportunities for both communication and learning, which Hord and Tobia (2012) describe as an imperative if the school is to have common goals.

5.1.3.2 Organisational Restructuring that Required Participation

While it has been said that, “There are few examples of school turnaround without some fundamental change in organisational behaviour” (Leithwood et al., 2013, p. 265), the present study adds insight into how organisational restructuring can occur to influence teacher practice. A key way in which this happened, which may have been because it is believed that “collaboration by invitation does not work” (DuFour & Eaker, 2009, p. 82), was the organisational restructuring allowed for and expected maximum involvement and participation of teachers and learning support officers. Further to the research of Timperley (2008) who proposed that “both voluntary and mandatory teacher participation have co-occurred with positive and negative outcomes” (p. 16), findings from the present study suggest that mandatory structures such as the learning support meetings, which included anyone on the staff that had involvement with the students, were seen as advantageous as they contributed to the collective responsibility for student learning that emerged. To support student needs more broadly and share expertise, staffing was also reorganised so that specialists could teach within classrooms. This inclusive structural approach, accompanied by an expectation of involvement, reflects the claim of Leithwood et al. (2013) who suggests that to generate the conditions for collaboration, “The main task of leaders is to create the organisational conditions ... where a different way of working is not only possible but absolutely required” (p.

265). In the present study, a different way of working was established and teachers acknowledged the inclusive approach as one of the structures that assisted them to learn.

5.1.3.3 Structures Heightened the Focus on Teaching and Learning

Changing structures was, as Timperley et al. (2007) found, an important leadership function but not one that had a greater impact than working directly with teachers. This finding stands in contrast to that of Horng and Loeb (2010) who claim organisational management for instructional improvement is more important than the time principals spend observing and coaching teachers. As seen in the following comment, it appears that structures alone did not change teacher practice; leaders created or modified structures with the intention of increasing the focus on teaching and learning: “The leadership team here put structures in place, which have really put this [teaching and learning] at the forefront of what’s happened in the school” (APF). While leaders ensured that they attended to the organisational aspects necessary for teacher learning, organisational management served as one of the enablers of the learning. Structural changes were seen as a ‘means to an end’ to influence teacher practice and, consistent with the view of Sparks (2005), were necessary but on their own insufficient to bring about meaningful change. Fullan (2005) concluded, “Structure is not enough” (p. 69). Similarly, in the present study, modified or new structures were put in place as both a necessity and a consequence of the increased focus on teaching and learning, not for the sake of the structure itself.

5.1.3.4 Some Roles and Responsibilities Altered along with Structural Changes

A natural corollary to the structural changes that occurred in the present study was the modification of some leadership roles, which is consistent with the view of Harris (2009) who suggests there is a need to remove structural barriers to improvement, including formal roles. However, it was difficult to determine which changed first, the structures or the roles. Leithwood et al. (2013) found that structures create the conditions for collaboration but it is what leaders do within these conditions that makes the difference. What leaders did in the present study was to learn and lead with teachers, reflecting what Harris (2009) describes as “more fluid patterns of interaction” (p. 17), which appeared to lead to the realisation that some roles also needed to change. Structures evolved to support these changes but time was needed for leaders to understand which required modification or creation. A key way that roles and responsibilities of leaders varied was that they became far more involved in instructional leadership in classrooms with teachers to influence their practice. A further role change was that PD became a shared responsibility across the leadership team and later with teachers. Roles were also adjusted for APs as they worked

closely with TEs to support the development of teachers. Some difficulties were encountered because APs were also responsible for teaching a class whereas the TE was solely dedicated to working with teachers. This is seen in the following comment: “All the planning sessions I’ve done, 95% of the time the Assistant Principal has been there with me as much as they can because they’re also on class” (TEF). Other findings related to the TE role will be discussed later in this chapter under Question 3.

5.1.3.5 A Strategic Approach to Organising and Mapping out the Direction

Consistent with the research of Robinson (2007) who identified the importance of leaders establishing goals and expectations, school leaders were perceived by teachers as the ones that developed a strategic approach to implementation by establishing directions, goals and an accompanying plan for how they were to be achieved. Teachers valued the way in which their leaders made sense of the context by organising and mapping out a clear strategic process. This is seen in the following comment:

They identified as a leadership team and were very strategic about what area of curriculum they wanted to focus on to develop in our school. Goals were set, there was data analysis, and they strategically put together a plan and an outline of what we wanted to achieve (TE).

5.1.4 Theme 4 – Resourcing

The theme of resourcing relates to both the time and financial resources that were provided and deployed through school and system leadership to influence teacher practice. Two key ideas emerged. The first is about the provision of resources, which was considered insufficient by teachers in relation to time, and the second is about their use. Much of the data in this section relates to school leaders but, when relevant, the role of system leaders will be discussed.

5.1.4.1 Provision of Resources

Schools were allocated resources by the system to implement actions across the six reforms of SSNP. In consultation with system leaders, it was the responsibility of school leaders to account for their use. Apart from the resources given to schools, some were retained by the system to provide ongoing off-site PD, particularly for TEs but also for leadership teams.

Each school leadership team managed the resources at the local level and influencing teacher practice was a high priority. Leaders seemed to have some autonomy in how this was achieved in each context as long as it was in accord with the SSNP reform agenda. A focus on

teacher practice through budget and time appeared to be a priority, as was the need to implement change slowly and strategically over a sustained period. Timperley (2008) found it “typically takes one to two years for teachers to understand how existing beliefs and practice are different from those being promoted, to build the required pedagogical content knowledge, and to change practice” (p. 15). Findings from the present study suggest that one to two years is the absolute minimum amount of time for these changes to occur as it seems it took that long for teachers to understand the need for change and work through their initial resistance to it.

5.1.4.2 Provision of Time was Considered Inadequate by Teachers

Teachers had high praise for their leaders regarding the provision of resources but an equally apparent finding regarding time appears to be attributed to system leaders. The amount of time allowed, proportionate to the work required, was found to be inadequate and teachers described their struggle to do all that was asked of them. Although time was made available, expectations appeared to well exceed the amount provided, which meant the work demands on teachers outside of school hours was difficult to manage. This is seen in the following comment:

We spent hours and hours after school because we couldn't finish what was expected of us at school ... I just found the paperwork too much. It should have been less paperwork and more focusing on the kids ... It was quite difficult (TE).

Consistent with the research of Leithwood et al. (2004) who found that, “Many school reform and restructuring initiatives, especially those which decentralize more decision making to the schools, increase the hours that teachers work” (p. 57), teachers felt that the large amount of work expected of them took the focus away from the students. While it is known that teachers were asked to regularly analyse data, which they apparently could not get done at school in the time provided, it is unknown how much of the additional work required of them came directly from the system. What is known is teachers felt that the resourcing available did not allow sufficient time for all that had to be done.

5.1.4.3 Use of Resources

Managing the competing demand of teachers being away from class was a challenge; therefore, systematic planning by school leaders for how these resources were to be used was important. Consistent with previous research that identified the value of time being given to colleagues to meet to discuss pedagogy (Priestley et al., 2011), the resources were predominantly used for on-site PD and time for teachers and leaders to work together in an ongoing way. Teachers were highly appreciative of how school leaders used the resources to support them in

their learning and planning for effective teaching. “Managing the competing demands on time” (Coulson, 2008, p. 223) in school contexts has been previously acknowledged as a challenge, and these demands were also apparent in the present study. Teachers expressed gratitude for the learning opportunities that the time allowed, which seemed to make the changes more manageable. Further to the research of Clausen et al. (2009) who found the conscious scheduling of time for teachers to work collaboratively indicated how much leaders valued this form of work, it seems that the gratitude expressed by teachers in the present study was about more than just the allocation of time. As seen in the following comment, it was the priority leaders placed on the organisation and allocation of their learning time that ‘showed’ teachers what was really important:

The biggest thing that leadership did was planning for and implementing effective teaching and learning. They gave it a priority. They gave money to it. They timetabled so that time was allocated to it. They showed us that this is what they believe in so that filters down to all of us (TI).

Grossman et al. (2001) found, “Time and resources are necessary but insufficient ingredients for building community ... structural arrangements alone cannot teach people how to interact differently” (p. 990). Findings from the present study support this previous research; however, what was different was that school leaders not only provided the time and resources but by modelling how to interact with teachers within the time available they taught people how to use the time effectively. It appears that it was what leaders did with teachers within those structural arrangements that made the difference to teacher practice.

5.2 Sub-question 2 - Did the experience of a professional learning community influence teacher practice and, if so, how?

5.2.1 Theme 1 – Leadership

This theme is about the role of leadership in PLCs and how instructional leadership, which involved the building of trusting relationships, was exercised. This was seen in certain ways. The first is the specific and direct way that leaders, i.e. the principal, AP, REC and TE, were instructional leaders. The second is the importance of not only the principal but also other leaders being instructional leaders, and the third is about how leaders exercised instructional leadership by initially taking responsibility for facilitating the PLCs. While participants did not explicitly use ‘instructional leadership’ as the term to describe the way in which leaders influenced teacher practice, it appears it was the overarching concept that captures what they did to achieve this. Considering that this research suggests that the development of PLCs was an organic process, the

work of leaders may also be described as what Reitzug et al. (2008) call “organic instructional leadership” (p. 702).

5.2.1.1 Leaders were Instructional Leaders in Specific and Direct Ways

Fundamental to the establishment of PLCs and their influence on teacher practice was the way in which leaders worked with teachers as instructional leaders, which called for all leaders to be directly involved in the daily practices of teachers. While this finding is consistent with that of Fullan (2010) who said, “The only route to success is to be more specific about the instructional practices that are most effective” (p. 1), it builds on this premise by describing how the involvement of leaders within and beyond the classroom provided specific modelling for teachers of expected practices such as guided reading and modelled writing. By working in classrooms rather than telling teachers what to do, leaders showed how things are done, which appeared to result in changed practice. An example of this is seen in the following comment:

The PLC did change the teaching practice because teachers started to see that there’s someone coming in that might have some expertise that can help you, or you can ask questions of, and is prepared to stand up and teach your class ... This person is willing to show me, they’re not willing just to tell me what I should be doing. I think the practice did change (PE).

Other specific ways in which leaders exercised instructional leadership included organising and leading planning and PD sessions, engaging in professional dialogue, implementing and leading Instructional Rounds and PLCs, and developing in themselves and others a deeper understanding of how to use data to inform practice. These practices reflect what Bendikson et al. (2012) recommend and describe as “direct” instructional leadership because they “focus on the quality of teacher practice” (p. 4). Similarly, Robinson (2010) defines instructional leadership as, “Sets of leadership practices that involve the planning, evaluation, coordination, and improvement of teaching and learning” (p. 2). The present study builds on these previously identified principles of instructional leadership by suggesting that these ‘sets of leadership practices’ can be operationalised through the particular and direct ways described that leaders engaged with teachers both inside and outside the classroom. An outcome of this form of instructional leadership was that teachers no longer worked in isolation. Leaders enabled this change by ensuring teachers were exposed to the teaching of others. In the past, instructional leadership has been described as, “more a slogan than a well defined set of leadership practices” (Leithwood, et al., 2004, p. 6) and recently it has been claimed that a clear understanding of what instructional leadership is and what it looks like for school leaders is a gap in the literature (Farwell, 2016). The present study addresses this

gap by suggesting instructional leadership can be defined through the abovementioned specific ways in which leaders supported teachers to learn actively in their work by engaging in it with them.

5.2.1.2 All Leaders, including the Principal, were Instructional Leaders in PLCs

While principals were directly involved in changing teacher practice, other leaders also exercised their instructional leadership with teachers. Previous research has found that strong principal instructional leadership is vital for school improvement (Robinson, 2010) as it can influence instruction (Wahlstrom & Seashore Louis, 2008), but this does not suggest it is only the role of the principal. In the present study, principals modelled and led the learning in PLCs, being what Fullan and Quinn (2016) describe as “lead learners” (p. 54). However, consistent with the position of Fullan (2014) who warns against positioning the principal as ‘the’ instructional leader, it is suggested that because the principals did not lead the learning alone a question emerges as to whether it is fitting for them to be considered as the only leader responsible for the instructional leadership in schools. Other researchers have raised this as a matter for concern (Mulford, 2008; Robinson, 2006); however, the present study suggests it warrants increased consideration, which supports Mulford’s (2008) proposition that, “The task of leading a school is too complex and demanding a job for one person” (p. 43). Consistent with Robinson (2006) who noted, “A reality check” (p. 71) is needed and cautions against advocating approaches without considering the existing demands on principals, it is suggested that the shared model of instructional leadership seen in this research that included all leaders is a suitable alternative to the notion of it being confined to the principal. An advantage of sharing instructional leadership was that many leaders not only gained experience in leading the learning but, just as Leithwood et al. (2008) found, they increased their influence as it was widely distributed.

A further benefit of instructional leadership being extended beyond the principal was that it did not rely entirely on their knowledge or leadership. Principal knowledge of content and pedagogy has been found to be important in instructional leadership (Bendikson et al., 2012); however, other research claims that not all have sufficient knowledge to do this effectively, which could put the instructional leadership at risk (McLaughlin & Talbert, 2006). Findings from this research did not suggest that principals were lacking in this regard but as leaders worked together to change teacher practice, and principals were not doing all the leading; therefore, the potential risk identified by McLaughlin and Talbert (2006) was averted. The essential nature of leaders, especially principals in reforms such as SSNP has been previously acknowledged (Leithwood et

al., 2004); however, findings from the present study suggest it is the collective effort of all leaders, including the principal, that appears to influence teacher practice. It is therefore suggested that instructional leadership is not so much about “the primacy of the principal” (Hargreaves & Fink, 2006, p. 101) but is about all leaders. Further to the research of Fullan et al. (2006) who found that other designated leaders could work with the principal to be internal change agents, the present study highlights the importance of many leaders working together to lead change in instructional practice. This is seen in the following comment: “All of our leaders are involved in classroom practice ... not just supporting, leading” (PI).

5.2.1.3 Leaders Initially Facilitated the PLCs

Leaders also exercised instructional leadership through the facilitation of PLCs. In certain contexts, the leadership of PLCs became shared with teachers who gradually took on the role of facilitating them. The notion of PLCs as the responsibility of leaders or confined to set meeting times dissipated and, as seen in the following comment, they became part of the way schools operated:

Now the beauty is you might walk around the school on a Monday afternoon and there will be little pockets of discussion happening all the time. They just instigate them ... I have never seen such a change evolve. To see that this is the same school four years down the track is amazing. Amazing. Our professional learning communities took off. They're fantastic now (TEI).

5.2.1.4 Leaders Developed Trusting Relationships with Teachers in PLCs

What appeared to contribute to the change in how PLCs operated was that leaders developed trusting professional relationships with teachers. A strong commitment to building trust and co-operation in every reform context is considered essential (OECD, 2011), and it was so in the present study. For teachers to feel safe and secure while leaders came into their classrooms to exercise instructional leadership in the ways that they did, trust and positive relationships were vital. A key way in which leaders built these relationships was by adopting a ‘no blame, no shame’ culture whereby they focused on teaching and learning behaviours rather than the individuals or their personalities. However, building these relationships did not occur easily. Teachers initially did not understand the reason for the reform; therefore, they were prone to assuming that it was due to their underperformance, which led to some defensiveness. Timperley (2008) found that “expectations for change can touch raw nerves if teachers take them as reflections on their competence or their professional identity” (p. 16). Findings from the present study resonate with

this previous research, as it seems teachers interpreted the need to change as a reflection on their competence. This is seen in the following quote:

It's not because we weren't effective teachers in the first place and we want to make that clear. When SSNP came in it was like the focus was blame the teachers, blame the teachers... It really hurts teachers who work their ring off to get somewhere with these kids. You know ... we've got the hardest kids in these schools and to be blamed because you're not good enough teachers and that's why they're not performing. Yeah, it's very hurtful (TH).

Park and Datnow (2009) have stressed the importance of “creating an ethos of learning and continuous improvement rather than one of blame” (p. 491). This is what leaders in the present study did but its effects were slow in coming. Similar to what some describe as the, “principle of innovation *resilience*” (Kruse & Seashore Louis, 2008, p. 116) it appears that the way leaders progressed beyond the hurt that teachers were feeling was to work relentlessly with them in a positive way to reassure them that there really was a, ‘no blame, no shame’ culture.

5.2.2 Theme 2 – Teacher Capacity

Within this theme, there were two key ideas about how teacher capacity changed as a result of the experience of a PLC. The first of these is how a focus on three particular characteristics of PLCs appeared to lead to increased teacher capacity, which in turn influenced their practice. These characteristics are the use of data, the deprivatisation of practice and professional dialogue. The second idea is about how teacher attitude and self-efficacy seemed to shift along with their increased capacity.

5.2.2.1 *Interrelated Nature of Three PLC Characteristics*

What was apparent in the present study was that three certain characteristics of PLCs seemed to be connected through a relationship that contributed to increased teacher capacity. The use of data, the deprivatisation of teaching practice and professional dialogue formed the core of what teachers and leaders focused on in PLCs. It became evident that these characteristics emerged as associated and instrumental to building teacher capacity. This finding is consistent with the research of Clausen et al. (2009) who found that characteristics of PLCs do not exist in isolation. However, what is different in the present study, which is similar to the research of Doppelt et al. (2009) where certain characteristics were more powerful than others, not all of the characteristics seemed to be as connected and influential on teacher practice as the use of data, the deprivatisation of teaching practice and professional dialogue. The relationship between these

three characteristics was seen in the connection between the ‘what’ related to the use of data, the cultural and attitudinal dimension of the deprivatisation of practice, and professional dialogue as the expression of the impact of the other two, which apparently built teacher capacity. This is reflected in the following quote:

We look at the data, we look at research, we look at team teaching, we look at building the leader within the teacher and then they become an expert in that area and they share that with others ... That influences the teaching ... It’s not how we are doing things now; it’s why ... That’s the change ... We ask each other. It’s not a blank culture; it’s an enquiry culture now ... Now we see we are a professional learning community (TEE).

This finding supports that of Nehring and Fitzsimons (2011) who found PLCs are more than their definition or characteristics suggest as they are about an adult culture to support student learning. Whether the “intellectually directed culture” (Seashore Louis & Marks, 1998, p. 539) or the changed practices came first in the present study is a question for further consideration but it appears that a learning culture emerged concurrently with the improved capacity of teachers, which was reflected in their practice. Three particular characteristics appeared to work together to influence teacher practice, which will be discussed in turn so their unique contribution can be described.

5.2.2.2 Use of Data – Evidence

The analysis and interpretation of various forms of data in PLCs seemed to be influential in deepening teacher knowledge of their practice in relation to student needs. Due to its objective nature, data may have provided an impetus for change. The importance of data is supported in previous research. As Hord (1997, 2004, 2009) consistently found, if real change is to be brought about its collection, review and interpretation must be central to the work of PLCs. In the present study, what also contributed to the changed teacher practice was the inclusive approach to this work.

How the Use of Data Influenced Teacher Practice in PLCs

Consistent with the research of Brodie (2013), data was instrumental in influencing teacher practice as it allowed teachers to identify the needs of students rather than work with their intuitions. Hord (1997) found it is not just the presence of a PLC that is important but more so what they focus on that influences their outcome. Similarly, in the present study, data was the focus of the work but it alone did not answer the questions; it provided what Earl and Katz (2007) described as the tools for thinking, that is, the what. The work with data was ongoing and other on-

site PD such as co-planning, modelling, and sharing research to build understandings of practice complemented it. This finding is consistent with that of Mandinach and Gummer (2016) who, when considering the capacity of data to transform practice, found that data skills need to be supported by other understandings, particularly of content and PCK. Brodie (2013) also found that unless the work is based on data and connected with other forms of knowledge the status quo is maintained. In this research, it was through the on-site learning experiences in PLCs that focused on how the data could be used to inform practice that these other forms of knowledge were developed. Wayman and Jimerson (2014) stressed the need for data-related PD not be reduced to episodic events. Because the learning for teachers in the present study was ongoing, it is suggested that learning about data can go well beyond 'episodic events' by surrounding it with other on-site learning for teachers that develops their capacity to respond to the findings of the data.

The necessity for teachers to develop the skills to understand and interpret data was considered a priority in this reform and great emphasis was given to this work. According to Mandinach and Jimerson (2016), if data skills are to influence teacher practice they need to translate into action. While the significance of this next step has been acknowledged, other research has found teachers respond to data but there are few instances where this has resulted in transformed instructional practice (Farrell & Marsh, 2016). Findings from the present study stand in contrast to this previous research as teacher interpretations of data were translated into changed practice, probably due to the building of PCK over time that accompanied the work with data. The following comment describes this focus and how, with the guidance of leaders, the data analysis informed the transformed teaching practice:

We've got specific aims. So, it wasn't OK to get together to just talk about reading. No, we needed to get together and look directly at the data. Where are their weaknesses in reading and where do you go next? It was really focused ... She's good at finding strategies that work with the kids. Assessments are good (TI).

Effects of an Inclusive Approach to the Use of Data

A key contributor to the positive effect of the use of data was the inclusion of all classroom teachers, specialists and, in some cases, learning support officers in the data analysis and discussion about implications for teaching. This type of shared interpretation and response to data has been found to be a central element of effective data use as it enables teachers to provide a range of perspectives (Wayman & Jimerson, 2014) and can support others to further develop their skills (Means et al., 2010). Similar to these previous findings and expressed in the following comment,

the inclusive approach to using data allowed for multiple perspectives to be presented, which in turn appeared to influence teaching practice: “Having a variety of people in different roles and with different expertise contributing to what’s going to be happening in the classroom ... has meant much more for effective teaching and learning” (APF).

With the support of leaders in PLCs, teachers shifted from an insular whole class approach to differentiating their teaching according to student need. Assessment, programming and planning practices changed as the teaching became student-centred through flexible groupings and team teaching that utilised the skills of different teachers. Contrary to the research of Van Gasse et al. (2016) who found limited teacher collaboration in using data and that collaboration does not occur routinely, teachers used data on a regular basis and worked together with leaders to determine the most appropriate way to respond to it. By doing this, they learnt from each other, which may have contributed to the shared sense of purpose and collective responsibility for student learning that was generated. This is seen in the comment below:

What I saw was the engagement of teachers within that community. They were talking about children within their class, not only learning about their class but about each other’s classes as well. They came with a shared purpose. They came with an understanding. They came to learn. They bounced off each other ... There was a collective responsibility for the students’ learning (TEG).

While collective responsibility for student learning is the goal of PLCs (Nehring & Fitzsimons, 2011), this appeared to be built through the inclusive data practices whereby teachers and leaders supported and learned from each other. However, the down side to this, which is consistent with the research of Nielsen et al. (2008) who found teachers were often given more to do than they could achieve in a day, was that the increased use of data was considered onerous for teachers. It was only after a significant period of time that the effects of doing this work were seen as positive. Due to the amount of work required and the additional time demands, it first led to annoyance and frustration from teachers. Many of them ultimately valued what was learned; however, they found the extra work and additional time excessive. The following quote reflects these feelings but also raises the question of, to what extent the disequilibrium created through the increased data analysis contributed to the eventual changes in teacher practice:

They were expecting us to do a lot of analysis. You can do your testing at school. You have to go home and analyse it all ... You can’t leave it for the next day because your mind is in another direction so you have to go every afternoon and analyse data (TE).

Previous research indicates that educators struggle to use data to inform their practice and this may be because it is difficult (Anderson et al., 2010). As teachers in the present study also struggled, the findings support this previous research but add a deeper level of thinking about the difficulties surrounding the use of data and how leaders working with teachers in PLCs can be fundamental to building teacher capacity to overcome them. Wells and Feun (2008) recognised frustration and resistance from teachers when they were required to analyse student data as teams in order to improve it, which was partly due to the demands on their time. This research adds to this finding by suggesting it was opposed more than partly, but predominantly due to the time constraints of teachers. The amount and type of data needed to inform practice, and how the time necessary to do this work can be best managed within schools, may warrant further investigation.

5.2.2.3 Deprivatisation of Teaching Practice

The deprivatisation of teaching practice was an important feature of the PLCs that seemed to result in changed teacher practice and an open approach to learning. This finding stands in contrast to previous research that reports Australian teachers have a latent profile of participation in the deprivatisation of their teaching practice (Vieluf et al., 2012); however, it was a very difficult process for teachers. Much anxiety resulted from the Instructional Rounds experience but this served to create a level of disequilibrium, which may have contributed to the eventual changes that occurred.

What Occurred for Teachers in the Deprivatisation of their Practice

The deprivatisation of teaching practice was a stressful and confronting experience for teachers. This was to be expected as Leithwood et al. (2010) found that “teachers participating in the deprivatisation process feel more vulnerable to other adults ... than ever before” (p. 53). This may be because it is a cultural shift that challenges the autonomy norms of the past and breaks the rule of “professional privacy” (McLaughlin & Talbert, 2001, p. 91). There were some things that were really difficult for teachers in the present study and they expressed a dilemma about them. They felt threatened, anxious, fearful, apprehensive and did not understand why they were deprivatising their practice. Resistance and negativity marked this anxiety.

Instructional Rounds and its Effects

The strategy employed by the system to deprivatise practice was ‘Instructional Rounds’. Teachers and leaders visited classrooms to gather data then met to discuss it. Teachers were genuinely discomforted by this experience, which is unsurprising as the literature that informed the

process is predicated on the belief that, “Discomfort is okay” (City et al., 2011, p. 96). The authors suggest that to reduce the fear, acknowledging it as challenging and unfamiliar is important but by working together they will get better at it (City et al., 2011). They also add, “Then it’s okay to let people squirm a bit because there is often good learning that comes out of discomfort” (p. 97). Learning did appear to result from the experience of Instructional Rounds; however, questions emerge regarding the cost of that ‘squirming’ for teachers as part of the learning process. TEs were provided with training from system leaders in Instructional Rounds and it was then reliant on them, with other school leaders, to implement it in each school. In light of what teachers in the present study experienced, further consideration should be given to how Instructional Rounds are introduced so the deprivatisation of practice can occur in a less confronting way. As this process resulted in fear and adversity, this may be a more significant problem than previously identified. Whether there was a gap between the training of TEs and how it was translated into practice remains a question.

The deprivatisation of teaching practice is considered as “one of the most powerful conditions for realising initial improvement” (Leithwood et al., 2010, p. 53) and to reach “maturity” as a PLC, teachers need to open their classrooms to others (Aubusson et al., 2007, p. 146). However, there is limited understanding about what occurs for teachers in this process. The present study addresses this gap as it went beneath a description of deprivatisation of practice as a characteristic of PLCs that has long been the expected norm (Newmann & Associates, 1996; Seashore Louis & Kruse, 1995), to look at it in practice and found that there are matters to be considered. The challenge of the deprivatisation of practice caused disequilibrium for teachers as it called for cultural transformation. This finding suggests that to prepare, support and encourage teachers to engage in this process, and hopefully avoid the stress it generated, a transition process may be required.

Why Instructional Rounds may have Led to Anxiety for Teachers

For a minority of teachers, reluctance to participate in Instructional Rounds reduced to a certain extent after involvement in them. This raises the question of whether the fear of this process may have emanated from the thought of colleagues watching them teach, suggesting that the degree to which anxiety is experienced in the deprivatisation of practice may be related to the extent to which one’s own teaching is exposed. This proposition resonates with earlier research where “Hybrid Teacher Leaders” who had an equivalent role to the TEs in the present study were keen to visit other teachers but not be observed. Teachers felt the same; they were happy to observe

but not be observed (Margolis & Doring, 2012, p. 877). While McLaughlin and Talbert, (2001) found that teachers are more open to the sharing of classroom practice once they have experienced it, the findings from the present study differ. Many teachers indicated that they were not keen to be observed even after an experience of Instructional Rounds, which may be due to the amount of stress it caused. Principals consistently outlined the benefits of teachers learning in this way but as teachers were not as positive, this finding reflects previous research that indicates principals generally perceive what is happening in their school more positively than teachers (Desimone, 2009). In another collaborative process designed to deprivatise practice, 'Quality Teacher Rounds' (Gore & Bowe, 2015), everyone has a turn teaching a lesson that is observed by others; however, in the present study, the data indicated that only one principal engaged fully in Instructional Rounds by having their teaching observed. All TEs and some APs took on the teaching role but while principals expected teachers to be observed, few of them did the same. This finding is interesting considering that principals were directly involved in classrooms with teachers in other ways. Previous research has found that teachers feel intimidated about the deprivatisation of their practice, some to the extent that it was postponed (Aubusson et al., 2007). Bandura (1986) explains this reluctance to participate is because "behind expected fears and calamities, and the unwillingness to try coping tasks, lie judgments of personal inefficacy to exercise control over risky situations. Fearful expectations and avoidance behavior are thus largely coeffects of perceived coping inefficacy" (p. 366). As only some leaders participated in Instructional Rounds at the level of being observed and teachers were clearly anxious, it seems both leaders and teachers experienced 'coping inefficacy' with Instructional Rounds; therefore, the 'fearful expectations' that Bandura (1986) identified were clearly apparent.

A key purpose of Instructional Rounds is to gather data based on classroom practice to evoke conversation, questions and subsequent action. Through this process, and the analysis and interpretation of other forms of data, teachers deepened their understandings about their practice. Evidence-informed conversations, generally described in the present study as professional dialogue, were generated.

5.2.2.4 Professional Dialogue

The expression and deepening of teacher learning was facilitated through professional dialogue. This appeared to change over time to reflect the learning that had occurred and centred on the different areas of PLC focus. Deeper forms of interaction based on data and effective pedagogy became evident and informal conversations shifted to be about student learning. This

research highlights the importance of high depth interactions about data in PLCs as over the four years of SSNP, conversations progressed from being off-task to those that were honest, forthright and sufficiently informed to challenge the status quo.

Professional Dialogue Shifted Over Time

During the early stages of SSNP, leaders had difficulty keeping the conversations focused, but as PLCs became more widely accepted and there was greater involvement in them, the language used to describe what was happening altered. Teachers gradually developed a meta-language to discuss their practice and the language changed to reflect their shifts in understanding. Gore and Bowe (2015) described this specialised language as the “discursive effects” (p. 81), which are critical to the quality of the professional dialogue generated as they enable teachers to speak to colleagues about their work with clarity and direction. In this previous research, the common consistent language and concepts came from the Quality Teaching Framework (NSW DET, 2003); however, in the present study the language differed somewhat in each setting. Because PLCs had different areas of focus, the meta-language that was developed to discuss the learning varied. Horn and Little (2010) found it is the particular kind of talk that matters; in the present study, it was conversations about learning according to the focus of the PLCs that mattered as they assisted teachers to build common understandings. This is seen in the quote below:

It was having that conversation so everyone was speaking the common language, having that common understanding. Also, it was talking about things that didn't work. Therefore, it was not just my problem. It was shared amongst the staff. It was shared amongst the leadership team ... We needed to have that common language so we could have useful and purposeful conversations (TF).

Contrary to the findings of Wells and Feun (2008) who found the largest area of growth in PLCs was collaboration but the dialogue remained superficial, particularly in relation to analysing data to improve learning, deeper forms of interaction about how students learn and what the data was telling them evolved. Teachers and leaders engaged in what Timperley and Earl (2009) described as “a highly interpretative process” (p. 123) whereby they discussed what the data was telling them and its implications for their teaching practice. Informal conversations also changed to be about student learning, which was important as teachers need to be able to discuss their everyday experiences of teaching and learning as this can assist them to deepen their own understandings (Ambler, 2016). As described below, differences in the type of professional dialogue became apparent and conversations with colleagues about learning not heard before were evident:

Our conversations here in the staffroom now have changed further this year; they will be in there talking about students and their learning. I've heard it from staff members that have been here for a long time that twelve months ago they would have been talking about the football, or this or that (PH).

Professional Dialogue was Honest and Open

As deeper, more meaningful and challenging dialogue emerged, teachers felt it was important to discuss and share responsibility for what did not work as well as what did. Consistent with the research of Dooner et al. (2008) who found open and forthright conversations are “essential in realigning individual behaviour to the group’s goals” (p. 572), the honesty and passion ultimately demonstrated in professional dialogue allowed teachers to question assumptions and practices as well as keep the work focused. While group decisions have been found to take longer than unilateral ones (Bezzina, 2010), teachers progressed to being able to have open discussions in groups, manage the interpersonal tensions involved, and display the courage and conviction to challenge leaders as they navigated what Grossman et al. (2001) described as the “fault lines” of difference (p. 989). Consistent with the research of Edwards-Groves & Hardy (2013), professional dialogue that challenged the practices of colleagues emerged, which teachers attributed to their own learning. As expressed in the following comment, candid and robust conversations that tested the status quo became apparent: “We all sit down and we argue ... No. I don’t think they should be in that group. We have good old professional dialogue on it” (API). What seemed to enable this honest dialogue were collaboration, trust and a persistent approach to using data as the basis for conversations about learning. As time passed, teacher capacity increased, which may have given them more confidence to challenge what was happening. Katz and Earl (2010) found that collaboration was important in building teacher capacity; however, if it was limited to teachers routinely supporting each other in their work and not challenging the status quo, it might not be as influential in changing their thoughts and actions as other things. If the findings from the present study were confined to what appeared to be happening initially, they would concur with those of Katz and Earl (2010); however, as teacher understandings and commitment changed over time the status quo was challenged. This resulted in a transformed learning culture that was reflected in an increased willingness of teachers to engage constructively in PLCs.

Importance of the Type of Professional Dialogue

Professional dialogue has frequently been named as a characteristic of PLCs (Lieberman & Wood, 2002; Newmann & Associates, 1996; Seashore Louis & Kruse, 1995). Seashore Louis and

Kruse (1995) stressed the need for these conversations to be focused on students, teachers and learning, including the identification of related issues and problems. This research adds to this existing knowledge about the importance of an intentional emphasis on the type of reflective dialogue that occurs in PLCs. In a review of effective PLC elements by Scott et al. (2011), engaging in reflective dialogue was named in all four studies (Bolam et al., 2005; Coburn & Russell, 2008; Darling-Hammond & Richardson, 2009; Johnson, 2009); however, engaging in high depth interactions was evident in only one (Coburn & Russell, 2008). Previous studies have identified the importance of reflective dialogue; however, building on the findings of Coburn and Russell (2008), the present research suggests it is not just the reflection or the dialogue that is important but what it is about, and how much thinking and discussion it provokes. The role of data in transitioning professional dialogue from polite congenial conversations that remained superficially focused (Nelson et al., 2010) to those that probed into teaching practice was seen as a catalyst to the shifts in professional dialogue. Shulman (2000) found that when teachers engage in dialogue with students they begin to “lose control of the discourse” (p. 133), complexity rises and unpredictability increases, which enables students to wrestle with the new learning. Similarly, in the present study, as teachers engaged in dialogue with each other they appeared to do what Shulman (2000) describes as making the internal learning external to render it as “*community property*” (p. 133). Because the learning of teachers in the present study became shared through the ‘unpredictability’ of the professional dialogue that occurred, it was worked on together. A change in the type of professional dialogue in PLCs, which Little (2004) found is essential for real change, may require greater emphasis if substantial growth in teacher learning is to occur.

As a focus on student needs informs teacher needs (Brodie, 2013), an outcome of this research is to suggest that, when working together, the role of data, deprivatisation of practice and professional dialogue are essential to building teacher capacity and collective responsibility for student learning.

5.2.2.5 Attitude and Efficacy

For various reasons, teacher attitudes were initially negative but these and their self-efficacy appeared to shift along with their increased capacity. Key reasons given for this change were the ongoing learning teachers experienced in PLCs, the ownership they had of the shared vision, and the positive and supportive school climate.

Teacher Attitudes Began as Negative

Teacher attitudes appeared to be quite negative at the beginning of SSNP, which is to be expected as it has been found that, “Fundamental changes to the status quo can raise uncertainties that can trigger resistance from stakeholders” (OECD, 2011, p. 20). There was suspicion and resistance, but this is unsurprising as these reactions can be the effect of requests that do not make initial sense (Wells & Feun, 2013). There were reasons for the negative attitude of teachers, many of which have already been discussed. Teachers have previously been found to feel vulnerable due to a range of causes (Dooner et al., 2008) and in the present study, it seems that some of the causes were: they believed they were being blamed for the poor performance of their students, they were confused, they lacked an understanding of PLCs, they resented the additional work, and they saw the need to work with others as a reflection on their own capacity. Bandura (1986) found, “Perceived self-efficacy leads people to approach intimidating situations anxiously ... Fearful expectations are not sourceless” (pp. 364–365). Instructional Rounds appeared to be one of the sources that led to this ‘perceived self-efficacy’. As described in the comment below, teachers also believed they were being watched: “...initially there were feelings of Big Brother” (TI). It has been found that “the process of educational reform depends on teachers’ efficacy and its link with a school-wide capacity for promoting students’ learning” (Lee et al., 2011, p. 829); it was therefore essential that the anxiety and ‘perceived self-efficacy’ (Bandura, 1986) of teachers be addressed so the reform could progress.

Teacher Attitudes and Self-efficacy Shifted along with their Capacity

Teacher attitudes and self-efficacy appeared to slowly improve as they continued to learn. This shift seemed to be a consequence of their increased confidence and sense of accomplishment, which also served as an incentive for ongoing learning. Leithwood (2007) proposed that teachers feel positive about their work when they are involved in quality PD. Similarly, in the present study, as teachers engaged in learning that influenced their practice, they became more positive. Consistent with the finding of Bruce et al. (2010) where improvements in teacher efficacy were reciprocal with changed actions, as teacher capacity and a sense of shared purpose grew, they demonstrated greater confidence in their effectiveness as teachers. Teachers’ sense of self-efficacy has been identified as “the most important motivational factor for explaining teacher learning and teaching practices” (Thoonen et al., 2011, p. 517). In the present study, their increased self-efficacy became evident as a motivational factor when they started to recognise changes in their knowledge and practice. Consistent with the research of Bruce et al. (2010), teacher efficacy seems to have acted as a mediator to positively impact on their practice, which appeared to boost their persistence

to learn and develop further, suggesting there may be a reciprocal relationship between self-efficacy and teacher practice. It seems that the learning teachers experienced in PLCs contributed to their improved self-efficacy, which was possibly both an outcome and a mediator of the learning. Bandura (1997) found the main sources of teacher efficacy are mastery and vicarious experiences, the physiological and emotional state of teachers regarding their confidence and feelings of success, and the social and verbal persuasion they receive from positive feedback. The learning teachers experienced in PLCs enabled opportunities for mastery and vicarious teaching experiences, and constructive feedback from leaders and colleagues, which may have contributed to their increased self-efficacy. Other possible reasons for this growth were the ownership teachers had of the shared vision and the positive and supportive school climate. These will now be discussed.

