



**TEACHER ISOLATION AND THE
INCLUSION OF STUDENTS WITH AUTISM
SPECTRUM DISORDER: BRIDGING THE
DIVIDE**

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Statement of Original Authorship

This thesis contains no material that has been extracted in whole or in part from a thesis that I have submitted towards the award of any other degree or diploma in any other tertiary institution. No other person's work has been used without due acknowledgment in the main text of the thesis. All research procedures reported in the thesis received the approval of the relevant Ethics/Safety Committees (where required).

Signature: _____
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Acknowledgements

Firstly, it would be insolent of me to claim sole ownership of this thesis. Dual ownership belongs to me, and the participants of this study, who were willing to share their experiences, knowledge and hope as educators working with students who have Autism Spectrum Disorder. My hope is that I have shared their stories and daily lives as educators accurately throughout.

Secondly, this thesis would not exist without my adoptive dad, Douglas. In 2005, you asked what university qualification I wished to obtain, and I told you that I wanted a doctorate before I had even started my Bachelor's degree. Your initial apprehension was that I was a 'dreamer', and back then, perhaps I was. However, it was through your undeviating conviction and care that the 'doctorate dream' is now our reality. In my dotage, if I can say I have grown to be half the man you are, I will consider that my life has been well lived.

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Keywords

Australia, Autism Spectrum Disorder (ASD), case study, constructionism, education, inclusion, interpretivism, Queensland, Special Education Program (SEP), symbolic interactionism, teacher-aides, teachers.

Abstract

Both researchers and clinicians have observed an apparent increase in the prevalence of Autism Spectrum Disorder (ASD) in current and upcoming student populations (Australian Bureau of Statistics, 2016; CDC, 2018). In response to these findings, the Australian Federal Government and Queensland Government have policies in place to support students in inclusive general education settings for children with ASD. The purpose of this study was to develop a more sophisticated understanding of expectations of teacher capacity to implement the inclusive practices required in Queensland educational policy, and the actual capacity of teaching staff to support their students with ASD in one school with a Special Education Program (SEP) attached. The epistemological stance adopted for this study is constructionism with the theoretical perspective interpretivism, and embedded within this perspective is symbolic interactionism. Consistent with these perspectives, case study methodology has been used where data collection, adopted to investigate the case, included document analysis, survey and semi-structured individual interviews. During the exploration phase, data were obtained from the document analysis of pre-service courses offered to teachers and teacher-aides in Queensland, Australia and an online survey of 24 participants, consisting of both teachers and teacher-aides. During the inspection phase, data were obtained from individual, semi-structured interviews with 16 of the 24 participants, comprising 12 teachers and 4 teacher-aides. This research supports previous research findings which outline a need for more ASD-specific pre-service and in-service training for teachers, however, these findings have been extended through the use of a Symbolic Interactionist lens, where five theoretical propositions have been advanced. Drawing on these theoretical propositions, the D.I.S.I Dilemma Model has been promoted as a reflection of the school environment. The findings have clear implications for departments of education and pre-service training institutions for both teachers and teacher-aides.

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List of Abbreviations

ABA	Applied Behaviour Analysis
ABS	Australian Bureau of Statistics
AD	Autistic Disorder
ADHD	Attention-deficit/hyperactivity disorder
APA	American Psychiatric Association
AS	Asperger's Syndrome
ASD	Autism Spectrum Disorder
AVT	Advisory Visiting Teacher
CDC	Centres for Disease Control and Prevention
CRPD	Convention on the Rights of Persons with Disabilities
DSM-III	Diagnostic and Statistical Manual of Mental Disorders, 3 rd ed.
DSM-IV-TR	Diagnostic and Statistical Manual of Mental Disorders, 4 th ed.
DSM-5	Diagnostic and Statistical Manual of Mental Disorders, 5 th ed.
HOSES	Head of Special Education Services
ICD-9	International Classification of Diseases, 9 th ed.
ICD-10	International Classification of Diseases, 10 th ed.
ICD-11	International Classification of Diseases, 11 th ed.
ID	Intellectual Disability
IEP	Individual Education Program
LRE	Least Restrictive Environment
NSO	Non-School Organisation Program
OT	Occupational Therapist
PD	Professional Development
PDD	Pervasive Developmental Disorders
PDD-NOS	Pervasive Developmental Disorder Not Otherwise Specified
PE	Physical Education
Prep.	Preparatory Year
QLD	Queensland
RRBs	Restrictive, Repetitive Behaviours
SDAC	Survey of Disability, Ageing and Carers
SDSS	Specialist Disability Support in Schools Program
SEP	Special Education Program
SI	Symbolic Interactionism
UK	United Kingdom
USA	United States of America
WHO	World Health Organization

Chapter 1: Introduction

1.1 INTRODUCTION

The impetus for this study is a pragmatic concern for teachers and teacher-aides working with students with Autism Spectrum Disorder (ASD), as they negotiate how to include these students into mainstream school settings. Throughout my teaching experience, I have observed both fully qualified and pre-service teachers discussing their ability to work with students with ASD. During many of these conversations, it became evident to me that there is indeed a strong requirement for both current and future teachers to be provided with more rigorous training in this area, including the appropriate pedagogy to successfully work with students with ASD.

My teaching experiences in various primary schools in Brisbane have indicated that administrators and teachers often theoretically agree to inclusion but experience some insecurity and hesitation in the practice of inclusive policies. In particular, teachers would often convey the need for more planning time with special education staff and more professional development on ASD for generalist classroom teachers. Furthermore, many of the schools in which I had worked were in need of more systematic support for students with ASD. This need for better support was not due to a lack of effort on the teacher's part. There was often a strong willingness to accommodate the varying needs of each individual student, but this was only managed well if the difficulties experienced by students with ASD were not too diverse, and the general demeanour of the students was passive. In schools where there were systematic supports in place for students with ASD, goals outlined in Individual Education Plans (IEPs) were generally based on academic areas, often ignoring the deficits in social and emotional development in which many students with ASD experience. I realised that teachers, myself included, lacked knowledge about the significance of having an array of supportive interventions across multiple areas to enable these students to function successfully in a mainstream classroom. Despite substantial research focusing on the best evidence-based practices available for the inclusion of students with ASD, there was an apparent divide within each school concerning where to obtain information and how to implement such inclusive practices.

The global trend is that many students with ASD are being rightly placed in mainstream classroom environments, as they deserve equal opportunities (UNESCO, 2017). However, my anecdotal evidence would suggest that whilst teachers and teacher-aides are in support of this philosophy, there are many who do not feel they are adequately trained to meet the diverse needs of these students once they are in their classrooms. In an effort to provide an understanding of ASD, an overview of the autism spectrum, combined with government policies from Queensland, Australia is now provided.

1.2 THE AUTISM SPECTRUM

Autism is a term generally related to a cluster of neurological disorders often referred to as Autism Spectrum Disorder (ASD) and includes Asperger's Syndrome (AS), Autistic Disorder (AD), and Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS). The idea of autism being a continuum or spectrum was first characterised by Lorna Wing (1996). It is useful in that this interpretation acknowledges that whilst each form of autism may present the same triad of impairments: social interaction, communication, and rigid, repetitive patterns of behaviour, these may differ considerably in each individual.

Prior to the 1960's the educational experience of people with diagnosed disabilities, including ASD, was one of institutionalised segregation and palliative care and supervision (McRae, 1996). Almost all children who were considered uneducable were excluded from mainstream schooling because of the challenges they would entail (Sigmon, 1983). In the 1950's and 1960's special classes were increasingly assigned to students with disabilities, but special educators, academics and advocacy groups have argued since the late 1980's that the concept of inclusion in mainstream environments is the *right* initiative. (Lipsky & Gartner, 1987; Stainback, Stainback & Forest, 1989). The wide acceptance of inclusion by most, despite remaining a contentious issue for some, became the accepted ideology during the mid-1990's. However, the concept of inclusion for children with ASD initially began with criticism during this period (Kaufman & Hallahan, 1995; Mesibov & Shea, 1996). Today in Australia, the inclusion of all school-aged students in mainstream educational settings, including those with ASD, are protected by law.

1.2.1 Historical Perspectives of an Autism Spectrum Diagnosis

Leo Kanner first described autism in 1943 when conducting a study on the psychological features of 11 children comprising eight boys and three girls. His findings showed that these children had a number of common characteristics that formed a previously unreported ‘syndrome’ (Kanner, 1943). One of the commonalities that Kanner identified was that each child had an “inability to relate themselves in the ordinary way to people and situations from the beginning of life” (p. 33). He also noted that these children had difficulties with language. His testing found that there was a discrepancy in the language ability levels of each child, with some being mute or echolalic, whilst others developed some language. However, those children who had acquired some language did not use it for two-way communication. Their use of language was very literal and inflexible and often used incorrectly (Kanner, 1943).

Repetitive activities and a noticeable restriction to change was another identifying characteristic noted by Kanner. He stated that these children had “an anxiously obsessive desire for the maintenance of sameness” (1943, p. 36). He also found commonality in the repetitive movements of these children, and that “several of them were somewhat clumsy in gait and gross motor coordination, but all were very skilful in terms of fine muscle coordination” (p. 40). The children had a restricted ability for normal pretend play, preferring objects to people, and also seemed to restrict any external or internal intrusions into their environment, such as loud noises. Even food was often “feared or rejected” (pp. 38-39).

Despite initially viewing these children as “intellectually impaired” (1973, p. 39), Kanner described the children’s intellectual ability as being “endowed with good cognitive potentialities” (p. 39). It was during this very early period of research into autism that Kanner proposed that autism might very well present with varying degrees of severity. However, Kanner (1973) also expressed that he did not know the specific reasoning behind why each of the children he examined presented with varying levels of the neurodevelopmental disorder.

Ongoing research began to show differences between Kanner’s findings and the findings of other researchers. For example, Rutter (1978) identified that one of the features affecting the severity of presentation of autism was intellectual ability and that autism and intellectual disability could coincide. This finding meant that it was vital to define that the child’s impaired social development and unusual language were out

of keeping with his or her intellectual ability during diagnosis. Rutter's definition specified that when autism and intellectual disability coincide, then by two-and-a-half years of age the child should display "impaired social development, delayed and deviant language development, and stereotyped play patterns, abnormal preoccupations and resistance to change" (Rutter, 1978, p. 19).

The emergence of 'infantile autism' as a diagnostic category began in the 1970s when Rutter (1978) redefined Kanner's (1943) original descriptions following Rutter's own research into defining autism. As a result, autism and infantile autism were often used interchangeably. Infantile autism was included in the World Health Organization's (WHO) International Classification of Diseases, ninth edition (ICD-9) published in 1978, and the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, third edition (DSM-III) published in 1980. The definition of autism has been revised in these classification systems over time (Wing 1997), but the present diagnostic criteria in the International Classification of Diseases 11th edition (ICD-11) (WHO, 2018) and Diagnostic and Statistical Manual, fifth edition (DSM-5) (American Psychiatric Association, 2013) are still aligned with the fundamental areas of deficit identified by Kanner in 1943. The specific diagnostic term used in ICD-11 and DSM-5 is 'Autism Spectrum Disorder'. Autism features outlined in the ICD-11 fall into the same two categories as those in the DSM-5:

1. difficulties in initiating and sustaining social communication; and
2. difficulties in social interaction, and restricted interests and repetitive behaviours.

Previous versions of each manual included a third category for language problems, but these have been withdrawn (American Psychiatric Association, 2013; WHO, 2018).