Reasons for Changed Teacher Attitude and Self-efficacy: Learning in a PLC

Teacher engagement in PLCs and the PD within them appeared to influence teacher practice. This finding supports the research of Thoonen et al. (2011) who found the more teachers engage in professional learning to improve their practice, the better the quality of instruction; however, a point of difference in the present study is that teacher attitude and their self-efficacy also shifted. As teachers participated in learning experiences in PLCs, particularly through the use of data, the deprivatisation of teaching practice and ongoing professional dialogue, the connection between teacher self-efficacy, autonomy and engagement in PD identified by Liu et al. (2016) became more apparent. This finding supports other research that indicates these forms of learning in PLCs can influence teacher efficacy. Kennedy and Smith (2013) suggest that PLC behaviours, including the use of data that centres on teacher learning and invites reflection, can result in more efficacious teachers. Bruce et al. (2010) found the confidence that resulted from teachers observing their peers was a main source of teacher efficacy. This same confidence was seen in the present study as teachers observed their peers and subsequently engaged in honest professional dialogue about their experience. The TALIS (Vieluf et al., 2012) reported that teachers involved in the deprivatisation of their practice regularly have high self-efficacy but “it remains open in which direction this effect operates” (p. 119). Findings from the present study support this position and build on it by suggesting it was the changed practices of teachers, enabled by the on-site PD within PLCs, which included mastery experiences and the deprivatisation of practice, a vicarious learning experience (Bandura, 1997), that led to the growth in teacher self-efficacy. Other key features of what occurred in PLCs such as co-planning, co-teaching, opportunities to receive feedback and share frankly about their learning were also practices in which teachers engaged that, as Bruce et

al. (2010) found, were key contributors to their feelings of success. As seen in the following quote, these successful experiences that Bandura (1997) identified as being the main source of teacher efficacy led to teachers seeing themselves as independent competent leaders, which was very different from where they began four years earlier: “Whether it’s our first year out teacher or our experienced teacher, they see themselves as leaders now. They see themselves as competent people” (TEE).

5.2.2.6 Ownership of the Shared Vision

Teachers were part of building the shared vision of collective responsibility for student learning and, as Thoonen et al. (2011) found, internalising school goals into personal goals appeared to influence their motivation and commitment. Contrary to the research of Lee et al. (2011) where shared and supportive leadership were “not identified as a predictor of teachers commitment to students” (p. 820), it was through shared and supportive leadership that this vision of collective commitment to student learning was built. As seen in the following comment, increased teacher motivation to work toward a shared purpose was seen in their energy levels and changed attitude to learning. Teachers admitted that they ‘hated’ leaders at the beginning. This view changed over time, which exemplifies the extent of their growth in attitude:

Even the teachers; the energy that is there now. There’s this joke. They say, ‘I hated you at the beginning but I like you now.’ Our room out the back, they used to call it the torture chamber because that’s where we used to go for PD (TEE).

5.2.2.7 Positive and Supportive School Climate

A positive school climate within and throughout PLCs seemed to emanate from the support of school leaders, which appeared to influence teacher practice, their attitude and self-efficacy. The role of leaders as key agents in building this positive learning culture has been previously acknowledged (Anderson & Cawsey, 2008). Consistent with the findings of Lee et al. (2011), where teachers in a PLC with a trusting school culture and strong collegial relationships felt “they were not professionally isolated but interdependent in community” (p. 827), teachers felt well supported. They experienced a climate of trust, which could well have contributed to their willingness to engage in further learning. This finding also resonates with that of Liu et al. (2016) who found “when teachers perceive a climate of trust in the school they may feel it is safer and more productive to exercise initiative (i.e. agency) with respect to their professional learning” (p. 87). This supportive climate is described in the following comment: “The teachers knew they had

the support ... if you put the time into it and show them that you value it, then they appreciate it” (TEF).

5.2.3 Theme 3 – Structure and Organisation

Within this theme, the key focus of discussion is the organic development of various PLC structures, which was characterised in certain ways. It was a system expectation that leaders implement PLCs but the data did not reveal any process by which they were expected to do this. It is therefore assumed that leaders had the freedom to allow it to be an organic one. A predetermined structure was not imposed, which appeared to let PLCs be contextually responsive. Their growth was not linear, and no evaluation or monitoring processes occurred. Temporal issues associated with this organic development emerged and difficulties were encountered, but were eventually overcome.

5.2.3.1 Organic Development of PLCs

Without models prescribing how PLCs were to be implemented in schools, it seems they developed organically. Similar to the research of Hipp et al. (2008) that identified the uniqueness of each school and their cultures developed organically, Dinham (2008) also recommended PLCs “need to be encouraged, nourished and sustained in the manner of an organic system” (p. 114). It appears both of these things happened in the present study. Unlike some research that suggests a PLC is a structure characterised by certain attributes that, “Serve to explicate the identity of effective PLCs” (Hord, 2004, p. 38), PLCs were very different across the sites. This finding stands in contrast to that of Kruse and Seashore Louis (2008) who support top-down initiatives to create PLCs and challenge “a deep-seated belief that PLCs emerge organically in schools with effective principal and teacher leadership” (p. 116). In the present study, the expectation that PLCs would be established was a top-down initiative and, similar to the research of Clausen et al. (2009) where they began with a top-down mindset, the way in which school leaders went about creating them was not.

5.2.3.2 Structure of PLCs was Contextually Driven

In the absence of an imposed structure, leaders could let their PLCs be contextually specific. Consistent with the research of Brandmo (2016) who found that “development activities must be grounded in the specific strength and challenges of the particular school” (p. 103), it is suggested that the guiding principle that drove the creation of PLCs was the needs of the school. There were various examples of this. Within the five research schools, PLCs emerged differently

according to need and occurred without following a rigid process. Some were organised by stage for particular learning purposes or, due to the size of the school, others included a whole school approach. Harris and Jones (2010) believe it is the role of leaders to “actively build a context for PLCs to work” (p. 179) and that is what appeared to happen in the present study. Leaders allowed PLCs to emerge and they morphed over time into what worked best in each context.

Understandings of PLCs appeared to evolve as leaders built on existing structures such as committees. As greater clarity about their form and function emerged, PLCs became more widely embraced. Existing structures changed, as did the focus and language used to describe them. This finding presents a very different approach to the way in which some researchers recommend PLCs be developed. DuFour et al. (2009) claim that effective PLCs require certain underlying structures for their foundation and group norms are essential to building collective commitment as they help to, “determine whether it functions as a high performing team or becomes simply a loose collection of people” (DuFour & DuFour, 2012, p. 27). Such fixed structures and processes were not apparent in this research, which suggests they may not be required for the development of PLCs. Furthermore, Hord and Tobia (2012) have produced resources that are designed to be followed when implementing PLCs and serve as “a streamlined shirt-pocket reminder card of the steps involved in their work” (p. 42). The leaders in the present study had no such guidelines to tell them what to do next; however, as described in the comment below, their efforts resulted in PLCs that contributed to changed teacher practice:

I see huge, positive impact and I can see improvement in all areas. By having professional learning communities as a teacher yourself, you’re continually challenging your own professional thoughts in an environment where it’s got to be implemented (TI).

5.2.3.3 Growth of PLCs was not Linear

Similar to the finding of Bolam et al. (2005) where schools progressed or regressed in certain areas throughout their growth as a PLC, the present study found they developed gradually. However, unlike the previously identified phases (Grossman et al., 2001; Edwards, 2012) and stages (McLaughlin & Talbert, 2006) of development, this process was not linear. Certain characteristics were more apparent than others at various times. For example, collecting and analysing data, and acting on that analysis, as well as having a shared responsibility for student learning, were features of all schools by the end of the four years. McLaughlin and Talbert (2006) describe these particular characteristics as some of those associated with the “advanced stage” of a PLC (pp. 34–35); however, other characteristics that are more reflective of what is portrayed as

being at the “intermediate level” (pp. 32–33) were also apparent. The non-linear emergence of PLCs in the present study bears out the research of Hipp et al. (2008) who found they develop over time but are so complex it is difficult to define the discrete steps involved. It also supports the research of Bolam et al. (2005) who suggested the “differential levels of impact related to the PLC’s stage of development was inconclusive” (p. 147). PLCs in the present study did not all look the same or have the same features, which raises a question about whether stages of growth or the presence of all of their characteristics matters. Consistent with the TALIS (Vieluf et al., 2012) data that showed despite the theory that PLCs only exist when all characteristics are realised and some of the practices are used infrequently (p. 114), it is suggested that perhaps the presence of all of the characteristics of PLCs is not as critical to their effective functioning as some might claim.

5.2.3.4 Evaluation and Monitoring of PLCs

No reference was made in the data to the evaluation of PLCs or any formal monitoring of their processes. Because the PLCs were organic, it could not be foreseen how they were going to emerge; therefore, to put an evaluation process in place would have been difficult. While previous research has not tested the necessity of monitoring procedures, the absence of such has led to advocacy for them. Bolam et al. (2005) found they were not in place, which led to the following conclusion:

Staff in schools wishing to promote and sustain an effective PLC should monitor and evaluate the development of their characteristics and implementation of their practices over time, and take appropriate follow-up action to maximise their effectiveness (p. 151).

Despite this recommendation, leaders in this research developed PLCs without overt monitoring or evaluation of their characteristics. This may have occurred because ownership of the process was generated when it was not constrained and imposing a particular structure and process could have inhibited progress. PLCs developed in distinct ways and were generated under the guidance of skilled on-site facilitators with autonomy to construct and foster their development according to need without monitoring or evaluation of their characteristics.

5.2.3.5 Difficulties Encountered in the Organic Development of PLCs

There were temporal issues related to the organic development of PLCs. It was a lengthy process and the absence of a shared knowledge, language and structure at the outset may have contributed to the amount of time this took. The importance of extended time for the development of PLCs has been previously acknowledged because they are considered “a long term proposition” (Kruse & Seashore Louis, 2008, p. 115); therefore, this finding is unsurprising. The duration of

time experienced in the development of PLCs may well reflect what is expected regardless of whether shared understandings and structures existed at the beginning or not. Little and Horn (2008) also found that because time and effort are essential to the process of building a PLC, it cannot be rushed. Leaders in the present study allowed for that time and effort.

When leaders began to introduce PLCs they quickly became aware that neither they nor their teachers understood what was required of them. A corollary to this early lack of understanding was limited teacher commitment. Consistent with the research of Wells and Feun (2012) where the declaration that schools were to become PLCs led to confusion and resentment, there was confusion amongst leaders and teachers. This may have come from the lack of structure, but it had the positive function of creating disequilibrium that was resolved in a collegial way and ultimately led to the emergence of different structures. While this finding is consistent with what Aubusson et al. (2007) described as “double edged swords” (p. 145) because professional growth can emerge from overcoming difficulties, it also gives a deeper insight into perhaps how or why a positive conclusion was reached.

Because the process of developing PLCs appeared to be organic, their ultimate quality seemed to be dependent on the disequilibrium created. The confusion could not be ignored as teachers and leaders needed time to resolve it and did so as they created their own meaning. As seen in the following comment, leaders needed to work with teachers to develop shared understandings of PLCs through PD:

Because we now have a better understanding of what a professional learning community is, we've done a lot of PD around that and what it actually is, we've recognised that these are [now] actually a professional learning community (TE).

As well as allowing time, what appears to have contributed to this organic process of PLC development was that sustained on-site differentiated support was provided, which according to Harris and Jones (2010) “is one of the key resources necessary for PLCs to work” (p. 179). Leaders overcame difficulties by doing such things as breaking the challenges into manageable strategies, working initially with just one stage of teachers, and setting small objectives by keeping the work focused through the use of SMART goals. What eventuated were PLCs that did not necessarily mirror all of the characteristics suggested in previous research, or adhere to any set structure, but what occurred within them appeared to influence teacher practice.

5.3 Sub-question 3 – What was the particular contribution of the TE role to teacher practice?

5.3.1 Theme 1 – Structure and Organisation

Within this theme, two related ideas emerged regarding how the structure and organisation of the TE role contributed to changed teacher practice. The first is how the role was structured around its focus and the second is whether sustainability was possible without the TEs.

5.3.1.1 *Structure of the TE Role*

There has been an increasing trend over the last decade for the provision of on-site PD for teachers through the creation of job-embedded leadership roles (Stosich, 2016). Generally, these roles exist for effective teachers to work directly with peers within the school context to contribute to the improvement of the PCK of teachers. Some of the various titles given to them are ‘coach’ (Totterdell et al., 2010), ‘literacy coach’ (Vanderburg & Stephens, 2010), ‘teacher leader’ (Harrison Berg et al., 2011; Ross et al., 2011; Yost et al., 2009) and ‘mentor teacher’ (Domitrovich et al., 2009; Cheng & Yeung, 2010). The title given to such a role in the present study was TE. The purpose of the TE role was to provide leadership for the PD, support and advice to teachers to promote the mission of Catholic education and facilitate the implementation initiatives relating to teaching and learning emerging from the NPAs (See Position Description of TE, 2009. Appendix M). Similar to the finding of Cosner (2014), where leaders were the “buffer and filter between the school and the larger district context” (p. 712), the TE role did much of this as they maintained the focus on the improvement of teacher practice. While the implementation of such a role has been previously acknowledged as a fundamental change (Mangin, 2009), the structure of the TE role was considered effective as it influenced teacher practice. Suggested reasons for this were that it was dedicated solely to curriculum, it called for direct classroom involvement and it allowed for flexibility to respond to different learning needs. Balancing the TE role within existing leadership roles, particularly that of the AP, was described as difficult. This was primarily because curriculum had previously been the domain of APs.

The changes in teacher practice were attributed to the work of all leaders, but particularly the TEs. This is highlighted in the following quote: “I can’t imagine how the programme would work without that because she’s provided direction. No, we have provided direction but she’s been the backbone of all this, of driving the programme” (APF). While roles such as TEs call for excellent teaching practice, they also require knowledge and skills beyond those associated with teaching. It was suggested that these additional skills were evident in the TEs and contributed positively to their work. Some of these included their quality and capacity to lead, their dedication

to assisting and supporting teachers, and their commitment to the role. Contrary to the view of Harrison Berg et al. (2011) who suggested that “effective teachers are not necessarily effective in formal teacher leadership roles” (p. 33), and thus require formal training to strengthen their knowledge and skills before undertaking the position, apart from the regular system PD the TEs did not have any formal training to prepare them. Nevertheless, they appeared to be effective in the role.

5.3.1.2 Focus of the TE Role

Teachers and other leaders strongly endorsed the structure and focus of the TE role and how well they fulfilled it. A key reason for its success was the singular emphasis on teaching and learning. Having an expert on staff dedicated entirely to pedagogy was considered an asset as it allowed their energy to go in one direction and not be spread too thinly so that the focus was lost. Contrary to the research of Campbell and Malkus (2011) where ‘coaches’ had limited time to coach teachers because their role also included assessment, teaching, managing materials and attending meetings, the role of TEs was all about supporting teachers in their learning. While they performed some of the tasks previously named as obstacles to having sufficient time to work with teachers, TEs did so along with teachers and other leaders. The benefit of having another leader on staff to organise and resource teaching was named. While other members of the leadership teams had multi-faceted roles, the TE was the person that kept the focus on learning and practice. As described in the following comment, the TE role provided the drive to change teacher practice:

Things are just so much more professional, more focused, more directed ... The TE just took ownership of pedagogy and practice. The last four years have been so guided and so organised whereas before ... there wasn't that drive on how we used our skills and strategies to most benefit the students. It was almost like before the TE role here, it was we had the curriculum, we had to teach, and that was it (TH).

5.3.1.3 Balancing the TE Role within Existing Leadership Roles

While the TE role was considered highly successful, a problem was revealed with regard to managing the new position within existing leadership roles, particularly in the early stages of SSNP. As previous research has identified, without effort new educational initiatives cannot be inserted into existing contexts (Mangin, 2009); therefore, it was unsurprising that the new role led to some tension. This tension was between APs, who had traditionally looked after curriculum as well as a multitude of other things, and TEs whose role was entirely about teaching and learning. This was the first time these leaders had experienced a role dedicated specifically to this purpose so restructuring the leadership team with an additional member was complex. The situation had to be

managed sensitively and it appears that APs and TEs were the most affected. APs felt unsure of their role in relation to that of TEs while TEs realised there was tension with some APs and did not initially feel part of the leadership team. Over time, this obstacle was overcome; however, it was suggested that if ever the system was to introduce TEs again, the way in which that person transitions into the role needs to be carefully considered. While previous research describes roles such as TEs, it does not appear to refer to the need for a transition process onto the leadership team. The following comment highlights this need: “If we were ever to go down this track again then I think what would certainly be a big influence, a big factor that we would have to look at is how that person comes into the role ... how they manage the role” (PF).

5.3.1.4 Sustainability without the Time and Resources that Accompanied a TE Role

The TE role allowed for dedicated time to influence teacher practice that was necessary to effect change. Yendol-Hoppey et al. (2010) claim changing practice requires time, which may well be because, as Jaquith et al. (2010) suggest, time is needed for teachers to integrate theory with practice. Optimising time and resources have been found to be vital structural preconditions (Cranston, 2009) and key operational processes (Bolam et al., 2005) that support and sustain the work of PLCs. In the present study, the time and resources allocated for teachers to work with the TE and other leaders were greatly appreciated. Genuine disappointment that SSNP was nearing its end was apparent and the loss of the TE was seen as critical. Previous research has found that in schools that sustained reforms, key stakeholders demonstrated commitment to them, which was evident in their culture and structure (Datnow, 2005). In the present study, by the end of the four years there was clear commitment to the reform that became particularly evident when sustainability was discussed. The learning that had occurred was deeply valued and there was a strong desire for it to continue. Some teachers felt that the work of the TE was incomplete and without a role dedicated to developing teachers they may think their learning is over. Teachers were particularly unsure about why SSNP was concluding and raised concerns about the future. This is seen in the following comment: “It’s going to leave a big void ... who’s going to fill that gap? Who’s going to keep maintaining programs that we’ve started? I guess these are all the questions that we’re asking” (TF). A range of questions emerged about the sustainability of the work of the TE. It seems that teachers began SSNP with little information about what was happening, which was also apparent at its conclusion.

Leaders and teachers were concerned about **how** SSNP would continue without a TE. A particularly interesting finding is that despite the negativity and opposition from teachers in the

early stages neither they nor their leaders raised any questions regarding **why** it should continue, suggesting that they now realised they had learned from the experience. Much sentiment was expressed about losing the TEs. An example of this is seen below:

That's the thing that worries me. They set up a fabulous programme and then pull these resources when it's right at the climax of working. I just find it really quite confronting ... we all still want to grow, we all still want to learn and then it's sort of like pull the plug and okay, good luck now (TH).

Hargreaves (2005) described one of the difficulties of educational change is poor resourcing or it being withdrawn after “the first flush of innovation” (p. 1). SSNP was not poorly resourced and it extended well beyond the initial changes; however, concerns for its sustainability without the resources, human and financial, were expressed. Considering previous research has found opportunities for collaborative learning diminished after the funded initiative ended (Smith et al., 2009), this fear was understandable.

5.3.1.5 Why the Reforms may be Sustainable

Despite concerns about the sustainability of the reforms, leaders and teachers suggested a number of reasons as to why they would continue. Consistent with Fullan's (2010) suggestion that by unleashing “professional power” conditions for sustainability become more established (p. 40), leaders in the present study devolved power and responsibility to teachers. Because there was a degree of optimism about the future of the changed practices, this unleashing of power may have allowed the seeds of sustainability to be planted. Underpinning the suggested reasons for why the reforms would be sustained was the value of the learning that had occurred. Consistent with the research of DuFour and Fullan (2013) where practices were seen as indicative of the level of commitment to continuous improvement because they became the “way we do things around here” (p. 64), the new practices were described by some as embedded. To maintain them, processes were now documented for new staff and there was a belief that the new knowledge and skills would remain with teachers because they were developed over time. Due to these increased skills and ownership of the changes, sustainability had seemingly been built through the teachers. This is seen in the following comment: “There is an opportunity at this particular school as that sustainability is there. It sits with the teachers because they have better, greater ownership of what they're doing in class, greater responsibility” (APH). It seems that the ‘outbound knowledge’ that Wenger (1998) described as the knowledge required to preserve successes of the past, maintain improvement and leave a legacy when one has gone was seen in the knowledge and skills that the TEs and other leaders had passed on to teachers who were now seen as key to the sustainability of

their own improvement. One way in which leaders suggested they could further build an organisational culture for sustainability was to be more creative and flexible in their future use of time and resources. This finding is consistent with the research of Sanders (2012) who found “Reform Flexibility” (p. 859) was a major influence on sustainability.

5.3.2 Theme 2 – Characteristics and Qualities of the TEs

Within this theme, two ideas emerged regarding the characteristics and qualities of the TEs. To influence teacher practice, they had to do two things, i.e. TEs needed to build relationships with teachers and they had to establish credibility. Neither of these occurred easily.

5.3.2.1 TEs Built Trusting Relationships with Teachers

School reform requires a foundation of trust (Bullough, 2007) so building relationships with teachers was essential for all leaders, particularly TEs whose prime role was to facilitate change in teacher practice. Consistent with the research of Domitrovich et al. (2009) who found that the interpersonal skills of mentors and the relationships they developed with teachers were critical to their effectiveness, the importance of these relationships and how well TEs built them was regularly acknowledged. Bryk et al., (1999) found that social trust is an essential condition of relationships that supports collaboration, professional dialogue and the deprivatisation of practice. In the present study, these same practices were found to be instrumental in changing teacher practice but may not have been if trusting relationships had not been established. The deprivatisation of practice, which is recognised as one of “the most powerful conditions for realizing initial improvement” (Leithwood et al., 2010, p. 53), was particularly reliant on trusting relationships. There were strong signs of distrust amongst teachers, particularly in relation to the deprivatisation of their practice, which is similar to the research of Margolis and Doring (2012) where a lack of trust made teachers uncomfortable with classroom visits and cultural barriers such as fear, distrust and privacy pervaded. While these same negative feelings were prevalent initially in the present study they were overcome, suggesting that this shift may have been the impact of the TEs who worked consistently with teachers to build trust over a period of time. TEs were gradually welcomed into classrooms and teachers went so far as to openly declare that without trust they would not have changed regardless of what the TE said. This is seen in the following comment: “If the trust isn’t there, she could tell me whatever she wants, but I’m not going to take it on board” (T1).

Relationships Developed as TEs Worked with Teachers

As previously discussed, relationships were beginnings not ends in themselves. Consistent with the research of Bryk et al. (1999) where a base level of trust was required for a PLC to emerge and in working together this was expanded and strengthened, relationships grew as TEs worked with teachers to develop their knowledge and skills. Trust was, as Cranston (2011) described, the glue that bound the PLCs together. Relationships have been found to make a big difference to improving teacher practice (Harrison Berg et al., 2011) and previous research has recognised their necessity (Wei et al., 2009); however, there is a dearth of that which describes how they become a reality. Some research has identified the importance of being able to speak openly with the principal and how their availability and presence builds trust (Snyder, 2010). These practices were also apparent in the present study but TEs did much more to build relationships, suggesting the findings from this research may shed further light on this subject. The need for additional studies to deepen understandings of how relational trust works and is nurtured in PLCs has been identified (Cranston, 2011). The present study may address this gap by describing what TEs actually did to build trusting relationships.

How TEs Built Trusting Relationships

TEs were proactive in building respectful relationships with teachers and, according to the overwhelmingly positive data, it is suggested they were successful. Trust has been found to require “an increased focus on and visibility of the adult social relationships in schools” (Cranston, 2011, p. 70) that have to be built, sustained and active. TEs were highly visible and focused on these adult social relationships by being discreet, flexible, positive, available, supportive and approachable. Consistent with the research of Snyder (2010) who found “interpersonal skills and approaches to relationship building are important elements of supportive leadership that help foster the development of trust” (p. 142), TEs employed a vast array of interpersonal skills to build relationships. Being on-site allowed time and accessibility for this relationship building and they used various approaches. Similar to other leaders, TEs adopted a flat structure when working with teachers to demonstrate that they too were learners and open to new ideas. They were affirming, made sure teachers were thanked, told them that they were doing a great job and offered praise for the things they did well. TEs demonstrated a ‘no blame’ approach, focussed on teacher strengths, listened to them informally and found opportunities for coaching and mentoring.

Role of Relational Trust and Mutual Challenge in Productive Relationships

While TEs were described as non-confrontational, the importance of both trust and mutual challenge for relationships to be productive was important and has been previously identified (Katz & Earl, 2010). As Timperley (2008) suggests, “change is as much about the emotions as it is about knowledge and skills” (pp. 15–16), so for TEs to offer learning opportunities that influenced teacher practice, trust, challenge and dealing with the emotions were essential. In order to do so, TEs provided mutual challenge while demonstrating other positive attributes. One example of this was in relation to the low expectations some teachers had of their students. According to previous research, “teachers’ expectations can be influenced by the poverty level as well as the historically poor academic achievement levels of the students and the school as a whole” (Washington, 2016, p. 74). It was therefore unsurprising that some teachers in the present study had similar expectations. The students were also from low SES communities but TEs challenged teacher assumptions about their capacity to learn while managing the delicate balance between trust and building relationships. As seen in the following comment, nurturing teachers regardless of where they were in their own learning, being patient and ensuring that no teacher felt belittled was crucial: “She was able to build up that trusting relationship where a teacher can ask for the fourth time, the same question, knowing that he or she will not be belittled by asking it the fourth time. That takes and says a lot” (API).

By interacting with teachers in the ways described, it appears that the dynamic interplay between the four considerations of relational trust identified by Bryk and Schneider (2002), “respect, competence, personal regard for others, and integrity” (p. 23) were apparent in the actions of TEs as they built relationships with teachers and other leaders. As judgments about trustworthiness are made on this basis, Robinson (2007) also identified the importance of interpersonal characteristics in this process. Whether TEs were consciously aware that they were demonstrating these qualities as they built relationships is unknown but they were seemingly effective, which was obvious to others. In a review of the learning community concept (Clausen et al., 2009), one of the ten characteristics that are largely shared and considered essential as apparent to the “outside observer” is that “a culture of trust and respect exists among stakeholders” (p. 445). In the present study, it appears that this ‘culture of trust and respect’ was certainly evident in how TEs built and sustained relationships, which led to teachers feeling valued and capable.

Conflict was Part of Building Productive Positive Relationships

Although positive relationships were built, a related finding is that conflict was very much a part of this process. Watson (2014) raised a relevant point in saying, “PLCs place great emphasis on mutual trust (while conflict seems never cited as a key characteristic)” (p. 25). The present study concurs with this observation. Conflict has long been acknowledged as a necessary part of the change process (Fullan, 2005) and it is the role of leaders to manage it (Dinham, 2016); however, it is not named in research as a characteristic of PLCs. Due to its essential nature, the importance of “taking the time to gradually stimulate cognitive conflict” (Dooner et al., 2008, p. 572) has been recognised. While much research has been performed on the characteristics of PLCs, there is a gap in our understanding that the present study may address regarding how conflict can be overcome to result in positive relationships. Teachers felt vulnerable, were defensive and quite opposed to having a TE in their school and classroom; therefore, managing this situation was fraught with difficulty. As the following teacher quote describes, the TEs faced opposition and were working within a hostile environment: “That was absolutely horrible because little madam comes over here, takes up the computer and goes tick, tick, tick, and I sit there for two hours and do the same thing she does” (TE). Consistent with the research of Achinstein (2002) where exploring dissent was vital to fostering a learning community, some conflict was necessary for growth to occur and TEs worked through it.

It Took Time to Develop Trusting Relationships

So as not to overwhelm teachers, TEs took things slowly. Consistent with the view of Borko (2004) who suggested, “meaningful learning is a slow and uncertain process for teachers” (p. 6), TEs introduced new things gradually while they got to know the teachers personally and professionally. Progressively, the conflict and resistance dissipated. Yendol-Hoppey et al. (2010) indicated that resistance diminishes as PLCs became the norm but findings from the present study suggest the reduced opposition was also due to the trusting relationships that were developed. This finding supports the research of Cranston (2011) who found it takes time, commitment and effective communication to nurture trust but what the present study adds is exactly how much time was required. It took between six months and two years for TEs to gain the respect of teachers and develop trusting relationships. This broad variation in time may have been because teacher resistance can emanate from “outsiders” coming into the school (Chrispeels et al., 2007, p. 800). As TEs new to the school appeared to take longer to establish relationships with teachers than those that had been on staff previously, this same difficulty was faced. The title of the role of the TE was another impediment to the development of positive relationships as teachers interpreted it to mean

that the TEs were in their classrooms because there was a need for them to be ‘educated’. This reaction from teachers was to be expected as research describes TEs as teachers who “also teach others how to teach” (Becuwe et al., 2016, p. 3). This obstacle is outlined in the quote below:

The name, TE ... that was not a good name and I’m pretty confident that other schools thought this at the time. It was well you’re the TE and you’re in my room. What does that say about me? That was a really big hurdle that took a lot of relationship building ... The name itself was a major hurdle ... I’m here to educate you (API).

5.3.2.2 How TEs Established Credibility

A connectedness between credibility and trust was apparent in this research. As TEs built their credibility, teachers began to feel they could be trusted; however, this credibility had to be earned and, as with relationships, it was a lengthy and difficult process. TEs did this by being involved in classrooms modelling and supporting teachers in their learning while demonstrating sound knowledge, understandings and the practice of effective pedagogy.

TEs worked hard to build their credibility in a range of formal and informal ways. Contrary to the finding of Becuwe et al. (2016) where the facilitators were not seen as experts, which led to teachers feeling they did not need support, the assistance from TEs was eventually appreciated and they were ultimately described as experts. This finding reflects the research of Taylor et al. (2010) who found teacher leaders were “a credible reform savvy source of PD” (p. 93). Sharratt and Fullan (2012) have revealed that to be credible leaders, the highest ranked skill is “know-ability”; a “knowledge and understanding of best practice, professional” (p. 40). This “know-ability” was evident as TEs planned, team-taught, provided on-site PD and resources, modelled, gave feedback on teaching practice, and guided teachers in their analysis and response to data. In contrast to the finding of Margolis and Doring (2012) where leaders in a similar role to TEs had a pervasive insecurity in their own teaching and opened up their classrooms no more than their colleagues, TEs regularly demonstrated their teaching practice in view of colleagues, which appeared to result in increased credibility. A further seemingly small but apparently meaningful action of TEs was that they did routine things such as playground duty, which assisted teachers to see that they did not perceive themselves to be beyond these tasks. As seen in the following comment, TEs built credibility by becoming part of the daily life of teachers:

I’ve helped them with their programming. I’ve done the modelling, the team teaching so I’ve proved to them that I know what I’m talking about, that I’m competent ... I know it sounds little but I do playground duty. That for teachers is a big thing because I’m not just

sitting in my office. I do committees so I'm fully involved in all aspects of school life (TEF).

Another key responsibility of TEs that appeared to contribute to their credibility was they facilitated the PLCs for the most part. Nehring and Fitzsimons (2011) found that a lack of facilitative skill impacted negatively on an initiative. Conversely in the present study, it appears the facilitation skills of the TEs may have contributed to the positive outcomes of the PLCs. This finding is consistent with the research of Smith et al. (2009) who found the skills of the facilitator are critical to the group's progress. Brodie (2013) also posits the key to success is the facilitator who needs "the skills and knowledge to design appropriate activities for teachers" (p. 15). The TEs in the present study demonstrated these skills, which may have further enhanced their credibility; however, as with conflict, facilitation skills are not specifically mentioned in characteristics of high performing PLCs (Nehring & Fitzsimons, 2011). Based on the findings of the present study, it is suggested that they warrant a higher profile.

TEs Suffered as they Built Credibility with Teachers

Credibility had to be earned and, as with relationships, this was a lengthy and difficult process. Despite the affirming and positive way in which TEs treated teachers, for a long time most of them did not feel respected or valued. This is exemplified in the following comment:

There was a lack of respect for quite a while from some people in that you haven't done the hard yards on class. You haven't done this; you haven't done that ... It still is hard with some of these teachers. They take and take and take and if I get from them, oh that's a great idea, or I really like the way you did that, it's like they're trying to say I'm doing a good job (TEI).

Teachers were aware that TEs experienced difficulty when building credibility and attributed their opposition to how stressed and threatened they were feeling, often because of TEs coming into their classrooms. As described in the following comment, teachers were aware that TEs suffered because of the way some of them acted: "Our TE ... copped a lot for it" (TE). Pancucci (2007) also identified "resistors who used their interpersonal capacity to subvert change" (p. 67) so the leader used an authoritarian approach to force compliance, which resulted in what Hargreaves (1994) described as contrived collegiality, "a safe administrative simulation of collaboration" (p.196). However, in the present study, in the face of resistance TEs appeared to remain patient, persistent and collaborated with teachers in a respectful and professional manner. Ultimately teaching practice shifted from being isolated and insular to teachers working together across the school. As

seen in the following quote, teachers came to recognise the credibility of the TEs: “She is so knowledgeable ... an amazing leader of pedagogy” (TE).

5.3.3 Theme 3 – Contribution to Teacher Capacity

Within this theme, two areas emerged regarding how TEs contributed to increased teacher capacity. The first is about the particular practices that influenced teacher capacity. While many of these were generic to all leaders, because of the single intentional focus of the TEs on teaching and learning they engaged in them to a greater extent. The second is how TEs contributed to teacher self-efficacy.

5.3.3.1 Practices of TEs that Influenced Teacher Practice

TEs appeared to be a major contributor to increased teacher capacity that was then evident in their practice. After analysing 11 studies of PLCs, Vescio et al. (2008) found that how teaching practice is changed and what those specific changes are is “a relatively elusive activity” (p. 83). Findings from the present study suggest that how change in teaching practice eventuated was far from ‘elusive’. It occurred because TEs, and other leaders, were actively involved in classrooms supporting and developing teachers, which resulted in them knowing teachers and students well. Consistent with previous research where coaches were expert teachers who needed to make their expert thinking and practice explicit for teachers (Totterdell et al., 2010), TEs modelled, team-taught, observed, provided feedback, and eventually got teachers to observe each other. As seen in the quote below, TEs taught in classrooms with others to demonstrate quality practice:

The TE’s role was getting into classrooms and being that good model of teaching, of best practice, what good sound pedagogy looks like, going in and working in the classrooms modelling, team teaching. Also, giving some theory behind teaching and 21st century pedagogy (APE).

5.3.3.2 TEs had Flexibility to Differentiate the Learning According to the Needs

By TEs being immersed in classrooms, teacher practice became deprivatised and it seems that their capacity increased. Reflective of the recommendation of Pedder and Opfer (2013) who challenged schools “to develop more differentiated professional learning ... [to] respond to the specific mix of orientations of particular groups of teachers in the school’s particular learning ecology” (p. 563), what appeared to be critical to the positive influence of TEs was that they differentiated the learning. Borko (2004) also found that facilitators structuring the learning for the context is crucial to its success and TEs did this by tailoring the support according to the needs of

teachers and were readily available for in-class work and the required follow-up. Teachers were able to name an area in which they wanted support and TEs provided it; however, similar to the finding of Becuwe et al. (2016), they needed to delicately balance both the required and offered support so the learning was relevant and ‘just in time’. As seen in the comment below, teacher capacity increased:

It means that teacher capacity has grown because they’re standing up there. The literacy/numeracy person gave some yesterday, the Reading Recovery, ESL, class teachers, everybody. Not all the teachers but a bulk of them have run PD. We’ve got less people coming in from outside. I think that’s a good thing (TEH).

While context has been identified as important to teachers (Nielsen et al., 2008), it seems it was the differentiated support in each context, where particular learning needs were prioritised that enhanced the responsiveness of teachers to accept the support and to change. What seemed to enable this personalised response from TEs was that they did not teach a set class, so flexibility and freedom in the role was allowed. This is seen in the following comment:

I had the freedom to organise my timetable. Nobody has ever said to me, ‘What are you doing between 9:00 and 10:00 today’... Therefore, I could say, ‘This teacher needs this’... so it was very much needs based (TEH).

This finding stands in contrast to that of Yost et al. (2009) who called for a collaborative stress-free environment that focuses on learning and for school leaders to let the teacher leaders “do their jobs without undue interference” (p. 431). TEs were able to ‘do their jobs’ by working closely with other leaders to change teacher practice. They had the autonomy to use their contextual knowledge to provide the relevant learning for each individual or group. However, while TEs not having a class was ultimately considered beneficial, it was an issue with teachers for some time. Consistent with the research of Becuwe et al. (2016) where TEs had a different role to teachers and questions arose, teachers felt TEs needed to have their own class so they understood the complexities of teaching in these schools. This was originally a barrier for TEs but once their credibility was built and teachers came to value the support, their ongoing availability was seen as an advantage.

5.3.3.3 TEs had Particular Areas of Focus and Utilised Research in their Work

Building teacher capacity to influence teacher practice through responding to contextual needs extended beyond the in-class experiences. Reflective of the recommendation of Wayman et al. (2014) who called for data-related professional learning to be a component of all learning activities, the use of data and assessment were particular areas on which TEs focused with groups

of teachers. They also provided PD within the school to link current theory with practice. Consistent with the research of Vanderburg and Stephens (2010) where teachers valued learning about research-based instructional strategies, teachers appreciated being resourced with professional readings, which contributed to their understanding of the research behind the recommended teaching strategies. This cognisance is exemplified in the following comment: “The strategies we were using were contemporary and research-based just to make sure that we were in line with current research and we were offering the best for our students” (TG). Similar to the finding of De Neve et al. (2015) who identified a predictive role of professional dialogue on change in teacher practice, the research provided a provocation for the professional dialogue that prompted teachers to think deeply about their practice. In contrast to the research of Becuwe et al. (2016) where facilitators provided limited support and expertise to teachers in designing the curriculum, these discussions fed into the ensuing planning and programming that TEs facilitated.

5.3.3.4 How TEs Contributed to Teacher Self-efficacy

Teacher self-efficacy has been previously discussed under Question 2, but as TEs contributed to it in a range of ways, it will be the focus of the following discussion.

TEs contributed to the self-efficacy of teachers, which appeared to change along with their increased capacity. What seemed to facilitate this shift was that TEs provided extensive support and affirmation to teachers, which may have contributed to the feelings of confidence and success that Bandura (1997) identified as important to self-efficacy. As TEs built the capacity of teachers they also equipped them with the skills to enact mastery experiences, which has also been found to influence self-efficacy (Bandura, 1997). Findings from the present study correspond with the research of Nielsen et al. (2008) who found that literacy coaches were “profoundly effective... through their encouragement, support, modelling, observations and feedback” (p. 1299). The self-efficacy of teachers was built in a similar way as TEs supported and affirmed teachers as they built their capacity by focusing on teachers’ strengths as they modelled and team-taught. The improved self-efficacy that followed appeared to be both a by-product and an enabler of further learning. An example of how TEs did this is seen in the following quote: “Having a TE is around building teacher capacity and that’s exactly what happened here ... When she goes into a classroom, if she really wants to develop that teacher she’ll be looking and finding things they’re strong in” (TE). By TEs adopting such an approach, teachers developed the confidence to take risks and attempt different practices. What seemed to be critical to this improved self-efficacy was that, similar to the finding of Vanderburg and Stephens (2010) where coaches did not evaluate but “supported,

encouraged, facilitated, demonstrated, were accessible and helped with a wide range of tasks” (p. 157), TEs did not evaluate and judge teachers but assisted and supported them in a collegial way.

Teacher opposition slowly dissipated and their self-esteem increased. Similar to the research of Holzberger et al. (2013) where even the most experienced teachers improved in their self-efficacy over time, all teachers indicated that they were more confident as they had learned and changed in some way. Consistent with the research of Leithwood et al. (2010) who found teacher uncertainty and rigidity were eventually replaced with increased confidence due to a deliberate effort to support them through restructuring timetables to allow for collaboration, an increase in the quality of their PD, and evidence that new teaching practices made a difference to student learning, shifts in teacher attitudes occurred. To overcome their resistance, TEs provided ongoing encouragement and assistance that eventually resulted in growth in both their capacity and self-efficacy. Washington (2016) proposed that, “a teacher’s self-efficacy is linked to his or her instructional practices and how he or she views the students” (p. 74). Similarly, in the present study, changes in teacher self-efficacy came as their practice improved and expectations of students increased. As described below, teachers attributed this growth to what TEs did: “I have noticed that she’s made me feel a lot more confident and capable and has just really helped” (TH).

5.3.3.5 Teachers Became More Motivated, Confident, Capable and Less Reliant on TEs

In the long term, the shifts in teacher self-efficacy resulted in them being less reliant on the TEs. While the changes were originally TE driven, teachers became more motivated, confident and capable; therefore, the encouragement they originally needed reduced. Through the support and guidance of TEs over a sustained period, teacher self-efficacy seemed to increase and they were more competent and able to lead the learning. Leithwood et al. (2010) suggested that PD should focus as much on teacher efficacy as improving capacity because “continuous improvement depends on persistent instructional problem solving of its teachers. Efficacy leads to such persistence” (p. 59). In light of the findings of the present study, this previous research is endorsed. It appears that the required persistence was built through TEs having a deliberate focus on improving teacher capacity while building their self efficacy, so much so that it was suggested that because they did such a good job they may not be required as much anymore. This positive outcome is articulated in the following comment: “Initially it was TE driven ... but as the years went on and people become more confident there was less modelling ... Over time it’s not got rid of her job but it’s actually ... made us more independent” (TE).

5.4 Sub-question 4 – Did the nature of the on-site PD influence teacher practice and, if so, how?

The three themes within this question are teacher capacity, leadership, and resourcing and sustainability. Much of the data generated from this question supports the findings outlined in the first three sub-questions, which led to substantial overlap with what has already been discussed. For this reason, the first section of this discussion will provide a summary of the previous findings that were reinforced in this research question. The remainder of the discussion will focus on how the organisational context of on-site PD allowed for teacher practice to be influenced.

5.4.1 Summary of Previous Findings Reinforced in this Sub-question

Teacher capacity increased over time throughout the experience of on-site PD. This was evident in the improved knowledge and practices of teachers, particularly in relation to the use of data. Instructional Rounds and professional dialogue were seen as instrumental to this growth in capacity. As previously reported, teacher attitudes were found to eventually become positive and the building of trusting relationships along with their improved capacity, appeared to be key contributors to this change. Furthermore, on-site PD appeared to strengthen the importance of leadership, particularly in regard to leaders working with teachers to develop their knowledge, skills and practice. Having the learning on-site allowed for an inclusive approach to collaborating and learning together, which appeared to lead to collective involvement and shared ownership. By teachers working with leaders in a range of collaborative ways, an awareness of the skills of others emerged. These skills were shared and seen as contributing to the ongoing learning of all. The value and use of resources to support the on-site PD were again found to contribute to changed teacher practice but whether these changes would be sustained without the human and financial support prompted concern and speculation from teachers and leaders.

While these previous findings were reinforced in this question, there were some new areas that emerged about how the nature of the on-site PD contributed to changed teacher practice, particularly in relation to its organisational context. This is the focus of the following discussion.

5.4.2 Influence of the Organisational Context: Pedagogical Content Knowledge

The organisational context seemed to allow for the learning of teachers to be coherent over an extended duration, and include collective participation and active learning. Previous research (Garet et al., 2001) has acknowledged the importance of these features of PD but in addition included a “focus on content” (p. 916) as one of them. To “give renewed emphasis to the profound

importance of subject-matter focus in designing high-quality PD” (Garet et al., 2001, p. 936), these authors identified this feature as content knowledge. Furthermore, PD that had a focus on both content and coherence was found to “have substantial positive effects on enhanced knowledge and skills” of teachers (p. 933). Findings from the present study concur that the features of coherence, duration, collective participation and active learning identified by Garet et al. (2001) contribute to effective PD. However, as the nexus between improved teacher knowledge and practice was evident in their simultaneous development, it is suggested that in on-site PD it is the PCK of teachers (Shulman, 1987) rather than content knowledge alone that is central to changing teacher practice. The importance of developing content knowledge along with instructional practices has been previously acknowledged (King & Newmann, 2004) and Garet et al. (2001) do recognise PCK as one of the four dimensions of content knowledge; however, it is suggested that because the development of teacher content knowledge and their practice appeared to be so inextricably entwined in the present study, this feature of PD could be renamed as PCK.

Coherence, duration, collective participation and active learning also contributed to the effectiveness of the learning for teachers in the on-site PD. As well, the accessibility, convenience and immediacy of the support, assistance and learning opportunities were seen as influences on teacher practice and therefore will be discussed in the latter part of this question.

5.4.3 Coherence in On-site PD

The learning for teachers was considered to be coherent and, consistent with the views of Desimone (2011), it seems this coherence may have been related to the learning being on site. Garet et al. (2001) also found coherence, whereby the learning was active, integrated and connected with other activities in the school, contributed over time to the enhanced knowledge and skills of teachers. In the present study, it appears that the coherence of the on-site PD contributed to the learning of teachers through its cyclical, context specific, active, collective and sustained nature.

5.4.4 On-site PD Allowed for Cyclical Learning

On-site PD provided a structure in which the learning of teachers could be adapted to respond to the local needs. It seems this approach was effective because, as Timperley (2008) suggests, learning is cyclical so, “teachers need multiple opportunities to absorb new information and translate it into practice ... in their everyday contexts” (p. 15). Since the learning for teachers was on site, this cyclical learning process was apparently better able to occur. Kletchtermens

(2004) claims, learning “does not take place in a vacuum” (p. 221), and nor did it in the present study. Teachers made connections between prior and new learning as they applied and tested it in their own schools where it was most relevant. While the importance of embedding learning in the concrete tasks and daily activities of teachers has been previously recognised (Kwakman, 2003), it appears it was also the ongoing opportunities provided on-site for teachers to discuss, question and contribute to the learning of others that were seen as advantageous and very much part of the iterative learning process in which teachers engaged.

5.4.5 On-site PD Allowed for Context Specific Individualised Learning

Consistent with the research of McLaughlin and Talbert (2006) who identified the importance of PD responding to the needs of different teachers in their specific context, the on-site structure in the present study appeared to be essential for this context-based learning to occur as it afforded teachers ongoing support, assistance and feedback on the application of their learning. It seems, as suggested by Mitchell and Sackney (2011) where “the general surrenders to the particular, and the same idea is enacted differently in different contexts” (p. 37), effective instructional practices were demonstrated and developed with teachers within their context, which were specific to their individualised learning needs. Also consistent with other previous research where leaders personalised PD for teachers (Derrington & Kirk, 2016) and collaborative on-site learning was individualised to the needs of teachers (Quick et al., 2009), context specific individualised learning occurred in each school in a connected way.

Over a decade ago, Fullan (2001) suggested that programme coherence is about “organisational integration” (p. 64). More recently, he proposed that leaders in a culture of change must have the ability to build coherence (Fullan, 2014). It appears that in the present study, this ‘organisational integration’ and coherence occurred as leaders planned the on-site PD strategically while responding to the needs of individuals. This is highlighted in the following comment:

It was measured, planned, thought out, showing teachers why we are doing this. It was also cohesive in that most of the PD was around a central theme and then it just built out from that theme. There might have been little offshoots in different directions for teachers’ interests or particular teacher needs, but generally it was cohesive (TG).

5.4.6 Plans, Beliefs and Goals Underpinned the Coherent Learning in On-site PD

By situating the learning for individuals within the context of the school, the on-site PD was considered to be coherent, shared and connected with other activities. This finding resonates with

that of Cobb and Jackson (2011) who contend that instructional improvement requires the coordination of various components for a “Coherent Instructional System” (p. 26). Where the present study differs from other previous research is in relation to that of Quick et al. (2009) who also support the notion of PD being provided in sufficient quantities as “part of a larger coherent program of learning” (p. 67) but recommend that coherence be split into the two areas of relevance for plans, beliefs and goals, and a coherent program of PD. Findings from the present study suggest that coherence worked differently to this. It seems that it was the relevance for plans, beliefs and goals that underpinned and directed the coherent PD. To separate them, even if under the coherence banner, might detract from the importance of their connectedness for the learning to actually be coherent. This coherence was seen in the way that teachers and leaders learned and worked together toward a shared vision and singular purpose. It was considered that the on-site PD facilitated this coherent joint endeavour.

5.4.7 On-site PD Allowed for Active and Collective Participation in the Learning

Consistent with the research of Derrington and Kirk (2016) where effective teachers were active and demonstrated strategies to others, the on-site learning was seen as practical and teachers valued it more than hearing about things then later applying them. There were various means by which this active and collective learning occurred flexibly. Staff meetings, briefings, team-teaching, observing others teach and co-planning are some. It was found that the support from leaders and teachers for active learning was strong, which may have been because, as Tate (2009) identified, active engagement that includes collaborative activities and discussion can assist teachers to retain 90% of what they experience. The preference of teachers for this form of learning on site is highlighted in the following comment:

On-site PD is better than going out and sitting and listening to somebody because it's more practical. You're doing it in a school context rather than listening to somebody saying you've got to do this, this, and this, and then come back. It just doesn't work (TG).

5.4.8 On-site PD Allowed for Duration of the Learning

Consistent with the research of Gallo-Fox and Scantlebury (2016) who found job-embedded learning allowed for its extended duration, it seems that the prolonged nature of the learning experiences for teachers was also facilitated by it being on site. While an extended duration has been found to be important, an identified barrier is sustaining quality PD over time (Wilson, 2013). Findings from the present study suggest this problem can be overcome by situating the learning on site, as it offers opportunities for the sustained duration of active and

collective learning that Garet et al. (2001) identified as important to teacher learning. In the present study, having the whole staff consistently involved and hearing the same messages was considered essential for the collective learning that contributed to their shared understandings. As highlighted in the following comment, this may not have been possible had the learning been off site: “With on-site PD you all hear the same things. When you go out, people tend to bring in different things” (TG). Findings from the present study endorse those of Garet et al. (2001) in relation to the importance of duration, collective participation and active learning in PD. However, as changes to teacher practice seemed to occur because of the influence of the combined strength of these features in building coherence, it is suggested that they need to work in synergy.

5.4.9 Appeal of the Organisational Aspects of On-site PD

While much research focuses on the individual features of effective PD, very little describes the role of its organisational aspects that in the present study seemed to play an important role in influencing teacher practice. Desimone (2009) contends there is general consensus that it is the aforementioned features of PD identified by Garet et al. (2001) rather than its structure that leads to positive outcomes. Findings from the present study support this position in part. It appears that it was the on-site structure of the PD, coupled with the mutually reinforcing and connected nature of what happened within that structure, which contributed to teacher learning. Much of what occurred for teachers that had a positive influence on their practice seemed to be reliant on it taking place on site. Examples of this include the collective participation of all stakeholders in the data analysis, the subsequent discussion and team teaching, as well as the learning for teachers within their own classrooms and from observing the teaching practice of others on site.

5.4.10 Accessibility, Convenience and Immediacy of On-site PD

Further to the already identified reasons for why on-site PD appeared to be effective in influencing teacher practice, it appealed to teachers because it was convenient, accessible and timely. These characteristics may seem minor in comparison to the widely acknowledged and frequently cited features of effective PD identified by Garet et al. (2001), but as it has been suggested that they lack “sufficient specificity to guide practice” (Wayne et al., 2008, p. 470). The present study may provide some of that specificity. While Lloyd and Cochrane (2006) identified the relevance and immediacy of PD as important, previous research appears to provide limited detail regarding its practical features, which in the present study appeared to enhance the learning opportunities for teachers. For example, it was timely and there was a strong and immediate connection to what it looked like in practice. This is outlined in the following comment: “It’s very

easy to go from learning and being taught the different skills to then implementing it on the spot in the classroom situation” (TG). This instant application allowed for building what Klentschy (2005) described as “practitioner knowledge” (p. 3) that responds to particular problems of practice grounded in the work of teachers. While the learning was described as practical, it was considered richer than strategies alone. To deepen understandings of the underlying theory behind their practice, teachers asked questions at the point of need, bridging what Webster-Wright (2009) described as the “perceived divide between theory (what you learn in a course) and practice (what you do at work every day)” (p. 703). It appears that an interrelationship and reflexivity between theory and practice (Lloyd & Cochrane, 2006) was built as teachers learned on site.

The accessibility of on-site PD with relevant and personalised support readily available was found to be influential in the learning of teachers. The availability of the in-class guidance appeared to be what Lloyd and Cochrane (2006) referred to as ‘just in time’ (p. 17) learning as it was able to be applied immediately and was connected to the first-hand experiences of teachers in their own context. Learning in this way was reflective of the range of experiences that Shaver (2010) identified as the “ongoing formal and informal learning activities” (p. 598) in which teachers engage to improve their practice. Consistent with the research of Harrison Berg et al. (2011), this regular ongoing contact and support was found to be beneficial, and appeared to make a difference to teacher learning. This is seen in the following comment: “Things like the availability to have that conversation when it happened ... having someone a minute away. I can say quickly, where would I go? What do you think I do next ... any suggestions? Having that there and then” (TI). As teachers did not need to travel, the convenience of the learning apparently allowed them to feel comfortable in their own school setting. Being away from school was considered a hindrance and learning on site apparently put teachers in the right frame of mind to try new ideas and strategies.

5.4.11 On-site PD was the Preferred Mode of Learning

On-site PD was quite a shift in practice but teachers and leaders ultimately viewed it favourably. After experiencing a sustained experience of coherent on-site learning, external providers were seen as irrelevant and teachers reached the point where they felt they did not need to go elsewhere in order to learn. Outsiders were generally considered redundant but the risk in thinking this way is it could lead to an inward insular view or, as Hord and Tobia (2012) caution, “it is not a good idea to use available help that is inadequate or may confirm poor practice” (p. 41). Bolam et al. (2005) also recommend, “school staff need to look beyond the school boundaries,

through obtaining external support, networking and other partnerships in order to promote, sustain and extend their PLC” (p. 137). The sourcing of support beyond the school was limited in the present study but it appears “the impoverishment of professional practice that ensues when external ideas are not included in the professional discourse” described by Mitchell and Sackney (2011) was not experienced (pp. 36–37). Teachers and leaders generally did not express a need for external input as they worked together to generate ideas and strategies that were seen to have a positive influence on teacher practice. This may have been because the internal ‘available help’ to which Hord and Tobia (2012) refer was adequate, and shared ownership of the ideas was engendered as they were developed collectively, which led to teachers feeling they had sufficient expertise on staff for the support they needed at the time. A further suggested reason for their opposition to off-site PD was that, previously, individual teachers who attended external courses used to feel they owned the ideas and despite the attempts of leaders to get them to share their learning, this usually did not occur. While Bredeson and Scribner (2000) found that teachers were not confident to disseminate new knowledge with colleagues back at school, this practice appeared to be neglected in the present study because there was a lack of interest from other teachers that had not experienced the learning. As seen in the following comment, receiving second-hand advice was not helpful: “The reality was people weren’t really interested. Unless you went, getting it second- and third-hand is not the same as being involved and part of it, and learning, and making your own mistakes, and having another go” (APF). What seemed to make the difference to the effectiveness of the on-site PD was that everyone was involved in the learning rather than confining it to individuals.

Findings from the present study suggest that on-site PD was effective in influencing teacher practice. Having experienced on-site PD rather than the previous isolated decontextualised off-site PD, teachers and leaders indicated that learning on site led to changed teacher practice, which might be attributed to the quality of the learning that was provided. Consistent with the research of Gallo-Fox et al. (2016) where not all teachers learned the same things or their practice was modified in exactly the same ways, teacher practice changed but variously for different people. Unlike the finding of Yost et al. (2009) where on-site PD resulted in new and middle level teachers changing their practice more than the experienced ones, it seems that in the present study the skills, knowledge and practice of teachers, including the experienced ones, changed in some way. This is reflected in the following comment: “The skills that we have learnt over the last four years are skills that will stay with me personally forever. Even though I’ve been teaching twenty nine, nearly thirty years, you think it’s never too late to learn” (TH).

CHAPTER SIX – FINDINGS AND RECOMMENDATIONS

6.0 Introduction

The purpose of this research was to generate understandings of how on-site PD influenced teacher practice. The context for this multi-site case study was five metropolitan Catholic primary schools in Australia that participated in a reform process as part of the Federal Government's NPA (2010–2013). Throughout the present study, the perceptions of school leaders and teachers involved in the reform have been analysed to answer the research question posed. This chapter presents a summary of the findings and recommendations. It ends with a reflection on the Conceptual Framework developed in Chapter Two, the limitations, some suggestions for future research, and conclusions from this study.

6.1 Summary of Major Findings

The presentation of data in Chapter Four, and its subsequent analysis and discussion in Chapter Five, was conducted according to the four research sub-questions. This process revealed a clustering of ideas and pointed toward the findings being reduced to four major themes. These themes reflect the key concept from each of the research sub-questions as well as some of the difficulties and complexities that arose. The themes are: first, leadership in the schools and the system that influenced the reform; second, how PLCs contributed to the learning of teachers and their teaching practice; third, what an in-situ role called a TE contributed to ongoing teacher learning; and fourth, how the construct of on-site PD affected learning opportunities for teachers. To answer the major research question, "How does on-site PD influence teacher practice?" the findings and recommendations of the present study are summarised in this chapter under each of the four major themes.

6.1.1 Theme 1 - Leadership

The area of leadership is treated from the perspective of the school and the system.

6.1.1.1 School Leadership

In school leadership there were five findings about how school leaders influenced the learning and changed the practice of teachers.

Finding 1

School leaders co-constructed a shared vision of collective responsibility for student learning through collaborative engagement in classroom-centred teacher learning. Rather than imposing or creating a vision at the outset, school leaders focused on building shared understandings with teachers by modelling, team-teaching, co-planning, analysing data, leading

Instructional Rounds, providing feedback and engaging in professional dialogue. Throughout this process, teacher understandings of their practice grew and a shared vision gradually emerged.

Recommendation 1

It is recommended that the training, recruitment and PD of school leaders focus on the techniques of modelling, team teaching, co-planning, data analysis, the deprivatisation of teacher practice, constructive feedback and engagement in professional dialogue as the basis for generating a shared vision for teaching and learning that is understood and owned by teachers.

Finding 2

School leaders were found to do two key things to lead the reform effectively in the present study. First, they demonstrated a flattened more devolved organisational structure by working collaboratively in classrooms and co-learning with teachers. This close proximity to teaching had a positive influence on how school leaders were perceived by teachers. The second thing school leaders did was to adopt a non-hierarchical style. To influence teachers, school leaders were united in collaborative teams, open to new ideas, knowledgeable, flexible, proactive and credible. By integrating these attributes into how they worked with teachers, a shared commitment to the reform emerged. Leaders and teachers working and learning together underpinned the effective approach of school leaders to changing teacher practice.

Recommendation 2

It is recommended that in the development of role descriptions and review processes for school leaders, criteria specify that all leaders actively engage in teaching and learning in classrooms with teachers.

Finding 3

There was an association between building trusting relationships and shifts in teacher understanding and practice. School leaders nurture relationships with teachers by being approachable, non-threatening, supportive and humble as they support teachers in changing their practice. These relationships are critical, as is the focus on teaching and learning. Because building relationships and changing teacher practice were mutually supportive in the present study, they cannot be separated in terms of their priority in reform processes.

Recommendation 3

It is recommended that educational systems and tertiary institutions design leadership programmes that focus on the development of the necessary personal skills and attributes of leaders to build trusting professional relationships with colleagues.

Finding 4

Changing structures to be more inclusive of all relevant staff was an important leadership function; however, these structures did not operate in isolation from leaders working directly with teachers. Through a strategic approach to organisational leadership, school leaders made structural changes to heighten the focus on teaching and learning, which also was seen to facilitate collaboration and communication. A different way of working that called for inclusive structures was established. These structures were the necessary enablers of the increased focus on teaching and learning, but alone are not sufficient to bring about changed teaching practice.

Recommendation 4

It is recommended that school leaders establish structures in primary schools that enable all teachers and learning support staff to engage in a whole school approach to teaching and learning.

Finding 5

School leaders prioritised the improvement of teacher practice in the deployment of financial and human resources. However, the quantity provided proportionate to the work required of teachers was found to be inadequate. While time was dedicated to collaborative learning and data analysis during the teaching day, it was not sufficient for teachers to meet the additional responsibilities required of them in the reform. This increase in workload and limited available time led to teachers experiencing stress and pressure as much of the extra work had to occur outside of school hours.

Recommendation 5

It is recommended that school and system leaders resource teachers with the time required for data analysis and collaborative learning.

6.1.1.2 System Leadership

The second area of leadership dealt with system leadership. There were two key findings about how it influenced teacher practice. The first is the way in which school leaders and teachers perceived the influence of system leadership. The second is how, despite insufficient external direction, school leaders led the reform in their schools. The first finding contains three elements.

Finding 6

System leaders had an impact on school leaders who generally appreciated their support; however, teachers did not share this view. They communicated directly with school leaders therefore their influence on teacher practice was a secondary process, which led to teachers believing system leaders actually worked against their changed practice in three ways. First, there was an absence of consistent communication and strategic direction from system leaders. Second,

without teacher input or consultation system leaders set the areas of focus for the on-site PD. These areas were initially unrelated to school priorities so were not aligned with school plans. Third, there was limited collaboration and involvement of system leaders within schools throughout the top-down reform. Together, these three factors contributed to teachers feeling that system leaders were out of touch with classrooms and did not make a positive contribution their practice. Instead, teachers saw school leaders as the ones that provided clarity, developed a plan and led the reform collaboratively.

Recommendation 6

It is recommended that system leaders consult and communicate directly with classroom teachers and school leaders in the development and implementation of improvement initiatives.

Recommendation 7

It is recommended that system leaders spend sustained time in schools to develop a contemporary understanding of their complexities and everyday demands, and to build credibility with teachers.

Recommendation 8

It is recommended that system leaders collaborate and communicate with school leaders and teachers in the design of reform models to develop a clear strategic plan at the outset and consistent understandings amongst stakeholders throughout implementation.

Finding 7

School leaders worked towards improvement in their schools, even in the presence of perceived insufficient direction from the system. While this apparent lack of clarity and consistency from system leaders led to initial confusion, it allowed school leaders to lead the reform. It is unknown whether this happened by accident or design. System leaders expected TEs to be appointed, PLCs to be developed, teacher practice to be deprivatised through Instructional Rounds and data to be analysed. In the absence of a set structure or process, school leaders went about undertaking these initiatives individually.

Recommendation 9

It is recommended that system strategic plans for school reform identify the roles and responsibilities of all system and school stakeholders while allowing for local implementation that reflects alignment with the reform agenda.

6.1.2 Theme 2 – Professional Learning Communities

Within this theme, there were eight key findings about how PLCs contributed to the learning of teachers and their changed practice.

Finding 8

Leadership in PLCs was not limited to principals and was successful when shared with teachers. School leaders were perceived as effective and worked together with teachers as instructional leaders, actively supporting them, primarily in classrooms to demonstrate how teaching practice could change.

Recommendation 10

In the preparation and PD of leaders at all levels in schools, it is recommended that a focus be placed on instructional leadership that is classroom-centred.

Finding 9

Three characteristics of PLCs, the use of data, deprivatisation of teaching practice and professional dialogue, were associated and instrumental in building teacher capacity. These characteristics were connected through a relationship of trust and formed the core focus of PLCs. This finding does not negate the importance of their other characteristics but rather accentuates the need for these elements to work together in PLCs to change teacher practice.

Recommendation 11

It is recommended that school leaders and facilitators of PLCs be required to demonstrate skills and knowledge in analysing and interpreting data effectively, leading the deprivatisation of teaching practice, and facilitating constructive professional dialogue.

Finding 10

The collaborative analysis and interpretation of data in PLCs led to changed teacher practice. All relevant school personnel were involved collectively so the expertise of many was pooled, which led to shared ownership and responsibility for student learning.

Recommendation 12

It is recommended that school leaders initiate practices that facilitate and resource ongoing collaborative analysis and interpretation of data by all relevant school personnel.

Finding 11

There was a relationship between the development of teacher skills in data analysis and the building of their PCK. Changed teacher practice occurred as the work with data was complemented by other on-site PD experiences such as co-planning, team teaching, providing feedback, classroom modelling, and sharing and discussing research. The concurrent development of teacher understandings about the use of data and PCK facilitated the modification of teaching practice.

Recommendation 13

It is recommended that school leaders build the data analysis skills of teachers with their PCK through co-planning, discussing relevant research, classroom modelling, team teaching and feedback.

Finding 12

The deprivatisation of teaching practice through Instructional Rounds in PLCs played a central role in this reform as it eventually resulted in an open approach to learning. However, deprivatising teacher practice called for a cultural transformation, which was a stressful and confronting experience for teachers. While they benefitted from observing colleagues teach, they were highly anxious about the prospect of their teaching practice being exposed. Relationships of trust between and amongst leaders and teachers played a vital role in gradually overcoming these feelings. Some leaders had their teaching observed but only one principal participated in Instructional Rounds to the extent that teachers saw them teach.

Recommendation 14

It is recommended that school leaders implement reforms slowly and build the trust and confidence of teachers to deprivatise their practice by teaching in view of colleagues and seeking their feedback.

Finding 13

As teacher understandings grew, the professional dialogue in PLCs changed to reflect their increased knowledge about effective pedagogy for student learning. Data analysis and interpretation served as a stimulus for ongoing discussions about relevant research on effective pedagogical practice that was supported by in-class modelling for teachers. These forms of professional dialogue kept the focus on students, teachers and learning. What resulted was a shift from polite congenial off-task conversations to those that probed into teaching practice. Teachers felt they could challenge leaders and other teachers about the most appropriate teaching practices. Informal conversations also developed a focus on student learning.

Finding 14

The self-efficacy of teachers was both an outcome and a mediator of their ongoing learning. A reciprocal relationship between teacher self-efficacy and improved teaching practice was apparent. As teachers began to realise their capacity had increased, their self-efficacy and attitude improved, which provided an incentive for ongoing learning. Opportunities for mastery and vicarious teaching experiences, as well as constructive feedback from leaders and colleagues, contributed to improved teacher self-efficacy and a belief that they were competent. The ongoing

learning of teachers, shared ownership of the school vision, and the positive and supportive school climate were all found to contribute to the changed practice and enhanced self-efficacy of teachers.

Recommendation 15

It is recommended that school leaders build the self-efficacy of teachers by developing a positive and supportive school climate in which there are opportunities for engagement in mastery experiences, peer observation and constructive feedback.

Finding 15

The formation of PLCs was a lengthy and difficult experience for teachers and leaders. It seems that system leaders did not provide a process by which PLCs were to be established so it became a localised activity. The absence of shared understandings when school leaders first introduced PLCs led to general confusion, which contributed to the amount of time in their development. The process of evolving PLCs was an organic slow one; they emerged differently and did not adhere to any set structure. Although time consuming and confusing, this was ultimately a positive outcome as what occurred within PLCs influenced teacher practice.

The evolution of PLCs in schools was characterised in certain ways. They were contextually responsive and the guiding principle that drove their creation was the articulated needs of teachers and what the data revealed about student learning. PLCs morphed over time into what worked best in each context. Schools progressed or regressed in certain areas throughout their gradual development as a PLC, which meant it was not a linear process where certain phases and stages were identifiable. PLCs were constructed in distinct ways under the guidance of skilled on-site facilitators who had the autonomy to foster and shape their progress according to need.

Recommendation 16

It is recommended that school leaders incorporate the following elements when implementing PLCs:

- a) They engage in a process with teachers to create a shared understanding of their purpose and function.
- b) Time and resources are allocated.
- c) Contextual needs of the school, teachers and students guide their formation.
- d) Priority is given to the integration of the use of data, the deprivatisation of teacher practice and professional dialogue.
- e) Skilled on-site facilitators are available.

6.1.3 Theme 3 – The Contribution of an On-site Role in Influencing Teacher Practice

There were five key findings about how an in-situ role called a TE contributed to the ongoing learning and changed practice of teachers.

Finding 16

The structure of the TE role in this reform was effective due to its singular focus on teaching and learning, and TEs demonstrated a strong commitment to it. How the TEs were perceived as practical competent teachers led to increased esteem and credibility of the role. Being on the leadership team was an advantage to the reform as TEs kept the focus on teaching and learning throughout its implementation in their school.

Due to the active engagement of TEs in classrooms, they gained an understanding of the needs of teachers and students, and differentiated the learning accordingly. This differentiated support boosted teacher responsiveness to changing their practice. While the TE role had a positive influence on teacher practice, it caused tension in three ways. First, TEs not having a set class was initially an issue with teachers because, without this responsibility, teachers believed TEs could not relate to their daily challenges. However, not teaching a class was eventually found to be a positive feature of the role. Once the credibility of TEs was established and relationships were built, teachers came to value the learning they provided, and their ongoing contribution and availability were seen as an advantage. Second, APs had traditionally been responsible for curriculum implementation in schools, but in this reform it shifted to become primarily the role of the TEs. This change led to some sensitivity around role expectations between APs and TEs, and a restructure of leadership teams to accommodate the additional role. Third, the title ‘Teacher Educator’ was an impediment to acceptance of the role by teachers as they interpreted it to mean that TEs were there because they needed to be educated. The role and its definition had to be clearly spelt out for teachers.

Recommendation 17

It is recommended that in the development of reform models, system leaders institute an in-situ role such as a TE that has a singular focus on teaching and learning. The following elements should be incorporated into its structure:

- a) The occupant is part of the school Leadership Team and detached from teaching a set class.
- b) The title and purpose of the role are clearly stated.
- c) An induction process that addresses the function of the role within the Leadership Team is developed and implemented.

Finding 17

The building of trusting relationships between TEs and teachers was critical to the influence TEs had on teacher practice. However, because teachers initially felt vulnerable, defensive and opposed to having a TE in their school and classrooms, the TEs faced resistance. Relationship building with teachers was a slow process but, in time, TEs overcame the difficulties. They found they could earn trust with teachers by being highly visible, focused, discreet, flexible, positive, available, supportive and approachable. In addition, TEs adopted a flat structure of organisation. This structure was enhanced through TEs: demonstrating that they too were learners, affirming and appreciating teachers' efforts, focussing on teacher strengths, showing interest in teachers personally and professionally, and offering opportunities for coaching and mentoring.

To engage teachers in learning opportunities that influenced their practice, mutual challenge whereby teachers and TEs were able to question each other's assumptions and practices also became part of the relationship building process. In time, relationships were marked by mutual challenge, which evolved into an important part of the process and was essential for change to occur. However, while TEs needed to be challenging they could and were not confrontational, which was difficult because conflict was already present due to a lack of trust and teachers were suspicious about the TE role. Despite the difficulties involved, productive professional relationships were built that strengthened over time as teacher knowledge and skills increased. These relationships contributed to the dissipation of teacher resistance; however, it took a minimum of six months and up to two years for TEs to feel they had gained the respect of teachers and had overcome the barriers. TEs new to a school found it took them longer to develop relationships with teachers than their counterparts who had been appointed to the role where they had been on that school staff previously.

Finding 18

There was a reciprocal association between how TEs built relationships with teachers and how they earned credibility, a process that was protracted and problematic. As TEs built their credibility, teachers began to feel they could be trusted. For a long time TEs did not feel respected or valued, despite the positive way in which they treated teachers. TEs discovered they needed to be resilient, persistent and patient as they collaborated with teachers to influence their practice in a respectful and professional manner. Regularly teaching in view of their colleagues and working in classrooms where they demonstrated knowledge, understanding and practice of effective pedagogy eventually established the credibility of TEs. Beyond the classroom, their credibility also developed by co-planning with teachers; leading professional dialogue; facilitating on-site PD;

providing teacher feedback, resources and research; and guiding teachers in their analysis and response to student data.

Recommendation 18

It is recommended that those undertaking an on-site PD role:

- a) Invest time in building trust and professional relationships with teachers.
- b) Provide support, challenge and professional critique to teachers.
- c) Establish credibility by teaching in view of colleagues, providing feedback on teaching practice, demonstrating effective instructional practice by modelling and team teaching, facilitating co-planning and professional dialogue with teachers, leading on-site PD that is based on current research and includes relevant teaching resources and strategies, and building the skills of teachers in analysing and interpreting data.

Finding 19

Teacher opposition to the reform processes diminished by TEs providing extensive encouragement and affirmation while working with them in a positive and constructive climate. At the same time, teacher self-efficacy increased through the practical support and guidance of TEs over a sustained period. These positive shifts contributed to the persistence of teachers to continue learning and the belief that they were now more competent teachers.

Finding 20

Teacher practice was changed when power and responsibility were devolved to teachers. This was complemented by sustained support from credible school leaders that was linked directly to classroom practice. Collaboration was fundamental to the impact of the reform and was underpinned by respectful professional relationships amongst leaders and teachers. A heightened focus on teaching and learning that ultimately influenced teacher practice occurred through the adaptation of structures and the deployment of resources.

Recommendation 19

It is recommended that in the development of in-situ roles, such as a TE or in school Leader of Learning, school leaders establish policies and processes that:

- a) Identify teachers who are acknowledged by staff as credible classroom practitioners.
- b) Designate the role as a leadership position and allocate resources for its conduct.
- c) Incorporate mentoring duties with teachers within the role.
- d) Provide clinical supervision to support, advise and sustain the role.

6.1.4 Theme 4 – How the Construct of On-site PD Influences Teacher Practice

There were three key findings about how the construct of on-site PD influenced teacher practice. The first finding has three elements to it.

Finding 21

The organisational context of the on-site PD allowed it to be integrated and connected with other work in the school. As the PD took place for teachers within their own school site, the building of coherence and the knowledge, skills and practice of teachers were facilitated in three particular ways.

First, the learning of teachers was cyclical, context specific and active. School leaders assisted teachers to make connections between prior and new learning through its immediate application in classrooms. Learning was embedded into the concrete tasks and daily activities of teachers, and adapted to respond to the needs within each school. This coherent iterative learning was enabled by the on-site structure as teachers had ongoing opportunities to absorb new information, translate it into practice, and discuss and question it.

Second, by situating the learning on site there were multiple opportunities for collective participation. Shared understandings and a vision for student learning were built as teachers and learning support officers were involved in the PD, thereby heard consistent messages and developed their understandings together. The duration of the SSNP reform over a four-year period was seen as important because this extended time added to the influence of collective participation due to the sustained learning.

Third, the on-site PD was made coherent and relevant for teachers through school-based plans and goals that underpinned and directed it. Leaders planned the PD strategically in a connected way by situating the learning within the context of broader school needs. This facilitated the emergence of collective responsibility for student learning and the joint endeavour of leaders and teachers to improve teacher practice.

Recommendation 20

It is recommended that school leaders design and implement on-site PD models that are directly linked and embedded in the daily practice of teachers, allow for the collective and active participation of all relevant staff, and occur over a designated sustained period of time.

Finding 22

Teacher practice was influenced through the connected and supportive nature of the learning that happened within the structure of on-site PD. The structure alone did not influence teacher practice but it was important because its in-situ nature enabled the learning for teachers to be accessible, convenient and immediate. On-site PD changed teacher practice due to its timeliness, relevance and proximity to classroom practice. Teachers were able to receive assistance and support to deepen their understandings, ask questions at the point of need, and receive feedback on the application of their learning.

Finding 23

The establishment of on-site PD was a change from the long-standing practice of off-site PD for teachers and leaders, yet eventually it became their preferred mode of learning. Teachers came to value on-site PD through a range of influential experiences that included team-teaching, observing others teach, co-planning, sharing feedback, professional dialogue, learning about current research and the analysis of data to inform teaching practice. This form of learning was seen as practical and more effective than hearing about teaching theory and practice off-site, then later attempting to apply it. Furthermore, in light of their involvement in this reform, teachers and most leaders viewed external providers of PD redundant because they had worked together within their schools to generate strategies that positively influenced teacher practice. The effectiveness of the on-site PD was largely due to its collective nature and the quality of the learning experiences for teachers.

Recommendation 21

It is recommended that school leaders implement on-site PD programmes that feature experiences of: team-teaching, teachers and leaders observing colleagues teach, teachers co-planning with leaders, giving and receiving feedback on teaching practice, professional dialogue about teaching and learning at all levels, the analysis and interpretation of student data, and the use of current research to inform instructional practice.

6.2 Implications for Conceptual Framework

In Chapter Two, a Conceptual Framework was developed from the scholarly literature to diagrammatically represent three themes that can influence teacher practice- PD, PLCs and Leading for Learning (Figure 2.1). The findings from this study indicate that this model remains viable but they also contribute to a deeper understanding of it. While the design of the framework demonstrates that the themes in the Conceptual Framework are interrelated and have a high degree

of reciprocity in their role in influencing teacher practice, certain emphases across these themes are important and have implications for this model.

Leading for Learning is an area that has been well described in the literature but findings from this study show it was not confined to one theme. It was evident across the whole context of the research and was expressed by different people; system leaders, school leaders and at the level of the individual teachers. For example, leading PLCs was not limited to principals and was successful when shared with teachers. School leaders, particularly TEs, were considered effective as they worked as classroom-centred instructional leaders who actively supported teachers by demonstrating how teaching practice could change. Individual teachers learned from other teachers and leaders, and over time began showing leadership in ways not seen before. While the objective of the leading was learning, it was not only about that. Collaboration, trust and credibility were important in enabling the leading of learning to influence teacher practice, which was not limited to the theme of Leading for Learning.

The importance of PLCs as a structure and vehicle for collaboration between leaders and teachers in on-site PD was apparent in the findings. However, what was also clear was that there is no simple formulaic process that necessarily leads to the formation of PLCs. Skilled on-site facilitators were required to collaborate with others to foster and shape their progress according to the contextual needs of teachers and students. The availability of time, the deployment of other resources and the adaptation of structures were all necessary for leaders and teachers to collaboratively develop a shared vision, and an understanding of the purpose and function of PLCs. The use of data, the deprivatisation of teaching practice and professional dialogue worked in an interconnected way to change teacher practice, and inclusive structures enabled this collaboration to occur. Collaboration, underpinned by respectful professional relationships amongst leaders and teachers was fundamental to the impact of the reform to influence teacher practice and was embedded within all themes in the model.