A year after Kanner's (1943) original paper, Hans Asperger (1944) conducted a study on four boys that he defined as being 'autistic'. A range of symptoms was observed in these children. Social difficulties, such as their naivety and self-absorption were noted. He found that they each had good vocabulary and grammar and were able to articulate fluently. However, he also noted that they tended to be quite literal and pedantic in responses, using a peculiar tone of voice and little to no verbal communication. He also observed that these children had interests in specific subjects, odd responses to sensory stimuli and poor motor coordination. Difficulties in learning

conventional schoolwork were noted, despite the children in his study having either borderline, normal or superior intelligence levels.

The main difference between Kanner's (1943/1973) and Asperger's (1944/1991) studies was that the children used in Asperger's study did not have impairments as severe as the children observed by Kanner. While Kanner reported on 11 patients, where eight rarely used language and the remaining three never spoke, Asperger's research claimed that his patients spoke "like little adults" (Asperger, 1944, p. 12). In addition, Kanner reported that the subjects had good motor skills but that gross motor coordination was affected, in comparison to Asperger's study who noted that both fine and gross motor skills were impacted. Asperger (1944) also observed that each child had developed speech before school age and was able to express unusual thoughts and perceptions. Many years after his original descriptions of children as having varying ability levels and some intellectual disability, Asperger (1979) highlighted that these children had good intelligence and special abilities in the areas of logic and abstraction.

The term 'Asperger's Syndrome' (AS) was first used by Wing in 1981. She used the findings of Asperger's 1944 study to facilitate her own research on 34 children, including 28 boys and six girls in order to describe the syndrome. It was not until 1990 that AS first appeared in the draft International Classification of Diseases (ICD) and the finalised tenth edition in 1993 (WHO, 1993). It was published as 'Asperger's Disorder' in the DSM-IV-TR in 1994 (American Psychiatric Association, 1994). The diagnostic criteria in both the ICD-10 and DSM-IV-TR were almost identical in terms of requirements and exclusionary criteria.

Similar to the diagnostic criteria of Autistic Disorder, the diagnostic criteria for Asperger's Syndrome in DSM-IV-TR included:

1. Qualitative impairment in social interaction, and
2. Restricted repetitive and stereotyped patterns of behaviour, interests and activities" (American Psychiatric Association, 2000, p. 84).

However, the criteria for AS did not include the criterion "qualitative impairment in communication"; instead "there is no clinically significant general delay in language" was used. Additionally, the criteria for AS included that "there is no clinically significant delay in cognitive development or in the development of age-appropriate self-help skills, adaptive behaviour (other than in social interaction), and

curiosity about the environment in childhood” (American Psychiatric Association, 2000, p. 84).

1.2.2 Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5)

Over the last few decades, researchers have tried to classify ASD heterogeneity. The Diagnostic and Statistical Manual of Mental Disorders, 4th Edition (DSM-IV-TR) used a multi-categorical system of diagnosing pervasive developmental disorders (PDDs), as outlined above. Due to various studies reporting limited reliability in how DSM-IV-TR subtypes were given (Lord, Petkova, Hus, Gan, Lu, Martin, 2011; Walker et al., 2004), the fifth edition of the DSM (APA, 2013) changed the multi-categorical system with a single diagnostic dimension: Autism Spectrum Disorder (ASD).

Despite concerns about the legitimacy and diagnostic accuracy of the DSM-5 criteria, the theoretical validity of the new criteria has been supported by several studies (Lai, Lombardo, Chakrabarti, & Baron-Cohen, 2013; Mandy, Charman, Skuse, 2014; Williams & Bowler, 2014). It was found that more than 90 per cent of children with DSM-IV-TR defined PDDs were recognised by DSM-5 criteria, and the accuracy using the new diagnostic criteria was much better than the DSM-IV-TR criteria (Huerta, Bishop, Duncan, Hus, & Lord, 2012). The DSM-5 approach is considered comprehensive as it acknowledges both core ASD symptoms and clinical features that are not specific to ASD. Classifying significant subgroups in ASD is the ultimate goal of the DSM-5, to better understand the biological structures, treatment reactions and clinical results of individuals with ASD (American Psychiatric Association, 2013).

Within the DSM-5 (APA, 2013), additional alterations comprise sensory abnormalities within the repetitive behaviour domain, the specification that symptoms may be calculated if they occur currently or historically (Mazurek et al., 2017). Furthermore, the removal of language delay criteria, and the clarification that symptoms should occur early in development but may not fully manifest until later in life were also included. The two diagnostic subheadings of DSM-5 (APA, 2013) are:

1. Persistent deficits in social communication and social interaction across multiple contexts;
2. Restricted, repetitive patterns of behavior, interests, or activities.

1.3 CHARACTERISTICS OF AUTISM SPECTRUM DISORDER

ASD is identified by impairments in the areas of communication, socialisation and restricted, repetitive and stereotyped patterns of behaviour. There is variability across individuals with autism in the severity of these core impairments. In addition to the core deficits, some individuals with autism show characteristics that are common to other diagnostic groups. These characteristics are not unique to autism, nor are they shared by all individuals with autism, hence their exclusion in the diagnostic criteria. This section will discuss the three characteristics of ASD in more detail with; persistent deficits in social communication and social interaction across multiple contexts in Section 1.3.1, and restricted, repetitive patterns of behavior, interests and activities in Section 1.3.2. In addition to these characteristics, prevalence is discussed in Section 1.3.3.

1.3.1 Persistent deficits in social communication and social interaction across multiple contexts

ASD is classified by both impairments in verbal and nonverbal communication. Typical communication involves “a need to share with the listener a wider context of interaction in which each individual is actively involved” (Frith, 2003, p. 122). This involvement typically includes both nonverbal and verbal communication. This is not the case for most children with autism. A person with ASD may not understand aspects of nonverbal communication or may misread the body language of those with whom they are conversing. This may result in their use of language being less effective or reciprocally engaging to the listener. Such an atypical language profile can infer how we communicate with children with ASD, and how communication and language interventions are chosen (Hudry, et al., 2010). Use of a visual strategy for the purpose of initiation may provide a socially valid way to increase both verbal and nonverbal play initiations in children with ASD (Johnston, Nelson, Evans, & Palazolo, 2003; Shabani, Katz, Wilder, Beauchamp, Taylor, & Fischer, 2001).

Individuals with ASD who achieve competence with language can still present with difficulties in some areas of expressive and receptive language processing. For example, people with ASD often interpret everything literally. Often people will use idioms, metaphors and figurative speech, whether to support communication or simply to make life more interesting, whereas for people with ASD, the use of this type of speech can make no sense at all (Tager-Flusberg, 2003). While impairments in both

the construction and comprehension of language are well known in children with ASD, the respective level of impairment is less understood in each of these areas (Hudry et al., 2010). Early evidence suggests that comprehension is relatively impaired more than language construction. In a sample of pre-school students with ASD, receptive skills were also found to be further impaired than expressive skills (Hudry et al., 2010).

Social relationships and interaction difficulties have been central to the diagnosis of autism since Leo Kanner's (1943) initial description. In order to understand the nature of the social difficulties in ASD and to find effective treatments, researchers have been compelled to identify the best clinical and educational practices in the last 40 years (National Research Council, 2001). Social skills consist of the basic skills of taking turns, listening to others, saying positive things, receiving help from others, giving help, and sharing (Ashcroft, Argiro, & Keohane, 2013). Individuals with ASD demonstrate impairments in the development of social reciprocity, joint attention, and initiation and response to nonverbal gestures (National Research Council, 2001).

Many effective socialisation intervention programs have been developed for people with ASD (Matson, Matson & Rivet, 2007; McConnell, 2002; & Rogers, 2000). Examples include peer support networks (Garrison-Harrell, Kamps, & Kravits, 1997; Haring & Breen, 1992), circle of friends (Barton, Reichow, Wolery, & Chen, 2011; Kalyva & Avramidis, 2005; Whitaker, Barrett, Joy, Potter & Thomas, 1998), buddy systems (Laushey & Heflin, 2000), and lunch clubs (Baker, Koegel & Koegel, 1998; Koegel, Vernon, Koegel, Koegel & Paullin, 2012a; Koegel, Fredeen, Kim, Danial, Rubinstein, & Koegel, 2012b). In the absence of systematic social intervention, students with ASD may show limited or non-existent initiations with typical peers (Hughes, Golas, Cosgriff, Brigham, Edwards & Cashen, 2011), difficulty in engaging with typical peers (Humphrey & Symes, 2011), a general absence of social skills with typical peers (Knott, Dunlop & Mackay, 2006; Stichter, Randolph, Gage & Schmidt, 2007) and issues with engaging correctly in typical peer social activities (Orsmond, Krauss & Seltzer, 2004).

1.3.2 Restricted, repetitive patterns of behaviour, interests and activities

Another core characteristic of autism is restrictive, repetitive behaviours and interests (RRBs). RRBs form a class of behaviours characterised "by high frequency, repetition in an invariant manner, and desire for sameness in the environment" (Kanner, 1943, p. 562). This includes adherence to stereotyped/restricted patterns of

interest, non-functional routines, stereotyped/repetitive motor movements and unrelenting concentration on parts of objects (American Psychiatric Association, 2013). A variety of behavioural phenomena are considered RRBs, including: the control of object parts and repetitive body movements (Bodfish, Symons, Parker, & Lewis, 2000), compulsive or ritualised behaviours or routines; insistence on sameness of both routines and the environment (Lam & Emam, 2007), restricted interests; and behaviours involving self-harm (Kirby, Boyd, Williams, Faldowski, Baranek, 2017).

It has been considered that repetitive behaviour may fall within two clusters. The first is “lower order” behaviour, such as stereotyped movement and self-harm, where “higher order” behaviours consist of repetitive acts, obsessions and an insistence on sameness in the environment (Bechard & Lewis, 2012, p. 1). Repetitive behaviours from both clusters tend to co-occur in the autism population that have intellectual impairment, as well as people with autism that are high functioning (Carcani-Rathwell, Rabe-Hasketh, & Santosh, 2006; Mooney, Gray, & Tonge, 2006; South, Ozonoff, & McMahon, 2005).

Several autism characteristics appear to coincide with characteristics in people with intellectual and sensory impairments, or a combination of disabilities. The characteristics can materialise similarly regardless of whether autism is present or not, making it problematic to make a valid autism diagnosis when this occurs. There are, however, differences in the display of symptoms, the severity of symptoms and the underlying causes of behaviour (de Vaan, Vervloed, Knoors & Verhoeven, 2013). It is suggested in the research that the verbal and perceptual abilities indicated in intellectual assessment of children with autism may change over time as the child matures (Mayes & Calhoun, 2003).

1.3.3 Prevalence

It is estimated that there are 52 million people with ASD worldwide. Research literature suggests that there is slight disparity in the proportion of the population with ASD from one region to another (Baxter et al., 2014). The United States of America’s Center for Disease Control and Prevention (CDC) estimates that approximately one in 59 children in the United States of America are identified as having ASD (CDC, 2018). Researchers in the United Kingdom have indicated that the prevalence of ASD in adults is similar to that of children, which is consistent with the understanding that ASD is a lifelong condition (Brugha et al., 2011).