An emphasis on building trust to establish positive and productive relationships between and amongst leaders and teachers was also essential to influencing teacher practice as there was an association between these relationships and shifts in teacher understandings, attitude, self-efficacy and practice. This was seen particularly in the deprivatisation of teacher practice within the PLC theme but was apparent in others. While the deprivatisation of teacher practice eventually resulted in an open approach to collaborative learning, this shift was a stressful, confronting and anxious

experience for teachers. Relationships of trust within schools were vital in gradually overcoming these feelings of teachers. In building relationships with them, leaders were required to get to know teachers personally and professionally while being co-learners in a non-threatening, approachable and supportive manner. Trusting relationships were also instrumental in shifting professional dialogue from congenial off-task conversations to those that probed into teaching practice and a focus on student learning.

Collaboration and trusting relationships were central to all themes in the Conceptual Framework. These crucial elements of on-site PD were also facilitated and complemented by the credibility of school leaders that was slowly built through ongoing collaboration with teachers to influence their practice. This resulted in a reciprocal association between how leaders, particularly TEs, built relationships with teachers and how they earned credibility. As leaders built their credibility, teachers began to feel they could be trusted and they in turn became more willing and open to different forms of collaboration within and beyond their own classrooms. However, this process was protracted and problematic, and leaders needed to be resilient, persistent and patient in their work with teachers. Regularly teaching in view of their colleagues and working in classrooms where leaders demonstrated knowledge, understanding and practice of effective pedagogy was instrumental in leading the learning through collaborating, and building trusting professional relationships and credibility with teachers.

6.3 Limitations of the Present Study

The findings from the present study were constrained by certain limitations that generally relate to the methodology and processes for data collection.

Within the multi-site case study methodology, the data collected was confined to individual semi-structured interviews with school leaders, group interviews with teachers, and pre-interview self-reflection tools from all participants. System leaders had a role in this reform but they were not interviewed, which limited the understandings gained about their contribution to changed teacher practice to the perceptions of teachers and school leaders.

A further limitation was that while the present study looked particularly at the influence of on-site PD on teacher practice, it specifically did not focus on a comparison with off-site PD.

The present study was set in the context of five Australian low SES metropolitan Catholic primary schools engaged in the same reform; therefore, another limitation is that it is specific to Catholic primary schools. Despite this limitation, it is not a restrictive one. Accepting that the schools are Catholic and have a religious focus, with the exception of their religious exercise they are actually comparable to government schools. They are similar in organisation, curriculum and teaching staff, which make the findings and recommendations from the present study of benefit to government and independent primary schools in corresponding contexts.

6.4 Suggestions for Further Research

The present study has contributed to the knowledge about how on-site PD can influence teacher practice in primary schools. It is recommended that further research be conducted to:

- a) Extend the findings by investigating the impact of in-situ roles such as TEs and PLCs, on teacher practice in on-site PD in secondary, government and independent schools.
- b) Investigate the variation of the impact of TEs, or other in-situ PD roles in a school, between externally appointed ones with those that are internally promoted.
- c) Compare the long-term impact of on-site PD on teacher practice with externally provided PD across all levels of schooling.

6.5 Conclusion

The major research question from the present study asked: “How does on-site PD influence teacher practice?” The findings indicated that while learning in this way was a major shift for teachers, their practice improved due to their involvement in on-site PD. The experiences of leaders and teachers resulted in 23 findings. These findings led to 21 recommendations regarding ways in which system and school leaders can enhance the impact of learning for teachers engaged in future on-site PD.

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Appendices

Appendix A: Coding Process Data for Schools E, Questions 2-4 and Schools F-I, all questions

Phase 1 Data- Open Coding

Table 1(b) Open Coding, Question 1 (School F)

Q1: Did the exercise of leadership in the school and system influence teacher practice and if so, how?	IDEAS	FREQUENCY
Principal	1. System leadership (funds) had a strong influence on teacher practice e.g. Instructional Rounds, knowing the student	3
	2. Teachers originally reluctant, hesitant to observe each other in classrooms; thinking has shifted	2
	3. Open, approachable, knowledgeable LT contributed to improved practice	1
	4. Time has been provided for LT to work with teachers.	1
	5. Increased parent and community engagement	3
Assistant Principal	6. LT put structures in place for teacher PD; it is the driving force; maintains focus	4
	10. Collaboration with teachers a priority	1
	12. LT: Planning together; professional dialogue evident; influence on classroom practice	1
	8. Inclusive of all on staff and shared	2
	5. Parental involvement a positive experience	2
Teacher Educator	9. P and LT trusted and supported TE; trusting relationships	3
	10. LT cohesive, collaborative and agree on the same direction	3
	10. LT had a team approach	2
	4. AP contributed to PL but also on class	1
	12. Principal directly involved in IR and PL	3
	10. AP and TE have worked together on PL	4
	1. System and LT worked together	1
	10. LT value the changes; this contributes to its sustainability	1
	4. LT gave their time and made changes slowly	2
	12. LT participated in PL-showed they value of it	1
Teachers	10. LT united in their focus and directly involved	3
	3. LT helped teachers to know expectations, have a common language	2
	10. AP and TE worked together- common understanding	1
	6. LT all knew direction and had it in annual plan, also flexible	1
	5. Despite many efforts it remains difficult to engage parents	6
	3. LT proactive and keeps abreast of changes	2
	4. LT organised for time out of class for teachers	1
	8. LT included specialist teachers	1
	10. LT led PD.	1
	12. LT used data to analyse needs of the school	1
	13. LT have been into classrooms	1
	1. System leadership supportive	1
	5. TE runs courses for parents but participation is poor	1
3. LT team assisted teachers to develop in their knowledge and skills; were supportive	5	

Table 1(c) Open Coding, Question 1 (School G)

Q1: Did the exercise of leadership in the school and system influence teacher practice and if so, how?	IDEAS	FREQUENCY
Principal	1. System offered direction; guidance and consistency	2
	2. TE on leadership team significant	1
	3. Teacher leadership developed through recognising and nurturing talent-encouraged others to have a go	2
Assistant Principal	N.A	
Teacher Educator	4. Important to develop everyone as leaders of learning, not just the TE	3
	4. TE worked alongside others developing and utilising different expertise	2
	5. Developed in teachers understanding and use of a range of data	1
	4. Teacher confidence and capacity to present to others has increased from working with them	1
Teachers	6. Leadership team made decisions around PD provided based on needs of staff and school using data-some OSPD, other whole school	4
	7. Teachers more confident as a result of all the PD	1
	8. PD was systematic-rich and effective	1
	8. LT lead PD collaboratively	2
	8. PD made connections for staff	1
	9. System leadership has expected too much from teachers- takes away from learning time	3
	9. System expectations re data are effective in the long run but difficult and time consuming	3
	5. LT has helped teachers use data to write SMART goals and strategies for students	2
	8. Some LT members stronger than others; they too are on a journey; some confusion arose	3
	8. Teachers need to have the skills to challenge leaders effectively and professionally	1
10. Support from LT in working with parents appreciated	2	

Table 1(d) Open Coding, Question 1 (School H)

Q1: Did the exercise of leadership in the school and system influence teacher practice and if so, how?	IDEAS	FREQUENCY	
Principal	1. Success in influencing teacher practice has been largely dependent on the high quality of the TE-strong leader	3	
	2. Adequate support from the system for TE and LT	2	
	2. Negative view of system in the early days due to demands on teachers although can now see benefits	4	
	3. Other leadership team members aware but little evidence of them directly involved with teachers	1	
	4. The use of data shared by the system was helpful	1	
Assistant Principal	5. LT model good teaching practice and exercise supervisory aspect of leadership	2	
	6. Teachers know students well-always did	1	
	7. LT team design/plan PD	1	
	8. System provided off-site PD with mixed effects; irrelevant to particular school needs; over loaded	3	
	9. LT worked to manage expectations and implementation strategically	2	
	10. It all takes time over a continual period	2	
	11. LT have responsibility for building shared ownership across the school	1	
	12. LT will need to be creative to ensure sustainability	2	
	Teacher Educator	13. TE had to be agent of change on LT; align/get a consistent LT vision for change	2
		14. The change of Principal helped	1
		15. LT did not have structures or processes to raise teacher capacity, or they were not occurring	9
		16. People grew with the new processes and practices-data, timelines	3
16. Gradual release of responsibility; teachers now doing it themselves		1	
17. Resistance from LT members when encouraged to visit classrooms		2	
18. Importance of maintaining respect and dignity of people throughout		1	
19. System provided excellent support, particularly when dealing with difficulties		2	
20. Dealing with change meant working with those who were willing to change		2	
Teachers		21. L developed and facilitated PLCs	1
	14. New P involved in improving teacher practice	4	
	9 New Principal allocated time for involvement in improving teacher practice	2	
	11. Release of power from LT to teachers evident-shared leadership and ownership; empowerment	3	
	21. LT implemented SMART goals; PLCs now more focused, an expectation	4	
	11. Value LT now presenting as co-learners; they recognise expertise of others	1	
	15. LT need to make leadership decisions so things are expressed consistently through the school	1	
	13. TE had to liaise with LT and teachers	1	
	11. LT provided opportunities for teachers to work professionally and collaboratively	2	
	7. LT organised for PD but resources were not available until this year to support implementation	4	
	9. LT provided time on-site to plan together	1	
	2. System expectations exceed the amount of time given to teachers to do them	2	
	2. System needs to be more in touch with classroom realities and support teachers	5	
	17. The LT members are not in the classrooms	1	

Table 1(e) Open Coding, Question 1 (School I)

Q1: Did the exercise of leadership in the school and system influence teacher practice and if so, how?	IDEAS	FREQUENCY	
Principal	1. All leaders in the school are involved in supporting, leading classroom teaching practice	3	
	7. Big impact on teachers knowing students	1	
	2. System supports leaders on current pedagogical practices	1	
	3. Organisational decisions made to allow for LT to concentrate on teaching and learning	1	
Assistant Principal	2. System supported TE with a lot of PD	1	
	4. Regret that it needs to end	1	
	5. There was a number of struggles-teachers understanding the context, not content	1	
	6. LT had to constantly keep expectations for students high and not focus on the negative; we had a TE because we are a poor performing school	3	
	2. System personnel organising the approach needed to spend more time in the schools to understand and progress things more quickly	1	
	7. LT focus on student learning using data allowed for challenge and change	2	
	1. Collaborative approach with LT and staff; lots of discussion; changed over time	2	
Teacher Educator	3. There was a strategic approach	1	
	2. System influenced the focus	1	
	1.LT bring different gifts to the team	3	
	1.It works well now; did not gel in the first couple of years; you had to feel the waters	1	
	7. AP and TE modelled; injected themselves in the classrooms; allowed themselves to be observed; co-learners with teachers	3	
	2. We need credibility from system people	1	
	3. Principal is flexible	1	
	3. Principal changes timetables to support learning; responsive to staff needs	1	
	Teachers	7. LT very hands on; model what they expect; very strong; improvement due to them; student centred	2
		3. LT prioritized effective teaching and learning through planning, timetables, budget, resources, time	2
1. Collaborative decision making; team; open communication; do not feel threatened		4	
3. Collaborative opportunities provided by LT		1	
3. Collaborative opportunities resourced well by LT		1	
1. LT collaborative; open communication; supportive; 'you're heard with open ears', mentors		5	
2. Question the way in which TEs were allocated to schools and use of budget		1	
2. More collaboration across schools involved would have been beneficial		2	
2. Expectations from system for TE and teachers excessive and unrealistic		3	
1. LT a huge and crucial influence on teacher practice		2	

Table 2(a) Open Coding, Question 2 (School E)

Q2: Did the experience of a PLC influence teacher practice and, if so, how?	IDEAS	FREQUENCY	
Principal	1. Teachers initially apprehensive and resistant to others coming into their classrooms	2	
	2. Recognition of the phases of development of a PLC	1	
	3. Building of trusting relationships	3	
	4. The importance of modelling, not just 'telling'	4	
	5. Improved knowledge of content and contemporary pedagogy	6	
	7. Teachers have increased confidence	1	
	7. Risk taking has been a great thing	1	
	8. Importance of Principal as a model	1	
	9. Teachers know their students better	1	
	10. It has really opened up the classrooms	2	
	15. Teacher dialogue important	1	
	Assistant Principal	8. Leadership of PLC by LT members	2
		11. It is a collaborative approach	1
		12. Modelling, team teaching and visiting classrooms to develop others	2
		13. The need to dedicate time and planning for PLCs	1
7. Teacher choice and ownership is important to the functioning of PLC		1	
7. PLCs give teachers opportunities		1	
5. Importance of focus of PLC being on effective teaching and learning		1	
Teacher Educator	2. PLCs now more authentic, not task oriented	1	
	11. Every teacher is learning together, team approach	3	
	9. The use of data and enquiry culture in a PLC now	4	
	6. Teachers will speak out if something is ineffective	1	
	15. More conversations in the staff room now	1	
	12. A system to monitor programming and a common language is in place	3	
	12. Learning support meetings established	1	
	6. Teachers are now 'energetic' about learning	1	
	16. Student attendance and enrolments have increased	1	
Teachers	6. Teachers are now taking more leadership roles in PLCs	1	
	11. PLCs allow T and L to be communal; team approach	2	
	7. Teachers have grown in confidence	1	
	11. Teachers learn a lot from PLCs by sharing; a whole school approach	6	
	11. Shift from traditional 'cocoon' teaching to learning together	1	
	13. Learned together because time was given for PLCs	4	
	12. Processes put in place to support new teachers by classroom visits and modelling	2	
	2. It was initially too much work but the value can be seen now	3	
	9. Evidence allows you to know the students better	2	
	5. PLCs allow for a focus on strategies for teaching and learning	1	
	9. PLC sharing has given more opportunities for students to show what they have learned and have a voice	1	
	14. They embed and sustain consistent, good teaching practices	3	
	2. PLCs have changed over time as understandings evolved	4	
	9. The role of data in a PLC	1	
	15. Professional dialogue improved due to OSPD and PLCs	2	
	13. Insufficient time for PLCS	2	

Table 2(b) Open Coding, Question 2 (School F)

Q2: Did the experience of a PLC influence teacher practice and if so, how?	IDEAS	FREQUENCY
Principal	1. Instructional Rounds PLC had a major influence	1
	2. Data collection and analysis drives decisions	2
Assistant Principal	3. Teachers not working in isolation now; shared ownership; a collaborative venture	3
	4. Shared responsibility across staff for student learning	1
	5. Sharing of different expertise, group effort leads to improved teaching and learning	3
	6. Apprehensive initially in observing/being observed but found it affirming	3
	7. PLCs contribute to consistency of focus and practice	2
	8. More of a learning community now rather than people doing things in isolation	1
	8. Collaborative 'no blame/no shame' leads to supportive and safe learning environment for teachers	2
	Teacher Educator	3. PLC allows PL to be a whole school approach
	2. Data and research is used utilised to develop shared ownership	1
	9. Took small steps together to embed practice	2
	9. Teachers felt supported; tried to share time around; importance of dedicating time to them	2
	5. PLC allowed for a team of people, different experience and expertise to contribute and show leadership	4
	1. IR in PLC; teachers learned a lot from each other	1
Teachers	10. PLC and PL in it led to a common language	2
	8. All staff have contributed to a safe and supportive learning environment for teachers	3
	8. In PLCs feedback and support are given; not competitive	1
	3. All working for a common goal/understanding	3
	7. Whole school focus and consistency of practice now in place	2
	2. Assessment and monitoring occur and influence the T & L	1
	9. Learning in the PLC takes time but is worthwhile	1
	11. Now know the students and their needs better	2
	7. Students also demonstrate a common language to discuss their learning	3
	7. PLCs lead to common understanding and practice	5

Table 2(c) Open Coding, Question 2 (School G)

Q2: Did the experience of a PLC influence teacher practice and if so, how?	IDEAS	FREQUENCY
Principal	1. Understanding of what a PLC is took time	2
	2. PLCs have become much more focused, specific	2
	3. Teacher choice and utilising expertise is important	1
	4. Balancing time away from class for PL a priority	1
Assistant Principal		
Teacher Educator	5. PLCs engendered shared ownership and sharing of expertise	1
	5. Built collective responsibility for student learning	1
	6. Some personalities continue to present challenges in PLCs	1
	1. Teachers did not understand what a PLC was	1
Teachers	7. PLCs have required a whole mind shift change for teachers	3
	8. PLCs have up-skilled teachers and kept them current with contemporary pedagogy	1
	9. Sharing of resources and strategies builds community and acknowledges that everyone is still learning	3
	10. Teachers appreciate having choice in PLCs	2
	1. Smaller teams have led to whole school being a stronger PLC	2
	11. PLCs give teachers courage and confidence to have a voice and contribute	4
	9. PLCs provide support and guidance	1

Table 2(d) Open Coding, Question 2 (School H)

Q2: Did the experience of a PLC influence teacher practice and if so, how?	IDEAS	FREQUENCY
Principal	1. Notion of PLCs is now well understood	1
	2. PLCs have assisted teachers to be responsible for knowing the learner	1
	3. PLCs have strengthened collaboration and facilitated change	3
	4. Increased professional conversations evident	2
	5. It will be sustained because teachers see the benefits	1
	6. The no-blame, sharing/learning together culture allows teachers to say things based on trust in PLCs	2
Assistant Principal	7. PLCs develop common understandings of content and student expectations	2
	8. They impact heavily on time	1
	9. Initially there were often difficulties keeping conversations on track/task	2
	10. PLCs have increased collaboration and exposed people's expertise	2
Teacher Educator	1. PLCs now truly reflect a PLC inclusive, of all stakeholders	3
	3. Some interpreted the need to collaborate as a reflection on their teaching; now broken down	1
	6. A lot depends on how you approach things	1
	10. Process includes using expertise of staff across whole school	2
	11. Class visits (IR) have strengthened PLCs-data, planning, progression better grades, expectations, bench marks	2
	11. Initial reluctance to classroom visits	1
	5. Sustainability will be difficult without a budget	1
	3. Shift from insular practice to working together	2
	6. PLCs allowed for like-minded people to find each other and gain support	1
Teachers	1. PLCs have redefined committees; collection and analysis of data a focus using SMART goals	2
	3. Work collaboratively to analyse data and set benchmarks-a lot easier when you work as a team	6
	4. Professional conversations important	1
	7. PLCs as opposed to committees: now all the relevant people having the same conversation; the next level of depth	2
	1. It is a learning community, an opportunity; you don't need all the experts there; it is not top down	4
	10. PLCs utilise the skills of all stakeholders	4
	12. Skills learned will stay with teachers; have grown professionally and changed thinking	3
	12. There has been whole change by every staff member	3
	11. Class visits, then reflecting as a group to help plan is a positive	2
	8. School time needs to be dedicated to PLCs and be inclusive of all	3
	11. Teachers felt apprehensive, nervous and threatened during class visits but found them beneficial	5

Table 2(e) Open Coding, Question 2 (School I)

Q2: Did the experience of a PLC influence teacher practice and if so, how?	IDEAS	FREQUENCY
Principal	1. LT all involved in PLCs	1
	2. Professional dialogue an important part of PLCs	2
	3. Time has been reorganised to allow for PLCs; can improve it further	2
	4. People are passionate about expressing opinions in PLCs; no inhibitions	1
	5. PLCs have been effective in planning for teaching and learning	1
Assistant Principal	1. TE chaired PLCs until teachers were ready to take over	1
	5. PLCs influence teacher practice greatly; refined practice; addressed misunderstandings; changes in classroom practice; meet regularly	4
	3. Organisation re human and material resources needed to occur	1
	2. We have professional dialogue in PLCs	1
	4. We argue in PLCs about student progress	1
Teacher Educator	1. PLCs occur because there is a TE to drive them	1
	6. PLCs initially did not take off; very difficult but evolved over time to be fantastic	3
	3. Time has been allocated	1
	4. TE had respect for the teachers had respect for the teachers	1
	2. PLC not confined to meeting time; discussions happening all the time-teachers instigate them	1
Teachers	1. Teachers have gradually taken leadership and ownership of PLCs	1
	5. PLCs have had huge impact; better pedagogy; continual challenge; professional dialogue that is relevant; context important	3
	4. PLCs on site you can have deep, meaningful; honest conversations; 'say, this is the crunch'-we are in this together for the students	2
	5. PLCs are focused, have goals and work from the data	1
	2. PLCs provide different styles of teaching and a different range of ideas	2
	5. PLCs have deprivatised classrooms; no longer a solo teacher; part of team teaching approach; collaborative	2
	5. Feedback and learning by observation is critical	2
	4. Initially resistance to change; anxiety; feelings of 'big brother; difficult to take on; felt threatened;	3
	2. PLCs allow you to see different perspectives; different point of view; professional conversations are ongoing	4
	5. PLC sharing reduces the burden and you have someone to bounce ideas off	1
	3. Time was provided for PLCs and observing other teachers	2
	5. PLCs a definite influence on teacher practice; we have a huge learning community	1
	5. Ask others for advice; bounce off other colleagues or it is 'just running around in your own head a lot of the time'; timely	3

Table 3(a) Open Coding, Question 3 (School E)

Q3: What was the particular contribution of the TE role to teacher practice?	IDEAS	FREQUENCY	
Principal	1. TE has made a significant contribution to teacher practice through engagement in PL	1	
	2. Challenge of balancing TE role within existing leadership roles in the initial phase	1	
	3. A role focused entirely on teaching and learning important as it allows the time	4	
	4. TE being in classrooms, supporting teachers with their teaching, modelling and leading professional dialogue all important	2	
	5. Change of practice has taken time	1	
	6. Importance of setting learning goals for students	1	
	7. Building capacity beyond the TE-teachers modelling for other teachers has built teacher self-esteem	2	
	8. TE has provided resources for student and teacher learning	2	
	9. Procedures and practices have been established to ensure sustainability	3	
	13. Increased engagement with the community	1	
	Assistant Principal	10. TE has influenced learning culture in the school	1
		1. TE has built teacher capacity in pedagogy	1
		11. Use and understanding of data has increased-informs programming; used to track student progress	4
4. Importance of TE modelling, team teaching in their role		2	
12. TE provides theory behind teaching and knowledge of contemporary pedagogy		1	
13. Many opportunities provided to engage with the colleagues, parents, carers and community		1	
10. There was a lot of resistance to TE; had to build trust		2	
Teacher Educator	2. The role has a focus on learning	3	
	14. Building relationships over time facilitates change	2	
	9. TE has become redundant; built sustainability through building teacher capacity	5	
	15. Teachers see themselves as leaders now	1	
	11. Teachers now know their students better	1	
	16. Development of TE as a leader has occurred	2	
	17. TE, teachers and LT work together as a team	2	
	3. The learning journey has taken time	1	
Teachers	7. TE helped teachers to develop independence; teacher leadership	2	
	9. Sustainability is an issue	5	
	18. System caused pressure, stress and confusion-for teachers and the TE. Too much accountability	8	
	5. Learning is a process/journey that takes time	2	
	1. TE taught us to take risks and try new strategies; to lead and learn from each other	3	
	11. Teachers understand use of data; it informs planning and how students learn	5	
	4. TE modelling in classrooms builds teacher capacity; should have been more	5	
	7. TE identified teachers' strengths and develops teacher leaders	1	
	1. Importance of knowledge, experience and credibility of the TE	3	
	19. Not sufficient time allowed for all that is required of teachers	4	
	1. TE is seen as a learner and can see the big picture	3	

Table 3(b) Open Coding, Question 3 (School F)

Q3: What was the particular contribution of the TE role to teacher practice?	IDEAS	FREQUENCY
Principal	1. TE has made a significant contribution to teacher practice	2
	2. Challenge of balancing TE role within existing leadership roles	3
	3. TE being in classrooms, supporting teachers with their teaching, modelling, important	1
	4. Leadership of TE in IR process vital	1
	5. PL for TE and others has had a big influence	1
Assistant Principal	6. TE role dedicated to PD of teachers provides direction	2
	7. Importance of the right person (manner) for the TE role	2
	2. Difficulty of where AP role fits with TE- TE has more time for teaching and learning	3
	8. Sustainability without a TE is a problem; apprehensive	4
Teacher Educator	9. Teachers' skills have become embedded in programs	1
	3. Modelling, observing planning with teachers to establish credibility important	3
	7. Establishing trusting relationships; fully involved in life of the school	3
	8. Sustainability of changes is the biggest challenge	3
	10. Teachers have not been resistant/unwilling	1
	8. Teachers value changes; not being given dedicated time will reduce what can be continued in the future	2
	8. Will need to be creative with limited time for the future	1
	11. TE role has focused on PL for parents- range of initiatives in place	2
Teachers	3. TE modelled, did team teaching, understood the practice	4
	12. TE took small steps and did not over-burden teachers successful	3
	7. TE approachable; supportive; accessible; builds teacher confidence	7
	13. TE demonstrated being a co-learner	2
	14. TE utilised the particular skills of staff	1
	8. Sustainability a big concern-staff need to address this; proud of achievements	3
	2. Difficulty of AP role picking up all that TE does	1
	8. Time will not be available and teachers will be expected to do a lot in their own time	1
	1. Importance of TE role in school	1
	6. TE has provided the PL; teachers attend little off-site now	1
	8. Without TE sustainability of PL is an issue	1
	1. Importance of TE role; has formed and guided teachers to alter practice to cater for all students	4
	15. Communication, expectations, rationale and timing of communication from TE very clear	3

Table 3(c) Open Coding, Question 3 (School G)

Q3: What was the particular contribution of the TE role to teacher practice?	IDEAS	FREQUENCY
Principal	1. TE role has been very effective; valued by teachers; their practice improved	4
	2. TE works closely with teachers- models/observes/supports	3
	3. Sustainability is an issue-will require flexible and creative strategies	2
	4. Establishment of TE role on leadership team was a challenge	1
Assistant Principal		
Teacher Educator	2. TE did modelling for teachers when they wanted assistance and led staff meetings	3
	5. Coaching, mentoring and active listening had to be established and used in PLCS	2
	6. Respect for teachers as professionals is vital	3
	7. TE believing in own ability to challenge some practices; teachers tested TE	4
	8. Relationships had to be built for change to occur and had to let teachers challenge and question	3
	3. It took time to change the mindset-it took teachers six months to recognise TE as capable	2
	7. Teachers started whispering that the TE knew what she was talking about	2
	9. Vital that TE has professional learning/dialogue and is an 'expert' in things	2
	Teachers	
Teachers	2. TE modelled, provided feedback and support to teachers, collaboratively planned	4
	2. TE has shown how and accessed support for teachers' learning needs	2
	1. Having a TE role was a positive experience for teachers	1
	2. TE has been research based, data driven and insisted on accountability	2
	8. TE challenged people, coached, mentored, and asked big questions	3
	6. TE has been affirming and contributed to a safe and supportive learning environment	1

Table 3(d) Open Coding, Question 3 (School H)

Q3: What was the particular contribution of the TE role to teacher practice?	IDEAS	FREQUENCY	
Principal	1. TE is credible, available, supportive; made a big difference-outstanding leader	5	
	2. TE developed rapport and built relational trust with colleagues	4	
	3. Sustainability-believe that practices will continue but leadership in school will suffer	2	
	4. Time resource will no longer be available to release teachers	4	
Assistant Principal	1. TE experience has worked	1	
	5. Teachers have great ownership and responsibility now	1	
	6. TE has focussed on quality learning experiences, assessment and use of data across the school	4	
	7. Sustainability is possible but it is short sighted to remove the support	2	
Teacher Educator	8. Role effective as it is dedicated to curriculum; can focus on areas of need	2	
	9. Modelling, professional reading, team teaching, planning, programming, running PD, co-ordinating classroom visits all occur	2	
	5. TE doing less PD and modelling now as teachers are taking responsibility; confidence increased	3	
	2. Respect is vital	2	
	1. Role is valuable and should be continued	1	
	3. Will need to be inventive in the future	1	
	1. TE recognises own professional growth in the role	2	
	2. Believe in maintaining a safe and supportive environment for teachers	1	
	Teachers	9. TE introduced and is involved in PLCs	2
		2. TE non threatening, works with teachers, guides	1
9. Utilises latest research; organises timetables, PD, modelling, planning		4	
8. Things are now more focused, driven, professional-on curriculum, pedagogy, good practice		4	
1. TE is available, supportive, reasonable		4	
1. Concerned re what would have happened without the role		3	
2. Personality and gentleness contributed to effectiveness		6	
3. Concern re why a successful program would end		2	
8. TE focuses on areas of need in the school		1	
2. Helped teachers to feel more confident and capable		1	
6. TE made process of data collection manageable across the school	4		

Table 3(e) Open Coding, Question 3 (School I)

Q3: What was the particular contribution of the TE role to teacher practice?	IDEAS	FREQUENCY	
Principal	1. Importance of a role focusing on pedagogy	2	
	2. Substantial PD for TE; initially difficult but good in the long term	1	
	3. TE had to both challenge and partner teachers; had to build trust to do this	2	
	4. TE influenced teacher knowledge of students; provided PD; feedback	2	
Assistant Principal	1. Importance of a role focusing on OSPD and driving change; another expert on staff to support teachers	4	
	4. TE leads teachers 1:1, small groups, modelling, collection of data; differentiated approach based on need	2	
	3. It was about the privacy and dignity of each person; supporting subtly to make changes	3	
	4. Importance of TE working with teachers re data analysis and feedback	2	
	1. One person with this dedicated role is important; AP cannot do all this with other aspects to their role	2	
	3. The title of the TE role caused a major hurdle-deficit view of teachers; it took a lot of relationship building	3	
	2. Initially TEs were out of the school too much for PD; could not get momentum or consistency of practice	2	
	3. TE had to work hard to build relationships and a safe and supportive environment for teachers	1	
	3. There was a lot of give and take which gave people room to change	1	
	1. It is difficult as AP to nurture, demand, challenge, support simultaneously; good to have TE to work with to do this	1	
	7. TE has a high profile with parents; good relationship with community	2	
	Teacher Educator	3. Difficult for TE in the role being new to the school	2
		4. TE works with every teacher and knows every student	1
3. TE label caused problems initially; took two years to build relationships; teachers would take and take and take		2	
3. There was a lack of respect; TE hadn't done the hard yards		2	
3. Progressed slowly but have taught the teachers persistence-never give up; always challenge them; positive person		4	
5. TE has seen a lot of change in teacher practice		1	
5. Teachers are now skilled and less reliant on TE		1	
5. Teachers initially had low expectations of students; now improved as has student behaviour		2	
3. TE earned respect from teachers by being observed in the classroom- 'on the same playing field'		1	
6. Sad that the role is ending; next year they'll be fine; hopes to still be able to have a say		3	
3. Teachers now saying how will we do this without you? There is an accountability with TE there though;		2	
4. TE sits with teachers to support and guide them; professional dialogue		1	
Teachers		1. TE-another professional in the classroom with the teacher	2
	3. Some teachers felt threatened by TE in their classroom	1	
	3. TE a very personable person who built trusting relationships; gave teachers time before going into classrooms; always had time for you	4	
	3. Relationships were built because the TE was onsite over time; was part of it- collaborative	2	
	5. Classrooms are now open; team teaching	2	
	4. TE provided good PL; examples and readings; increased teachers' professional capacity; supported teachers; data based professional dialogue and planning; incredible learning opportunity	5	
	3. Teachers did not understand the TE role at first; some resistance/sceptical, but now no negativity	3	
	5. TE role has enhanced pedagogy; teachers have tried new things and moved; dynamic role-working in classrooms; ongoing programs	2	

1. Generally a positive response to having a TE; experienced person you can go to	2
4. Teachers now better observers; fresher and have increased strategies	2
3. TE always commended teachers on positives; never acted as a person in authority; blessed to have the TE	3
4. TE good at finding strategies and assessments	1
4. TE role has assisted teachers to feel more accountable for decisions made re students	1
6. TE role finished because unaffordable or now redundant?	1
5. TE has influenced classroom visits through Instructional Rounds and PLCs	1

Table 4(a) Open Coding, Question 4 (School E)

Q4: Did the nature of the on-site PD influence teacher practice and, if so, how?	IDEAS	FREQUENCY
Principal	1. On-site PD is inclusive involves everyone and is shared	3
	2. Modelling in classrooms and working with people important	2
	3. OSPD meets the needs of that particular community	3
	4. Professional dialogue has contributed to learning for all members of staff	2
	5. OSPD assists teachers to know the students and how they learn	1
	5. OSPD has changed the teaching practice of every single teacher	1
Assistant Principal	6. OSPD gives teachers confidence to put effective T & L in place	1
	7. OSPD can link/connect practices across the school (coherence)	3
	8. Builds sustainability of practices	2
	9. Some teachers may value OSPD but resist it	2
	10. Building of trust and relationships important to OSPD	2
Teacher Educator	1. OSPD allows for all staff to be engaged in the learning, have a say and have choice	2
	11. OSPD is long term	1
	7. Given support and within a context it is effective; makes connections, has accountabilities	2
	12. Off-site PD has no effect; not strategic or matched to needs	2
	1. OSPD allows for learning together as part of a team and is strategically linked	3
	13. Money and time have supported OSPD	2
	1. Builds a shared responsibility for learning	1
15. PL is valued; teachers can now critique professional readings and presenters; they are informed	2	
Teachers	1. OSPD is collaborative and shared	3
	12. Off-site PD is not relevant to need/expectation	1
	11. OSPD is practical, continuous and relevant	4
	9. Difficult to change teaching practice; creates fear, anxiety	7
	14. Parents and carers more involved	1
	11. It is long term	1
	1. OSPD is active learning, sharing knowledge, motivating	2
	10. Building of trusting, supportive relationships important	6
	12. Off-site PD teachers would discuss other things	1
	13. System involvement has been a negative experience	6
	14. Time must be given for OSPD and data analysis.	3

Table 4(b) Open Coding, Question 4 (School F)

Q4: Did the nature of the on-site PD influence teacher practice and if so, how?	IDEAS	FREQUENCY
Principal	1. OSPD is inclusive	1
	9. Shifts the emphasis back to the teachers	1
	2. OSPD has changed their way of working with teachers to develop common understandings	1
	3. Collaboration across schools a strong feature	1
Assistant Principal	4. OSPD great influence on tr. practice e.g. all assess together; analyse data	2
	5. Teachers analysing data together has shared the ownership of the learning; included specialist teachers, a positive cohesive approach	4
	6. Off-site PD 2 nd /3 rd hand	2
	11. OSPD allows for learning from mistakes	1
	11. OSPD allows for risk taking, experimenting in a safe and supportive environment	2
Teacher Educator	7. Presence of TE on site all the time brought accountability	1
	4. Use of data and follow-up can occur on-site; see the value of it	1
	4. Use of resources on-site, value it	1
	6. OSPD knows the needs of teachers and students; can tailor PL	3
	12. Can build relationships so teachers are open; provide support	2
Teachers	5. Time available helped teachers to develop a better understanding of how to use data to inform programming	4
	6. OSPD very focused to specific needs; off-site can be irrelevant to your context	6
	8. OSPD has led to more precise conversations about student needs, know students better	5
	5. Teachers now understand and realise the importance of data	5
	9. Teachers now recognise that they had learning needs before they could attend to the students-leads to continuous improved practice	3
	10. Good to observe as well as be observed in the classroom	1
	11. OSPD allows for a safe and supportive environment to ask questions	2
	6. OSPD more effective because it is continuous; you can go back to the people	1
	11. OSPD contributes to a strong supportive community, clear communication and follow-up	3

Table 4(c) Open Coding, Question 4 (School G)

Q4: Did the nature of the on-site PD influence teacher practice and if so, how?	IDEAS	FREQUENCY	
Principal	1. Importance of working as part of a system and teachers hearing a consistent message in off-site PD	3	
	2. OSPD relevant to context; flexible; available for follow-up	4	
	3. Professional conversations and cross class visits have increased	2	
Assistant Principal Teacher Educator	4. OSPD allows for everyone to be a leader of learning, not just leadership team	2	
	5. Development of data teams develops skills, capacity, responsibility, accountability more broadly	4	
	4. OSPD has allowed for leadership development of others	1	
	6. Careful management of people is essential; balance between challenge and support	3	
	7. Teaching practice has improved; expectations raised	2	
	8. Sustainability-it will be maintained as ongoing PL is valued by teachers	2	
	9. Parents do not support OSPD as the teacher is not in class	2	
	Teachers	2. OSPD is relevant to context and more authentic	3
		10. OSPD is timely, time effective and beneficial	3
11. OSPD is cohesive; links theory to practice and builds on other experiences		3	
12. Celebrating achievements and learning has been important		1	
11. OSPD provides a consistent and common message for all		3	
8. OSPD is not a temporary one-off experience		1	
3. OSPD is a dialogue that works both ways		1	
12. OSPD allows teachers the freedom to speak about what is happening in their school re teachers and students		2	
9. OSPD allows you to see parents in the morning so they do not get anxious about teachers not in the classroom		2	
13. OSPD has allowed for working closely with parents to develop their understandings		1	
11. OSPD allows for provision of resources that match data and teacher needs		1	

Table 4(d) Open Coding, Question 4 (School H)

Q4: Did the nature of the on-site PD influence teacher practice and if so, how?	IDEAS	FREQUENCY
Principal	4. OSPD has made a significant difference to teacher practice	1
	10. It takes teachers out of their comfort zones	1
	2. OSPD is relevant to needs of teachers in their context; molded to suit the learner	3
	3. OSPD is multi-natured and varied; brilliant; one size does not fit all	2
	4. We all know our students better now-use of data; assessment	2
	5. Community engagement is not strong	1
Assistant Principal	6. OSPD restricted to level of expertise at that school	2
	7. OSPD comes from an understanding of shared ownership/workload/support	3
	8. Sustainability will be difficult without the budget	2
	9. Teachers will give extra time if they see the benefit	2
	4. There has been a quantum shift in teacher practice	2
	10. The school was/is in a strong position; it is not a deficit model	4
Teacher Educator	1. Due to OSPD, now less insular.	2
	4. Changes in teacher practice are: peer observations; reduced emphasis on content; team teaching; feedback; opened classroom up, assessment; communication re students across schools	4
	11. Changes to school culture: more discussions about programming and practice (freer), data	2
Teachers	12. OSPD is timely, fluid and relevant to school/tr needs	3
	13. More focused and allows for reflective practice based on data	3
	6. OSPD not all run by LT but utilised other staff and external personnel or courses but implemented locally	2
	11. Teachers do not need to be experts; they feel free to say they have no idea without being criticised; it is 'comfortable'	3
	1. You do not necessarily need an expert	2
	1. Collaboration has been undervalued; there is so much that can be learned from 20 minutes in a colleague's classroom	4
	9. Time is a factor; organisational structures for part time staff an issue	5
	2. OSPD is relevant to needs of teachers in their context; outsiders might not understand	5
	5. Efforts have been made to engage with the community-some benefits for families; teachers not involved	4
	1. It has worked here.	2
	10. Teachers believe they were competent before this approach began-feel they were blamed; vey hurt	4
	7. Now teaching from the same core beliefs and support each other	2
	1. OSPD connects people in all roles across the school	1
	1. Classroom visits need to happen	1

Table 4(e) Open Coding, Question 4 (School I)

Q4: Did the nature of the on-site PD influence teacher practice and if so, how?	IDEAS	FREQUENCY
Principal	1. Many positives to OSPD	1
	2. Stigma attached to being a school requiring this support but teachers have shown they can 'cut-it'	1
	3. Professional dialogue, teachers exposed to how other classrooms are set up,	2
	4. Utilising skills from within has progressed; recognize the need to increase teacher voice and differentiation of PD	1
	6. OSPD can utilise many things to engage teachers at their own rate-technology, external professionals etc.	1
	Assistant Principal	6. It is relevant and teachers are learning at the point of need; coherent ('got a flow on')
	6. Off site PD gets forgotten, not applied, not relevant for when you need it; OSPD is a strong model	4
	2. Focus on students and their learning led to great change; teachers were interested; it is a much calmer place now	4
	7. Relationships across entire community are cohesive now	1
	5. Regular cross-classroom visits with a particular focus for all teachers really worked to focus on teaching and learning strategies	2
	2. Teachers were in a sensitive place because they knew they were involved because of poor performance; teachers therefore reluctant to open classrooms; trust had to be built	3
	2. Professional attitude to learning has changed-teachers/leaders now comfortable to admit they need to learn more; four teachers now studying	2
Teacher Educator	3. OSPD can work in classrooms with teachers to develop a whole school approach to up-skill teachers (reading)	2
	4. All doors have opened and team teaching occurring- students are used to different teachers now	3
	4. Everything has changed, PD is happening on site now	1
	2. Amazing; teachers engage in PL now; five-six doing higher education currently	2
	7. Working with parents and the community is a real challenge	2
	5. Teachers know their students well now; evidence-based practice really evident	2
	2. Teachers now feel empowered and students striving to achieve more highly	3
	5. Teachers knowledge of ESL scales, IEPs, SMART GOALS, PLCs all evident-now put into practice	1
Teachers	2. Off site PD, everyone is a bit guarded;	1
	2. OSPD you can be honest; not feel embarrassed that you're not on top of it	2
	6. OSPD is relevant; timely; in a context; 'you can't understand something until you walk in their shoes'	4
	5. Big improvements in teacher practice; shift from whole class model to individual students	3
	6. OSPD includes a person resource	1
	6. Off site PD is a one-off, minimal sharing and does not provide feedback from others	4
	6. OSPD still includes some external or online provider	1
	6. PL has improved-coherent, trackable	1
	7. Improvement in parent commitment to students' learning	2
	4. Colleagues now more open to sharing; more collaborative	2
	3. OSPD occurs more in daily interactions, learn more from colleagues if I ask a direct question	2
	8. OSPD limited to what is available on-site; does not allow for communication across schools or differentiation for staff learning needs	1
	6. OSPD saves travel time	1
	8. OSPD is not necessarily a good change; no formal recognition re certification for teacher standards; needs to have more 'tangible wealth' for teachers; level of professionalism; external provides more depth and expertise	4

6. OSPD important rather than going out and reporting back, you get caught up in social things rather than PL, 'you are in the right head space in your own environment' 2

Appendix B: Phase 2A Data School E, Questions 2-4 and Schools F-I, all questions

Table 5(b) Axial Coding- Categories, Question 1 (School F)

Q1: Did the exercise of leadership in the school and system influence teacher practice and if so, how?	CATEGORY TITLE/S:					
	TEAM; COLLABORATION (COMMUNITY ENGAGEMENT) COMMON GOALS/VALUES INCLUSIVE (5) (10)(8)	LT PRACTICES INFLUENCING TEACHER PRACTICES (3) (12) (13)	SYSTEM CONTRIB- UTION (1)	ORGANISATIONAL LEADERSHIP (STRATEGIC APPROACH; CHANGE OF STRUCTURES)(6)	RELATIONSHIPS; SHIFTS IN TR THINKING (2) (9)	TIME (4)
Principal	3	1	3	0	2	1
Assistant Principal	5	1	0	4	0	0
Teacher Educator	10	4	1	0	3	3
Teachers	13	11	1	1	0	1
TOTAL:	31	17	5	5	5	5

Table 5(c) Axial Coding- Categories, Question 1 (School G)

Q1: Did the exercise of leadership in the school and system influence teacher practice and if so, how?	CATEGORY TITLE/S:			
	TEACHER LEADERSHIP (including increased confidence and capacity- teacher efficacy) (3) (4)	LT PRACTICES (particularly in planning and organising for PD) INFLUENCING TEACHER KNOWLEDGE AND PRACTICES (2) (6) (8) (10) (7)	SYSTEM CONTRIBUTION (1)	DATA (5)
Principal	2	1	2	0
Assistant Principal	0	0	0	0
Teacher Educator	6	0	0	1
Teachers	0	14	6	2
TOTAL:	8	15	8	3

Table 5(d) Axial Coding- Categories, Question 1 (School H)

Q1: Did the exercise of leadership in the school and system influence teacher practice and if so, how?	CATEGORY TITLE/S:				
	TEAM; COLLABOR- ATION (11) (21)	LT PRACTICES INFLUENCING TEACHER PRACTICES (1)(3) (5) (14) (17)	SYSTEM CONTRIBUTION (2) (4) (8) (19)	ORGANISATIONA L LEADERSHIP (STRATEGIC APPROACH; CHANGE OF STRUCTURES; TIME)(7) (9) (10) (12) (15) (16)	RELATIONSHIPS; (CHANGE) (6) (13)(16) (18) (20)
Principal	0	4	7	0	0
Assistant Principal	1	2	3	5	1
Teacher Educator	0	3	2	9	9
Teachers	11	7	7	7	1
TOTAL:	12	16	19	21	11

Table 5(e) Axial Coding- Categories, Question 1 (School I)

Q1: Did the exercise of leadership in the school and system influence teacher practice and if so, how?	CATEGORY TITLE/S:			
	TEAM; COLLABORATION (1)	LT PRACTICES INFLUENCING TEACHER PRACTICES (7) (6) (5)	SYSTEM CONTRIBUTION (2)	ORGANISATIONAL LEADERSHIP (STRATEGIC APPROACH; CHANGE OF STRUCTURES; TIME) (3)
Principal	3	1	1	1
Assistant Principal	0	6	2	0
Teacher Educator	6	3	2	3
Teachers	11	2	6	4
TOTAL:	20	12	11	8

Table 6(a) Axial Coding- Categories, Question 2 (School E)

Q2: Did the experience of a PLC influence teacher practice and, if so, how?	CATEGORY TITLE/S:								
	TEAM; COLLABORATION (11)	LEADER SHIP (4) (6) (8)	TIME (2) (13)	STRATEGIC APPROACHES; CHANGES OF STRUCTURES (12)	RELATIONSHIPS (3)	TEACHER KNOWLEDGE AND PRACTICES (5) (9) (10) (14) (15) (16)	TEACHER ATTITUDE (1) (6) (7)	DATA (9)	CHANGES TO PLC OVER TIME (2)
Principal	0	5	0	0	1	10	4	0	1
Assistant Principal	1	2	1	2	0	1	2	0	0
Teacher Educator	3	0	0	4	1	2	1	4	1
Teachers	9	1	9	2	0	7	1	3	4
TOTAL:	13	8	10	8	2	20	8	7	6

Table 6(b) Axial Coding- Categories, Question 2 (School F)

Q2: Did the experience of a PLC influence teacher practice and if so, how?	CATEGORY TITLE/S:				
	COLLABORATION; COMMON APPROACH AND LANGUAGE (3) (10) (7)	TEACHER LEADERSHIP; DIFFERENT EXPERTISE (5)	TIME (9)	LEARNING CULTURE Classroom visits (1) (8) (6)	ASSESSMENT; MONITORING; DATA; KNOWLEDGE OF STUDENTS (2) (4) (11)
Principal	0	0	0	1	1
Assistant Principal	5	3	0	6	1
Teacher Educator	1	4	4	1	1
Teachers	15	0	0	4	3
TOTAL:	21	7	5	12	6

Table 6(c) Axial Coding- Categories, Question 2 (School G)

Q2: Did the experience of a PLC influence teacher practice and if so, how?	CATEGORY TITLE/S:			
	SHARED OWNERSHIP AND COLLECTIVE RESPONSIBILITY (for student learning and sharing of expertise) (5)	BENEFITS OF PLCs (what makes them work well) (3) (8) (9) (11) (10)	TIME (importance of) (4)	LEARNING CULTURE; (EVOLUTION OF PLC; CHALLENGES ENCOUNTERED) (1) (6) (7) (2)
Principal	0	1	1	4
Assistant Principal	0	0	0	0
Teacher Educator	2	0	0	5
Teachers	0	11	0	2
TOTAL:	2	12	1	11

Table 6(d) Axial Coding- Categories, Question 2 (School H)

Q2: Did the experience of a PLC influence teacher practice and if so, how?	CATEGORY TITLE/S:			
	COLLABORATION; COMMON APPROACH AND LANGUAGE (3) (7)	EVOLUTION OF PLC; TEACHER LEADERSHIP; (USE OF DIFFERENT EXPERTISE) (1) (10)	SUSTAINABILITY (TIME) (5) (8)	LEARNING CULTURE; (professional conversations; taking responsibility for knowing the learner; classroom visit-concerns/gains) (2) (4) (6) (9) (11) (12)
Principal	3	1	1	5
Assistant Principal	2	3	1	2
Teacher Educator	3	5	1	4
Teachers	8	8	3	13
TOTAL:	16	17	6	24

Table 6(e) Axial Coding- Categories, Question 2 (School I)

Q2: Did the experience of a PLC influence teacher practice and if so, how?	CATEGORY TITLE/S:			
	COLLABORATION; COMMON APPROACH AND LANGUAGE	EVOLUTION OF PLC; TEACHER LEADERSHIP; (USE OF DIFFERENT EXPERTISE; LT involved) (1)	SUSTAINABILITY (TIME and ORGANISATIONAL STRUCTURES) (3)	LEARNING CULTURE and PRACTICE due to PLCs (professional, honest, relevant conversations; better pedagogy; continual challenge; use of data; focused; classroom visits- concerns/gains) (4) (2) (6) (5)
Principal	0	1	2	4
Assistant	0	2	1	6
Principal				
Teacher	0	4	1	2
Educator				
Teachers	0	0	2	24
TOTAL:	0	7	6	36

Table 7(a) Axial Coding- Categories, Question 3 (School E)

Q3: What was the particular contribution of the TE role to teacher practice?	CATEGORY TITLE/S:							
	SYSTEM (18)	TE ROLE, LEADERSHIP (2) (16) (17)	TE PRACTICES THAT INFLUENCED TEACHER PRACTICE (1) (4) (6) (8) (12)	TIME (3) (5) (19) (14)	CHANGE OF STRUCTURE; SUSTAINABILITY (9)	LEARNING CULTURE; TEACHER ATTITUDE; CONFIDENCE (15) (10) (7)	DATA (11)	COMMUNITY ENGAGEMENT (13)
Principal	0	1	6	5	3	2	0	1
Assistant Principal	0	0	4	1	0	3	4	1
Teacher Educator	0	7	0	3	5	1	1	0
Teachers	8	0	14	6	5	3	5	0
TOTAL:	8	8	24	15	13	9	10	2

Table 7(b) Axial Coding- Categories, Question 3 (School F)

Q3: What was the particular contribution of the TE role to teacher practice?	CATEGORY TITLE/S:					
	IMPORTANCE OF TE ROLE (1)	TE ROLE/ LEADERSHIP TEAM (2)	TE PRACTICES THAT INFLUENCED TEACHER PRACTICE (3) (4) (5) (6) (15) (14) established credibility- modelling; co-learner; leading PL; communication; utilised skills of staff	TE QUALITIES THAT INFLUENCED TEACHER PRACTICE (7) (12) TEACHER ATTITUDE (10)	TIME; SUSTAINABILITY (8) (12)	COMMUNITY ENGAGEMENT (11)
Principal	2	3	2	0	0	1
Assistant Principal	0	3	3	2	4	1
Principal Teacher Educator	0	0	3	4	6	0
Teachers	5	1	11	10	5	0
TOTAL:	7	7	19	16	15	2

Table 7(c) Axial Coding- Categories, Question 3 (School G)

Q3: What was the particular contribution of the TE role to teacher practice?	CATEGORY TITLE/S:				
	IMPORTANCE OF TE ROLE (1)	TE ROLE ON LEADERSHIP TEAM (4)	TE PRACTICES THAT INFLUENCED TEACHER PRACTICE (2) (9) established credibility- modelling; co-learner; feedback; data driven; research based; supported professional learning	BUILDING RELATIONSHIPS (TE QUALITIES THAT INFLUENCED TEACHER PRACTICE) Coaching, mentoring, affirming, challenging (5) (6) (7) (8)	SUSTAINABILITY (3)
Principal	4	1	3	0	1
Assistant Principal	0	0	0	0	0
Teacher Educator	0	0	5	13	3
Teachers	1	0	9	4	0
TOTAL:	5	1	17	17	4

Table 7(d) Axial Coding- Categories, Question 3 (School H)

Q3: What was the particular contribution of the TE role to teacher practice?	CATEGORY TITLE/S:			
	IMPORTANCE OF TE ROLE (available, supportive, strong leader) (1)	TE PRACTICES THAT INFLUENCED TEACHER PRACTICE (5) (6) (8) (9) Established credibility- modelling; co-learner; professional learning; research based; involved in PLCs, focused on areas of need	TE QUALITIES THAT INFLUENCED TEACHER ATTITUDE openness; built relational trust (2)	TIME; SUSTAINABILITY (3) (4) (7)
Principal	5	1	4	6
Assistant Principal	1	5	0	2
Teacher Educator	3	7	3	0
Teachers	7	15	8	2
TOTAL:	16	28	15	10

Table 7(e) Axial Coding- Categories, Question 3 (School I)

Q3: What was the particular contribution of the TE role to teacher practice?	CATEGORY TITLE/S:					
	IMPORTANCE OF TE ROLE (focusing on pedagogy; available) (1)	TE PRACTICES THAT INFLUENCED TEACHER PRACTICE (4) (5) (established credibility- modelling; co-learner; Professional Learning; research based; PLCs; feedback; data; teachers now less reliant on TE)	TE QUALITIES THAT INFLUENCED TEACHER ATTITUDE (and built relational trust; challenges and difficulties; title of the role a problem; earned respect by being observed; managing change) (3)	(TIME) SUSTAINABILITY (6)	COMMUNITY (7)	SYSTEM (2)
Principal	5	2	2	0	0	1
Assistant Principal	6	4	8	0	2	2
Teacher Educator	0	6	13	3	0	0
Teachers	4	14	13	1	0	0
TOTAL:	15	26	36	4	2	3

Table 8(a) Axial Coding- Categories, Question 4 (School E)

Q4: Did the nature of the on-site PD influence teacher practice and, if so, how?	CATEGORY TITLE/S:									
	ROLE OF SYSTEM (13)	INCLUSIVE; COLLABORATIVE (1)	RELEVANT CONTEXTUAL COHERENT (12) (3)	TIME (14) (13)	BUILDS SUSTAINABILITY (8)	TR. KNOWLEDGE (4) (5) (15)	LEARNING CULTURE; TEACHER ATTITUDE, RESISTANCE, RESILIENCE, CONFIDENCE (2)(6) (9)	DURATION (11)	COMMUNITY ENGAGEMENT (14)	RELATIONSHIPS (10)
Principal	0	3	3	0	0	4	3	0	0	0
Assistant Principal	0	2	3	0	2	0	2	0	0	2
Teacher Educator	0	4	4	2	0	2	0	1	0	0
Teachers	6	5	2	3	0	0	7	5	1	6
TOTAL:	6	14	12	15	2	6	12	6	1	8

Table 8(b) Axial Coding- Categories, Question 4 (School F)

Q4: Did the nature of the on-site PD influence teacher practice and if so, how?	CATEGORY TITLE/S:						
	COLLABORATIVE INCLUSIVE (1) (3)	COMMON UNDERSTANDINGS (2)	RELEVANT CONTEXTUAL COHERENT (6)	TR. KNOWLEDGE AND PRACTICE (8) (9) (10)	LEARNING CULTURE: SUPPORTIVE COMMUNITY TEACHER RELATIONSHIPS (11) (12)	ASSESSING TOGETHER; understanding and USE OF DATA-led to shared ownership (4)(5)	ACCOUNTABILITY DUE TO CONSTANT PRESENCE OF TE (7)
Principal	2	1	0	1	0	0	0
Assistant Principal	0	0	2	0	3	6	0
Principal Teacher Educator	0	0	3	0	2	1	1
Teachers	0	0	7	9	5	9	0
TOTAL:	2	1	12	10	10	16	1

Table 8(c) Axial Coding- Categories, Question 4 (School G)

Q4: Did the nature of the on-site PD influence teacher practice and if so, how?	CATEGORY TITLE/S:						
	COLLABORATIVE INCLUSIVE (RESULTING IN TEACHER LEADERSHIP) (4)	BUILDS COMMON UNDERSTANDINGS; COHERENT (1) (11) (2) (8)	RELEVANT; CONTEXTUAL; TIMELY (2) (10)	TEACHER KNOWLEDGE AND PRACTICE (use of data) (7) (5) (3)	LEARNING CULTURE: SUPPORTIVE COMMUNITY ; TEACHER RELATIONSHIPS (6) (12)	PARENTAL ASPECTS (Including concerns) (9) (13)	SUSTAINABILITY (8)
Principal	0	3	4	2	0	0	0
Assistant Principal	0	0	0	0	0	0	0
Principal Teacher Educator	3	0	0	6	3	2	1
Teachers	0	11	3	1	3	3	0
TOTAL:	3	14	7	9	6	5	1

Table 8(d) Axial Coding- Categories, Question 4 (School H)

Q4: Did the nature of the on-site PD influence teacher practice and if so, how?	CATEGORY TITLE/S:						
	COLLABORATIVE (1) (6)	COMMON UNDERSTANDINGS (7)	RELEVANT; CONTEXTUAL COHERENT (2) (3) (12)	TEACHER KNOWLEDGE AND PRACTICE (4) (13)	LEARNING CULTURE TEACHER RELATIONSHIPS (10) (11)	TIME (8) (9) (ORGANISATIONAL FACTORS-Sustainability)	COMMUNITY (5)
Principal	0	5	5	3	1	0	1
Assistant Principal	2	3	0	2	4	4	0
Teacher Educator	2	0	0	4	2	0	0
Teachers	12	2	8	3	7	5	4
TOTAL:	16	10	13	10	14	9	5

Table 8(e) Axial Coding- Categories, Question 4 (School I)

Q4: Did the nature of the on-site PD influence teacher practice and if so, how?	CATEGORY TITLE/S:				
	COLLABORATIVE (4)	RELEVANT; CONTEXTUAL, COHERENT (positives and negatives of OSPD) (6) (1) (8)	TEACHER KNOWLEDGE AND PRACTICE regular classroom visits; open doors; professional dialogue; cross-class visits focus on teaching and learning (3) (5)	LEARNING CULTURE (Professional attitude; additional study; honesty) (2)	COMMUNITY (7)
Principal	2	2	2	1	0
Assistant Principal	0	7	2	9	1
Teacher Educator	4	0	5	5	2
Teachers	2	19	5	3	2
TOTAL:	8	28	14	18	5

Appendix C: Phase 2B Data Axial Coding - Category Matrix, Question 2 all schools, Table 9(b)

Collaboration: team: common goals	Leadership	Time: Sustainability	Strategic approach	Relationships	Teacher knowledge and practices-learning culture	Teacher attitude	Data	PLC evolution and contributors
<p>School E: TEAM: COLLABORATION (11) TOTAL=13</p> <p>School E: LEADERSHIP (4) (6) (8) TOTAL=8</p>	<p>School E: TIME (2) (13) TOTAL=10</p>	<p>School E: STRATEGIC APPROACH; CHANGE OF STRUCTURES (12) TOTAL= 8</p>	<p>School E: RELATION-SHIPS (3) TOTAL= 2</p>	<p>School E: TEACHER KNOWLEDGE (of students) AND PRACTICES (5) (9) (10) (14) (15) (16) TOTAL=20</p>	<p>School E: TEACHER ATTITUDE (1) (6) (7) TOTAL=8</p>	<p>School E: DATA (9) TOTAL=7</p>	<p>School E: PLC EVOLVES OVER TIME (2) TOTAL=6</p>	
<p>School F: COLLABORATION: COMMON APPROACH AND LANGUAGE (3) (10) (7) TOTAL=21</p> <p>School G: SHARED OWNERSHIP AND COLLECTIVE RESPONSIBILITY (for student learning and sharing of expertise) (5) TOTAL=2</p>	<p>School F: TEACHER LEADERSHIP; DIFFERENT EXPERTISE (5) TOTAL=7</p>	<p>School F: TIME (9) TOTAL=5</p>	<p>School F: TOTAL=0</p>	<p>School F: LEARNING CULTURE, community; classroom visits (1) (8) (6) TOTAL=12</p>	<p>School F: TOTAL= 0</p>	<p>School F: ASSESSMENT, MONITORING, DATA, KNOWLEDGE OF STUDENTS (2) (4) (11) TOTAL=6</p>	<p>School F: TOTAL=0</p>	
<p>School G: COMMON APPROACH AND LANGUAGE (3) (7) TOTAL=16</p>	<p>School G: TOTAL=0</p>	<p>School G: TIME (importance of) (4) TOTAL=1</p>	<p>School G: TOTAL= 0</p>	<p>School G: LEARNING CULTURE; (EVOLUTION OF PLC; CHALLENGES ENCOUNTERED) (1) (6) (7) (2) TOTAL=11</p>	<p>School G: TOTAL=0</p>	<p>School G: TOTAL=0</p>	<p>School G: BENEFITS OF PLCs (what makes them work well) (3) (8) (9) (11) (10) TOTAL=12</p>	
<p>School H: COLLABORATION: COMMON APPROACH AND LANGUAGE (3) (7) TOTAL=16</p>	<p>School H: EVOLUTION OF PLC; TEACHER LEADERSHIP; (USE OF DIFFERENT EXPERTISE) (1) (10) TOTAL= 17</p>	<p>School H: SUSTAIN-ABILITY (TIME) (5) (8) TOTAL= 6</p>	<p>School H: TOTAL= 0</p>	<p>School H: LEARNING CULTURE; (professional conversations; taking responsibility for knowing the learner; classroom visits-concerns/gains) (2) (4) (6) (9) (11) (12) TOTAL= 24</p>	<p>School H: TOTAL=0</p>	<p>School H: TOTAL=0</p>	<p>School H: TOTAL=0</p>	
<p>School I: COLLABORATION: COMMON APPROACH AND LANGUAGE TOTAL=0</p>	<p>School I: EVOLUTION OF PLC; TEACHER LEADERSHIP; (USE OF DIFFERENT EXPERTISE; LT involved) (1) TOTAL= 7</p>	<p>School I: SUSTAIN-ABILITY (TIME; ORGANISATIONAL STRUCTURES) (3) TOTAL= 6</p>	<p>School I: TOTAL= 0</p>	<p>School I: LEARNING CULTURE and PRACTICE due to PLCs (professional, honest, relevant conversations; better pedagogy; continual challenge; use of data; focused; classroom visits-concerns/gains)(4) (2) (6) (5) TOTAL=36</p>	<p>School I: TOTAL=0</p>	<p>School I: TOTAL= 0</p>	<p>School I: TOTAL=0</p>	
<p>OVERALL TOTAL=52</p>	<p>OVERALL TOTAL=39</p>	<p>OVERALL TOTAL=28</p>	<p>OVERALL TOTAL= 8</p>	<p>OVERALL TOTAL=2</p>	<p>OVERALL TOTAL= 103</p>	<p>OVERALL TOTAL= 8</p>	<p>OVERALL TOTAL= 13</p>	<p>OVERALL TOTAL= 18</p>

Phase 2B Data Axial Coding - Category Matrix, Question 3 all schools Table 9(c)

System	TE role and LT	TE practices that influence teacher practice	TE qualities that influence teacher practice	Time: sustain-ability	Structures and sustainability	Learning culture/ teacher confidence	Data	Community engagement	
School E: SYSTEM (18) TOTAL=8	School E: TE ROLE/ LEADERSHIP (2) (16) (17) TOTAL=8	School E: TE PRACTICES THAT INFLUENCED TEACHER PRACTICE (1) (4) (6) (8) (12) TOTAL=24	School E: TE PRACTICES THAT INFLUENCED TEACHER PRACTICE (3) (4) (5) (6) (15) (14) (established credibility; modelling; co-learner; leading professional learning; communication; utilised skills of staff) TOTAL=19	School E: TE QUALITIES THAT INFLUENCED TEACHER PRACTICE (7) (12) TEACHER ATTITUDE (10) TOTAL=16	School E: TIME (3) (5) (19) (14) TOTAL= 15	School E: CHANGE OF STRUCTURE: SUSTAINABILITY (9) TOTAL=13	School E: LEARNING CULTURE: TEACHER ATTITUDE, CONFIDENCE (15) (10) (7) TOTAL=9	School E: DATA (11) TOTAL=10	School E: COMMUNITY ENGAGEMENT (13) TOTAL= 2
School F: TOTAL=0	School F: IMPORTANCE OF TE ROLE (1) TE ROLE on LEADERSHIP TEAM (2) TOTAL=14	School F: TE PRACTICES THAT INFLUENCED TEACHER PRACTICE (3) (4) (5) (6) (15) (14) (established credibility; modelling; co-learner; leading professional learning; communication; utilised skills of staff) TOTAL=19	School F: TE PRACTICES THAT INFLUENCED TEACHER PRACTICE (2) (9) (established credibility; modelling; co-learner; feedback; data driven; research based; supported professional learning) TOTAL=17	School F: TE QUALITIES THAT INFLUENCED TEACHER PRACTICE (7) (12) TEACHER ATTITUDE (10) TOTAL=16	School F: TIME: SUSTAIN-ABILITY (8) (12) TOTAL=15	School F: TOTAL=0	School F: TOTAL=0	School F: TOTAL=0	School F: COMMUNITY ENGAGEMENT (11) TOTAL=2
School G: TOTAL=0	School G: IMPORTANCE OF TE ROLE (1) TE ROLE/ LEADERSHIP TEAM (4) TOTAL=6	School G: TE PRACTICES THAT INFLUENCED TEACHER PRACTICE (2) (9) (established credibility; modelling; co-learner; feedback; data driven; research based; supported professional learning) TOTAL=17	School G: TE PRACTICES THAT INFLUENCED TEACHER PRACTICE (5) (6) (8) (9) (established credibility; modelling; co-learner; professional learning; research based; involved in PLCs; focused on areas of need) TOTAL=28	School G: BUILDING RELATIONSHIPS (TE QUALITIES THAT INFLUENCED TEACHER PRACTICE) coaching, mentoring, affirming, challenging (5) (6) (7) (8) TOTAL=17	School G: SUSTAIN-ABILITY (3) TOTAL= 4	School G: TOTAL=0	School G: TOTAL=0	School G: TOTAL=0	School G: TOTAL=0
School H: TOTAL=0	School H: IMPORTANCE OF TE ROLE (available, supportive, strong leader (1) TOTAL=16	School H: TE PRACTICES THAT INFLUENCED TEACHER PRACTICE (5) (6) (8) (9) (established credibility; modelling; co-learner; professional learning; research based; involved in PLCs; focused on areas of need) TOTAL=28	School H: TE PRACTICES THAT INFLUENCED TEACHER PRACTICE (5) (6) (8) (9) (established credibility; modelling; co-learner; professional learning; research based; involved in PLCs; focused on areas of need) TOTAL=28	School H: TE QUALITIES THAT INFLUENCED TEACHER ATTITUDE: openness; built relational trust (2) TOTAL= 15	School H: TIME: SUSTAINABILITY (3) (4) (7) TOTAL= 10	School H: TOTAL=0	School H: TOTAL=0	School H: TOTAL=0	School H: TOTAL=0
School I: SYSTEM (2) TOTAL=3	School I: IMPORTANCE OF TE ROLE (focusing on pedagogy; available) (1) TOTAL= 15	School I: TE PRACTICES THAT INFLUENCED TEACHER PRACTICE (and how) (4) (5) (established credibility- modelling; co-learner; professional learning; research based; PLCs; feedback; data; teachers now less reliant on TE) TOTAL= 26	School I: TE PRACTICES THAT INFLUENCED TEACHER PRACTICE (and how) (4) (5) (established credibility- modelling; co-learner; professional learning; research based; PLCs; feedback; data; teachers now less reliant on TE) TOTAL= 26	School I: TE QUALITIES THAT INFLUENCED TEACHER ATTITUDE (and built relational trust; challenges and difficulties; title of the role a problem; earned respect by being observed; managing change) (3) TOTAL= 36	School I: (TIME) SUSTAINABILITY (6) TOTAL= 4	School I: TOTAL=0	School I: TOTAL=0	School I: TOTAL=0	School I: COMMUNITY (7) TOTAL=2
OVERALL TOTAL=4	OVERALL TOTAL= 59	OVERALL TOTAL= 114	OVERALL TOTAL= 114	OVERALL TOTAL= 84	OVERALL TOTAL= 48	OVERALL TOTAL= 13	OVERALL TOTAL= 7	OVERALL TOTAL=10	OVERALL TOTAL= 6

Phase 2B Data Axial Coding - Category Matrix, Question 4 all schools Table 9(d)

System	Collaboration; team; common goals	Cohesive; relevance; common understandings	Time	Sustainability	Teacher knowledge and practices	Duration	Community	Learning culture; relationships
School E: ROLE OF SYSTEM (13) TOTAL=6	School E: INCLUSIVE; COLLABORATIVE (1) TOTAL=14	School E: RELEVANT; CONTEXTUAL; COHERENT (7) (12) (3) TOTAL=12	School E: TIME (14) (13) TOTAL=15	School E: BUILDS SUSTAINABILITY (8) TOTAL=2	School E: TEACHER KNOWLEDGE (4) (5) (15) TOTAL=6	School E: DURATION (11) TOTAL=6	School E: COMMUNITY ENGAGEMENT (14) TOTAL=1	School E: RELATIONSHIPS (10) TOTAL=8 LEARNING CULTURE; TEACHER ATTITUDE; RESISTANCE; RESILIENCE; CONFIDENCE (2) (6) (9) TOTAL=12
School F: TOTAL=0	School F: COLLABORATIVE; INCLUSIVE (1) (3) TOTAL=2	School F: COMMON UNDERSTANDINGS (2); RELEVANT CONTEXTUAL COHERENT (6) TOTAL=13	School F: TOTAL=0	School F: TOTAL=0	School F: TEACHER KNOWLEDGE AND PRACTICE (8) (9) (10); ASSESSING TOGETHER; understanding and USE OF DATA led to shared ownership (4) (5) TOTAL=26	School F: TOTAL=0	School F: TOTAL=0	School F: LEARNING CULTURE; SUPPORTIVE COMMUNITY; TEACHER RELATIONSHIPS (11) (12) ACCOUNTABILITY DUE TO CONSTANT PRESENCE OF TE (7) TOTAL=11
School G: TOTAL=0	School G: COLLABORATIVE; INCLUSIVE RESULTING IN TEACHER LEADERSHIP (4) TOTAL=3	School G: BUILDS COMMON UNDERSTANDINGS; COHERENT (1) (11) (2) (8) RELEVANT; CONTEXTUAL; TIMELY (2) (10) TOTAL=21	School G: TOTAL=0	School G: SUSTAINABILITY (8) TOTAL=1	School G: TEACHER KNOWLEDGE AND PRACTICE (including use of data) (7) (5) (3) TOTAL=9	School G: TOTAL=0	School G: PARENTAL ASPECTS (including concerns) (9) (13) TOTAL=5	School G: LEARNING CULTURE; SUPPORTIVE COMMUNITY; TEACHER RELATIONSHIPS (6) (12) TOTAL=6
School H: TOTAL=0	School H: COLLABORATIVE; INCLUSIVE (1) (6) TOTAL=16	School H: COMMON UNDERSTANDINGS (7); RELEVANT; CONTEXTUAL COHERENT (2) (3) (12) TOTAL=23	School H: TIME; ORGANISATION-AL FACTORS, SUSTAINABILITY (8) (9) TOTAL=9	School H: TOTAL=0	School H: TEACHER KNOWLEDGE AND PRACTICE (4) (13) TOTAL=10	School H: TOTAL=0	School H: COMMUNITY (5) TOTAL=5	School H: LEARNING CULTURE; TEACHER RELATIONSHIPS (10) (11) TOTAL=14
School I: TOTAL=0	School I: COLLABORATIVE (4) TOTAL=8	School I: RELEVANT; CONTEXTUAL, COHERENT (positives and negatives of OSPD) (6) (1) (8) TOTAL=28	School I: TOTAL=0	School I: TOTAL=0	School I: TEACHER KNOWLEDGE AND PRACTICE (regular classroom visits; open doors; professional dialogue; cross-class visits focus on teaching and learning) (3) (5) TOTAL=14	School I: TOTAL=0	School I: COMMUNITY (7) TOTAL=5	School I: LEARNING CULTURE (Professional attitude; additional study; honesty) (2) TOTAL=18
OVERALL TOTAL=6	OVERALL TOTAL=43	OVERALL TOTAL=97	OVERALL TOTAL=24	OVERALL TOTAL=3	OVERALL TOTAL=65	OVERALL TOTAL=6	OVERALL TOTAL=16	OVERALL TOTAL=69

Appendix D: Phase 3 Data- Selective Coding: Themes and Theme Components School E, Questions 2-4 and schools F- I, all questions

Table 10(b) Selective Coding: Themes and Theme Components, Question 1 (School F)

Q1: DID THE EXERCISE OF LEADERSHIP IN THE SCHOOL AND SYSTEM INFLUENCE TEACHER PRACTICE, AND IF SO HOW?	
Theme One: Collaboration	System Leadership: 6
<p>(36) Component 1 (C1): Development of a collaborative team approach</p> <p>Component 2 (C2): Leaders working with teachers</p> <p>Component 3 (C3): Shared vision and understandings</p> <p>Component 4 (C4): The role of system leadership</p>	<p>School Leadership: 30</p> <p>Principal=3 Assistant Principal=6 Teacher Educator=6</p> <p>System Leadership: 6</p> <p>Principal=4 Assistant Principal=0 Teacher Educator=1 Teachers=1</p>
<p>Increased parent and community engagement (C1-3).</p> <p>Principal=3 Assistant Principal=6 Teacher Educator=6</p> <p>Parental involvement a positive experience (C1-2); collaboration with teachers was a priority (C2-1); LT: planning together; professional dialogue evident; influence on classroom practice (C2-1); inclusive of all on staff and shared (C2-2).</p> <p>LT cohesive, collaborative and agreed on the same direction (C3-3); LT had a team approach (C1-2); LT participated in PL- showed they valued it (C2-1).</p> <p>LT helped teachers to know expectations, have a common language (C3-2); AP and TE worked together- common understanding (C3-1); LT included specialist teachers (C2-1); LT have been into classrooms (C2-1); LT team assisted teachers to develop in their knowledge and skills (C2-3); despite many efforts it remains difficult to engage parents (C1-6); TE ran courses for parents but participation was poor (C1-1).</p>	<p>Principal=4 Assistant Principal=0 Teacher Educator=1 Teachers=1</p> <p>System leadership had a strong influence on instructional rounds and knowing the student (C4-3); collaboration across schools a strong feature (C4-1).</p> <p>System and LT worked together (C4-1). System leadership supportive (C4-1).</p>
Theme Two: Leadership Capabilities (16)	System Leadership: 0
<p>Component 1 (C1): Relationships</p> <p>Component 2 (C2): Characteristics of leaders</p> <p>Component 3 (C3): Openness to change</p> <p>Component 4 (C4): Devolution of responsibility</p>	<p>School: Leadership 16</p> <p>Principal=1 Assistant Principal=2 Teacher Educator=3</p> <p>Teachers=10 LT united in their focus and directly involved (C2-3); LT flexible (C2-1); LT proactive and keeps abreast of changes (C3-2); LT led PD (C2-1); LT used data to analyse needs of the school (C3-1); LT were supportive (C1-2).</p> <p>Assistant Principal=0 Teacher Educator=0 Teachers=0</p>
<p>Open, approachable, knowledgeable LT contributed to improved practice (C2-1).</p> <p>LT was the driving force- maintained focus (C3-2).</p> <p>LT gave their time and made changes slowly (C3-2); LT valued the changes- this contributes to its sustainability (C3-1).</p>	<p>Assistant Principal=0 Teacher Educator=0 Teachers=0</p>

Theme Three: Organisational Restructuring (5)	School: Leadership 4	System Leadership: 0						
	Principal=0	Assistant Principal=N.A.	Teacher Educator=0	Teachers=5 Leadership team made decisions around PD provided based on needs of staff and school using data-some OSPD, other whole school (C3-4); PD was systematic-rich and effective (C1-1).	Principal=0	Assistant Principal=N.A.	Teacher Educator=0	Teachers=0
Component 1 (C1): Strategic approach								
Component 2 (C2): Roles and responsibilities								
Component 3 (C3): Organisational and structural change								
Theme Four: Resourcing (0)	School Leadership: 0	System Leadership: 0						
Component 1 (C1): Provision of resources	Principal=0	Assistant Principal=N.A.	Teacher Educator=0	Teachers=0	Principal=0	Assistant Principal=N.A.	Teacher Educator=0	Teachers=0
Component 2 (C2): Use of resources								

Table 10(d) Selective Coding: Themes and Theme Components, Question 1 (School H)

Q1: DID THE EXERCISE OF LEADERSHIP IN THE SCHOOL AND SYSTEM INFLUENCE TEACHER PRACTICE AND IF SO HOW?	
Theme One: Collaboration (28)	System Leadership: 14
<p>Component 1 (C1): Development of a collaborative team approach</p> <p>Component 2 (C2): Leaders working with teachers</p> <p>Component 3 (C3): Shared vision and understandings</p> <p>Component 4 (C4): The role of system leadership</p>	<p>School Leadership: 14</p> <p>Principal=4 Success in influencing teacher practice has been largely dependent on the high quality of the TE-strong leader (C2-3); other leadership team members aware but little evidence of them directly involved with teachers (C2-1).</p> <p>Assistant Principal=1 LT have responsibility for building shared ownership across the school (C3-1).</p> <p>Teacher Educator=4 TE had to be agent of change on LT; align/get a consistent LT vision for change (C3-2); resistance from LT members when encouraged to visit classrooms (C2-2).</p> <p>Teachers=5 New Principal involved in improving teacher practice (C2-4); the LT is not in the classrooms (C2-1).</p> <p>Principal=7 Adequate support from the system for TE and LT (C4-2); negative view of system in the early days due to demands on teachers although can now see benefits (C4-4); the use of data shared by the system was helpful (C4-1).</p> <p>Assistant Principal=0</p> <p>Teacher Educator=2 System provided excellent support, particularly when dealing with difficulties (C4-2).</p> <p>Teachers=5 System needs to be more in touch with classroom realities and support teachers (C4-5).</p>
Theme Two: Leadership Capabilities (13)	System Leadership: 0
<p>Component 1 (C1): Relationships</p> <p>Component 2 (C2): Characteristics of leaders</p> <p>Component 3 (C3): Openness to change</p> <p>Component 4 (C4): Devolution of responsibility</p>	<p>School Leadership 13</p> <p>Assistant Principal=3 LT model good teaching practice and exercise supervisory aspect of leadership (C2-2); LT team designed and planned PD (C2-1).</p> <p>Teacher Educator=5 The change of Principal helped (C4-1); gradual release of responsibility, teachers now doing it themselves (C4-1); important to maintain respect and dignity of people throughout (C1-1); dealing with change meant working with those who were willing to change (C3-2).</p> <p>Teachers=5 Release of power from LT to teachers evident-shared leadership and empowerment (C4-3); LT needed to make leadership decisions so things were expressed consistently through the school (C2-1); value LT now presenting as co-learners; they recognise expertise of others (C3-1).</p>

	School Leadership: 14	System Leadership: 3
Theme Three: Organisational Restructuring (17)	Principal=0	Principal=0
Component 1 (C1): Strategic approach	Assistant Principal=2 LT worked to manage expectations and implementations strategically (C1-2).	Assistant Principal=3 System provided off-site PD-mixed effects; irrelevant to particular school needs; over loaded (C3-3).
Component 2 (C2): Roles and responsibilities	Teacher Educator=9 LT did not have structures or processes to raise teacher capacity, or they were not occurring (C3-9).	Teacher Educator=0
Component 3 (C3): Organisational and structural change	Teachers=3 LT provided opportunities for teachers to work professionally and collaboratively (C3-2); TE had to liaise with LT and teachers (C2-1).	Teachers=0
Theme Four: Resourcing (13)	School Leadership 6 Principal=0	System Leadership: 7 Principal=0
Component 1 (C1): Provision of resources	Assistant Principal=4 It all takes time over a continual period (C1-2); LT will need to be creative to ensure sustainability (C2-2).	Assistant Principal=0
Component 2 (C2): Use of resources	Teacher Educator=0	Teacher Educator=0
	Teachers=2 New Principal allocated time for involvement in improving teacher practice (C2-2);	Teachers=7 System expectations exceed the amount of time given to teachers to do them (C1-2); LT provided time on-site to plan together (C2-1); LT organised for PD but resources were not available until this year to support implementation (C1-4).