The Australian Bureau of Statistics (ABS) quadrennial survey of ‘Disability, Ageing and Carers’ (SDAC), provided the evidence to support the claim that an estimated 164,000 Australians in 2015 identified as having a diagnosis of ASD (Australian Bureau of Statistics, 2016). This signified a prevalence rate of about one in 150 people with autism in Australia. This number has risen significantly in the last decade, up from an estimated 64,400 people in 2009 (Australian Bureau of Statistics, 2016). Autism was most prevalent between children aged five to 14, signifying an overall rise in diagnosis for school age children. It is generally considered that males are 4.1 times higher to have the condition than females, with prevalence rates of 1.1% and 0.3% respectively, and this is consistent with findings in other countries (Australian Bureau of Statistics, 2016). During the last two decades, the reported prevalence of autism increased dramatically from its original estimate of about one in 500 in 1995 (Weintraub, 2011). Current research claims indicate that the increased diagnosis rate of ASD is due to reporting practices changing (Hansen, Shendel & Parner, 2015) as well as diagnostic criteria changes, which now include a wider range of diagnostic features (Polyak, Kubina & Girirajan, 2015).

1.3.4 Psychological theories of cognition in ASD

A number of psychological theories have been suggested to describe the cognitive characteristics of people with ASD. The three most commonly researched theories are deficits in:

1. Theory of Mind;
2. Executive Functioning; and
3. Central Coherence.

The term Theory of Mind is used to describe a person’s ability to infer mental states to others and their behaviour (Baron-Cohen, Leslie, & Frith, 1985). When a person has a Theory of Mind deficit, it simply means that a person has trouble interpreting what others are thinking or feeling, and also what effect one’s actions may have on what others are thinking or feeling. People with ASD are often described as having a social detachment or an inability to communicate effectively, and this is often considered as evidence indicating a Theory of Mind deficit (Hill & Frith, 2003). This deficit may explain to some degree the social-communicative impairments seen in people with autism; however, it is important to keep in mind that alone, it does not

explain other core characteristics such as stereotyped behaviour, interests and activities.

The second psychological theory used to describe the cognitive characteristics of ASD relates to deficits in executive functioning. Executive functioning is the term used to define a group of cognitive processes such as the ability to initiate behaviour, selecting relevant task goals or planning and organising a means to solve complex problems (Gioia, Isquith, Guy, & Kenworthy, 2000; Rogers & Pennington, 1991). Individuals with autism can have difficulties in executive functioning and particularly in managing changes in routine, and display stereotypical behaviours, narrow interests, and rigidity. This lack of cognitive flexibility and the capacity to forward plan can result in highly perseverative responses to tasks and is often suggestive of difficulty in executive functioning (Hill & Frith, 2003; Lopez, Lincoln, Ozonoff, & Lai, 2005; Ozonoff, Pennington, & Rogers, 1991). These impairments in executive functioning are not clearly linked with the impairments shown in social and communicative function, yet they do explain the repetitive behaviours, need for rigid routines, and limited interests often displayed by individuals with ASD (South, et al., 2007).

The third psychological theory used to describe the cognitive characteristics of ASD are difficulties related to central coherence. Central coherence is related to a person's capacity to combine several pieces of information to form a coherent understanding of a topic. Typically, developing children can process information for meaning in global or gestalt forms (Frith, 2003). Conversely, a weak central coherence is when a person does not see the overall context after organising or focusing on pieces of information. Difficulties that individuals with ASD have with theory of mind tasks may relate to extracting meaning from a context, signifying that a deficit in central coherence could be a more obstinate impairment in autism than the inability to attribute mental states alone (Happé, 1998).

1.4 INCLUSION

As discussed above, the characteristics of ASD are complex and not mutually exclusive in their manifestation or treatment. As a result, student achievement and teacher effectiveness necessitate policies, structures, practices, supports and assessments that will support each child and his or her specific needs. Australia has enacted inclusive laws on the education of students with disabilities based on

international trends to ensure the rights of all students to receive an equitable education. The policies which will be discussed below are the:

1. Committee on the Rights of Persons with Disabilities (CRPD) General Comment No. 4, Article 24: Right to Inclusive Education (2016);
2. Disability Standards for Education (2005);
3. Education Queensland's Inclusive Education Statement (2018);
4. Non-School Organization Program (2018); and the
5. Specialist Disability Support in Schools Program (2019).

1.4.1 Federal and State Government policies

In 2002, the Australian Federal Government ran an inquiry into the education of students with disabilities in response to issues concerning the effectiveness of programs for students with disabilities in Australia (The Senate, 2002). The inquiry examined whether the needs of students with disabilities in the school and post-secondary education sectors were being met. The major result of this inquiry was a finding that, "Schools do not adequately provide for difference" (The Senate, 2002, p. 1). It was from this inquiry that Queensland became one of the first Australian State's to approve the process of inclusion despite the ongoing challenges confronted by providing a genuinely inclusive education for students with disabilities (The Senate, 2002). During that time, there was a commitment from both State and non-State education providers in Queensland to work toward creating inclusive school communities. This commitment was made evident within the Departmental Disability Definitions Fact Sheet (Education Queensland, 2005b) where it is stated that:

An education provider must make 'reasonable adjustments' to accommodate a student with a disability. An adjustment is a measure or action taken to assist a student with a disability to participate in education and training on the same basis as other students. An adjustment is reasonable if it does this while taking into account the learning needs of the student, and balancing the interests of all parties affected, including those of the student with a disability, the education provider, staff and other students (p. 4).

In 2005, the Commonwealth Attorney-General framed the Disability Standards for Education 2005 under the Disability Discrimination Act 1992 with

a strong emphasis on the need for schools and teachers within Australia to include students with ASD. In The Standards it is stated that:

[An educational institution] must take reasonable steps to ensure that [a student with a disability] is able to participate in the courses or programs provided by the educational institution, and use the facilities and services provided by it, on the same basis as a student without a disability, and without experiencing discrimination (paragraph 5.2, p. 1).

This approach is evident in Education Queensland’s Inclusive Education Statement (2005a) where a strong emphasis is placed on the interrelationships among all students, teachers and caregivers when dealing with the concept of inclusion. They also believe that inclusion involves “...building communities that value, celebrate and respond to diversity”, that are “...supported by collaborative relationships with communities and governments” (p. 1). The statement notes that inclusive education encourages students “to learn, respect and value difference and to develop productive processes for developing equity in their personal relationships and in their communities” (p. 2).

The United Nations Convention on the Rights of Persons with Disabilities (CRPD) Article 24, General Comment 4, (2016) is in full support of inclusive education and the rights of all. It is stated that:

Acceptability is the obligation to design and implement all education-related facilities, goods and services taking full account of and respecting the requirements, cultures, views and languages of persons with disabilities. The form and substance of education provided must be acceptable for all. States parties must adopt affirmative action measures to ensure that education is of good quality for all.¹ Inclusion and quality are reciprocal: an inclusive approach can make a significant contribution to the quality of education (CRPD, 2016, p. 9).

The current quadrennial data from the Australian Bureau of Statistics (Australian Bureau of Statistics, 2016) regarding the number of students with disabilities shows there are more than 20,000 students with a disability enrolled in State primary and

¹ CESCR E/C.12/1999/10

secondary schools across Queensland. In an effort to support students with disabilities, Education Queensland (2018) has developed an Inclusive Education Policy which reads:

The department commits to continuing our journey towards a more inclusive education system at policy and regional levels, and as part of our everyday practice in schools, educational settings and classrooms. Inclusive education means that students can access and fully participate in learning, alongside their similar-aged peers, supported by reasonable adjustments and teaching strategies tailored to meet their individual needs. Inclusion is embedded in all aspects of school life, and is supported by culture, policies and every day practices (p. 1).

Education Queensland (2018) continues this policy statement by explaining the key differences from other approaches to the education of students with disabilities:

Integration: students are placed in schools or educational settings with their similar-aged peers but adjustments are not made to meet their individual needs. This limits their ability to fully access or participate in learning. Integration is not necessarily a step towards inclusion.

Segregation: students learn in separate environments, designed or used to respond to their particular needs or impairment, in isolation from other students.

Exclusion: students are unable to access any form of education (p. 1).

The Non-School Organisation (NSO) program was introduced in 1985 to support schools by providing funding to approved organisations, enabling access and participation in curriculum and learning outcomes for eligible school-aged students with a disability. In 2019, the NSO program is being rebranded as the ‘Specialist Disability Support in Schools’ (SDSS) program (Education Queensland, 2018a). Much like the NSO program, the purpose of SDSS is to enable school staff to work closely with parents, students and external organisations to provide adjustments that ensure a student with a disability is meeting their educational goals. The program is designed to have the student and their parents at the centre of collaborative discussions about support requirements. Yet despite the program delivering annual funding of up to \$11.6 million to 23 organizations, only one of these organisations, known as Autism

QLD, is specifically focused on the needs of students with ASD (Education Queensland, 2018b, p. 1).

The identified policies and procedures do not necessarily ensure the successful implementation of inclusive practices within schools (Prior, Roberts, Rodger, Williams & Sutherland, 2011). This may be due to the differing daily experiences of individual schools that result in varying inclusive practices being applied among schools and districts working within the same education system (Boyle, Scriven, Durning, & Downes, 2011a). There is evidence to suggest that this widespread problem is occurring within schools in other Australian States (Page & Ferrett, 2018), as well as internationally in countries such as the United States of America (Danforth & Naraian, 2015; Robertson, McCaleb & Smith, 2017) and the United Kingdom (Ravet, 2018).

1.5 PERSPECTIVES ON INCLUSION

Inclusion policies mean that many mainstream classrooms will include one or more students with a diagnosed intellectual, physical, sensory or learning disability, such as children with ASD. This is due to the widespread acceptance that people with a disability have the same rights as other people to participate fully in the community. Many parents of students with a disability may choose to send their children to mainstream schools rather than to a special school or schools with a special education program (SEP). Some teachers have concerns regarding inclusive education as it is often noted that highly specialised knowledge and skills are required to provide for students with disabilities appropriately. The following section examines the literature concerning the perspectives of teachers, parents, and the impact a child with ASD may have on other children in a mainstream classroom.

1.5.1 Inclusion attitudes

Despite the clear policies in place regarding inclusion in mainstream schools, much of the research pertaining to teacher's attitudes on inclusion has been negative (Lopes, Monteiro, & Sil, 2004; Monsen, Ewing & Kwoka, 2014; Ryan, 2009). It has been found that administrators and teachers approve the theoretical notion of inclusion, but experience some anxiety and reluctance to putting inclusive policies in practice (Hwang & Evans, 2011). One study found that teachers were hesitant to consider including students with high support needs or severe behavioural problems, and it was

evident that approval of inclusion declined as perceptions of the severity of the disability increased (Forlin & Hopewell, 2006). Teachers have expressed the need for more time to plan and collaborate with special education support teachers and for ongoing professional development (Sokal & Sharma, 2014). Conversely, challenges can come from many students with or without a disability, and some teachers found that a child with a diagnosed disability may be less of a challenge than others in the class (Foreman & Arthur-Kelly, 2017). This difference in teacher perceptions has been linked to the availability of support. Reported in the research literature is that success of inclusion depends greatly upon the accessibility and quality of the support that is offered in the mainstream school (Anderson, Klassen & Georgiou, 2007; Farrell, 2004; Urton, Wilbert, & Hennemann, 2014).

The Australian Senate Report (2002) also outlined the educational service provision for children with a disability. The Committee wanted direct input from various sources including school administrators, teachers, parents, and disability support groups. The report acknowledged the anxiety and frustration experienced by teachers who stated concerns regarding “a lack of training in the management and education of students with disabilities, a lack of time to prepare appropriate curricula, [and] a lack of funded support for affected children” (Employment Workplace Relations and Educational References Committee, 2002, p. 2).