Table 10(e) Selective Coding: Themes and Theme Components, Question 1 (School I)

Q1: DID THE EXERCISE OF LEADERSHIP IN THE SCHOOL AND SYSTEM INFLUENCE TEACHER PRACTICE AND IF SO HOW?	
Theme One: Collaboration (33)	School Leadership: 20
Component 1 (C1): Development of a collaborative team approach	Principal=3 Assistant Principal=0
Component 2 (C2): Leaders working with teachers	Teacher Educator=8 Teachers=9
Component 3 (C3): Shared vision and understandings	Principal=2 Assistant Principal=4
Component 4 (C4): The role of system leadership	Teacher Educator=2 Teachers=5
	System Leadership: 13
	Principal=2 Assistant Principal=4
	Teacher Educator=2 Teachers=5
	System Leadership: 0
	Principal=0 Assistant Principal=0
	Teacher Educator=0 Teachers=0
	System Leadership: 14
Theme Two: Leadership Capabilities (14)	School Leadership: 14
Component 1 (C1): Relationships	Principal=0 Assistant Principal=7
Component 2 (C2): Characteristics of leaders	Teacher Educator=2 Teachers=5
Component 3 (C3): Openness to change	Principal=0 Assistant Principal=0
Component 4 (C4): Devolution of responsibility	Teacher Educator=0 Teachers=0

	School: 4		System: 0	
Theme Three: Organisational Restructuring (4)	Principal= 1	Assistant Principal=0	Teacher Educator= 3	Teachers=0
Component 1 (C1): Strategic approach	Organisational decisions made to allow for LT to concentrate on teaching and learning (C3-1).		There was a strategic approach (C1-1); Principal is flexible; changes timetables to support learning; responsive to staff needs (C3-1); LT prioritized effective teaching and learning through planning and timetables (C3-1).	
Component 2 (C2): Roles and responsibilities				
Component 3 (C3): Organisational and structural change				
Theme Four:	School Leadership: 2		System Leadership: 1	
Resourcing (3)	Principal= 0	Assistant Principal=0	Teacher Educator= 0	Teachers= 2
Component 1 (C1): Provision of resources				LT prioritised effective teaching and learning through budget, resources, time (C1-1); collaborative opportunities resourced well by LT (C2-1).
Component 2 (C2): Use of resources				Question the way in which TEs were allocated to schools and use of budget (C2-1).

Table 11(a) Selective Coding: Themes and Theme Components, Question 2 (School E)

Q2: DID THE EXPERIENCE OF A PROFESSIONAL LEARNING COMMUNITY INFLUENCE TEACHER PRACTICE AND IF SO HOW?			
Theme One: Leadership (27)	Principal= 8 Built trusting relationships (C3-3); LT modelled, not just told (C2-4); Principal modelled teaching (C2-1).	Assistant Principal= 6 Leadership of PLC by LT members (C1-2); a collaborative approach (C1-1); LT modelled, team-taught and visited classrooms to develop others (C2-2); teacher choice and ownership important to the functioning of PLC (C3-1).	Teacher Educator= 3 Every teacher learnt together, a team approach (C1-3).
Component 1 (C1): A collaborative approach			Teachers= 10 PLCs allowed T & L to be communal- a team approach (C1-2); teachers learnt a lot from PLCs by sharing- a whole school approach (C1-6); shift from traditional 'cocoon' teaching to learning together (C1-1); teachers now taking more leadership roles in PLCs (C3-1).
Component 2 (C2): The exercise of instructional leadership			
Component 3 (C3): Relationships of trust and professionalism			
Theme Two: (36) Teacher Capacity	Principal=13 Teachers initially apprehensive and resistant to others coming into their classrooms (C2-1); improved knowledge of content and contemporary pedagogy (C1-6); teachers have increased confidence (C2-1); risk taking has been a great thing (C2-1); teachers know their students better (C1-1); it has opened up the classrooms (C1-2); teacher dialogue important (C1-1).	Assistant Principal=2 PLCs gave teachers opportunities (C1-1); focus of PLC on effective teaching and learning (C1-1);	Teacher Educator=7 The use of data and enquiry culture in a PLC now (C1-4); teachers will speak out if something is ineffective (C2-1); more professional 'alive' conversations in the staff room now (C1-1); teachers now 'energetic' about learning (C2-1).
Component 1 (C1): Knowledge and practices			Teachers=15 Teachers have grown in confidence (C2-1); initially too much work but the value can be seen now (C2-3); evidence allows you to know the students better (C1-2); PLCs allow for a focus on strategies for T and L (C1-1); PLC sharing provided opportunities for students to show what they have learned and have a voice (C1-1); they embed and sustain consistent, good teaching practices (C1-3); the role of data in a PLC increased (C1-1); professional dialogue improved due to OSPD and PLCs (C1-2).
Component 2 (C2): Attitude and efficacy			
Theme Three: (19) Structure and Organisation	Principal=1 Development of a PLC over time was recognised (C2-1).	Assistant Principal=1 Time and planning dedicated to PLCs (C2-1).	Teacher Educator=5 PLCs now more authentic, not task oriented (C1-1); system to monitor programming and a common language in place (C1-3); learning support meetings established (C1-1).
Component 1 (C1): Reorganisation of structures and roles			Teachers=12 Learned together because time given for PLCs (C2-4); processes put in place to support new teachers by classroom visits and modelling (C1-2); PLCs changed over time as understandings evolved (C2-4); insufficient time for PLCs (C2-2).
Component 2 (C2): Resourcing			

Table 11(b) Selective Coding: Themes and Theme Components, Question 2 (School F)

Q2: DID THE EXPERIENCE OF A PROFESSIONAL LEARNING COMMUNITY INFLUENCE TEACHER PRACTICE AND IF SO HOW?			
Theme One: Leadership (25)	Principal=1 Instructional Rounds in the PLC had a major influence (C1-1).	Assistant Principal=10 Teachers not working in isolation now; shared ownership; a collaborative venture (C1-3); shared responsibility across staff for student learning (C1-1); sharing of different expertise, group effort leads to improved teaching and learning (C1-3); more of a learning community now rather than people doing things in isolation (C1-1); collaborative 'no blame/no shame' culture led to supportive and safe learning environment for teachers (C3-2).	Teacher Educator=7 PLC allows PL to be a whole school approach (C1-1); data and research utilised to develop shared ownership (C2-1); HR in PLC; teachers learned a lot from each other (C1-1); PLC allowed for a team of people, different experience and expertise to contribute and show leadership (C1-4).
Component 1 (C1): A collaborative approach			Teachers=6 All work for a common goal/understanding (C1-3); students also demonstrate a common language to discuss their learning (C1-3).
Component 2 (C2): The exercise of instructional leadership			
Component 3 (C3): Relationships of trust and professionalism			
Theme Two: Teacher Capacity (28)	Principal=5 Teachers originally reluctant, hesitant to observe each other in classrooms- almost palpable (C2-2); there has been a change in teacher thinking (C2-1); data collection and analysis drives decisions (C1-2).	Assistant Principal=5 Teachers were apprehensive initially in observing/being observed but found it affirming (C2-3); PLCs contributed to consistency of focus and practice (C1-2).	Teacher Educator=2 Took small steps together to embed practice (C1-2).
Component 1 (C1): Knowledge and practices			Teachers=16 PLC and PL in it led to a common language (C1-2); all staff contributed to a safe and supportive learning environment for teachers (C2-3); in PLCs feedback and support are given; not competitive (C2-1); whole school focus and consistency of practice now in place (C1-2); assessment and monitoring occur and influence the T & L (C1-1); Now know the students and their needs better (C1-2); PLCs lead to common understanding and practice (C1-5).
Component 2 (C2): Attitude and efficacy			
Component 3 (C3): Leadership			
Theme Three: Structure and Organisation (1)	Principal=0	Assistant Principal=0	Teacher Educator=0
Component 1(C1): Reorganisation of structures and roles			Teachers=1 Learning in the PLC takes time but is worthwhile (C2-1).
Component 2 (C2): Resourcing			

Table 11(c) Selective Coding: Themes and Theme Components, Question 2 (School G)

Q2: DID THE EXPERIENCE OF A PROFESSIONAL LEARNING COMMUNITY INFLUENCE TEACHER PRACTICE AND IF SO HOW?			
Theme One: Leadership (7)	Principal=2 PLCs have become much more focused, specific, targeted (C2-2).	Assistant Principal=0	Teacher Educator=2 PLCs engendered shared ownership and sharing of expertise (C1-1); built collective responsibility for student learning (C1-1);
Component 1 (C1): A collaborative approach			Teachers=3 Sharing of resources and strategies built community and acknowledges that everyone is still learning (C1-3).
Component 2 (C2): The exercise of instructional leadership			
Component 3 (C3): Relationships of trust and professionalism			
Theme Two: Teacher Capacity (16)	Principal=3 Understanding of what a PLC is took time (C1-2); teacher choice and utilising expertise is important (C2-1).	Assistant Principal=0	Teacher Educator=5 Some personalities continue to present challenges in PLCs (C2-1); teachers did not understand what a PLC was (C1-1); PLCs have required a whole mind shift change for teachers (C2-3).
Component 1 (C1): Knowledge and practices			Teachers=8 PLCs have up-skilled teachers and kept them current with contemporary pedagogy (C1-1); teachers appreciate having choice in PLCs (C2-2); PLCs give teachers courage and confidence to have a voice and contribute (C2-4); PLCs provide support and guidance for teachers (C1-1).
Component 2 (C2): Attitude and efficacy			
Component 3 (C3): Leadership			
Theme Three: Structure and Organisation (3)	Principal=1 Balancing time away from class for PL a priority (C2-1).	Assistant Principal=0	Teachers=2 Smaller teams have led to whole school being a stronger PLC (C1-2).
Component 1(C1): Reorganisation of structures and roles			
Component 2 (C2): Resourcing			

Table 11(d) Selective Coding: Themes and Theme Components, Question 2 (School H)

Q2: DID THE EXPERIENCE OF A PROFESSIONAL LEARNING COMMUNITY INFLUENCE TEACHER PRACTICE AND IF SO HOW?			
Theme One: Leadership (28)	Principal=5 PLCs have strengthened collaboration and facilitated change (C1-3); the no-blame, sharing/learning together culture allows teachers to say things based on trust in PLCs (C3-2).	Assistant Principal=2 PLCs have increased collaboration and exposed people's expertise (C1-2).	Teacher Educator=6 PLCs now truly reflect a PLC-inclusive of all stakeholders (C1-3); a lot depended on how you approached things (C3-1); process included using expertise of staff across whole school (C1-2).
Component 1 (C1): A collaborative approach			Teachers=15 Leadership developed and facilitated PLCs (C2-1); LT implemented SMART goals-PLCs now more focused, an expectation (C2-4); work collaboratively to analyse data and set benchmarks-a lot easier when you work as a team (C1-6); PLCs utilise the skills of all stakeholders (C1-4).
Component 2 (C2): The exercise of instructional leadership			
Component 3 (C3): Relationships of trust and professionalism			
Theme Two: Teacher Capacity (43)	Principal=5 Notion of PLCs is now well understood (C1-1); PLCs assisted teachers to be responsible for knowing the learner (C1-1); increased professional conversations evident (C1-2); it will be sustained because teachers see the benefits (C2-1).	Assistant Principal=5 Teachers know students well and always did (C1-1); PL Cs develop common understandings of content and student expectations (C1-2); initially there were often difficulties keeping conversations on track/task (C2-2).	Teacher Educator=11 People grew with the new processes and practices e.g. data, timelines (C2-3); some interpreted the need to collaborate as a reflection on their teaching; now broken down (C2-1); class visits (1R) have strengthened PLCs-data, planning, progression better grades, expectations, bench marks (C1-2); initial reluctance to classroom visits (C2-1); shift from insular practice to working together (C1-2); PLCs allowed for like-minded people to find each other and gain support (C2-1).
Component 1 (C1): Knowledge and practices			Teachers=22 PLCs have redefined committees; collection and analysis of data a focus using SMART goals (C1-2); professional conversations important (C2-1); PLCs as opposed to committees: now all the relevant people having the same conversation; the next level of depth (C1-2); it is a learning community, an opportunity; you don't need all the experts there; it is not top down (C2-4); skills learned will stay with teachers; have grown professionally and changed thinking (C2-3); there has been whole change by every staff member (C2-3); class visits, then reflecting as a group to help plan is a positive (C2-2); teachers felt apprehensive, nervous and threatened during class visits but found them beneficial (C2-5).
Component 2 (C2): Attitude and efficacy			
Component 3 (C3): Leadership			
Theme Three: Structure and Organisation (6)	Principal=0	Assistant Principal=2 They impact heavily on time (C2-1); smaller PLCs have strengthened PLC as a whole school (C1-1).	Teacher Educator=1 Sustainability will be difficult without a budget (C2-1).
Component 1 (C1): Reorganisation of structures and roles			Teachers=3 School time needs to be dedicated to PLCs and be inclusive of all (C2-3).
Component 2 (C2): Resourcing			

Table 11(e) Selective Coding: Themes and Theme Components, Question 2 (School 1)

Q2: DID THE EXPERIENCE OF A PROFESSIONAL LEARNING COMMUNITY INFLUENCE TEACHER PRACTICE AND IF SO HOW?			
Theme One: Leadership (19)	Principal=1 LT all involved in PLCs (C2-1).	Assistant Principal=2 TE chaired PLCs until teachers were ready to take over (C2-1); PLCs occur because there is a TE to drive them (C2-1).	Teacher Educator=5 PLCs initially did not take off, very difficult but evolved over time to be fantastic (C2-3); TE had respect for the teachers (C3-1); teachers have gradually taken leadership and ownership of PLCs (C2-1).
Component 1 (C1): A collaborative approach			Teachers= 11 PLCs are focused, have goals and work from the data (C1-1); PLCs have deprivatised classrooms; no longer a solo teacher; part of team teaching approach; collaborative (C1-2); PLCs allow you to see different perspectives; different point of view; professional conversations are ongoing (C3-4); PLC sharing reduces the burden and you have someone to bounce ideas off (C3-1); ask others for advice; bounce off other colleagues or it's 'just running around in your own head a lot of the time'; timely (C1-3).
Component 2 (C2): The exercise of instructional leadership	Component 2 (C2): The exercise of instructional leadership		
Component 3 (C3): Relationships of trust and professionalism			
Theme Two: Teacher Capacity (24)	Principal=4 Professional dialogue an important part of PLCs (C1-2); people are passionate about expressing opinions in PLCs; no inhibitions (C2-1); PLCs have been effective in planning for teaching and learning (C1-1).	Assistant Principal=6 PLCs influenced teacher practice greatly; refined practice; addressed misunderstandings; changes in classroom practice; meet regularly (C1-4); we have professional dialogue in PLCs (C1-1); we argue in PLCs about student progress (C2-1).	Teacher Educator= 1 PLC not confined to meeting time; discussions happening all the time- teachers instigate them (C1-1);
Component 1 (C1): Knowledge and practices			Teachers= 13 PLCs have had huge impact; better pedagogy; continual challenge; professional dialogue that is relevant; context important (C1-3); PLCs on site you can have deep, meaningful, honest conversations; 'say, this is the crunch'-we are in this together for the students (C2-2); PLCs provide different styles of teaching and a different range of ideas (C1-2); feedback and learning by observation is critical (C1-2); initially resistance to change; anxiety; feelings of 'big brother; difficult to take on; felt threatened (C2-3); PLCs a definite influence on teacher practice; we have a huge learning community (C2-1).
Component 2 (C2): Attitude and efficacy			
Component 3 (C3): Leadership			
Theme Three: Structure and Organisation (6)	Principal= 2 Time has been reorganised to allow for PLCs; can improve it further (C2-2).	Assistant Principal= 1 Organisation re human and material resources needed to occur (C1-1).	Teacher Educator= 1 Time has been allocated (C2-1).
Component 1(C1): Reorganisation of structures and roles			Teachers= 2 Time was provided for PLCs and observing other teachers (C2-2).
Component 2 (C2): Resourcing			

Table 12(a) Selective Coding: Themes and Theme Components, Question 3 (School E)

Q3: WHAT WAS THE PARTICULAR CONTRIBUTION OF THE TEACHER EDUCATOR (TE) ROLE TO TEACHER PRACTICE?			
<p>Theme One: (34) Structure and Organisation</p> <p>Component 1 (C-1): The Teacher Educator role</p> <p>Component 2 (C2): Time/sustainability</p>	<p>Principal=9 Challenge of balancing TE role within existing leadership roles in the initial phase (C1-1); role focused entirely on teaching and learning important (C1-3); TE role allowed time (C2-1); change of practice took time (C2-1); procedures and practices established to ensure sustainability (C2-3).</p>	<p>Assistant Principal=1 Change in learning culture due to focus of role (C1-1).</p>	<p>Teacher Educator=13 Role had a focus on learning (C1-3); TE has become redundant- built sustainability through building teacher capacity (C2-5); development of TE as a leader occurred through role (C1-2); TE, teachers and LT worked together as a team (C1-2); the learning journey has taken time (C2-1).</p>
<p>Theme Two: (10) Characteristics and Qualities of the Teacher Educator</p> <p>Component 1 (C1): Relationships</p> <p>Component 2 (C2): Credibility</p>	<p>Principal=0</p>	<p>Assistant Principal=2 There was a lot of resistance to TE; had to build trust (C1-2).</p>	<p>Teacher Educator=2 Built relationships over time to facilitate change (C1-2).</p>
<p>Theme Three: (36) Contribution to Teacher Capacity</p> <p>Component 1 (C1): Teacher Practices</p> <p>Component 2 (C2): Teacher Efficacy</p>	<p>Principal=8 Significant contribution to teacher practice through engagement in professional learning (C1-1); TE in classrooms, supported teachers with teaching, modelling and leading professional dialogue (C1-2); set learning goals for students (C1-1); built capacity beyond TE- teachers modelling for other teachers built teacher self-esteem (C2-2); provided resources for student and teacher learning (C1-2).</p>	<p>Assistant Principal=9 Teacher capacity in pedagogy built through focus on reading and PD (C1-1); developed teacher understanding of data-informs programming, used to track student progress (C1-4); TE modelled, did team teaching (C1-2); TE provided theory behind teaching and knowledge of contemporary pedagogy (C1-1); provided opportunities to engage with the colleagues, parents, carers and community (C1-1).</p>	<p>Teacher Educator=2 Teachers see themselves as leaders now (C2-1); teachers know their students better (C2-1).</p>
			<p>Teachers=17 TE identified teachers' strengths to develop teacher leaders (C1-1); TE developed teacher confidence and teacher leadership (C2-2); TE helped teacher to develop independence (C2-1); TE taught teachers to take risks and try new strategies- learnt from each other (C1-3); assisted teachers' understanding and use of data to inform planning and how students learn (C1-5); TE modelled in classrooms and built teacher capacity, should have been more (C1-5).</p>

Table 12(b) Selective Coding: Themes and Theme Components, Question 3 (School F)

Q3: WHAT WAS THE PARTICULAR CONTRIBUTION OF THE TEACHER EDUCATOR (TE) ROLE TO TEACHER PRACTICE?			
<p>Theme One: Structure and Organisation (27)</p> <p>Component 1 (C-1): The Teacher Educator role</p> <p>Component 2 (C2): Time and sustainability</p>	<p>Principal=3</p> <p>Challenge of balancing TE role within existing leadership roles (C1-3).</p>	<p>Assistant Principal=9</p> <p>TE role dedicated to PD of teachers provided direction (C1-2); difficulty of where AP role fits with TE (C1-2); TE has more time for T & L than AP (C2-1); sustainability without a TE is a problem; apprehensive (C2-4).</p>	<p>Teacher Educator=7</p> <p>Tried to share time around-importance of dedicating time to teachers (C2-1); sustainability of changes is the biggest challenge (C2-3); teachers value changes-not being given dedicated time will reduce what can be continued in the future (C2-2); will need to be creative with limited time for the future (C2-1).</p>
<p>Theme Two: Characteristics and qualities of the Teacher Educator (36)</p> <p>Component 1 (C1): Relationships</p> <p>Component 2 (C2): Credibility</p>	<p>Principal=2</p> <p>TE being in classrooms, supporting teachers with their teaching, modelling important (C2-1); leadership of TE in IR process vital (C2-1).</p>	<p>Assistant Principal=2</p> <p>Importance of the right person (manner) for the TE role (C1-2).</p>	<p>Teacher Educator=12</p> <p>P and LT trusted and supported TE- had trusting relationships (C1-3); teachers felt supported (C1-1); modelling, observing, planning with teachers to establish credibility important (C2-3); established trusting relationships (C1-2); TE got fully involved in life of the school (C2-1); TE role focused on PL for parents- range of initiatives in place (C1-2).</p>
<p>Theme Three: Contribution to Teacher Capacity (11)</p> <p>Component 1 (C1): Teacher Practices</p> <p>Component 2 (C2): Teacher Efficacy</p>	<p>Principal=4</p> <p>TE has made a significant contribution to teacher practice (C1-2); leadership of TE in IR process vital (C1-1); PL for TE and others had a big influence (C1-1).</p>	<p>Assistant Principal=1</p> <p>Teachers' skills have become embedded in programs (C1-1).</p>	<p>Teacher Educator=1</p> <p>Teachers have not been resistant/unwilling (C2-1).</p> <p>Teachers=5</p> <p>TE utilised the particular skills of staff (C2-1); TE role has formed and guided teachers to alter practice to cater for all students (C1-4);</p>

Table 12(c) Selective Coding: Themes and Theme Components, Question 3 (School G)

Q3: WHAT WAS THE PARTICULAR CONTRIBUTION OF THE TEACHER EDUCATOR (TE) ROLE TO TEACHER PRACTICE?			
Theme One: Structure and Organisation (12)	Principal=8 TE on leadership team significant (C1-1); sustainability is an issue-will require flexible and creative strategies (C2-2); establishment of TE role on leadership team was a challenge (C1-1); TE role was very effective, valued by teachers and their practice improved (C1-4).	Assistant Principal=0	Teacher Educator=3 It took time to change the mindset-it took teachers six months to recognise TE as knowledgeable (C2-3).
Component 1 (C1): The Teacher Educator role			Teachers=1 Having a TE role was a positive experience for teachers (C1-1).
Component 2 (C2): Time and sustainability			
Theme Two: Characteristics and qualities of the Teacher Educator (21)	Principal=0	Assistant Principal=0	Teacher Educator=16 Coaching, mentoring and active listening had to be established and used in PLCS (C1-2); respect for teachers as professionals was vital (C1-3); TE believed in own ability to challenge some practices-teachers tested TE (C2-3); relationships had to be built for change to occur and had to let teachers challenge and question (C1-4); teachers started whispering that the TE knew what she was talking about (C2-2); vital that TE had professional learning, dialogue and is an 'expert' in things (C2-2).
Component 1 (C1): Relationships			Teachers=5 TE has been research based, data driven and insisted on accountability (C2-2); TE challenged people, coached, mentored, and asked big questions (C1-3); TE was affirming and contributed to a safe and supportive learning environment (C1-1).
Component 2 (C2): Credibility			
Theme Three: Contribution to Teacher Capacity (13)	Principal=3 TE worked closely with teachers to model, observe, support (C1-3).	Assistant Principal=0	Teacher Educator=3 TE did modelling for teachers when they wanted assistance and led staff meetings (C1-3).
Component 1 (C1): Teacher Practices			Teachers=7 TE modelled, provided feedback and support to teachers, collaboratively planned (C1-5); TE showed how and accessed support for teachers' learning needs (C2-2);
Component 2 (C2): Teacher Efficacy			

Table 12(d) Selective Coding: Themes and Theme Components, Question 3 (School H)

Q3: WHAT WAS THE PARTICULAR CONTRIBUTION OF THE TEACHER EDUCATOR (TE) ROLE TO TEACHER PRACTICE?			
<p>Theme One: Structure and Organisation (20)</p> <p>Component 1 (C-1): The Teacher Educator role</p> <p>Component 2 (C2): Time and sustainability</p>	<p>Principal=6</p> <p>Sustainability-believe that practices will continue but leadership in school will suffer (C2-2); time resource will no longer be available to release teachers (C2-4).</p>	<p>Assistant Principal=3</p> <p>TE experience has worked (C1-1); sustainability is possible but it is short sighted to remove the support (C2-2).</p>	<p>Teacher Educator=5</p> <p>Role effective as it is dedicated to curriculum; can focus on areas of need (C1-2); role is valuable and should be continued (C1-1); will need to be inventive in the future (C2-1); TE recognises own professional growth in the role (C1-2)</p>
<p>Theme Two: Characteristics and qualities of the Teacher Educator (23)</p> <p>Component 1 (C-1): Relationships</p> <p>Component 2 (C2): Credibility</p>	<p>Principal=9</p> <p>TE is credible, available, supportive, made a big difference, outstanding leader (C2-5); TE developed rapport and built relational trust with colleagues (C1-4).</p>	<p>Assistant Principal=0</p>	<p>Teacher Educator=3</p> <p>Respect is vital (C1-2); believes in maintaining a safe and supportive environment for teachers (C1-1).</p>
<p>Theme Three: Contribution to Teacher Capacity (25)</p> <p>Component 1 (C-1): Teacher Practices</p> <p>Component 2 (C2): Teacher Efficacy</p>	<p>Principal=0</p>	<p>Assistant Principal=5</p> <p>Teachers have great ownership and responsibility now (C2-1); TE focussed on quality learning experiences, assessment and use of data across the school (C1-4).</p>	<p>Teacher Educator=5</p> <p>Modelling, professional reading, team teaching, planning, programming, running PD, co-ordinating classroom visits all occur (C1-2); TE doing less PD and modelling now as teachers are taking responsibility; confidence increased (C2-3).</p>
			<p>Teachers=15</p> <p>TE introduced and is involved in PLCs (C1-2); utilises latest research; organises timetables, PD, modelling, planning (C1-4); things are now more focused, driven, professional-on curriculum, pedagogy, good practice (C1-4); TE helped teachers to feel more confident and capable (C2-1); TE made process of data collection manageable across the school (C1-4).</p>

Table 12(e) Selective Coding: Themes and Theme Components, Question 3 (School I)

Q3: WHAT WAS THE PARTICULAR CONTRIBUTION OF THE TEACHER EDUCATOR (TE) ROLE TO TEACHER PRACTICE?			
<p>Theme One: Structure and Organisation (21)</p> <p>Component 1 (C1): The Teacher Educator role</p> <p>Component 2 (C2): Time and sustainability</p>	<p>Principal=2 Importance of a role focusing on pedagogy (C1-2).</p>	<p>Assistant Principal= 6 Importance of a role focusing on OSPD and driving change (C1-2); TE another expert on staff to support teachers (C1-1); one person with this dedicated role is important; AP cannot do all this with other aspects to their role (C1-2); it is difficult as AP to nurture, demand, challenge, support simultaneously; good to have TE to work with to do this (C1-1).</p>	<p>Teacher Educator= 5 Difficult for TE in the role being new to the school (C1-2); said that the role is ending; next year they'll be fine; hopes to still be able to have a say (C2-3).</p>
<p>Theme Two: Characteristics and qualities of the Teacher Educator (33)</p> <p>Component 1 (C1): Relationships</p> <p>Component 2 (C2): Credibility</p>	<p>Principal=2 TE had to both challenge and partner teachers; had to build trust to do this (C1-2).</p>	<p>Assistant Principal= 10 It was about the privacy and dignity of each person; supporting subtly to make changes (C1-3); the title of the TE role caused a major hurdle-deficit view of teachers; it took a lot of relationship building (C1-3); TE had to work hard to build relationships and a safe and supportive environment for teachers (C1-1); there was a lot of give and take which gave people room to change (C1-1); TE developed a high profile with parents; good relationship with community (C2-2).</p>	<p>Teacher Educator= 11 TE label caused problems initially; took two years to build relationships; teachers would take and take and take (C1-2); there was a lack of respect from teachers; TE hadn't done the hard yards (C2-2); progressed slowly but have taught the teachers persistence-never give up; always challenge them; a positive person (C1-4); TE earned respect from teachers by being observed in the classroom- 'on the same playing field' (C2-1); teachers now saying how will we do this without you? There is accountability with TE there though (C2-2).</p>
<p>Theme Three: Contribution to Teacher Capacity (26)</p> <p>Component 1 (C1): Teacher Practices</p> <p>Component 2 (C2): Teacher Efficacy</p>	<p>Principal=2 TE influenced teacher knowledge of students; provided PD, feedback (C1-2).</p>	<p>Assistant Principal= 4 TE led teachers 1:1, small groups, modelling, collecting data; differentiated approach based on need (C1-2); importance of TE working with teachers re data analysis and feedback (C1-2).</p>	<p>Teacher Educator= 6 TE works with every teacher and knows every student (C1-1); TE has seen a lot of change in teacher practice; (C1-1); teachers are now skilled and less reliant on TE (C2-1); teachers initially had low expectations of students; now improved as has student behaviour (C1-2); TE sits with teachers to support and guide them; professional dialogue (C2-1).</p>
		<p>Teachers= 14 Classrooms are now open; team teaching (C1-2); TE provided good PL; examples and readings; increased teachers' professional capacity; supported teachers; data based professional dialogue and planning; incredible learning opportunity (C1-5); TE role has enhanced pedagogy; teachers have tried new things and moved; dynamic role-working in classrooms; ongoing programs (C1-2); teachers now better observers; fresher and have increased strategies (C1-2); TE good at finding strategies and assessments (C1-1); TE role has assisted teachers to feel more accountable for decisions made re students (C1-1); TE has influenced classroom visits through (IR) and PLCs (C1-1).</p>	

Table 13(a) Selective Coding: Themes and Theme Components, Question 4 (School E)

Q4: DID THE NATURE OF THE ON-SITE PROFESSIONAL DEVELOPMENT (OSPD) INFLUENCE TEACHER PRACTICE AND IF SO HOW?				
Theme One: (30) Leadership	Principal=6 OSPD is inclusive, involves everyone and is shared (C1-3); OSPD meets the needs of that particular community- contextual (C2-3).	Assistant Principal=5 OSPD linked and connected practices across the school (C2-3); OSPD allows for all staff to be engaged in the learning, have a say and have choice (C1-2).	Teacher Educator=8 Given support and within a context it is effective, makes connections, has accountabilities (C2-2); off-site PD has no effect, not strategic or matched to needs (C2-2); OSPD allowed for learning together as part of a team (C1-2); it is strategically linked (C2-1); built a shared responsibility for learning (C1-1).	Teachers=11 OSPD is collaborative and shared (C1-3); off-site PD not relevant to need/expectation (C2-1); OSPD is practical, continuous and relevant (C2-4); OSPD is active learning, sharing knowledge, motivating (C1-2); off-site PD teachers discuss other things (C2-1).
Component 2 (C2): Coherence				
Theme Two: (27) Teacher Capacity	Principal=7 Modelling in classrooms and working with people important (C1-2); professional dialogue contributed to learning for all members of staff (C1-2); OSPD assists teachers to know the students and how they learn (C1-1); OSPD changed the teaching practice of every single teacher (C1-1); OSPD gives teachers confidence to put effective teaching and learning in place (C2-1).	Assistant Principal =4 Some teachers may value OSPD but resisted it (C2-2); building of trust and relationships important to OSPD (C2-2).	Teacher Educator=2 PL is valued (C2-1); teachers can now critique professional readings and presenters; they are informed (C1-1).	Teachers=14 Difficult to change teaching practice; created fear, anxiety (C2-7); parents/carers more involved (C1-1); building of trusting, supportive relationships important (C2-6).
Component 1 (C1): Teacher Knowledge and Practices				
Component 2 (C2): Teacher Attitude, Trust and Relationships				
Theme Three: (9) Resourcing and sustainability	Principal=0	Assistant Principal=2 OSPD built sustainability of practices (C1-2).	Teacher Educator=3 OSPD is long term (C1-1); money and time have supported OSPD (C1-2).	Teachers=4 It's long term (C1-1); time must be given for OSPD and data analysis (C1-3).
Component 1 (C1): Resourcing and sustainability				

Table 13(b) Selective Coding: Themes and Theme Components, Question 4 (School F)

Q4: DID THE NATURE OF THE ON-SITE PROFESSIONAL DEVELOPMENT (OSPD) INFLUENCE TEACHER PRACTICE AND IF SO HOW?			
Theme One: Leadership (20)	Principal=1 OSPD is inclusive (C1-1).	Assistant Principal=6 Teachers analysing data together has shared the ownership of the learning (C1-2); specialist teachers included, a positive cohesive approach (C2-2); off-site PD 2 nd /3 rd hand (C2-2).	Teacher Educator=3 OSPD knows the needs of teachers and students: can tailor PL (C2-3).
Component 1 (C1): Collaboration			Teachers=10 OSPD very focused to specific needs; off-site can be irrelevant to your context (C2-6); OSPD more effective because it is continuous; you can go back to the people (C1-1); OSPD contributes to a strong supportive community, clear communication and follow-up (C1-3).
Component 2 (C2): Coherence			
Theme Two: Teacher Capacity (25)	Principal=1 Shifts the emphasis back to the teachers (C1-1).	Assistant Principal=5 OSPD great influence on teacher practice e.g. all assess together; analyse data (C1-2); OSPD allows for learning from mistakes (C2-1); OSPD allows for risk taking, experimenting in a safe and supportive environment (C2-2).	Teacher Educator=3 Use of data and follow-up can occur on-site; see the value of it (C1-1); can build relationships so teachers are open-provide support (C2-2).
Component 1 (C1): Teacher Knowledge and Practices			Teachers=16 OSPD has led to more precise conversations about student needs: know students better (C1-5); teachers now understand and realise the importance of data (C1-5); teachers now recognise that they had learning needs before they could attend to the students-leads to continuous improved practice (C2-3); it is good to observe as well as be observed in the classroom (C2-1); OSPD allows for a safe and supportive environment to ask questions (C2-2).
Component 2 (C2): Teacher Attitude, Trust and Relationships			
Theme Three: Resourcing and sustainability (7)	Principal=1 OSPD has changed their way of working with teachers to develop common understandings (C1-1).	Assistant Principal=0	Teacher Educator=2 Presence of TE on site all the time brought accountability (C1-1); use of resources on-site, value it (C1-1).
Component 1 (C1): Resourcing and sustainability			Teachers=4 Time available helped teachers to develop a better understanding of how to use data to inform programming (C1-4).