1.5.2 Parent beliefs about inclusion

Parents play a key role in the inclusion process that begins with the parents’ decision to place their child in a mainstream school setting. A review of the literature shows that parents are divided in their attitudes towards inclusion. Parents of children with disabilities often have concerns regarding social integration and academic progress in mainstream settings (de Boer, Pijl, Minnaert, 2010; Gasteiger-Klicpera, Klicpera, Gebhardt, & Schwab, 2012; Leyser & Kirk, 2004). Furthermore, parents have been reported as expressing concerns regarding the competencies of teachers to deliver ample care for their child, access to qualified teachers to meet children’s needs, and the necessary training for inclusive settings to be productive (de Boer et al., 2010).

In Australia, the Employment Workplace Relations and Educational References Committee (2002) found that parents of children with disabilities attending mainstream schools were disappointed in their relationship with the school. Parents claimed, “they had to bring teachers up to the mark on how to deal with children with

various disabilities” (Employment Workplace Relations and Educational References Committee, 2002, p. 45). Parents of children without disabilities have also raised concerns regarding inclusion in mainstream schools because they consider that their child may learn undesired behaviours, be injured or frightened by children with disabilities, or have a reduced learning rate due to the inclusion of children with disabilities (Rafferty, Boettcher, & Griffin, 2001). Certain studies have shown more support toward the inclusion for children with speech impairments or orthopaedic impairments, and less support toward including children with ASD or severe disability in a mainstream setting (de Boer & Munde, 2015; Gasteiger-Klicpera, Klicpera, Gebhardt, & Schwab, 2012).

In contrast, parents of children with disabilities have also held positive views when considering inclusion (de Boer, Pijl, Minnaert, 2010; Gallagher et al., 2000; Rafferty & Griffin, 2005). Gaining acceptance through inclusion, independently developing self-help skills, greater availability to participate in an array of activities, higher preparedness for the real world and improved self-worth have all been reported by parents (Diamond & Le Furgy, 1994; Rafferty, Boettcher & Griffin, 2001; Seery, Davis & Johnson, 2000). Parents of typically developing children also noted that there was an increased sensitivity to others, a stronger understanding of human diversity and a heightened awareness of their own strengths and weaknesses through inclusion (de Boer et al., 2010).

1.5.3 Concerns for teaching students with ASD

There appears to be some clear objectives behind the notion of mainstreaming a student with ASD. The first is to ensure every student is given the opportunity to receive an appropriate education, and the other is to improve the social skills and academic achievement of the student with ASD through daily contact with typically developing peers (McGregor & Campbell, 2001). However, it has been found that many teachers feel inadequately trained and insufficiently supported when taking on the challenge of educating a student with ASD (Cassady, 2011). Many teachers experience anxiety when dealing with the social and emotional difficulties students with ASD can present. These anxieties can include the angst the teacher felt over their capacity to meet the needs of all students within the class. These anxieties could influence the quality of teacher–student interactions (Emam & Farrell, 2009).

The behavioural problems and social impairments exhibited by students with ASD can result in the teacher having a poor relationship with them (Anderson et al., 2007; Robertson, Chamberlain, & Kasari, 2003). It has been reported that a student with ASD may experience less social acceptance by peers if a teacher has a negative relationship with that student (Robertson et al., 2003). It has also been found that frustration can develop in students without disability when witnessing the differential treatment of particular behaviours exhibited by a student with ASD (Humphrey & Symes, 2011). It has been proposed that if teachers have appropriate training that enables them to successfully include students with ASD, perhaps these negative social outcomes could be minimised (Simpson, de Boer-Ott & Smith-Myles, 2003; Humphrey & Symes, 2011). However, while teachers wait for this training, reported research findings indicate that students with ASD are three times more likely to be bullied and/or rejected by their peers, and are less likely to be provided with social support (Humphrey & Hebron, 2015; Symes & Humphrey, 2010).

To support students in an inclusive environment research advocates for specific approaches to teach students with ASD, while it has been found that these strategies are not always familiar to mainstream teachers (Leach & Duffy, 2009). Although knowing these strategies would be considered beneficial to make a positive difference to classroom practice for mainstream teachers, there is a shortage in the training to appropriately support students with ASD (Dybvik, 2004; Marshall & Goodall, 2015; Robertson et al., 2003) and also to support the other children in the class (Sinz, 2004). The ‘missing link’ for teachers is knowing the appropriate practices and strategies for working with students with ASD (Humphrey & Parkinson, 2006; Marshall & Goodall, 2015), and which strategies are appropriate depend greatly upon the individual student (Hess, Morrier, Heflin, & Ivey, 2008). Providing teachers with access to expertise where the sharing of knowledge, skills and strategies could alleviate teacher stress and ensure a better success rate when working with a student with ASD in a mainstream setting is essential. Many teachers believe that additional support from teacher-aides is also necessary in a mainstream setting (Rose, 2001), for the benefit of both the student with ASD as well as the other students in the class (Sinz, 2004).

Some research presents the perspective that the behaviours exhibited by students with ASD that differ from typically developing peers may interfere with developing positive peer relationships (Emam & Farrell, 2009; Teixeira De Matos & Morgado,

2016). Hyperactivity and defiance have been noted as having negative effects in the classroom (Robertson et al., 2003) damaging relationships with their peers. It is argued that these behaviours are detrimental causing frequent disruptions to others, restricting the chances of the student with ASD to develop positive relationships with his/her teachers and peers and for the learning environment to flourish (Emam & Farrell, 2009). In addition, it has been noted that peers were more likely to socially ignore students with disabilities if they sensed different treatment was being provided (Hemmingsson, Borell, & Gustavsson, 2003). Teacher-aides could minimise this negative impact, by including other peers in the differentiated activities (Humphrey & Symes, 2011). This again gives rise to the opinion that teacher-aides may play a pivotal role in successfully including students with ASD in mainstream schools.

1.5.4 Skills required for the successful inclusion of a child with ASD

Children with ASD are as different as they are similar, and this is perplexing to even the most experienced teacher (Magnusen, 2005). All teachers face the dilemma of putting theory into practice, and perhaps the most confusing aspect for teachers is to know which theory is best for a particular child. Several key indicators are mentioned throughout the literature on how to gain positive outcomes when working with a student with ASD.

The attached table accentuates a number of requisites considered critical for the provision of equal educational opportunities for children with ASD. The research into assessment and placement highlight the urgency for comprehensive evaluation, followed by early intervention programs that allow for regular progress appraisements. Collaborative, systemic, flexible and multi-disciplinary approaches are recommended for the education of children with ASD and should involve a variety of appropriate professionals (Olley, 2005; Roberts, 2006) Whilst the teaching and learning environments for children with ASD must be well structured and supported by both staff and peers, a predictable routine should be paramount throughout all instruction (Roberts, 2006). In addition, socio-emotional support and social skill development, designed specifically towards the management of physical school-based transitions, should also be an integral feature of the Individual Education Program (IEP) (Batten et al., 2006; Roberts, 2006). Communication, learning, and sensory issues pertaining to any individual with ASD must be addressed through periods with teachers, psychologists, speech pathologists, and occupational therapists (Kasari, 2009). It is

envisaged that a well-trained, knowledgeable and supportive staff would be better equipped to collaborate with parents/caregivers and professionals in order to meet the needs of all children with ASD. This research has been summarised in Table 1.1.

Table 1.1

Studies Describing the Requirements for the Inclusion of Students with ASD

Educational service	Meaning	Personnel required	Studies
Placement and assessment	Intervention is based on comprehensive assessments and tailored to student's strengths and needs (1) Placement and support options are varied with student progress being regularly assessed (2)	Teachers Administrators	(1) <i>Howlin, 1998; Lovannone, Dunlap, & Kincaid, 2003; National Research Council, 2001; Tsatsanis, Foley, & Donehower, 2004.</i> (2) <i>Batten, Corbett, Rosenblatt, Withers, & Yuille, 2006; Department of Education & Science in Ireland, 2006; Jones, 2002.</i>
Multi-disciplinary, systematic and flexible approaches	A multi-disciplinary approach, which is collaborative and involves a varied team of professionals (i.e. psychologists, speech pathologists and occupational therapists) (3) A systematic and flexible approach to instruction (4)	Teachers Psychologists/Speech Pathologists/Occupational Therapists	(3) <i>Roberts, 2006.</i> (4) <i>Lovannone, Dunlap, & Kincaid, 2003; Olley, 2005; Sainsbury, 2000.</i>
Teaching environment	The teaching environment needs to be well structured to support the need of students with ASD who need predictability and routine (5)	Teachers	(5) <i>Roberts, 2006.</i>
Learning environment	The learning environment for the child with ASD is supportive from all school staff and peers (6) The learning environment must consider ecological and social factors (7)	Whole school	(6) <i>Kasari, 2009; Kuncze, 2003; Sainsbury, 2000.</i> (7) <i>Arick, Krug, Fullerton, Loos, & Falco, 2005; Olley, 2005; Roberts, 2006.</i>
Behaviour and socio-emotional support	Socio-emotional support and social skills programs both in and out of the school are delivered (8) A positive approach to behaviour support (9) Additional support is provided for students with ASD to successfully manage transitions, such as changes within the school setting along with the commencement and conclusion of school (10)	Teachers Parents	(8) <i>Arick et al., 2005; Batten et al., 2006; Lovannone, Dunlap, & Kincaid, 2003.</i> (9) <i>Lovannone, Dunlap, & Kincaid, 2003; Perry & Condillac, 2003.</i> (10) <i>Roberts, 2006.</i>

A specialised curriculum	The curriculum is specialised in order to address social, communication, learning and sensory issues (11)	Teachers Teacher-Aides	(11) Arick et al., 2005; National Research Council, 2001; Perry & Condillac, 2003; Sainsbury, 2000.
A contract of commitment between staff	School staff is trained and knowledgeable, and are adequately supported in whatever educational placement students with ASD are enrolled (12)	Teachers Administrators	(12) Lovannone, Dunlap, & Kincaid, 2003; Perry & Condillac, 2003.
Parents/caregivers	Collaboration between the parents/caregivers and professionals must remain open to determine how best to support the child with ASD (13)	Parents	(13) Howlin, 1998; Marcus, Kunce, & Schopler, 2005; Simpson, de Boer-Ott, & Smith-Myles, 2003.

With all of this in mind, there is much for both teachers and teacher-aides to understand. For teachers to embrace the policies, they are in need of additional training to work effectively with students with ASD in mainstream classes (Blackwell, Sheppard, Lehr & Huang, 2017; Bond et al., 2016). ASD remains a compelling mystery to many professionals despite an increase in research of autism-related disabilities. Over several decades, studies related to highly skilled, competent teachers and school-based professionals have found that most consider themselves inadequate when it comes to meeting the needs of students identified as having ASD (Killoran et al., 2013; Segall & Campbell, 2012; Spears, Tollefson, & Simpson, 2001). Moreover, teachers, related service professionals, parents and others, often lament the fact that they are confronted with the ominous task of creating programs that are considered inclusive for students with ASD without clear guidelines and procedural protocols (Segall & Campbell, 2012; Simpson, de Boer-Ott, Sonja, & Smith-Myles, 2003).

1.6 RESEARCH CONTEXT

As stated in Section 1.3.5, both researchers and clinicians have observed an apparent increase in the prevalence of ASD in current and upcoming student populations. In response to these findings, the Australian Federal Government and the Queensland Government have policies in place to support students in inclusive general education settings for children with disabilities. Although the education sector attributes continuing importance to using intervention strategies that are supported by research, these strategies are not always used (Noland, Cason, & Lincoln, 2007; Schaeffer, Hamilton & Johnson, 2016). To complicate the issue for teachers of children with ASD, there are no singular or collection of interventions that will work to support every student with ASD (Lehman & Klaw, 2003; Roberts & Williams, 2016).

In Queensland, Australia, policies and policy guidelines have been established to provide educational services which support staff in inclusive state schools. A Special Education Program (SEP) is offered to schools where support for students with a disability is required. A short review of the function of a SEP, taken from Education Queensland's (2018b) explanation:

A special education program (SEP) draws a cluster of specialist teachers, teacher-aides and resources to a particular school. A school's SEP is designed

to be dedicated to supporting the educational needs of students with disability to access, participate and achieve at school. At the head of the SEP is the Head of Special Education Services (HOSES), assisted by a qualified special-education teacher and three teacher-aides.

In addition to this, Queensland's Inclusive Education policy clearly states that,

Teachers must have a good understanding of the social and economic factors that influence a student's ability to engage in education. They must be given the opportunity to update and refine their knowledge of issues of poverty, gender, disability, location, culture and sexuality in order to respond to diversity and to deliver productive pedagogies effectively. (Department of Education and Training, 2018, p. 1)

The policy expectation in Queensland is that teachers will have an inclusive approach to education and therefore provide all students with equal educational opportunities (Forlin, 2006).

1.7 RESEARCH PROBLEM

Given the number of children being diagnosed with ASD each year in Australia (Australian Bureau of Statistics, 2016) and the policy of inclusion, it is imperative that teachers have the appropriate skills to support the needs of students with ASD in their classrooms. My anecdotal evidence suggests that mainstream schools may have tensions between the expectations of teacher capacity to implement the inclusive practices required in the Queensland policy, and the actual capacity of teachers to support their students with ASD as outlined in the literature.

1.8 RESEARCH PURPOSE

My purpose in this study was to develop a more sophisticated understanding of the perceived tension between the expectations of teachers and their capacity to implement the inclusive practices required by policy.

1.9 RESEARCH QUESTION

1. What tensions exist between teacher capacity to implement inclusive practices for students with ASD in mainstream schools and their actual capacity?

Based on the literature reviewed in Chapter 2, the following sub-questions were also generated:

1. What are the teachers' experiences of supporting students with ASD?
2. How do these teachers develop the necessary skills to support students with ASD?
3. How do these teachers enact that support?
4. What are the relationships between classroom teachers, specialist subject teachers, teachers from the Special Education Program and teacher-aides?

1.10 SIGNIFICANCE OF THE RESEARCH

As a consequence of policy, the responsibility for ensuring an appropriate education for students with ASD lies with the teachers themselves. The Council for Exceptional Children (2010) argue that exceptional educational services for students with disabilities are based on the expertise, qualifications and skills of the service providers. In contrast to the expectations of policy, the anecdotal evidence from my personal discussions with teachers in Queensland schools indicate that there is indeed a shortage of teachers who are suitably skilled and qualified to serve the needs of students with ASD.

This research is significant as it seeks to understand what tensions exist between teacher capacity to implement inclusive practices for students with ASD in mainstream schools and their actual capacity to achieve this. Understanding these tensions may provide professional practice implications as well as provide direction for ongoing research in this important field of supporting students with ASD in inclusive settings.

1.11 THESIS STRUCTURE

A thesis with publication at Australian Catholic University includes one or more academic journal articles which are included in the document. This thesis contains one journal article, which has been published in Chapter Four. This article is part of the student's research, and the contribution by others concerning this publication is outlined in the student's research portfolio in Appendix A. The remaining chapters of this thesis are in the traditional format, and a chapter-by-chapter outline of the content of the thesis is provided below.

Chapter 2 explores the literature pertaining to the education of students with ASD in inclusive school settings. The prevalence of ASD and the inclusion policies of both national and state authorities mean that children with ASD are increasingly present in mainstream school settings. There is little opposition in theory to the notion of inclusion, but in practice, there appears to be considerable opposition from a range of sectors within the community. The majority of the responsibility to make inclusion work is left to teachers. Studies outlined in the literature review show that the inclusion of students with ASD indicates that there is a tension between the expectations of teacher capacity to implement the inclusive practices required by policy and their capacity to implement inclusive practices. The review of the literature also discusses that this tension may be further heightened in schools without a Special Education Program (SEP), as these teachers will be working in schools without the supports that a Special Education Program (SEP) is supposed to provide.

Chapter 3 outlines the theoretical framework underpinning the current study. The chapter begins with a brief overview of the theoretical framework, which includes a discussion of the epistemological stance adopted for this study, which is constructionism. The chosen theoretical perspective is interpretivism and embedded within this is symbolic interactionism. Consistent with these perspectives, case study methodology has been used where data collection, adopted to investigate the case, included document analysis, survey and semi-structured individual interviews. Presented is a rationale for the selection of case study to address the research question related to what tensions exist between teacher capacity to implement inclusive practices for students with ASD in mainstream schools and their actual capacity to achieve this. A document analysis was the basis of the first data collection and formed the first results, which is Chapter Four. In addition, one school with a SEP attached is the site of the case study where 24 teachers and teacher-aides participated in an online survey and 17 of these participated in individual interviews. Data were analysed using the General Inductive Qualitative Method.

Chapter 4 includes the published journal paper, a document analysis, which is also the first results chapter for the study. Documents analysed were those pertaining to the course content and structure of university and teacher-aide pre-service training in Queensland. Additionally, program enrolment guides were examined, and further data gathered from direct contact with institutions. Education programs were narrowed

from 101 down to 45, which included both early-childhood and primary education programs, plus eight online teacher-aide training programs. Findings are discussed in light of the results found from the document analysis.

Chapter 5 displays results obtained from teachers in the current study. I report on findings drawn from the responses made by 17 teachers to an online survey, and face-to-face interviews with 12 of those respondents who agreed to a follow-up participation. In line with the research questions, I present the data collection, analysis and interpretation during this stage of the study.

Chapter 6 reports on data drawn from the responses made by seven teacher-aides to an online survey, and face-to-face interviews with four of those respondents who agreed to a follow-up participation. In line with the research questions, I present the data collection, analysis and interpretation during this stage of the study. Consistent with Chapter 5, the results obtained focused on the issues of planning and support, professional development, collaboration, resources, interaction with staff and modification of environment.

In **Chapter 7** the research findings related to the literature are discussed. Theoretical propositions are then advanced consistent with an interpretivist study. Also highlighted is how the research contributes to current knowledge. Findings relevant to teachers, teacher-aides and researchers, along with the implications of these is also included. The chapter concludes with both recommendations for further research and the current study's limitations.

Chapter 2: Literature Review

2.1 INTRODUCTION

The impetus for this study was a pragmatic concern for teachers working with students with ASD as they negotiate how to include these students into mainstream school settings. My purpose in this study was to develop a more sophisticated understanding of the perceived tension between the expectations of teachers and their capacity to implement the inclusive practices required by policy. The structure of Chapter 2 begins with an introduction to the method used to locate relevant literature in Section 2.2, followed by an introduction to the literature in 2.3 Five themes, generated from the review of the literature are covered: Section 2.4 examines the literature pertaining to ASD and inclusion guidelines, followed by training in Section 2.5. Attitudes and the relationships between students and staff are examined in Sections 2.6 and 2.7. In Section 2.8, the literature related to burnout when teaching students with ASD is discussed. The conclusion to this chapter is followed by the research questions which are presented in Section 2.9.

2.2 METHOD

A comprehensive search of four selected computer databases, A+ Education, ERIC, ProQuest and PsycINFO was conducted. Combinations were used with keywords (*=truncation): *autis**, *teacher attitudes autis**, *teacher efficacy autis**, *educator self-efficacy autis**, *ASD*, *teacher training* and *teacher education* for the period 1999-2016. This timeframe was selected due to research in education not having a major focus of inclusion prior to 1999. The following criteria had to be met for inclusion in this review:

1. Articles were published in a peer reviewed journal.
2. Participants were teachers or teacher aides in early-childhood, primary and secondary settings (teachers of students who have ASD in university settings were excluded).
3. Participants from each study had worked with a student who has ASD in a mainstream school setting.

4. Articles relating to inclusion perspectives were included only if the primary focus was in relation to inclusion and ASD.
5. A search of each reference list from the selected articles was also conducted to ensure the author covered any articles based on these criteria.

Of the 3693 articles found through the aforementioned search engines, 63 were included for the current review based on the criteria outlined above. Studies were rejected based on irrelevant keywords, abstracts, and/or being outside the field of education. The 63 studies were initially ordered chronologically, with keywords and findings from each study being color-coded in order to develop themes for the current review. This process generated five themes, with particular articles corresponding with more than one theme. Outlined in the table below are the themes for the current review, with a summary of each of the studies in the sections following.

Table 2.1 Themes

Themes	No. of Articles	No. of Journals	Countries where studies were conducted within each theme	Year/s Published
ASD and Inclusion Guidelines	12	11	USA, Ireland, England	2000-2017
Educator Training	10	9	Greece, Saudi Arabia, England, Singapore, Australia, USA	1999-2017
Educator Attitudes	18	16	Jordan, USA, Greece, Sweden, England, Ireland, Scotland, Malaysia, Australia, Singapore	2001-2017
Educator Relationships with Students and Staff	11	11	England, Scotland, Sweden, USA	1999-2011

Educator Burnout	26	23	Australia, Finland, 2001-2013, Ireland, Canada, USA, Switzerland, Spain, Syria, Germany, Norway
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2.3 INTRODUCTION TO THE LITERATURE

Since Leo Kanner’s first description of autism in 1943, the disorder continues to be debated among researchers in a variety of fields (Besag, 2009; Elphinstone, 2004; Gargaro, Rinehart, Bradshaw, Tonge, Sheppard, 2011; Greenfield, 2011). As a result, the pioneering work of Kanner (1943) and Asperger (1944) has since resulted in extensive research on autism spectrum disorder (ASD), and many would argue that we now have a much better understanding of the disorder. Despite these understandings, there remain conflicting beliefs relating to the causation or treatment of ASD between parents, mental health professionals, teachers and the public (Fleury et al., 2014; Helps, Newsom-Davis, & Callias, 1999). The conflicting beliefs could be a result of ASD being characterised by significant deficits in basic areas of functioning, such as learning and behaviour, social interaction, and communication, each presenting individual challenges for teachers working with students with the disorder (Berkell, 1999; Happé, 1998; Quill, 1995). Beyond these, people with ASD often display (1) difficulty connecting suitably with others, (2) diverse communication and language disorders, (3) difficulty working with an unmodified curriculum (4) an assertion for environmental monotony, and (5) stereotypic, repetitive, and self-stimulatory responses which can be difficult to understand (American Psychiatric Association, 2013; Scheurermann & Webber, 2002).

Both researchers and clinicians report an increase in the prevalence of ASD in current and upcoming student populations. Although well reported, the ASD prevalence data remains disputed with The Centers for Disease Control and Prevention (2018) in the United States claiming the prevalence of ASD to be one in 59 children. This figure stands in stark contrast to the estimates by the Centers for Disease Control and Prevention in 2002 and 2000, which remained at a considerably lower incidence of 1 in 150 children for both reporting years. Even by 2007, the prevalence of ASD in Australia was still being reported to be one in 160 children aged six to 12 years

(Williams, MacDermott, Ridley, Glasson, & Wray, 2008). However, by June 2012, ASD prevalence had increased to at least one in 61.5 of school-age children (Buckley, 2013). Regardless of which statistic is used, it is irrefutable that students with ASD have been progressively enrolled worldwide in mainstream schools within the last several years (Safran, 2008). It is difficult to assess whether prevalence has increased due to changes in diagnosis or whether there is an increase in incidence (Liu, King, & Bearman, 2010), but these figures make it clear that ASD is more prevalent than blindness, deafness, cerebral palsy, leukemia, and childhood diabetes combined (Williams et al., 2008).