Table 13(c) Selective Coding: Themes and Theme Components, Question 4 (School G)

Q4: DID THE NATURE OF THE ON-SITE PROFESSIONAL DEVELOPMENT (OSPD) INFLUENCE TEACHER PRACTICE AND IF SO HOW?			
Theme One: Leadership (28)	Principal= 7 Assistant Principal=0	Teacher Educator=5	Teachers=16
Component 1 (C-1): Collaboration	Importance of working as part of a system and teachers hearing a consistent message in off site PD (C2-3); OSPD relevant to context; flexible; available for follow-up (C2-4).	OSPD allows for everyone to be a leader of learning; not just leadership team (C1-2); OSPD has allowed for leadership development of others (C1-1); parents do not support OSPD, as the teacher is not in class (C1-2).	OSPD is relevant to context and more authentic (C2-3); OSPD is timely, time effective and beneficial (C2-3); OSPD is cohesive, links theory to practice and builds on other experiences (C2-3); OSPD provides a consistent and common message for all (C2-3); OSPD is a dialogue that works both ways (C1-1); OSPD allows you to see parents in the morning so they do not get anxious about teachers not in the classroom (C1-2); OSPD has allowed for working closely with parents to develop their understandings (C1-1)
Component 2 (C2): Coherence			
Theme Two: Teacher Capacity (14)	Principal=2 Assistant Principal=0	Teacher Educator=9	Teachers=3
Component 1 (C-1): Teacher Knowledge and Practices	Professional conversations and cross class visits have increased (C1-2).	Development of data teams develops skills, capacity, responsibility and accountability more broadly (C1-4); careful management of people is essential- balance between challenge and support (C2-3); teaching practice has improved, expectations raised (C1-2).	Celebrating achievements and learning have been important (C2-1); OSPD allows teachers the freedom to speak about what is happening in their school re teachers and students (C2-2).
Component 2 (C2): Teacher Attitude, Trust and Relationships	Principal=0 Assistant Principal=0	Teacher Educator=2	Teachers=2
Theme Three: Resourcing and sustainability (4)		Sustainability-it will be maintained as ongoing PL is valued by teachers (C1-2);	OSPD is not a temporary one-off experience (C1-1); OSPD allows for provision of resources that match data and teacher needs (C1-1).
Component 1 (C-1): Resourcing and sustainability			

Table 13(d) Selective Coding: Themes and Theme Components, Question 4 (School H)

Q4: DID THE NATURE OF THE ON-SITE PROFESSIONAL DEVELOPMENT (OSPD) INFLUENCE TEACHER PRACTICE AND IF SO HOW?			
Theme One: Leadership (30)	Principal=6 OSPD is relevant to needs of teachers in their context; moulded to suit the learner (C2-3); OSPD is multi-natured and varied; brilliant; one size does not fit all (C2-2); community engagement is not strong (C1-1).	Assistant Principal=3 OSPD comes from an understanding of shared ownership, workload and support (C2-3).	Teacher Educator=2 Due to OSPD, now less insular (C1-2).
Component 1 (C-1): Collaboration			Teachers=19 OSPD is timely, fluid and relevant to school/teacher needs (C2-3); OSPD not all run by LT but utilised other staff and external personnel or courses but implemented locally (C1-2); collaboration has been undervalued; there is so much that can be learned from 20 minutes in a colleague's classroom (C1-4); OSPD is relevant to needs of teachers in their context; outsiders might not understand (C2-5); efforts have been made to engage with the community-some benefits for families, teachers not involved (C1-4); OSPD connects people in all roles across the school (C2-1).
Component 2 (C2): Coherence			
Theme Two: Teacher Capacity (35)	Principal=4 OSPD has made a significant difference to teacher practice (C1-1); it takes teachers out of their comfort zones (C2-1); we all know our students better now-use of data; assessment (C1-2);	Assistant Principal=8 OSPD restricted to level of expertise at that school (C1-2); there has been a quantum shift in teacher practice (C1-2); the school was/is in a strong position, it is not a deficit model (C1-4);	Teacher Educator=6 Changes in teacher practice are: peer observations; reduced emphasis on content; team teaching; feedback; opened classroom up, assessment; communication re students across schools (C1-4); changes to school culture: more discussions about programming and practice freer, data (C1-2).
Component 1 (C-1): Teacher Knowledge and Practices			Teachers=17 More focused and allows for reflective practice based on data (C1-3); teachers do not need to be experts; they feel free to say they have no idea without being criticised; it is 'comfortable' (C2-3); you do not necessarily need an expert (C2-2); it has worked here (C2-2); teachers believe they were competent before this approach began-feel they were blamed; very hurt (C2-4); now teaching from the same core beliefs and support each other (C2-2); classroom visits need to happen (C2-1).
Component 2 (C2): Teacher Attitude, Trust and Relationships			
Theme Three: Resourcing and sustainability (9)	Principal=0	Assistant Principal=4 Sustainability will be difficult without the budget (C1-2); teachers will give extra time if they see the benefit (C1-2).	Teacher Educator=0
Component 1 (C-1): Resourcing and sustainability			Teachers=5 Time is a factor; organisational structures for part time staff an issue (C1-5);

Table 13(e) Selective Coding: Themes and Theme Components, Question 4 (School 1)

Q4: DID THE NATURE OF THE ON-SITE PROFESSIONAL DEVELOPMENT (OSPD) INFLUENCE TEACHER PRACTICE AND IF SO HOW?			
Theme One: Leadership (28)	Principal=4 Many positives to OSPD-staff working together (C1-1); utilising skills from within has progressed (C1-1); recognised the need to increase teacher voice and differentiation of PD (C2-1) ; OSPD can utilise many things to engage teachers at their own rate-technology, external professionals etc. (C2-1).	Assistant Principal=7 It is relevant and teachers are learning at the point of need; coherent ('got a flow on') (C2-3); off site PD gets forgotten, not applied, not relevant for when you need it; OSPD is a strong model (C2-4).	Teacher Educator=2 Working with parents and the community is a real challenge (C1-2).
Component 1 (C-1): Collaboration			Teachers=15 OSPD is relevant, timely; in a context; 'you can't understand something until you walk in their shoes' (C2-4); off site PD is a one-off, minimal sharing and does not provide feedback from others (C1-4); PL has improved-coherent, trackable (C2-1); improvement in parent commitment to students' learning (C1-2); colleagues now more open to sharing, more collaborative (C1-2) ; OSPD important rather than going out and reporting back; you get caught up in social things rather than PL, 'you are in the right head space in your own environment' (C2-2).
Component 2 (C2): Coherence			
Theme Two: Teacher Capacity (40)	Principal=3 Stigma attached to being a school requiring this support but teachers have shown they can 'cut-it' (C2-1); professional dialogue; teachers exposed to how other classrooms are set up (C1-2).	Assistant Principal =12 Focus on students and their learning led to great change; teachers were interested; it is a much calmer place now (C1-4); relationships across entire community are cohesive now (C2-1); regular cross-classroom visits with a particular focus for all teachers really worked to focus on teaching and learning strategies (C1-2); teachers were in a sensitive place because they knew they were involved because of poor performance; teachers therefore reluctant to open classrooms; trust had to be built (C2-3); professional attitude to learning has changed;-teachers/leaders now comfortable to admit they need to learn more; four teachers now studying (C2-2).	Teacher Educator=13 OSPD can work in classrooms with teachers to develop a whole school approach to up-skill teachers (reading) (C1-2); all doors have opened and team teaching occurring- students are used to different teachers now (C1-3) ; amazing; teachers engage in PL now; five-six doing higher education currently (C2-2); teachers know their students well now; evidence-based practice really evident (C1-2); teachers now feel empowered and students striving to achieve more highly (C2-3); teachers' knowledge of ESL scales, IEPs SMART GOALS, PLCs all evident-now put into practice (C1-1).
Component 1 (C-1): Teacher Knowledge and Practices			Teachers=12 Off site PD, everyone is a bit guarded (C2-1); OSPD you can be honest; not feel embarrassed that you're not on top of it (C2-2); big improvements in teacher practice; shift from whole class model to individual students (C1-3); OSPD occurs more in daily interactions; learn more from colleagues if I ask a direct question (C1-2); OSPD is not necessarily a good change; no formal recognition re certification for teacher standards; needs to have more 'tangible wealth' for teachers; level of professionalism, external provides more depth and expertise (C1-4).
Component 2 (C2): Teacher Attitude, Trust and Relationships			
Theme Three: Resourcing and sustainability (5)	Principal=0	Assistant Principal=0	Teacher Educator=1 Everything has changed, PD is happening on site now (C1-1).
Component 1 (C-1): Resourcing and sustainability			Teachers=4 OSPD includes, requires a person resource (C1-1); OSPD still includes some external or online provider (C1-1); OSPD limited to what is available on-site, does not allow for communication across schools or differentiation for staff learning needs (C1-1); OSPD saves travel time (C1-1).

Appendix E:

Phase 4 Data- Summary Tables School E, Questions 2-4 and Schools F-I, all questions

Table 14(b): Summary Table, Question 1 (School F)

Q1: Did the exercise of leadership in the school and system influence teacher practice and if so, how?	Open coding results:	Selective coding results:			
	IDEAS	FRE- QUENCY	RESEA RCH QUESTI ON	THEME	THEME COMPO NENT
Principal	1. System leadership had a strong influence on teacher practice e.g. Instructional Rounds, knowing the student	3	1	1	4
	2. Teachers originally reluctant, hesitant to observe each other in classrooms	2	2	2	2
	2. There has been a change in teacher thinking	1	2	2	2
	3. Open, approachable, knowledgeable LT contributed to improved practice	1	1	2	2
	4. Time has been provided for LT to work with teachers.	1	1	5	1
	5. Increased parent and community engagement	3	1	1	1
Assistant Principal	6. LT put structures in place for teacher PD	2	1	3	3
	6. LT is the driving force; maintains focus	2	1	2	3
	6. It has been at the forefront re timetabling, funding, PD priorities	1	1	5	2
	10. Collaboration with teachers a priority	1	1	1	2
	12. LT: Planning together; professional dialogue evident; influence on classroom practice	1	1	1	2
	8. Inclusive of all on staff and shared	2	1	1	2
	5. Parental involvement is a positive experience	2	1	1	1
Teacher Educator	9. P and LT trusted and supported TE; had trusting relationships	3	3	2	1
	10. LT cohesive, collaborative and agree on the same direction	3	1	1	3
	10. LT had a team approach	2	1	1	1
	4. AP contributed to PL but also on class	1	1	3	2
	12. P directly involved in IR and PL	3	1	3	2
	10. AP and TE have worked together on PL	4	1	3	2
	1. System and LT worked together	1	1	1	4
	10. LT value the changes; this contributes to its sustainability	1	1	2	3
	4. LT gave their time and made changes slowly	2	1	2	3
	12. LT participated in PL-showed they value of it	1	1	1	2
Teachers	10. LT united in their focus and directly involved	3	1	2	2
	3. LT helped teachers to know expectations, have a common language	2	1	1	3
	10. AP and TE worked together- common understanding	1	1	1	3
	6. LT all knew direction and had it in annual plan	1	1	3	1
	6. LT flexible	1	1	2	2
	5. Despite many efforts it remains difficult to engage parents	6	1	1	1
	3. LT proactive and keeps abreast of changes	2	1	2	3
	4. LT organised for time out of class for teachers	1	1	5	1
	8. LT included specialist teachers	1	1	1	2
	10. LT led PD.	1	1	2	1
	12. LT used data to analyse needs of the school	1	1	2	3
	13. LT have been into classrooms	1	1	1	2
	1. System leadership supportive	1	1	1	4
	5. TE runs courses for parents but participation is poor	1	1	1	1
	3. LT team assisted teachers to develop in their knowledge and skills	3	1	1	2
3. LT were supportive	2	1	2	1	

Table 14(c): Summary Table, Question 1 (School G)

Q1: Did the exercise of leadership in the school and system influence teacher practice and if so, how?	Open coding results		Selective coding results		
	IDEAS	FREQUENCY	RESEARCH QUESTION	THEME	THEME COMPONENT
Principal	1. System offered direction; guidance and consistency	2	1	1	4
	2. TE on leadership team significant	1	3	1	1
	3. Teacher leadership developed through recognising and nurturing talent-encouraged others to have a go	2	1	2	4
Assistant Principal	N.A.				
Teacher Educator	4. Importance of developing everyone as leaders of learning, not just the TE	3	1	2	4
	4. TE worked alongside others developing and utilising different expertise	2	1	1	2
	5. Developed in teachers understanding and use of a range of data	1	1	1	2
	4. Teacher confidence and capacity to present to others has increased from working with them	1	1	1	2
Teachers	6. Leadership team made decisions around PD provided based on needs of staff & school using data-some OSPD, other whole school	4	1	3	3
	7. Teachers more confident as a result of all the PD	1	1	1	2
	8. PD was systematic-rich and effective	1	1	3	1
	8. LT lead PD collaboratively	2	1	1	2
	8. PD made connections for staff	1	1	1	3
	9. System leadership has expected too much from teachers- takes away from learning time	3	1	1	4
	9. System expectations re data are effective in the long run but difficult and time consuming	3	1	1	4
	5. LT has helped teachers use data to write SMART goals and strategies for students	2	1	1	2
	8. Some LT members stronger than others, different skills and abilities-they too are on a journey re T&L and leadership;	3	1	2	2
	8. Some LT members upset staff members, confusion arose, some things not as effective as they could have been	2	1	2	1
8. Teachers need to have the skills to challenge leaders effectively and professionally	1	1	2	1	
10. Support from LT in working with parents appreciated	2	1	1	2	

Table 14(d): Summary Table, Question 1 (School H)

Q1: Did the exercise of leadership in the school and system influence teacher practice and if so, how?	Open coding results		Selective coding results		
	IDEAS	FRE-QUENCY	RESEAR-CH QUESTI-ON	THEME	THEME COMPO-NENT
Principal	1. Success in influencing teacher practice has been largely dependent on the high quality of the TE-strong leader	3	1	1	2
	2. Adequate support from the system for TE and LT	2	1	1	4
	2. Negative view of system in the early days due to demands on teachers although can now see benefits	4	1	1	4
	3. Other leadership team members aware but little evidence of them directly involved with teachers	1	1	1	2
	4. The use of data shared by the system was helpful	1	1	1	4
Assistant Principal	5. LT model good teaching practice and exercise supervisory aspect of leadership	2	1	2	2
	6. Teachers know students well-always did	1	2	1	1
	7. LT team design/plan PD	1	1	2	2
	8. System provided off-site PD-mixed effects; irrelevant to particular school needs; over loaded	3	1	3	3
	9. LT worked to manage expectations and implementation strategically	1	1	3	1
	10. It all takes time over a continual period	2	1	4	1
	11. LT have responsibility for building shared ownership across the school	1	1	1	3
	12. LT will need to be creative to ensure sustainability	2	1	4	2
	13. TE had to be agent of change on LT; align/get a consistent LT vision for change	2	1	1	3
	14. Change of Principal helped	1	1	2	4
	15. LT did not have structures or processes to raise teacher capacity, or they were not occurring	9	1	3	3
	16. People grew with the new processes and practices-data, timelines	3	2	2	2
Teacher Educator	16. Gradual release of responsibility; teachers now doing it themselves	1	1	2	4
	17. Resistance from LT members when encouraged to visit classrooms	2	1	1	2
	18. Important to maintain respect and dignity of people throughout	1	1	2	1
	19. System provided excellent support, particularly when dealing with difficulties	2	1	1	4
	20. Dealing with change meant working with those who were willing to change	2	1	2	3
	21. Leadership developed and facilitated PLCs	1	2	1	2
	14. New P involved in improving teacher practice	4	1	1	2
	9. New Principal allocated time for involvement in improving teacher practice	2	1	4	2
	11. Release of power from LT to teachers evident-shared leadership and ownership; empowerment	3	1	2	4
	21. LT implemented SMART goals; PLCs now more focused, an expectation	4	2	1	2
Teachers	11. Value LT now presenting as co-learners; they utilised expertise of others	2	1	2	3
	15. LT needed to make leadership decisions so things were expressed consistently through the school	1	1	2	2
	13. TE had to liaise with LT and teachers	1	1	3	1
	11. LT provided opportunities for teachers to work professionally and collaboratively	2	1	3	3
	7. LT organised for PD but resources were not available until this year to support implementation	4	1	4	1
	9. LT provided time on-site to plan together	1	1	4	2
	2. System expectations exceed the amount of time given to teachers to do them	2	1	4	1
	2. System needs to be more in touch with classroom realities and support teachers	5	1	4	1
	17. The LT is not in the classrooms	1	1	1	2

Table 14(e): Summary Table, Question 1 (School I)

Q1: Did the exercise of leadership in the school and system influence teacher practice and if so, how?	Open coding results		Selective coding results		
	IDEAS	FRE-QUENCY	RESEARCH QUESTION	THEME	THEME COMPONENT
Principal	1. All leaders in the school are involved in supporting, leading classroom teaching practice	3	1	1	2
	7. Big impact on teachers knowing students	1	1	1	2
	2. System supported leaders on current pedagogical practices	1	1	1	4
	3. Organisational decisions made to allow for LT to concentrate on teaching and learning	1	1	3	3
Assistant Principal	2. System supported TE with a lot of PD	1	1	1	4
	4. Regret that it needs to end	1	1	2	3
	5. There was a number of struggles-teachers understanding the context, not content	1	1	2	3
	6. LT had to constantly keep expectations for students high and not focus on the negative; we had a TE because we are a poor performing school	3	1	2	3
	2. System personnel organising the approach needed to spend more time in the schools to understand and progress things more quickly	1	1	1	4
	7. LT focus on student learning using data allowed for challenge and change	2	1	2	3
	Teacher Educator	1. Collaborative approach with LT and staff; lots of discussion; changed over time	2	1	1
3. There was a strategic approach		1	1	3	1
2. System influenced the focus		1	1	1	4
1.LT bring different gifts to the team		3	1	1	1
1. It works well now; did not gel in the first couple of years; you had to feel the waters		1	1	2	2
7. AP and TE modelled; injected themselves in the classrooms; allowed themselves to be observed; co-learners with teachers		3	1	1	2
2. We need credibility from system people		1	1	1	4
3. Principal is flexible		1	1	2	3
3. Principal changes timetables to support learning; responsive to staff needs		1	1	3	3
Teachers	7. LT very hands on; modelled what they expected; very strong; improvement due to them; student centred	2	1	1	2
	3. LT prioritised effective teaching and learning through planning and timetables.	1	1	3	3
	3. LT prioritised effective teaching and learning through budget, resources, time	1	1	4	1
	1. Collaborative decision making; team; open communication; do not feel threatened	4	1	1	1
	3. Collaborative opportunities provided by LT	1	1	1	1
	3. Collaborative opportunities resourced well by LT	1	1	4	2
	1. LT collaborative; open communication	2	1	1	1
	1. LT is supportive; 'you're heard with open ears', mentors	3	1	2	1
	2. Question the way in which TEs were allocated to schools and use of budget	1	1	4	2
	2. More collaboration across schools involved would have been beneficial	2	1	1	4
	2. Expectations from system for TE and teachers excessive and unrealistic	3	1	1	4
	1. LT a huge and crucial influence on teacher practice	2	1	2	4

Table 15(a): Summary Table, Question 2 (School E)

Q2: Did the experience of a PLC influence teacher practice and if so, how?	Open coding results:		Selective coding results:		
	IDEAS	FREQUENCY	RESEARCH QUESTION	THEME	THEME COMPONENT
Principal	1. Teachers initially apprehensive and were resistant to others coming into their classrooms	2	2	2	2
	2. Recognition of the phases of development of a PLC	1	2	3	2
	3. Built trusting relationships	3	2	1	3
	4. The importance of modelling, not just 'telling'	4	2	1	2
	5. Improved knowledge of content and contemporary pedagogy	6	2	2	1
	7. Teachers have increased confidence	1	2	2	2
	7. Risk taking has been a great thing	1	2	2	2
	8. Importance of Principal modeling teaching	1	2	1	2
	9. Teachers know their students better	1	2	2	1
	10. It has really opened up the classrooms	2	2	2	1
15. Teacher dialogue important	1	2	2	1	
Assistant Principal	8. Leadership of PLC by LT members	2	2	1	1
	11. It is a collaborative approach	1	2	1	1
	12. LT modelling, team teaching and visiting classrooms to develop others	2	2	1	2
	13. The need to dedicate time and planning for PLCs	1	2	3	2
	7. Teacher choice and ownership is important to the functioning of PLC	1	2	1	3
	7. PLCs give teachers opportunities	1	2	2	1
	5. Importance of focus of PLC being on effective teaching and learning	1	2	2	1
Teacher Educator	2. PLCs now more authentic, not task oriented	1	2	3	1
	11. Every teacher is learning together, team approach	3	2	1	1
	9. The use of data and enquiry culture in a PLC now	4	2	2	1
	6. Teachers will speak out if something is ineffective	1	2	2	2
	15. More conversations in the staff room now	1	2	2	1
	12. A system to monitor programming and a common language is in place	3	2	3	1
	12. Learning support meetings established	1	2	3	1
	6. Teachers are now 'energetic' about learning	1	2	2	2
Teachers	6. Teachers are now taking more leadership roles in PLCs	1	2	1	1
	11. PLCs allow T & L to be communal; team approach	2	2	1	1
	7. Teachers have grown in confidence	1	2	2	2
	11. Teachers learn a lot from PLCs by sharing; a whole school approach	6	2	1	1
	11. Shift from traditional 'cocoon' teaching to learning together	1	2	1	1
	13. Learned together because time was given for PLCs	4	2	3	2
	12. Processes put in place to support new teachers by classroom visits and modelling	2	2	3	1
	2. It was initially too much work but the value can be seen now.	3	2	2	2
	9. Evidence allows you to know the students better	2	2	2	1
	5. PLCs allow for a focus on strategies for teaching and learning	1	2	2	1
	9. PLC sharing has given more opportunities for students to show what they have learned and have a voice	1	2	2	1
	14. They embed and sustain consistent, good teaching practices	3	2	2	1
	2. PLCs have changed over time as understanding has evolved	4	2	3	2
	9. The role of data in a PLC increased	1	2	2	1
	15. Professional dialogue improved due to OSPD and PLCs	2	2	2	1
13. Insufficient time for PLCS	2	2	3	2	

Table 15(b): Summary Table, Question 2 (School F)

Q2: Did the experience of a PLC influence teacher practice and if so, how?	Open coding results:		Selective coding results:		
	IDEAS	FREQUENCY	RESEARCH QUESTION	THEME	THEME COMPONENT
Principal	1. Instructional Rounds in the PLC had a major influence	1	2	1	1
	2. Data collection and analysis drives decisions	2	2	2	2
Assistant Principal	3. Teachers not working in isolation now; shared ownership; a collaborative venture	3	2	1	1
	4. Shared responsibility across staff for student learning	1	2	1	1
	5. Sharing of different expertise, group effort leads to improved teaching and learning	3	2	1	1
	6. Apprehensive initially in observing/being observed but found it affirming	3	2	2	2
	7. PLCs contribute to consistency of focus and practice	2	2	2	1
	8. More of a learning community now rather than people doing things in isolation	1	2	1	1
	8. Collaborative 'no blame/no shame' culture leads to supportive and safe learning environment for teachers	2	2	1	3
	Teacher Educator	3. PLC allows PL to be a whole school approach	1	2	1
2. Data and research utilised to develop shared ownership	1	2	1	2	
9. Took small steps together to embed practice	2	2	2	1	
9. Teachers felt supported; tried to share time around	1	3	2	1	
9. Importance of dedicating time to teachers	1	3	1	2	
5. PLC allowed for a team of people, different experience and expertise to contribute and show leadership	4	2	1	1	
Teachers	1. IR in PLC; teachers learned a lot from each other	1	2	1	1
10. PLC and PL in it led to a common language	2	2	2	1	
8. All staff have contributed to a safe and supportive learning environment for teachers	3	2	2	2	
8. In PLCs feedback and support are given; not competitive	1	2	2	2	
3. All working for a common goal/understanding	3	2	1	1	
7. Whole school focus and consistency of practice now in place	2	2	2	1	
2. Assessment and monitoring occur and influence the teaching and learning	1	2	2	1	
9. Learning in the PLC takes time but is worthwhile	1	2	3	2	
11. Now know the students and their needs better	2	2	2	1	
7. Students also demonstrate a common language to discuss their learning	3	2	1	1	
7. PLCs lead to common understanding and practice	5	2	1	5	

Table 15(c): Summary Table, Question 2 (School G)

Q2: Did the experience of a PLC influence teacher practice and if so, how?	Open coding results:		Selective coding results:			
	IDEAS	FREQUENCY	RESEARCH QUESTION	THEME	THEME COMPONENT	
Principal	1. Understanding of what a PLC is took time	2	2	2	1	
	2. PLCs have become much more focused, specific	2	2	1	2	
	3. Teacher choice and utilising expertise is important	1	2	2	2	
	4. Balancing time away from class for PL a priority	1	2	3	2	
Assistant Principal						
Teacher Educator	5. PLCs engendered shared ownership and sharing of expertise	1	2	1	1	
	5. Built collective responsibility for student learning	1	2	1	1	
	6. Some personalities continue to present challenges in PLCs	1	2	2	2	
	1. Teachers did not understand what a PLC was	1	2	2	1	
	7. PLCs have required a whole mind shift change for teachers	3	2	2	2	
	Teachers					
	8. PLCs have up skilled teachers and kept them current with contemporary pedagogy	1	2	2	1	
9. Sharing of resources and strategies builds community and acknowledges that everyone is still learning	3	2	1	1		
10. Teachers appreciate having choice in PLCs	2	2	2	2		
1. Smaller teams have led to whole school being a stronger PLC	2	2	3	1		
11. PLCs give teachers courage and confidence to have a voice and contribute	4	2	2	2		
9. PLCs provide support and guidance	1	2	2	1		

This process was replicated for comments in [Table 17\(a\): Summary Table, Question 4 \(School E\)](#) 13. System involvement has been a negative experience and [Table 16\(a\) Summary Table, Question 3 \(School I\)](#), 2. Substantial PD for TE initially difficult, but good in the long term.

Table 15(d): Summary Table, Question 2 (School H)

Q2: Did the experience of a PLC influence teacher practice and if so, how?	Open coding results		Selective coding results		
	IDEAS	FREQUENCY	RESEARCH QUESTION	THEME	THEME COMPONENT
Principal	1. Notion of PLCs is now well understood	1	2	2	1
	2. PLCs have assisted teachers to be responsible for knowing the learner	1	2	2	1
	3. PLCs have strengthened collaboration and facilitated change	3	2	1	1
	4. Increased professional conversations evident	2	2	2	1
	5. It will be sustained because teachers see the benefits	1	2	2	2
	6. The no-blame, sharing/learning together culture allows teachers to say things based on trust in PLCs	2	2	1	3
Assistant Principal	7. PLCs develop common understandings of content and student expectations	2	2	2	1
	8. They impact heavily on time	1	2	3	2
	9. Initially there were often difficulties keeping conversations on track/task	2	2	2	2
	1. Smaller PLCs have strengthened PLC as a whole school	1	2	3	1
	10. PLCs have increased collaboration and exposed people's expertise	2	2	1	1
Teacher Educator	1. PLCs now truly reflect a PLC inclusive, of all stakeholders	3	2	1	1
	3. Some interpreted the need to collaborate as a reflection on their teaching; now broken down	1	2	2	2
	6. A lot depended on how you approached things	1	2	1	3
	10. Process included using expertise of staff across whole school	1	2	1	1
	11. Class visits (IR) have strengthened PLCs-data, planning, progression better grades, expectations, bench marks	2	2	2	1
	11. Initial reluctance to classroom visits	1	2	2	2
	5. Sustainability will be difficult without a budget	1	2	3	2
	3. Shift from insular practice to working together	2	2	2	1
6. PLCs allowed for like-minded people to find each other and gain support	1	2	2	2	
Teachers	1. PLCs have redefined committees; collection and analysis of data a focus using SMART goals	2	2	2	1
	3. Work collaboratively to analyse data and set benchmarks-a lot easier when you work as a team	6	2	1	1
	4. Professional conversations important	1	2	2	2
	7. PLCs as opposed to committees: now all the relevant people having the same conversation; the next level of depth	2	2	2	1
	1. It is a learning community, an opportunity; you don't need all the experts there; it is not top down	4	2	2	2
	10. PLCs utilise the skills of all stakeholders	4	2	1	1
	12. Skills learned will stay with teachers; have grown professionally and changed thinking	3	2	2	2
	12. There has been whole change by every staff member	3	2	2	2
	11. Class visits, then reflecting as a group to help plan is a positive	2	2	2	2
	8. School time needs to be dedicated to PLCs and be inclusive of all	3	2	3	2
	11. Teachers felt apprehensive, nervous and threatened during class visits but found them beneficial	5	2	2	2

Table 15(e): Summary Table, Question 2 (School I)

Q2: Did the experience of a PLC influence teacher practice and if so, how?	Open coding results		Selective coding results		
	IDEAS	FREQUENCY	RESEARCH QUESTION	THEME	THEME COMPONENT
Principal	1. LT all involved in PLCs	1	2	1	2
	2. Professional dialogue an important part of PLCs	2	2	2	1
	3. Time has been reorganised to allow for PLCs; can improve it further	2	2	3	2
	4. People are passionate about expressing opinions in PLCs; no inhibitions	1	2	2	2
	5. PLCs have been effective in planning for teaching and learning	1	2	2	1
Assistant Principal	1. TE chaired PLCs until teachers were ready to take over	1	2	1	2
	5. PLCs influence teacher practice greatly; refined practice; addressed misunderstandings; changes in classroom practice; meet regularly	4	2	2	1
	2. We have professional dialogue in PLCs	1	2	2	1
	1. PLCs occur because there is a TE to drive them	1	2	2	2
Teacher Educator	6. PLCs initially did not take off; very difficult but evolved over time to be fantastic	3	2	1	2
	3. Time has been allocated	1	2	3	2
	4. TE had respect for the teachers	1	2	1	3
	2. PLC not confined to meeting time; discussions happening all the time-teachers instigate them	1	2	2	1
	1. Teachers have gradually taken leadership and ownership of PLCs	1	2	1	2
	5. PLCs have had huge impact; better pedagogy; continual challenge; professional dialogue that is relevant; context important	3	2	2	1
Teachers	4. PLCs on site you can have deep, meaningful; honest conversations; 'say, this is the crunch'-we are in this together for the students	2	2	2	2
	5. PLCs are focused, have goals and work from the data	1	2	1	1
	2. PLCs provide different style of teaching and a different range of ideas	2	2	2	1
	5. PLCs have deprivatised classrooms; no longer a solo teacher; part of team teaching approach; collaborative	2	2	1	1
	5. Feedback and learning by observation is critical	2	2	2	1
	4. Initially resistance to change; anxiety; feelings of 'big brother; difficult to take on; felt threatened;	3	2	2	2
	2. PLCs allow you to see different perspectives; different point of view; professional conversations are ongoing	4	2	1	3
	3. Time was provided for PLCs and observing other teachers	2	2	3	2
	5. PLCs a definite influence on teacher practice; we have a huge learning community	1	2	2	2
	5. Ask others for advice; bounce off other colleagues or it is 'just running around in your own head a lot of the time'; timely	3	2	1	1

Table 16(a): Summary Table, Question 3 (School E)

Q3: What was the particular contribution of the TE role to teacher practice?	Open coding results		Selective coding results			
	IDEAS	FREQUENCY	RESEARCH QUESTION	THEME	THEME COMPONENT	
Principal	1. TE has made a significant contribution to teacher practice through engagement in PL	1	3	3	1	
	2. Challenge of balancing TE role within existing leadership roles in the initial phase	1	3	1	1	
	3. A role focused entirely on T & L important	3	3	1	1	
	3. TE role allows the time	1	3	1	2	
	4. TE being in classrooms, supporting teachers with their teaching, modelling and leading professional dialogue all important	2	3	3	1	
	5. Change of practice has taken time	1	3	1	2	
	6. Importance of setting learning goals for students	1	3	3	1	
	7. Building capacity beyond the TE- teachers modelling for other teachers has built teacher self-esteem	2	3	3	2	
	8. TE has provided resources for student and teacher learning	2	3	3	1	
	9. Procedures and practices have been established to ensure sustainability	3	3	1	2	
	13. Increased engagement with the community	1	1	1	1	
	10. TE has influenced learning culture in the school	1	3	1	1	
	Assistant Principal	1. TE has built teacher capacity in pedagogy through focus on reading and PD	1	3	3	1
11. Use and understanding of data has increased-informs programming; used to track student progress		4	3	3	1	
4. Importance of TE modelling, team teaching in their role		2	3	3	1	
12. TE provides theory behind teaching and knowledge of contemporary pedagogy		1	3	3	1	
13. Many opportunities provided to engage with the colleagues, parents, carers and community		1	3	3	1	
10. There was a lot of resistance to TE; had to build trust		2	3	2	1	
Teacher Educator		2. The role has a focus on learning	3	3	1	1
		14. Building relationships over time facilitates change	2	3	2	1
		9. TE has become redundant; built sustainability through building teacher capacity	5	3	1	2
		15. Teachers see themselves as leaders now	1	3	3	2
	11. Teachers now know their students better	1	3	3	2	
	16. Development of TE as a leader has occurred	2	3	1	1	
	17. TE, teachers and LT work together as a team	2	3	1	1	
3. The learning journey has taken time	1	3	1	2		
Teachers	7. TE helped teachers to develop confidence and teacher leadership	2	3	3	2	
	9. Sustainability is an issue	5	3	1	2	
	18. System caused pressure, stress and confusion-for teachers and TE- too much accountability	8	1	1	4	
	5. Learning is a process/journey that takes time	2	3	1	2	
	1. TE taught teachers to take risks and try new strategies; lead/learn from each other	3	3	3	1	
	11. Teachers understand use of data to inform planning and how students learn	5	3	3	1	
	4. TE modelling in classrooms builds teacher capacity; should have been more	5	3	3	1	
	7. TE identifies teachers' strengths to develop teacher leaders	1	3	3	1	
	1. Importance of knowledge, experience and credibility of the TE	3	3	2	2	
	19. Not sufficient time allowed for all that is required of teachers	4	3	1	2	
	1. TE is seen as a learner and can see the big picture	3	3	2	2	

Table 16(b): Summary Table, Question 3 (School F)

Q3: What was the particular contribution of the TE role to teacher practice?	Open coding results		Selective coding results		
	IDEAS	FREQUENCY	RESEARCH QUESTION	THEME	THEME COMPONENT
Principal	1. TE has made a significant contribution to teacher practice	2	3	3	1
	2. Challenge of balancing TE role within existing leadership roles	3	3	1	1
	3. TE being in classrooms, supporting teachers with their teaching, modelling important	1	3	2	2
	4. Leadership of TE in Instructional Rounds process vital	1	3	2	2
	5. PL for TE and others has had a big influence	1	3	3	1
Assistant Principal	6. TE role dedicated to PD of teachers provides direction	2	3	1	1
	7. Importance of the right person (manner) for the TE role	2	3	2	1
	2. Difficulty of where AP role fits with TE	2	3	1	1
	7. TE has more time for T & L than AP	1	3	1	2
	8. Sustainability without a TE is a problem; apprehensive	4	3	1	2
Teacher Educator	9. Teachers' skills have become embedded in programs	1	3	3	1
	3. Modelling, observing, planning with teachers to establish credibility important	3	3	2	1
	7. Established trusting relationships	2	3	2	1
	7. TE got fully involved in life of the school	1	3	2	2
	8. Sustainability of changes is the biggest challenge	3	3	1	2
	10. Teachers have not been resistant/unwilling	1	3	3	2
	8. Teachers value changes; not being given dedicated time will reduce what can be continued in the future	2	3	1	2
Teachers	8. Will need to be creative with limited time for the future	1	3	1	2
	11. TE role has focused on PL for parents- range of initiatives in place	2	3	2	1
	3. TE modelled, did team teaching, understood the practice	4	3	2	2
	12. TE took small steps and did not over-burden teachers successful	3	3	2	1
	7. TE approachable, supportive, accessible, builds teacher confidence	7	1	2	1
	13. TE demonstrated being a co-learner	2	3	2	2
	14. TE utilised the particular skills of staff	1	3	3	2
	8. Sustainability a big concern-staff need to address this; proud of achievements	3	3	1	2
	2. Difficulty of AP role picking up all that TE does	1	3	1	1
	8. Time will not be available and teachers will be expected to do a lot in their own time	1	3	1	2
	1. Importance of TE role in school	2	3	1	1
	6. TE has provided the PL; teachers attend little off-site now	1	3	2	2
	8. Without TE sustainability of PL is an issue	1	3	1	2
	1. TE role has formed and guided teachers to alter practice to cater for all students	4	3	3	1
	15. Communication, expectations, rationale and timing of communication from TE very clear	3	3	2	2

Table 16(c): Summary Table, Question 3 (School G)

Q3: What was the particular contribution of the TE role to teacher practice?	Open coding results	Selective coding results			
	IDEAS	FREQUENCY	RESEARCH QUESTION	THEME	THEME COMPONENT
Principal	1. TE role has been very effective, valued by teachers-their practice improved	4	3	2	1
	2. TE worked closely with teachers to model, observe, support	3	3	3	1
	3. Sustainability is an issue-will require flexible and creative strategies	2	3	1	2
	4. Establishment of TE role on leadership team was a challenge	1	3	1	1
Assistant Principal					
Teacher Educator	2. TE did modelling for teachers when they wanted assistance and led staff meetings	3	3	3	1
	5. Coaching, mentoring and active listening had to be established and used in PLCS	2	3	2	1
	6. Respect for teachers as professionals is vital	3	3	2	1
	7. TE believed in own ability to challenge some practices-teachers tested TE	3	3	2	
	8. Relationships had to be built for change to occur and had to let teachers challenge and question	4	3	2	2
	3. It took time to change the mindset-it took teachers six months to recognise TE as knowledgeable	3	3	1	2
	7. Teachers started whispering that the TE knew what was talking about	2	3	2	2
	9. Vital that TE has PL/dialogue and is an 'expert' in things	2	3	2	2
	Teachers				
2. TE modelled, provided feedback and support to teachers, collaboratively planned	5	3	3	1	
	2. TE showed how and accessed support for teachers' learning needs	2	3	3	2
	1. Having a TE was a positive experience for teachers	1	3	1	1
	2. TE has been research based, data driven and insisted on accountability	2	3	2	2
	8. TE challenged people, coached, mentored and asked big questions	3	3	2	1
	6. TE was affirming and contributed to a safe and supportive learning environment	1	3	2	1

Table 16(d): Summary Table, Question 3 (School H)

Q3: What was the particular contribution of the TE role to teacher practice?	Open coding results		Selective coding results			
	IDEAS	FREQUENCY	RESEARCH QUESTION	THEME	THEME COMPONENT	
Principal	1. TE is credible, available, supportive; made a big difference-outstanding leader	5	3	2	2	
	2. TE developed rapport and built relational trust with colleagues	4	3	2	1	
	3. Sustainability-believe that practices will continue but leadership in school will suffer	2	3	1	2	
	4. Time resource will no longer be available to release teachers	4	3	1	2	
Assistant Principal	1. TE experience has worked	1	3	1	1	
	5. Teachers have great ownership and responsibility now	1	3	3	2	
	6. TE has focussed on quality learning experiences, assessment and use of data across the school	4	3	3	1	
	7. Sustainability is possible but it is short sighted to remove the support	2	3	1	2	
Teacher Educator	8. Role effective as it is dedicated to curriculum; can focus on areas of need	2	3	1	1	
	9. Modelling, professional reading, team teaching, planning, programming, running PD, co-ordinating classroom visits all occur	2	3	3	1	
	5. TE doing less PD and modelling now as teachers are taking responsibility; confidence increased	3	3	3	2	
	2. Respect is vital	2	3	2	1	
	1. Role is valuable and should be continued	1	3	1	1	
	3. Will need to be inventive in the future	1	3	1	2	
	1. TE recognises own professional growth in the role	2	3	1	2	
	2. Believes in maintaining a safe and supportive environment for teachers	1	3	2	1	
	Teachers	9. TE introduced and is involved in PLCs	2	3	3	1
		2. TE non threatening, works with teachers, guides	1	3	2	1
9. Utilises latest research; organises timetables, PD, modelling, planning		4	3	3	1	
8. Things are now more focused, driven, professional-on curriculum, pedagogy, good practice		4	3	3	1	
2. TE is available, supportive, reasonable		4	3	2	1	
1. Concerned re what would have happened without the role		3	3	1	1	
2. Personality and gentleness contributed to effectiveness		6	3	2	2	
3. Concerned re why a successful program would end		2	3	1	2	
8. TE focuses on areas of need in the school		1	3	1	1	
2. TE helped teachers to feel more confident and capable		1	3	3	2	
6. TE made process of data collection manageable across the school		4	3	3	1	

Table 16(e): Summary Table, Question 3 (School I)