The Salamanca Statement and framework for action on special needs education (UNESCO, 1994) declares that access to mainstream schools that use a child-centred pedagogy, tailored to meeting the needs of students who have special educational needs, including ASD, is a necessity. The result of the Salamanca Statement (UNESCO, 1994) has seen the centre of education increasingly in transition towards inclusion (Forlin, 2006). Findings in the ten years following the release of the Salamanca Statement showed that some schools in Australia were unable to accomplish the paradigm of inclusion due to direction by “impassive bureaucracies and/or teachers’ unions who were more anxious with ideology than substantiating what happens in the classroom” (Donnelly, 2004, p. 27). Nonetheless, it can be argued that the majority of students with disabilities, including ASD, attend mainstream schooling today alongside their typically developing peers in both Australia, and in most parts of the world (Safran, 2008).

Despite there being limited adherence to certain policies such as the Salamanca Statement, activists continue to argue for the inclusion of students with ASD within mainstream schools as it improves their self-esteem, and at the same time allows them to obtain additional social skills not attainable if attending to an education in isolation. It also can lead to an empathetic and accommodating attitude by peers (Cassimos, Polychronopoulou, Tripsianis, & Syriopoulou-Delli, 2015). There are further favourable outcomes for neurotypical peers including learning and embracing of alternative attitudes and behaviours (Kasari, Rotheram-Fuller, Locke, & Gulsrud, 2012; Mesibov & Shea, 2011).

Whilst studies have highlighted positive outcomes for the inclusion of students with ASD (Kasari et al., 2012; Mesibov & Shea, 2011; Rotheram-Fuller, Kasari,

Chamberlain, Locke, 2010), the perceptions of teachers regarding ASD and inclusion have been examined to a much lesser extent. Some early studies claimed that mainstream teachers regarded themselves as unqualified to deal with students with ASD (McConkey & Bhlirgri, 2003; Mavropoulou & Padeliaadu, 2000; Whinnery, Fuchs, & Fuchs, 1991). Similar studies from the same time reported that mainstream schools can support students with ASD by increasing their social cognisance, confirming that teachers play a vital part in the successful inclusion of students with ASD (Burack, Root, & Zigler, 1997; McGregor & Campbell, 2001). It has been stated that two imperative features of the successful inclusion of students with ASD are that teachers be willing to participate, and that they have appropriate teacher training (Huskens, Reijers, & Didden, 2012).

2.4 ASD AND INCLUSION GUIDELINES

Since the inception of the Salamanca Statement (UNESCO, 1994) and the inclusion of students with ASD in mainstream schools, no singular, universal guidelines have been used regarding how to achieve this effectively. However, few models and procedures have been developed to enable the effective placement and care of students with ASD in mainstream classrooms (Simpson, de Boer-Ott & Smith-Myles, 2003) but these have not been widely accepted as universal guidelines. This need has placed great pressure on schools and education departments globally to develop inclusion programs with a shortage of clear procedures and guidelines to follow. Simpson et al., (2003) predicted that including students with ASD would continue to be a significant challenge for schools for decades after a revision of their own model. Reading between the lines of research, which was conducted by Kucharczyk et al., (2015), it appears that this challenge still exists. To develop appropriate guidelines, which can be used by all educational institutions worldwide would indeed be a challenge. This is due to the diverse nature of ASD, along with differing laws pertaining to local jurisdictions. In the absence of definitive guidelines, there are measures that teachers can use to alleviate difficulties experienced when including a student who has ASD in a mainstream school, and some of these are the focus of discussion below.

It has been widely recognised that all students with ASD need meticulous and individualised planning in order to achieve educational success (Dybvik, 2004; Lang & Fox, 2004; Leach & Duffy, 2009; Shyman, 2012). When students with ASD are

placed in a mainstream school setting, their presence can create additional pressure on the inclusive school program regardless of its design. In an effort to minimise this effect, Simpson et al., (2003) believe that collaboration is crucial in order for the successful inclusion, and should also include shared responsibility between general and special teachers, teacher-aides, and parents. Several studies have highlighted the need for environmental modifications; in-classroom and social support; whole-school commitment; regular evaluation of practices and updated knowledge regarding instructional methods; plus, a positive collaboration between home and school in order for inclusion and ASD to work (Dybvik, 2004; Lang & Fox, 2004; Leach & Duffy, 2009; Shyman, 2012; Simpson et al., 2003). Additionally, students with ASD need suitably trained support personnel, a reduction in class sizes, communication within collaborative relationships among staff, sufficient teacher preparation time, and in-service training (Simpson et al., 2003). These findings are echoed by Dybvik (2004), who believes that program development for each student who has ASD should be unique to that child, based on his or her set of needs.

Dybvik, (2004) outlines the worst practices of inclusion by using one student who has ASD as the basis for her paper. At the forefront of this list is her criticism of a demand for inclusion at all costs regardless of student outcomes, or simply an insistence on a student's physical presence within the classroom. Several other studies have echoed her concern for poor inclusion practice, by highlighting limited staff training, teaching by rote to ensure the student passes tests, limiting communication with paraprofessionals and failing to effectively include peers to ensure their understanding of ASD (Dybvik, 2004; Hess et al., 2008; McGillicuddy & O'Donnell, 2014; Symes & Humphrey, 2011a). Due to the continuing modification of what is considered best practice for the inclusion of students with ASD, it has been noted that teachers must constantly be aware of current research in order to incorporate new strategies within daily programs (Westling & Fox, 2000).

Developing universal ASD and inclusion guidelines for teachers to use, seems meaningless when considering the notion advanced by Hess et al., (2008) that the first step towards successful inclusion is the improvement of teacher training in relation to ASD. It has been noted in the past that teacher-training programs are rarely taught by special education professors and are typically classes that focus on various teaching strategies to cater for the range of characteristics found in students with ASD (Dybvik,

2004). The professional development of all teachers, including both pre-service and in-service in special and general education must contain coursework and resources, which are focused on understanding ASD (Fleury et al., 2014; Shyman, 2012). Shyman (2012) considers that despite students with ASD being consistently enrolled in mainstream schools in recent years, the field of teacher training that has an explicit emphasis on ASD is still in its beginning stages. Studies have been conducted which appear to support this statement, and will be outlined in the following section.

2.5 TRAINING

Lack of universal guidelines for inclusion of students with ASD outlined above also plays out in regard to teacher training. During the past few decades, a serious absence of well-prepared teachers in the developing field of ASD exists despite calls for training to occur (Cassimos, et al., 2015; Haimour & Obaidat, 2013; Helps et al., 1999; Hess et al., 2008; Mavropoulou & Padeliaadu, 2000). Due to the increase in prevalence of ASD as discussed earlier, the demand to provide relevant and specific training for teachers has reached an all-time high. To meet the complex needs of students with ASD, several studies have highlighted that teachers need a specialised skillset and foundational knowledge (Barned, Knapp & Neuharth-Pritchett, 2011; Hess et al., 2008; Shyman, 2012; Symes & Humphrey, 2011a). Furthermore, the demands of teachers who work with students with ASD are greater when considering the collaborative relationships needed with a large selection of personnel, such as outside experts and other staff (Lang & Fox, 2004).

Previous studies have indicated that often the specialised training and foundational knowledge has not been delivered within pre-service education programs, and teachers are placed in the problematic position of gradually learning in classrooms through day-to-day experience (Dybvik, 2004; Shyman, 2012; West, Jones, Chambers & Whitehurst, 2012). Barned et al., (2011) conducted a small-scale in-depth study with 15 early-childhood pre-service teachers. Findings from this study showed that participants lacked knowledge and believed basic fallacies about ASD, such as that children could “outgrow” ASD. In support of these findings, Symes and Humphrey (2011a) conducted a study with 15 teacher-aides who work with students with ASD, with results showing that many of the participants had no experience of ASD prior to working in schools or little to no training. Considering how often classroom teachers place the responsibility of a student who has ASD in the hands of

teacher-aides, this research suggests a need for everybody who works with students with ASD to be adequately trained. More recently, Thaver and Lim (2014) conducted a large quantitative study with 1538 pre-service teachers, with findings indicating little change, and in particular that pre-service teachers had limited or no knowledge and experience with disabilities. In the seven types of disabilities examined, limited knowledge of severe disabilities was found, including 77.7 per cent of 1194 participants not knowing about ASD.

In addition to the few studies examining pre-service training, few researchers have examined the in-service training of teachers in schools where students with ASD are present. One study with this focus was by West et al., (2012) where they conducted a study in the USA, UK and Australia with 38 practicing teachers. The study identified areas where more assistance was required, such as the observation of appropriate classroom practice, concentrated in-service learning opportunities, the availability of mentors and assistive technology training. Lang and Fox (2004) considered similar issues and recommended that this could be achieved by school systems that need to run high-level professional development activities in order to create competent and better-prepared staff for students with ASD. In order to develop these professional-development opportunities, it has been widely proposed that teachers, consultants, and other outside experts should assist schools in the development of sophisticated plans (Frederickson, Jones & Lang, 2010; Haimour & Obaidat, 2013; Lang & Fox, 2004; Mavropoulou & Padelidiadu, 2000).

Although the importance of pre-service and in-service training has been documented in the aforementioned studies, additional implications of poorly prepared teachers who work with students with ASD have been highlighted. Hess et al., (2008) used a representative sample of 185 teachers who work with students with ASD in grades pre-school to Year 12. Their survey, The Autism Treatment Survey, was used to identify what strategies were being used in the education of children with ASD (Hess et al., 2008). It was revealed that strategies varied considerably depending on the grade and classroom type, and that there is a necessity for continual research regarding evidence-based strategy use in mainstream schools where students with ASD are present. These findings resonate with the work by Fluery et al., (2014) where they argue that there is a vital demand for the expansion of academic research-based interventions that concurrently focus on the specific learning needs of students with

ASD in secondary schools. Regardless of what training is provided for pre-service/in-service and/or to general teachers/special education teachers, it needs to be comprised of coursework and resources that are focused on understanding ASD.

2.6 ATTITUDES

Attitudes can be defined as positive or negative evaluations of issues, behaviour or people (Babin & Harris, 2014). The absence of clear guidelines to enable the successful inclusion of students with ASD, and limited training of teachers could affect attitudes and educational outcomes for this particular cohort. Teacher attitudes are important because they determine the success of a teacher's chosen interventions for children with ASD (McGregor & Campbell, 2001). Two key aspects highlight the importance of a teacher's attitude towards the inclusion of students with ASD. Firstly, teacher attitudes play a vital role in the level of inclusion provided, and secondly, attitudes can influence teachers' expectations of students with ASD, impacting students' self-image and academic performance (Park & Chityo, 2011). The importance of understanding the basis of teacher attitudes pertaining to inclusion and ASD is because it can enable the appropriate development of pre-service and in-service teacher training.

Teacher attitudes regarding the inclusion of students with ASD have been noted to be influenced by several factors, for example: gender, age, educational background, years of teaching experience, and a background of general or special education but most importantly, specialised ASD training (Abu-Hamour & Muhaidat, 2013; Cassimos et al., 2015; Engstrand & Roll-Pettersson, 2014; Thaver & Lim, 2014). When considering this and the lack of universal guidelines, these factors will impact accommodations made by teachers, and ultimately the level of effort spent to ensure full inclusion (Thaver & Lim, 2014).

Without the appropriate training, teachers with negative and/or indifferent attitudes can have negative consequences for the successful inclusion of students with ASD, resulting in alienation and distress for the student (Cassady, 2011; Segall & Campbell, 2012). When teachers display such attitudes, they risk modelling discriminatory attitudes, and as Holzbauer & Conrad (2010) suggested may be taken up and exhibited by neurotypical students towards their peers with ASD. Whilst certain studies indicate negative and indifferent teacher attitudes towards the inclusion of

students with ASD, explanations of what causes these attitudes vary (Barned et al., 2011; Kelly & Barnes-Holmes, 2013; Park & Chitiyo, 2011; Thaver & Lim, 2014). One study examined the attitudes towards inclusive education and disabilities from over 1500 pre-service teachers, and found that the majority of participants (n=1528) believed that students with disabilities such as ASD are better placed in special schools (Thaver & Lim, 2014). This particular study highlighted that a minimal connection was established between the pre-service teacher attitudes and the demographic variables mentioned above. On the other hand, Park and Chitiyo's (2011) study of 127 teachers in primary, middle and secondary schools stated that a negative attitude was pointedly linked with age and emphasised that the younger the participants, the more positive their attitude. They found also that a negative attitude was linked with the teacher's school level, and that primary school teachers were generally more positive than middle and secondary school teachers (Park & Chitiyo, 2011). Barned et al., (2011) examined 15 early-childhood pre-service teachers' attitudes and found that almost all believed the inclusion of children with ASD was appropriate. However, two-thirds of the participants also reported that students with severe and/or low-functioning students with ASD present with too many impairments, and therefore do not consider that they gain anything from a general education setting (Barned et al., 2011).

At the same time, several studies highlighted that teachers do have positive attitudes towards the inclusion of students with ASD (Humphrey & Symes, 2013; Razali, Toran, Kamaralzaman, Salleh, & Yasin, 2013; Ruble, Usher & McGrew, 2011; Soto, Pooley, Cohen & Taylor, 2012). It has been noted that students' attitudes towards peers are often aligned with those of teachers, in that positive attitudes exist towards peers with mild symptoms of ASD, and negative attitudes with peers who have more severe symptoms of ASD (Dowjotas, 2009). Two studies found that participants with higher levels of experience, and an awareness of better practice options for students with ASD reported more positive attitudes overall (Jennet, Harris & Mesibov, 2003; Segall & Campbell, 2012). This implies that access to inclusion guidelines and better teacher training would result in more positive teacher attitudes and outcomes for the inclusion of students with ASD. One study, which is in contrast to previous findings, and conducted by Humphrey and Symes (2013), found generally more positive attitudes by teachers, with some participants suggesting that socialisation can promote acceptance. Another key finding from this study of 53 teachers within 11 secondary

schools was that generic training might not be as beneficial as suggested by other researchers. Instead, they argue for informed, targeted training as a whole school approach when working with students with ASD. This notion has been discussed further in the following section, which pertains to the relationships between teachers, and studies that outline relationships between teachers and students with ASD.

2.7 RELATIONSHIPS

As students with ASD present with unique difficulties, teachers may have trouble in managing both their own and other students' needs, which could significantly impact rapport. This is perhaps in contrast to teacher-aides who often have one-to-one working relationships with students with ASD. (Emam & Farrell, 2009). In an effort to understand teacher needs, a number of studies have examined the relationships between teachers and teacher-aides, and between teachers and students with ASD in mainstream settings (Emam & Farrell, 2009; Robertson et al., 2003; Symes & Humphrey, 2011a; Symes & Humphrey, 2011b) with many areas inside this theme worth investigating.

A study conducted by Emam and Farrell (2009) investigated pressures on collaborative relationships that teachers in mainstream schools may experience when working with students with ASD. Teachers in this study demonstrated a positive attitude towards the inclusion of students with ASD only when a teacher-aide was available to assist, which demonstrated the teacher had less responsibility for the child overall (Emam & Farrell, 2009). Similar findings were found in Symes and Humphrey's (2011a) study, which demonstrated conflicting evidence with some teachers not fully utilising teacher-aides effectively, whilst others had heavy reliance on teacher-aides. In order to improve working relationships between the classroom teacher and teacher-aides, it was suggested that teacher-aides be assigned to subject areas, rather than particular students (Symes & Humphrey, 2011a). This recommendation may well be suitable for the secondary school setting, but it is not suitable at the primary level as teachers teach all subject areas. Training both the teacher and teacher-aides in collaboration has also been recommended as it could ensure an understanding of each person's role in the classroom and the support that is required (Morewood, 2009). Beyond the teacher and teacher-aide relationships, it has been noted in several studies that the one-to-one working relationships between teacher-aides and students with ASD can often have a negative impact on peer

relationships due to a reduction in teacher attention and independent learning with peers (Farrell, Balshaw & Polat, 1999; Hemmingson, Borell & Gustavsson, 2003; Howes, 2003).

Beyond the issues of collaboration, higher incidences of behavioural problems reduced the quality of the teacher-student relationship. One study observed 187 students, 12 of whom had ASD, and the relationship between peers, the classroom teacher and teacher-aides (Robertson et al., 2003). Two contrary findings from other studies were that the teacher-student relationship was improved if the student was better accepted by his or her peers, and that the presence of teacher-aides in the classroom did not negatively impact classroom response to the student with ASD (Robertson et al., 2003). Blatchford et al. (2011) later work did not support the findings by Robertson et al. (2003) with their findings suggesting that many teacher-aides felt devalued because the classroom teacher and students did not appreciate their roles. Teacher understanding of ASD and the role of a teacher-aide has been mentioned as a cause for deterring appropriate support for students with ASD (Symes & Humphrey, 2011b).

As a number of studies (Blatchford et al., 2011; Glashan, MacKay & Grieve, 2004) have found that generic training for teacher-aides is not as effective as learning and collaborating with experienced staff members, suggestions have been made to support a collaborative learning environment. Firstly, making a collaborative environment in schools where requesting information is encouraged, followed by the opportunity for teacher-aides to attend staff meetings to gain advice from colleagues, and shadowing teacher-aides to provide advice on how to better support students with ASD were all suggested (Symes & Humphrey, 2011b). This research stresses the importance of how school staff experience and knowledge needs to be esteemed and shared through appropriate means, as a way to develop positive outcomes for students with ASD. These findings can be extended to more experienced staff being encouraged to connect and remain working with their colleagues within schools, as those with knowledge and demonstrated proficiency could mentor newer members of staff (Morewood, 2009). Perhaps education departments and schools will have to place greater importance on the sharing of best practice, and how their experience can be shared. This could have a positive effect for teachers who are feeling overwhelmed by the expectations placed on them to successfully include students with ASD.

2.8 BURNOUT

It has been suggested that the study of teacher burnout needs a complete model, which can link the varying theoretical features that contribute to burnout (Mason & Matas, 2015). Despite this missing model, researchers have found that there is a high incidence of stress and burnout in the field of education, with the highest levels of occupational stress being reported by teachers in Australia, the UK and US (Howard & Johnson, 2004; Milburn, 2011). It has been estimated that one in four teachers do not teach beyond five years in Australia (Manuel, 2003; Marshall, 2013; Milburn, 2011) however, teacher burnout is a “complex phenomenon with numerous variables at play” (Mason & Matas, 2015, p. 58). According to Maslach, Leiter and Jackson (2012), the three main components of burnout are firstly, emotional exhaustion (not being able to teach effectively due to a poor psychological state). Secondly, depersonalisation (having negative attitudes towards students and schools) where teachers may feel burdened to express attitudes in accordance with what is thought to be socially acceptable while trying to overcome negative biases towards students with ASD. This second component can lead to burnout and other psychological problems (Pruett & Chan, 2006). Thirdly, reduced personal accomplishment (unhappy with their work and personal satisfaction). This is evident when there is a marked decline in the interest to teach due to a sense of inadequacy, powerlessness and incompetency, and as a result, a lower level of job satisfaction is experienced by the teacher (Hakanen, Bakker & Schaufeli, 2006; Maslach, Schaufeli & Leiter, 2001; Schaufeli & Salanova, 2007). Further to these three aspects, catering to students with ASD presents with a range of characteristics, which can create an excessive workload for teachers (Ruble et al., 2011), especially if limited pre-service and in-service training is provided and if no guidelines are available. Despite most teachers acknowledging that stress is part of the profession, continuing stress seems to lead to burnout (Jennett, Harris, & Mesibov, 2003; Skaalvik & Skaalvik, 2010). Educating students with ASD may increase teachers’ vulnerability to stress and burnout due to managing this particular group of students’ unique needs (Billingsley, Carlson, & Klein, 2004; Boyer & Gillespie, 2000).

The social conduct and attitudes of teachers who present with symptoms of burnout may have explicit consequences in the ability to sustain a positive working environment with other staff and students because of issues such as increased exhaustion and cynicism (Hakanen, Bakker & Schaufeli, 2006). On a more positive

note, Ruble et al., (2011) conducted an in-depth study with 35 teachers working with students with ASD across two states in the USA, finding that teacher confidence was correlated with lower levels of burnout. There were also correlations between administrator support and emotional exhaustion, suggesting that administrators may play an important role in preventing teacher burnout (Ruble et al., 2011). In support of these findings, Praisner (2003) found that successful inclusion could be determined by the preparedness of administrators to provide appropriate opportunities for students with ASD to remain in mainstream classes, giving them opportunities to learn with their peers.

Aside from appropriate administrator attitudes, other factors can reduce the risk of stress and burnout among teachers. Inclusive schools need positive attitudes to be conveyed by all in the school community, from people such as administrators, teachers, teacher-aides, students, parents (Kolar & Dickson, 2002). In addition to this, guidelines to develop a sense of self-efficacy, having a collaborative working relationship with students and colleagues to provide emotional support, and recognition for the use of appropriate strategies are of equal importance (Flook, Goldberg, Pinger, Bonus, & Davidson, 2013; Gardner, 2010; Klassen, Perry & Frenzel, 2012). Teachers who know their own thoughts and feelings, or have 'mindfulness', can react competently to mental processes that create emotional concern and defective behaviour (Bishop et al., 2006; Flook et al., 2013). Here the researchers argue that if a teacher possesses an understanding of his or her negative attitudes towards students with ASD, the potential for psychological stress and burnout can be reduced.

Taking the work of these researchers one step further, Kelly and Barnes-Holmes' (2013) in-depth study of 32 teachers, advanced the need to develop professional training programs that deal with burnout and the symptoms that foster burnout, such as stress and depersonalisation among teachers working with students with ASD. As special teachers are noted for being those with the highest burnout rates of all teachers, (McLeskey, Tyler, & Saunders, 2004), a significant loss of skilled and experienced teachers only further impacts the issue of successfully including students with ASD (Howard & Johnson, 2004; Mearns & Cain, 2003).

This comprehensive review of the research literature has been conducted in order to feature the main issues surrounding the inclusion of students with ASD in

mainstream schools. The following is a model, which has been developed in an attempt to understand the continuum of experiences that are reported in the research literature between schools that are effectively embracing the paradigm of inclusion and those that have yet to achieve this. The top half of the model represents the worst-case scenario where teachers have limited training and poor inclusion guidelines ultimately leading to negative attitudes, poor relationships and minimal collaboration within the school community. As demonstrated by research outlined in the literature, this scenario often leads to a limited chance of successfully including students with ASD in mainstream classrooms and an increased incidence of teacher burnout. On the bottom half of the model, when pre-service training has been completed, and in-service training is regularly conducted with the staff in inclusive schools, several positive outcomes are found. When appropriate inclusion guidelines are developed for all staff to follow, positive attitudes are more likely to resonate throughout the school community. The ultimate goal from taking such steps would be to achieve the successful inclusion of students with ASD and reduce the likelihood of teacher burnout.