Q3: What was the particular contribution of the TE role to teacher practice?	Open coding results		Selective coding results			
	IDEAS	FREQUENCY	RESEARCH QUESTION	THEME	THEME COMPONENT	
Principal	1. Importance of a role focusing on pedagogy	2	3	1	1	
	2. Substantial PD for TE; initially difficult but good in the long-term	1	1	2	2	
	3. TE had to both challenge and partner teachers; had to build trust to do this	2	3	2	1	
	4. TE influenced teacher knowledge of students, provided PD, feedback	2	3	2	1	
Assistant Principal	1. Importance of a role focusing on OSPD and driving change	2	3	1	1	
	TE another expert on staff to support teachers	2	3	1	1	
	4. TE led teachers 1:1, small groups, modelling, collection of data; differentiated approach based on need	2	3	3	1	
	3. It was about the privacy and dignity of each person; supporting subtly to make changes	3	3	2	1	
	4. Importance of TE working with teachers re data analysis and feedback	2	3	3	1	
	1. One person with this dedicated role is important; AP cannot do all this with other aspects to their role	2	3	1	1	
	3. The title of the TE role caused a major hurdle-deficit view of teachers; it took a lot of relationship building	3	3	2	1	
	2. Substantial PD for TE; initially difficult but good in the long term	2	1	1	4	
	3. TE had to work hard to build relationships and a safe and supportive environment for teachers	1	3	2	1	
	3. There was a lot of give and take which gave people room to change	1	3	2	1	
	1. It is difficult as AP to nurture, demand, challenge, support simultaneously; good to have TE to work with to do this	1	3	1	1	
	7. TE developed a high profile with parents; good relationship with community	2	3	2	2	
	Teacher Educator	3. Difficult for TE in the role being new to the school	2	3	1	1
		4. TE works with every teacher and knows every student	1	3	3	1
3. TE label caused problems initially; took two years to build relationships; teachers would take and take and take		2	3	2		
3. There was a lack of respect; TE hadn't done the hard yards		2	3	2	2	
3. Progressed slowly but have taught the teachers persistence-never give up; always challenge them; positive person		4	3	2	1	
5. TE has seen a lot of change in teacher practice		1	3	3	1	
5. Teachers are now skilled and less reliant on TE		1	3	3	2	
5. Teachers initially had low expectations of students; now improved as has student behaviour		2	3	3	2	
3. TE earned respect from teachers by being observed in the classroom- 'on the same playing field'		1	3	2	2	
6. Sad that the role is ending; next year they'll be fine; hopes to still be able to have a say		3	3	1	2	
3. Teachers now saying, how will we do this without you? There is an accountability with TE there though		2	3	2	2	
Teachers	4. TE sits with teachers to support and guide them; professional dialogue	1	3	3	1	
	1. TE-another professional in the classroom with the teacher	2	3	1	1	
	3. Some teachers felt threatened by TE in their classroom	1	3	2	2	
	3. TE a very personable person who built trusting relationships; gave teachers time before going into classrooms; always had time for you	4	3	2	1	
	3. Relationships were built because the TE was onsite over time; was part of it- collaborative	2	3	2	1	
	5. Classrooms are now open; team teaching	2	3	3	1	
	4. TE provided good PL; examples and readings; increased teachers' professional capacity; supported	5	3	3	1	

teachers; data based professional dialogue and planning; incredible learning opportunity				
3. Teachers did not understand the TE role at first; some resistance/sceptical, but now no negativity	3	3	1	1
5. TE role has enhanced pedagogy; teachers have tried new things and moved; dynamic role-working in classrooms; ongoing programs	2	3	3	1
1. Generally a positive response to having a TE; experienced person you can go to	2	3	1	1
4. Teachers now better observers; fresher and have increased strategies	2	3	3	1
3. TE always commended teachers on positives; never acted as a person in authority; blessed to have the TE	3	3	2	1
4. TE good at finding strategies and assessments	1	3	3	1
4. TE role has assisted teachers to feel more accountable for decisions made re students	1	3	3	1
6. TE role finished because unaffordable or now redundant?	1	3	1	2
5. TE has influenced classroom visits (IR) and PLCs	1	3	3	1

Table 17(a): Summary Table, Question 4 (School E)

Q4: Did the nature of the on-site PD influence teacher practice and if so, how?	Open coding results:		Selective coding results:		
	IDEAS	FREQUENCY	RESEARCH QUESTION	THEME	COMPO NENT
Principal	1. On-site PD is inclusive involves everyone and is shared	3	4	1	1
	2. Modelling in classrooms and working with people important	2	4	2	1
	3. OSPD meets the needs of that particular community	3	4	1	2
	4. Professional dialogue has contributed to learning for all members of staff	2	4	2	1
	5. OSPD assists teachers to know the students and how they learn	1	4	2	1
	5. OSPD has changed the teaching practice of every single teacher	1	4	2	1
Assistant Principal	6. OSPD gives teachers confidence to put effective T & L in place	1	4	2	2
	7. OSPD can link/connect practices across the school (coherence)	3	4	1	2
	8. Builds sustainability of practices	2	4	3	1
	9. Some teachers value OSPD but resist it	2	4	2	2
	10. Building of trust and relationships important to OSPD	2	4	2	2
Teacher Educator	1. OSPD allows for all staff to be engaged in the learning, have a say and have choice	2	4	1	1
	11. OSPD is long term	1	4	3	1
	7. Given support and within a context it is effective; makes connections, has accountabilities	2	4	1	2
	12. Off-site PD has no effect; not strategic or matched to needs	2	4	1	2
	1. OSPD allows for learning together as part of a team	2	4	1	1
	1. It is strategically linked	1	4	1	2
	13. Money and time have supported OSPD	2	4	3	1
	1. Builds a shared responsibility for learning	1	4	1	1
	15. PL is valued	1	4	2	1
	15. Teachers can now critique professional readings and presenters; they are informed	1	4	2	1
Teachers	1. OSPD is collaborative and shared	3	4	1	1
	12. Off-site PD is not relevant to need/expectation	1	4	1	2
	11. OSPD is practical, continuous and relevant	4	4	1	2
	9. Difficult to change teaching practice; creates fear, anxiety	7	4	2	2
	14. Parents and carers more involved	1	4	2	1
	11. It is long term	1	4	3	1
	1. OSPD is active learning, sharing knowledge, motivating	2	4	1	1
	10. Building of trusting, supportive relationships important	6	4	2	2
	12. Off-site PD teachers discuss other things	1	4	1	2
	13. System involvement has been a negative experience	6	1	1	4
	14. Time must be given for OSPD and data analysis.	3	4	3	1

Table 17(b): Summary Table, Question 4 (School F)

Q4: Did the nature of the on-site PD influence teacher practice and if so, how?	Open coding results		Selective coding results		
	IDEAS	FREQUENCY	RESEARCH QUESTION	THEME	COMPONENT
Principal	1. OSPD is inclusive	1	4	1	1
	9. Shifts the emphasis back to the teachers	1	4	2	1
	2. OSPD has changed their way of working with teachers to develop common understandings	1	4	3	1
	3. Collaboration across schools a strong feature	1	1	1	4
Assistant Principal	4. OSPD great influence on teacher practice e.g. all assess together; analyse data	2	4	2	1
	5. Teachers analysing data together has shared the ownership of the learning	2	4	1	1
	5. Specialist teachers included, a positive cohesive approach	2	4	1	2
	6. Off-site PD 2 nd /3 rd hand	2	4	1	2
	11. OSPD allows for learning from mistakes	1	4	2	2
	11. OSPD allows for risk taking, experimenting in a safe and supportive environment	2	4	2	2
Teacher Educator	7. Presence of TE on site all the time brought accountability	1	4	3	1
	4. Use of data and follow-up can occur on-site; see the value of it	1	4	2	1
	4. Use of resources on-site, value it	1	4	3	1
	6. OSPD knows the needs of teachers and students; can tailor PL	3	4	1	2
	12. Can build relationships so teachers are open; provide support	2	4	2	2
Teachers	5. Time available helped teachers to develop a better understanding of how to use data to inform programming	4	4	3	1
	6. OSPD very focused to specific needs; off-site can be irrelevant to your context	6	4	1	2
	8. OSPD has led to more precise conversations about student needs; know students better	5	4	2	1
	5. Teachers now understand and realise the importance of data	5	4	2	1
	9. Teachers now recognise that they had learning needs before they could attend to the students-leads to continuous improved practice	3	4	2	2
	10. It is good to observe as well as be observed in the classroom	1	4	2	2
	11. OSPD allows for a safe and supportive environment to ask questions	2	4	2	2
	6. OSPD more effective because it is continuous; you can go back to the people	1	4	1	1
	11. OSPD contributes to a strong supportive community, clear communication and follow-up	3	4	1	1

Table 17(c): Summary Table, Question 4 (School G)

Q4: Did the nature of the on-site PD influence teacher practice and if so, how?	Open coding results		Selective coding results			
	IDEAS	FREQUENCY	RESEARCH QUESTION	THEME	THEME COMPONENT	
Principal	1. Importance of working as part of a system and teachers hearing a consistent message in off site PD	3	4	1	2	
	2. OSPD relevant to context; flexible; available for follow-up	4	4	1	2	
	3. Professional conversations and cross class visits have increased	2	4	2	1	
Assistant Principal						
Teacher Educator	4. OSPD allows for everyone to be a leader of learning, not just leadership team	2	4	1	1	
	5. Development of data teams develops skills, capacity, responsibility, accountability more broadly	4	4	2	1	
	4. OSPD has allowed for leadership development of others	1	4	1	1	
	6. Careful management of people is essential; balance between challenge and support	3	4	2	2	
	7. Teaching practice has improved; expectations raised	2	4	2	1	
	8. Sustainability-it will be maintained as ongoing PL is valued by teachers	2	4	3	1	
	9. Parents do not support OSPD as the teacher is not in class	2	4	1	1	
	Teachers					
	2. OSPD is relevant to context and more authentic	3	4	1	2	
10. OSPD is timely, time effective and beneficial	3	4	1	2		
11. OSPD is cohesive; links theory to practice and builds on other experiences	3	4	1	2		
12. Celebrating achievements and learning have been important	1	4	2	2		
11. OSPD provides a consistent and common message for all	3	4	1	2		
8. OSPD is not a temporary one-off experience	1	4	3	1		
3. OSPD is a dialogue that works both ways	1	4	1	1		
12. OSPD allows teachers the freedom to speak about what is happening in their school re teachers and students	2	4	2	2		
9. OSPD allows you to see parents in the morning so they do not get anxious about teachers not in the classroom	2	4	1	1		
13. OSPD has allowed for working closely with parents to develop their understandings	1	4	1	1		
11. OSPD allows for provision of resources that match data and teacher needs	1	4	3	1		

Table 17(d): Summary Table, Question 4 (School H)

Q4: Did the nature of the on-site PD influence teacher practice and if so, how?	Open coding results		Selective coding results		
	IDEAS	FREQUENCY	RESEARCH QUESTION	THEME	THEME COMPONENT
Principal	4. OSPD has made a significant difference to teacher practice	1	4	2	1
	10. It takes teachers out of their comfort zones	1	4	2	2
	2. OSPD is relevant to needs of teachers in their context; molded to suit the learner	3	4	1	2
	3. OSPD is multi-natured and varied; brilliant; one size does not fit all	2	4	1	2
	4. We all know our students better now-use of data; assessment	2	4	2	1
	5. Community engagement is not strong	1	4	1	1
Assistant Principal	6. OSPD restricted to level of expertise at that school	2	4	2	1
	7. OSPD comes from an understanding of shared ownership/workload/support	3	4	1	2
	8. Sustainability will be difficult without the budget	2	4	3	1
	4. There has been a quantum shift in teacher practice	2	4	2	1
	10. The school was/is in a strong position, it is not a deficit model	4	4	2	1
Teacher Educator	1. Due to OSPD, now less insular	2	4	1	1
	4. Changes in teacher practice are: peer observations reduced emphasis on content; team teaching; feedback; opened classroom up, assessment; communication re students across schools	4	4	2	
	11. Changes to school culture: more discussions about programming and practice (freer), data	2	4	2	1
Teachers	12. OSPD is timely, fluid and relevant to school/teacher needs	3	4	1	2
	13. More focused and allows for reflective practice based on data	3	4	2	1
	6. OSPD not all run by LT but utilised other staff and external personnel or courses but implemented locally	2	4	1	1
	11. Teachers do not need to be experts; they feel free to say they have no idea without being criticised; it is 'comfortable'	3	4	2	2
	1. You do not necessarily need an expert	2	4	2	2
	1. Collaboration has been undervalued; there is so much that can be learned from 20 minutes in a colleague's classroom	4	4	1	1
	9. Time is a factor; organisational structures for part time staff an issue	5	4	3	1
	2. OSPD is relevant to needs of teachers in their context; outsiders might not understand	5	4	1	2
	5. Efforts have been made to engage with the community-some benefits for families; teachers not involved	4	4	1	1
	1. It has worked here.	2	4	2	2
	10. Teachers believe they were competent before this approach began-feel they were blamed; vey hurt	4	4	2	2
	7. Now teaching from the same core beliefs and support each other	2	4	2	2
	1. OSPD connects people in all roles across the school	1	4	1	2
	1. Classroom visits need to happen	1	4	2	2

Table 17(e): Summary Table, Question 4 (School I)

Q4: Did the nature of the on-site PD influence teacher practice and if so, how?	Open coding results		Selective coding results		
	IDEAS	FREQUENCY	RESEARCH QUESTION	THEME	THEME COMPONENT
Principal	1. Many positives to OSPD-staff working together	1	4	1	1
	2. Stigma attached to being a school requiring this support but teachers have shown they can 'cut-it'	1	4	2	2
	3. Professional dialogue, teachers exposed to how other classrooms are set up	2	4	2	1
	4. Utilising skills from within has progressed	1	4	1	1
	4. Recognised the need to increase teacher voice and differentiation of PD	1	4	1	2
	6. OSPD can utilise many things to engage teachers at their own rate-technology, external professionals etc.	1	4	1	2
Assistant Principal	6. It is relevant and teachers are learning at the point of need; coherent ('got a flow on')	3	4	1	2
	6. Off site PD gets forgotten, not applied, not relevant for when you need it; OSPD is a strong model	4	4	1	2
	2. Focus on students and their learning led to great change; teachers were interested; it is a much calmer place now	4	4	2	1
	7. Relationships across entire community are cohesive now	1	4	2	2
	5. Regular cross-classroom visits with a particular focus for all teachers really worked to focus on teaching and learning strategies	2	4	2	1
	2. Teachers were in a sensitive place because they knew they were involved because of poor performance; teachers therefore reluctant to open classrooms; trust had to be built	3	4	2	2
	2. Professional attitude to learning has changed- teachers/leaders now comfortable to admit they need to learn more; four teachers now studying	2	4	2	2
	3. OSPD can work in classrooms with teachers to develop a whole school approach to up-skill teachers (reading)	2	4	2	1
Teacher Educator	4. All doors have opened and team teaching occurring- students are used to different teachers now	3	4	2	1
	4. Everything has changed; PD is happening on site now	1	4	3	1
	2. Amazing; teachers engage in PL now; five-six doing higher education currently	2	4	2	2
	7. Working with parents and the community is a real challenge	2	4	1	1
	5. Teachers know their students well now; evidence-based practice really evident	2	4	2	1
	2. Teachers now feel empowered and students striving to achieve more highly	3	4	2	2
	5. Teachers knowledge of ESL scales, IEPs SMART GOALS, PLCs all evident-now put into practice	1	4	2	1
	2. Off site PD, everyone is a bit guarded	1	4	2	2
Teachers	2. OSPD you can be honest; not feel embarrassed that you're not on top of it	2	4	2	2
	6. OSPD is relevant; timely; in a context; 'you can't understand something until you walk in their shoes'	4	4	1	2
	5. Big improvements in teacher practice; shift from whole class model to individual students	3	4	2	1
	6. OSPD includes a person resource	1	4	3	1
	6. Off site PD is a one-off, minimal sharing and does not provide feedback from others	4	4	1	1
	6. OSPD still includes some external or online provider	1	4	3	1
	6. PL has improved-coherent, trackable	1	4	1	2
	7. Improvement in parent commitment to students' learning	2	4	1	1
	4. Colleagues now more open to sharing; more collaborative	2	4	1	1
	3. OSPD occurs more in daily interactions, learn more from colleagues if I ask a direct question	2	4	2	1
	8. OSPD limited to what is available on-site, does not allow for communication across schools or differentiation for staff learning needs	1	4	3	1

6. OSPD saves travel time	1	4	3	1
8. OSPD is not necessarily a good change; no formal recognition re certification for teacher standards; needs to have more 'tangible wealth' for teachers; level of professionalism; external provides more depth and expertise	4	4	2	1
6. OSPD important rather than going out and reporting back', you get caught up in social things rather than PL, 'you are in the right headspace in your own environment'.	2	4	1	2

Appendix E: Application to conduct research – conditional approval

22 March 2012

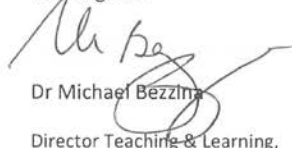
To: Catherine Forrester

Re: Application to conduct research on "The Effect of On-Site Professional Development on Teacher Practice."

Conditional approval is granted for you to conduct research within the jurisdiction of the Catholic Education _____; on the above topic subject to formal ethics approval from the Research Ethics Committee of your institution/University. **Please forward a copy of the relevant Ethics Approval correspondence to this office once it is received.**

Once this correspondence is received, _____ will contact you regarding final approval which is subject to additional requirements including full compliance with NSW Child Protection and Commonwealth Privacy Act legislation.

Kind regards



Dr Michael Bezzina
Director Teaching & Learning,

Appendix F: Application to conduct research

26 March 2013

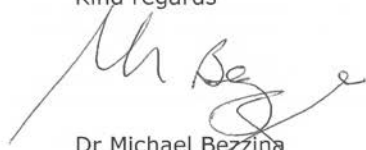
To: Catherine Forrester

Re: Application to Conduct Research on: "The Effect of On-site Professional Development on Teacher Practice".

This is to certify that approval is granted for you to conduct research within the jurisdiction of the Catholic Education on the above topic.

Approval to conduct research has been reviewed by the Australian Catholic University Human Research Ethics Committee and formal approval has been granted until 30/12/2013. (Register no. 2013 83N)

Kind regards

A handwritten signature in black ink, appearing to read 'Michael Bezzina', written over a faint circular stamp.

Dr Michael Bezzina
Director Teaching and Learning,

Appendix G: Consent Form



CONSENT FORM – Access to Addresses and Permission to Access and Analyse CEO Documentation

Email

PROJECT TITLE: The Effect of On-Site Professional Development on Teacher Practice
PRINCIPAL INVESTIGATOR: Associate Professor Charles Burford
STUDENT RESEARCHER: Mrs Cathy Forrester
STUDENT'S DEGREE: Doctor of Education

I, Michael Sezzina, have read and understood the information provided in the Information Letter regarding the need to make contact with participants in order to conduct the research project above. Any questions I have asked have been answered to my satisfaction.

On behalf of the Catholic Education I give consent for the researcher to request and obtain access to the email addresses of the Principal, Assistant Principal, Teacher Educator and classroom teachers in each of the sample 4-5 case study Catholic primary schools of the Archdiocese of Sydney. I also give consent for the researcher to access and analyse existing Catholic Education Office documentation relating to the Smarter Schools National Partnership innovation.

I understand that I can withdraw this consent at any time without adverse consequences. I agree that research data collected for the study may be published or may be provided to other researchers in a form that does not identify any participant, or school, in any way.

I understand that the email addresses used to make contact with the participants and used for the return of consent forms will only be accessible to the research assistant. An agreement exists between the Catholic Education Office and the researcher that at the end of the data collection period the email addresses will be deleted from any records. The database of staff email addresses used in the research will be permanently deleted from the research assistant's computer and will not be used for any other purpose.

NAME OF CEO REPRESENTATIVE: (please print) M. Sezzina

Contact Phone Number: 9568 8269 Email Address: michael.sezzina@diocese.catholic-education.nsw.gov.au

SIGNATURE: [Signature] DATE: 25/3/13

SIGNATURE OF PRINCIPAL SUPERVISOR: [Signature] DATE: 27/3/2013

SIGNATURE OF STUDENT RESEARCHER: C. Forrester DATE: 26/3/13

Appendix H: Information letter to participants - teachers



INFORMATION LETTER TO PARTICIPANTS- Teachers

PROJECT TITLE: The Effect of On-Site Professional Development on Teacher Practice

PRINCIPAL INVESTIGATOR: Associate Professor Charles Burford

STUDENT RESEARCHER: Mrs Cathy Forrester

STUDENT'S DEGREE: Doctor of Education

Dear Teacher,

You are invited to participate in a research project that will investigate the effect of on-site professional development on teacher practice.

Background to the project

Prior to the development of this research project I commissioned an evaluation, in which your school participated, that generated data relevant to the purpose of this research. The participants in the evaluation correspond with the participants for this research. On the basis of diversity in both school size and location, the data has been utilised to guide the selection of the 4-5 schools to be involved in a case study that is the focus of this research. You are now invited to participate in this research project.

What is the project about?

The research project seeks to explore how on-site professional development, through the establishment of professional learning communities, contributes to changes in teacher practice. This will be achieved by studying the experience of participants- teachers, leaders and Teacher Educators from a selected sample of the fourteen primary schools involved in the Sydney Catholic schools' on-site professional development model.

Who is undertaking the project?

This project is being conducted by Cathy Forrester, Head: Primary Curriculum at the Catholic Education Office. It will form the basis for the degree of Doctor of Education at Australian Catholic University under the supervision of Associate Professor Charles Burford.

Who is being asked to be involved in the project?

With their consent, the project will involve you as a teacher and other members of your school staff: the Principal, the Assistant Principal, the Teacher Educator, and other teachers. In one and two stream schools one group of 4-6 teachers randomly selected with at least one teacher per stage will be invited to participate in a group interview. In three and four stream schools it will involve two groups of 4-6 teachers, randomly selected, with half the teachers from K-2 and the other half from Years 3-6.

What will I be asked to do?

You will be asked to participate in a group interview with other teachers, as described above. The Principal, Assistant Principal and Teacher Educator from your school will be invited to participate in



individual semi-structured interviews. In addition, reflective journals and a self-reflection statement will be requested from the Teacher Educator for document analysis.

How much time will the project take?

The group interviews will take about 30 minutes and will be arranged in accordance with the most appropriate time for you, the staff and the school.

What are the benefits of the research project?

Your participation in this research will help to inform understandings about the influence of on-site professional development on teacher practice. The information gained from the research project will contribute to the wider understanding about the meaning of on-site professional development as a generic construct and will explore its nature and teachers' perceptions of how it contributes to improved teaching practice. This information has the potential to inform future professional learning opportunities for teachers.

Are there any risks associated with participating in this project?

There will be some risks involved however all means will be made to minimize those risks. In addition, the researcher must abide by the requirements of the Commonwealth Privacy Act 2000.

Due to the position of the researcher in Sydney the identity of sample schools and participants will be protected through the use of a research assistant who will be responsible for the de-identification of documents and the conduct of interviews. Your identity and the identity of your school will not be known to the researcher. Confidentiality will be protected as your responses will be de-identified and data collected will be aggregated. During the study primary data (audio recordings and scanned documents) will be stored on the password-protected computer of the research assistant and on a USB in a locked filing cabinet in the office of the Chief Investigator. Once the data has been de-identified it will also be stored on the password-protected computer of the researcher. Results of the study may be summarised and appear in publications or may be provided to other researchers in a form that does not identify participants. Only aggregated data will be used in any publication arising from this research and the names of schools or participants will not be identifiable. Participation in this study is completely voluntary and you are not under any obligation to do so. If you agree to participate you can withdraw from the study at any time without adverse consequences.

Will anyone else know the results of the project?

Key findings from this research will be distributed to the Sydney Leadership Team and may be disseminated in academic journals and Sydney publications.

Will I be able to find out the results of the project?

All participants in the project will be sent an Executive Summary of the research project.

Who do I contact if I have questions about the project?

Any questions regarding this project should be directed to the Principal Investigator, Associate Professor Charles Burford.

Associate Professor Charles Burford
 Australian Catholic University
 North Sydney Campus



School of Education
 Room 1815, Tenison Woods Building
 9-20 Napier St. North Sydney. 2060
 Tel. +61 2 9701 4166 Fax +61 2 9701 4240
 Email: charles.burford@acu.edu.au

What if I have a complaint or any concerns?

The study has been approved by the Human Research Ethics Committee at the Australian Catholic University (approval number 2013 83N). If you have any complaints or concerns about the conduct of the project, you may write to the Chair of the Human Research Ethics Committee care of the Office of the Deputy Vice Chancellor (Research). Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

Chair, HREC
 c/o Office of the Deputy Vice Chancellor (Research)
 Australian Catholic University
 Melbourne Campus
 Locked Bag 4115
 FITZROY, VIC, 3065
 Ph: 03 9953 3150
 Fax: 03 9953 3315
 Email: res.ethics@acu.edu.au

I am willing to participate. How do I sign up?

Attached are:

- A signed 'Permission to be Approached' Consent Form indicating your Principal's consent for you and other members of staff at your school to be invited to participate in this study, and,
- A 'Teacher Consent Form' that gives your consent to participate in a group interview for 30 minutes as part of this study.

If you agree to participate please sign both Consent Forms, retain a copy for your records and return the other copy to the research assistant, Mr Ken Nobin via email. kennobin@gmail.com

Thank you for your time in considering this invitation to participate in this research.

Yours sincerely,

Principal Investigator
 Associate Professor Charles Burford.

Student Researcher
 Mrs Cathy Forrester.

Appendix I: Interviewee consent form - teachers



Interviewee Consent Form- Teachers
Copy for Researcher

PROJECT TITLE: The Effect of On-Site Professional Development on Teacher Practice
PRINCIPAL INVESTIGATOR: Associate Professor Charles Burford
STUDENT RESEARCHER: Mrs Cathy Forrester
STUDENT'S DEGREE: Doctor of Education

I.....(the participant) have read and understood the information provided in the Information Letter to Participants- Teachers. Any questions I have asked have been answered to my satisfaction. I agree to participate in a 30 minute digitally recorded group interview on the school site during the second half of 2013. I realise that I can withdraw my consent at any time without comment.

I agree that research data collected for the study may be published or may be provided to other researchers in a form that does not identify me in any way.

NAME OF PARTICIPANT:

SIGNATURE:

DATE:

SIGNATURE OF PRINCIPAL SUPERVISOR: [Handwritten Signature]

DATE: 2/7/2013

SIGNATURE OF RESEARCH ASSISTANT: [Handwritten Signature]

DATE: 2/7/13

IF CONSENT IS GRANTED PLEASE RETURN THIS SIGNED FORM TO THE RESEARCH ASSISTANT, MR KEN NOBIN, VIA EMAIL kennobin@gmail.com Thank you.

Horizontal lines for additional text or signatures.

Appendix J: Pilot Interview Process

Instructions for Research Assistant:

In the interview ask participants to explain, give examples and describe evidence to support their ratings on their pre-interview self-reflection tool. At the conclusion of the discussion about each of their responses to the questions in the reflection tool ask:

- In the context of this on-site professional development experience is there anything else you would like to say about the influence of the following things on teacher practice:
 1. Leadership (in the school or system)
 2. Professional Learning Communities
 3. The Teacher Educator role
 4. The nature of the on-site professional development.

Final open-ended question after discussion:

- What is your overall response to on-site professional development in influencing teacher practice?

Appendix K: Interview Process for Semi-structured and Group Interviews

Instructions for the Research Assistant:

The interviews are intended to last for approximately 30 minutes. The following is an overview of the process.

- 5 minutes: Welcome, introductions, explanation of interview protocols and how it will progress.
- 20 minutes: Thank participants for completing the pre-interview Self-reflection Tool. Remind them that the major research question is, “How does on-site professional development influence teacher practice?” Suggest that as they answer the following four questions they are encouraged to explain, give examples and provide evidence to support their responses. Some participants may have listed evidence on their Self-reflection Tool.
 5. Did the exercise of leadership in the school, and system, influence teacher practice and if so how?
 6. Did the experience of a PLC influence teacher practice and if so how?
 7. What was the particular contribution of the TE to teacher practice?
 8. Did the nature of the on-site PD influence teacher practice and if so how?
- 5 minutes: At the conclusion of the discussion ask- In light of your on-site professional development experience, is there anything else you would like to add about the influence of the following things on your teaching practice (or that of others with leaders that do not teach a class):
 5. Leadership (in the school or system)
 6. Professional Learning Communities
 7. The Teacher Educator role
 8. The nature of the on-site professional development.

Finally, thank participants for their contribution.

Preamble for Research Assistant to communicate at the pre-interview school visits, prior to the completion of the Pre-interview Self-reflection Tool:

To aid the interview process each participant is asked to complete a Self-reflection Tool. This will take approximately 10-15 minutes. It is important that this be done prior to the interview and brought along to focus the discussion. The completed Self-reflection Tool will be given to the research assistant at the conclusion of the interview but will not be identifiable. The purpose of this tool is to guide reflection on the impact of on-site professional development on teacher practice using the seven Standards from the National Professional Standards for Teachers (AITSL 2011.)

For participant information a copy of this document will be sent as an attachment to the pre-interview Self-reflection Tool. This tool is not intended to assess your teaching or that of others, but is about the influence of the on-site professional development on teacher practice. Please note that there is no expectation of change or growth. If you did not see improvement it is a reflection of the effectiveness of the on-site professional development rather than the teacher or the Teacher Educator.

In light of your experience of on-site professional development, you are asked to provide an honest response to each of the questions in the self-reflection tool. The questions focus on four key elements of the on-site professional development: Leadership, Professional Learning Communities, the Teacher Educator role, and the features of the on-site professional development. In responding to each question you are asked to consider **from your perspective** the influence of each of these elements on your teaching practice and indicate whether it ‘diminished’, stayed the same i.e. there was ‘no change’, or ‘improved’ in the seven teaching standards areas. If you are a Principal, Teacher Educator or non-teaching Assistant Principal please respond in relation to the overall influence of the on-site professional development experience on teaching practice at your school. To allow you to respond to the ‘How’ aspect of these questions, the interview will provide an opportunity for you to discuss your responses and give examples/evidence to support your ratings.

Appendix L: Pre-interview Self-reflection Tool

The purpose of this pre-interview reflection tool is to guide reflection on the impact of on-site professional development on teacher practice using the seven Standards from the National Professional Standards for Teachers (AITSL 2011.) It is not intended to assess your teaching or that of others, but is about the effectiveness of the on-site professional development in relation to teacher practice. Please note that there is no expectation of change or growth.

In light of your experience of on-site professional development, please provide an honest response to each of the questions listed below. These questions focus on four key elements of on-site professional development: Leadership, Professional Learning Communities, the Teacher Educator role, and the features of on-site professional development. In responding to each question you are asked to consider **from your perspective** the influence of each of these elements on your teaching practice and indicate whether it ‘diminished’, stayed the same i.e. there was ‘no change’, or ‘improved’ in each of the seven Teaching Standard areas. (If you are a Principal, Teacher Educator or non-teaching Assistant Principal, please respond to these questions in relation to the overall influence of the on-site professional development experience on teaching practice at your school.) To allow you to respond to the ‘How’ aspect of these questions the interview will provide an opportunity for you to discuss your responses and give examples/evidence to support your ratings.

PLEASE BRING THIS COMPLETED FORM TO THE INTERVIEW AS IT WILL BE USED TO FOCUS THE DISCUSSION. THANK YOU.

QUESTION ONE: DID THE EXERCISE OF LEADERSHIP IN THE SCHOOL AND SYSTEM INFLUENCE TEACHER PRACTICE AND IF SO HOW?

THE NATIONAL PROFESSIONAL STANDARDS FOR TEACHERS	DIMINISHED	NO CHANGE	IMPROVED
1: Know students and how they learn			
2: Know the content and how to teach it			
3: Plan for and implement effective teaching and learning			
4: Create and maintain supportive and safe learning environments			
5: Assess, provide feedback and report on student learning			
6: Engage in professional learning			
7: Engage professionally with colleagues, parents/carers and the community.			

QUESTION TWO: DID THE EXPERIENCE OF A PROFESSIONAL LEARNING COMMUNITY INFLUENCE TEACHER PRACTICE AND IF SO HOW?

THE NATIONAL PROFESSIONAL STANDARDS FOR TEACHERS	DIMINISHED	NO CHANGE	IMPROVED
1: Know students and how they learn			
2: Know the content and how to teach it			
3: Plan for and implement effective teaching and learning			
4: Create and maintain supportive and safe learning environments			
5: Assess, provide feedback and report on student learning			
6: Engage in professional learning			
7: Engage professionally with colleagues, parents/carers and the community.			

QUESTION THREE: WHAT WAS THE PARTICULAR CONTRIBUTION OF THE TEACHER EDUCATOR ROLE TO TEACHER PRACTICE?

THE NATIONAL PROFESSIONAL STANDARDS FOR TEACHERS	DIMINISHED	NO CHANGE	IMPROVED
1: Know students and how they learn			
2: Know the content and how to teach it			
3: Plan for and implement effective teaching and learning			
4: Create and maintain supportive and safe learning environments			
5: Assess, provide feedback and report on student learning			
6: Engage in professional learning			
7: Engage professionally with colleagues, parents/carers and the community.			

QUESTION FOUR: DID THE NATURE OF THE ON-SITE PROFESSIONAL DEVELOPMENT INFLUENCE TEACHER PRACTICE AND IF SO HOW?

(Literature suggests that on-site professional development has some distinctive features. These include, but are not restricted to such things as: peer observations, team teaching, teacher feedback, coherence, use of time, duration, content, active learning, changes in school culture and the development of trusting relationships. You may have experience of other features and you are encouraged to discuss these at the interview.)

THE NATIONAL PROFESSIONAL STANDARDS FOR TEACHERS	DIMINISHED	NO CHANGE	IMPROVED
1: Know students and how they learn			
2: Know the content and how to teach it			
3: Plan for and implement effective teaching and learning			
4: Create and maintain supportive and safe learning environments			
5: Assess, provide feedback and report on student learning			
6: Engage in professional learning			
7: Engage professionally with colleagues, parents/carers and the community.			

Appendix M: Position Description

NAME:	TBA
POSITION TITLE:	Adviser/Teacher Educator
REPORTS TO:	The Principal
DATE:	August 2009

BASIC ROLE PURPOSE:

The role exists within the implementation plans of the School's National Partnership Agreements and is situated within the broad Archdiocesan framework of curriculum. This is a school-based appointment with accountabilities within the school leadership team, regional consultant and the Archdiocese curriculum team in the context of the *Towards 2010 Strategic Leadership and Management Plan*.

The purpose of the role is to provide leadership for the professional development, support and advice to teachers in order to promote the Archdiocese mission of Catholic education and facilitate the implementation initiatives relating to teaching and learning emerging from the National Partnership Agreements. The Teacher Educator reports to the Principal in all matters concerning performance, planning and review and is a member of the school leadership team.

PRINCIPAL ACCOUNTABILITIES

- 1. Ensures the implementation of the vision of Catholic Education as expressed in the *Towards 2010 Strategic Leadership and Management Plan* by:**
 - 1.1 Promoting the Archdiocesan Vision and Mission formally and informally in day-to-day professional accountabilities, tasks and responsibilities
 - 1.2 Actively promoting the integration of Catholic values across the curriculum
 - 1.3 Evaluating and monitoring teaching and learning practices to ensure students' experiences, including their home and culture, are valued and respected.

- 2. Ensures the promotion of social constructivism and interactionism by:**
 - 2.1 Supporting teachers in identifying new experiences for their continual professional development
 - 2.2 Promoting with each person and between teachers an attitude of 'learning to learn'
 - 2.3 Establishing professional learning communities within and across schools
 - 2.4 Promoting and modelling classroom strategies that maximise student learning and incorporate principles of contemporary learning
 - 2.5 Being informed by teachers' work through the documentation and interpretation of their observations
 - 2.6 Exploring a range of structures and practices, which support and promote improved pedagogy and teaching practice in a practical way.

- 3.0 Contributes to building the capacity of teachers by:**
 - 3.1 Modelling collegial practices for evaluating and sharing best practice in teaching strategies and professional knowledge and practice

- 3.2 Critically reviewing research on best practice in teaching and learning to assist colleagues to further develop their teaching expertise
- 3.3 Initiating strategies for developing a climate for accepting and providing constructive feedback and recognition of achievement
- 3.4 Mentor teachers through sharing ideas about the creation, selection and use of appropriate teaching strategies and resources including ICT and other techniques to make content meaningful to individuals and groups of students.

4.0 Contributes to the development of leadership by:

- 4.1 Making significant contributions to educational policy and practice at the school and in wider professional contexts
- 4.2 Taking a leadership role in professional networks and enhancing the professional learning of teachers
- 4.3 Organising, promoting and delivering professional development through participation in professional networks
- 4.4 Consistently, systematically and critically reviewing all aspects of practice to inform and improve student learning

5.0 Manages the collection of school data required to demonstrate evidence based teaching by:

- 5.1 Supporting teachers in the analysis of the National Assessment Program-Literacy and Numeracy student and school performance data
- 5.2 Monitoring student and school literacy and numeracy performance to identify areas where support is required
- 5.3 Assisting teachers in the design and implementation of intervention strategies for students at risk and requiring support
- 5.4 Informing target setting for improved student outcomes.

6.0 Contributes to the effective promotion of pedagogy across the Archdiocese through:

- 6.1 Participating in communities of practice across the National Partnership Agreement schools and sharing initiatives and learnings across the Archdiocese
- 6.2 Engaging in continuous professional learning with the curriculum team
- 6.3 Supporting and liaising with advisers/teacher educators across the archdiocese
- 6.4 Collaborating with regional consultants and advisers in the development, implementation and presentation of curriculum policies/issues.
- 6.5 Assisting teachers to integrate an analysis of student assessment data into overall program evaluation to inform and improve teaching and learning programs

Signed:

[Name]
/Adviser/Teacher Educator

[Name]
School Principal

Date:

Date:

Appendix N: ACU approval form



Human Research Ethics Committee
Approval Form

Principal Investigator/Supervisor: Associate Professor Charles Burford

Co-Investigators:

Student Researcher: Cathy Forrester

Ethics approval has been granted for the following project:

The Effect of On-site Professional Development on Teacher Practice

for the period: 30/12/2013

Human Research Ethics Committee (HREC) Register Number: 2013 83N

This is to certify that the above application has been reviewed by the Australian Catholic University Human Research Ethics Committee (ACU HREC). The application has been approved for the period given above.

Researchers are responsible for ensuring that all conditions of approval are adhered to, that they seek prior approval for any modifications and that they notify the HREC of any incidents or unexpected issues impacting on participants that arise in the course of their research. Researchers are also responsible for ensuring that they adhere to the requirements of the *National Statement on Ethical Conduct in Human Research*, the *Australian Code for the Responsible Conduct of Research* and the *University's Code of Conduct*.

Any queries relating to this application should be directed to the Research Ethics Manager (reethics.manager@acu.edu.au).

Signed:  Date: 29/05/2017
 (Research Ethics Manager, Australian Catholic University, Tel: 02 9739 2646)