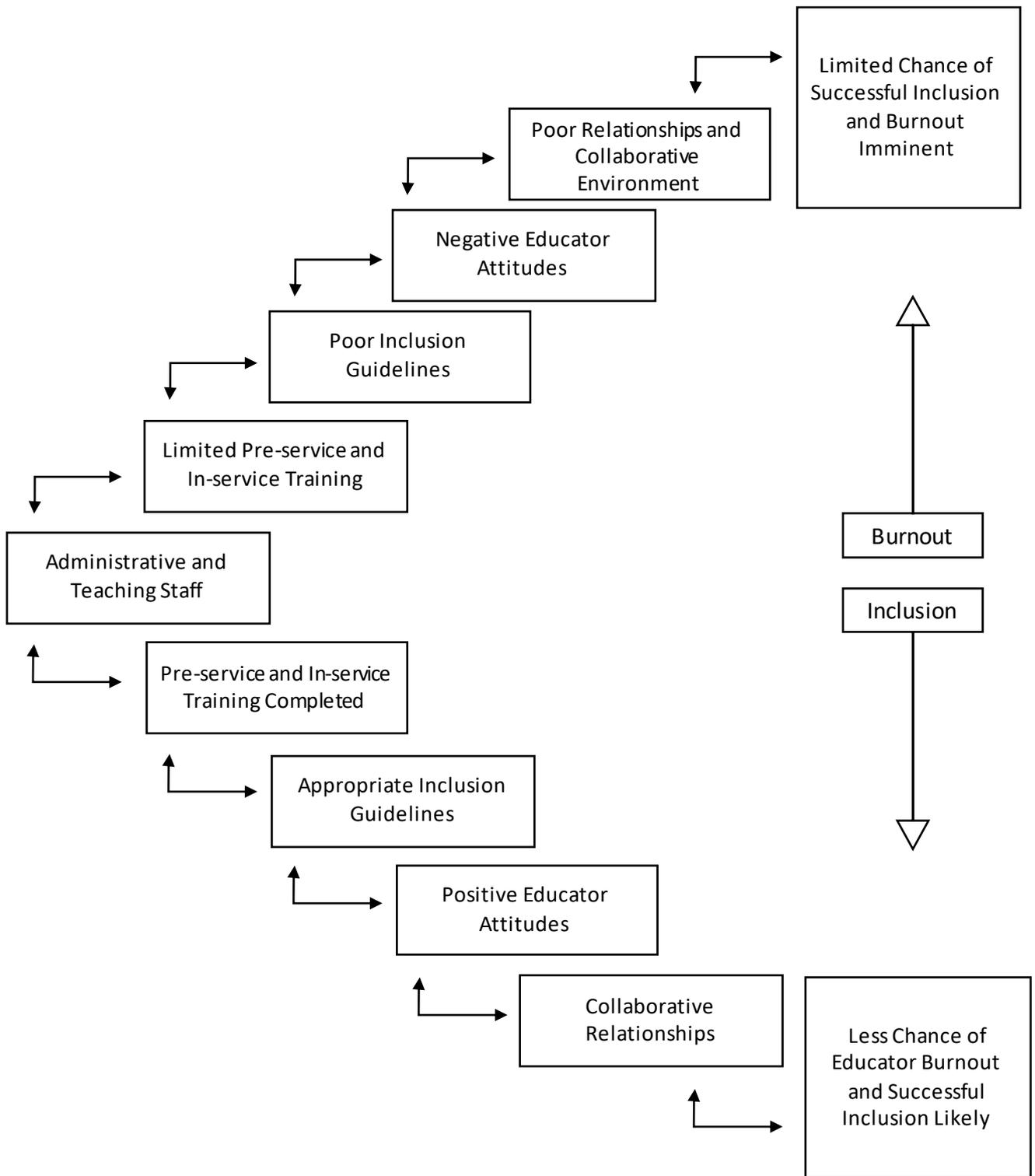


Figure 2.1. The positive and negative circumstances affecting attempts to achieve the successful inclusion of students with ASD.

2.9 RESEARCH QUESTION

The prevalence of ASD and the inclusion policies of both national and state authorities mean that children with ASD are increasingly present in mainstream school settings. There is little opposition in theory to the notion of inclusion, but in practice, there appears to be considerable opposition from within the schooling sector. The majority of the responsibility to make inclusion work is left to teachers. Studies outlined in the literature review show that the inclusion of students with ASD indicates that there could be a tension between the expectations and capacity of teachers to implement the inclusive practices required by policy. Despite these findings, there are schools that are revered due to their approach to inclusion. The overarching research question for this study is:

1. What tensions exist between teacher capacity to implement inclusive practices for students with ASD in mainstream schools and their actual capacity?

Based on the literature reviewed in this chapter it is reasonable to ask the following questions:

1. What are the teachers' experiences of supporting students with ASD?
2. How do these teachers develop the necessary skills to support students with ASD?
3. How do these teachers enact that support?
4. What are the relationships between classroom teachers, specialist subject teachers, teachers from the Special Education Program and teacher-aides?

Chapter 3: Research Design

3.1 INTRODUCTION

My purpose in this study was to develop a more sophisticated understanding of the perceived tension between the expectations of teachers and their capacity to implement the inclusive practices required by policy. To support this purpose, the research literature presented in Chapter Two generated four sub-research questions for the study.

In Chapter 3 I will present the research methodology used for examining these sub-research questions:

1. What are the teachers' experiences of supporting students with ASD?
2. How do these teachers develop the necessary skills to support students with ASD?
3. How do these teachers enact that support?
4. What are the relationships between classroom teachers, specialist subject teachers, teachers from the Special Education Program and teacher-aides?

These research questions target teachers and teacher-aides who teach in a mainstream school that has a Special Education Program (SEP) attached.

3.2 THEORETICAL FRAMEWORK

The epistemological stance adopted for this study is constructionism with the theoretical perspective interpretivism, and embedded within this is symbolic interactionism. Consistent with these perspectives, case study methodology has been used where data collection, adopted to investigate the case, included document analysis, survey and semi-structured individual interviews. This selection is now outlined in full and justified.

3.2.1 Constructionism

Epistemology can be defined as “the study of the limits and conditions of knowledge” (Bartlett, 2017, p. 1), which takes into account the fundamental choices we make when we attempt to know something. In attempting to know something,

constructionism explicitly acknowledges the potential for multiple perspectives with each perspective related to those involved. Its aim is to gather collectively agreed upon and diverse notions of what occurred, beginning with the idea that there can be no objective truth, by maintaining that meaning is predominantly generated by individuals and groups (Stake, 1995, 2000, 2005, 2006).

For constructionists, there is a consistent belief that knowledge is constructed when individuals and groups interact with something and with each other until they create their own jointly held understanding (Creswell & Poth, 2018; Crotty, 1998; Schwandt, 2000). This belief is further supported by the understanding that experiences in the social world are constructed socially (Neuman, 2014) through interactions, within the context of mutual understandings, routines, principles and language (Schwandt, 2000). Constructionism acknowledges that any particular group of people from any particular environment may well have differing interpretations of the very same reality. As a consequence, it is said that truth is relative and depends on one's perspective. Constructionists argue that people create meaning in connection with the social world in which they engage, and that meaning is based upon personal experiences and the teachings from within this (Neuman, 2014).

This epistemological stance is a suitable selection for this study as it “recognises the importance of the subjective nature of how humans create meaning, but doesn’t reject outright, some notion of objectivity. One of the advantages of constructionist-based research is the close collaboration between the researcher and the participants, which enables the participants to develop a relationship with the researcher/s such that they are willing to tell their own stories” (Crabtree & Miller, 1999, p. 10). When participants describe their own views of reality within their stories, the researcher can gain a better understanding of the participants’ actions and perception of reality (Lather, 1992; Robottom & Hart, 1993). Further to this, Creswell and Poth (2018) assert that individuals construct their own levels of understanding based upon their own individual experiences. A presumption of this research was that there would be multiple understandings of the tension between the expectations of teachers’ capacity to implement the inclusive practices required by policy, and their actual capacity. In particular, teachers and teacher-aides participating in this study may well have been shaped with or by others over time (Burbank & Martins, 2009; Neuman, 2014).

3.2.2 Interpretivism

A theoretical perspective is a collection of ideas about reality that guide the questions we ask and the types of answers we provide as a result. It is a collection of ideas about reality, and as a result, guide the questions we pose and the type of answers we provide (Crotty, 1998). A theoretical perspective is informed by the epistemological stance, so informing the research design, which includes the research methods and how the data will be analysed. There are several theoretical perspectives, including but not limited to, positivism, interpretivism, critical theory and postmodernism (Candy, 1989). The position of interpretivism is that interpretivists believe reality to be multiple and relative to one's experiences (Hudson & Ozanne, 1988). Multiple realities also depend on other meaning systems, which make the interpretation of fixed realities even more difficult (Lincoln & Guba, 1985). The acquired knowledge in this discipline is socially constructed and not objectively determined and perceived, as with other theoretical perspectives (Carson, Gilmore, Perry & Gronhaug, 2001).

Interpretive research is aimed at understanding and interpreting the meanings of human behaviour as opposed to generalising and predicting causes and effects, as is the case with positivists (Neuman, 2014). It is important for an interpretative researcher to understand time and context related interpretations, arguments and other subjective experiences (Hudson & Ozanne, 1988). Interpretivists use a flexible and more personal research structure, avoiding rigid structural frameworks in order to capture meanings in human interaction, and to understand what is seen as reality (Black, 2006; Carson et al., 2001). With this in mind, interpretivist researchers believe that the researcher and the participants in the study are interdependent and mutually interactive (Hudson & Ozanne, 1988), where new knowledge can develop throughout the study with participant assistance.

Although the discussion to this point implies that interpretivism is one constant, it is in fact, "not a homogenous position" (O'Donoghue, 2007, p. 21), but a position which is made up of other theoretical positions which fit within this perspective. These theoretical positions include hermeneutics, phenomenology, and symbolic interactionism:

- Hermeneutics is a branch of knowledge that deals with interpretation of texts. Using an open interpretation of the meaning of the text can allow the

possibility for the author to gain an understanding beyond their own (Crotty, 1998).

- Phenomenology is the study of structures of consciousness as experienced from the first-person point of view. It is a critical methodology that encourages the researcher to revisit their own conscious experiences, and in doing so, develop new meaning (Barkway, 2001).
- Symbolic interactionism is based on the understanding that people behave "on the basis of the meanings that the things have for them" (Blumer, 1986, p. 2).

3.2.3 Symbolic interactionism

Symbolic interactionism is focused on becoming closer to group life in order to better understand what is happening (Blumer, 1986). Therefore, employing this methodology requires

a high order of careful and honest probing, creative yet disciplined imagination, resourcefulness and flexibility in study, pondering over what one is finding, and a constant readiness to test and recast one's views and images of the area. That it is demanding in a genuinely rigorous sense can be seen in the analysis of its two fundamental parts. I term these parts respectively as "exploration" and "inspection". (Blumer, 1986, p. 40)

The usefulness of symbolic interactionism for this study is that it is a theoretical framework that can be used to explain the case. Symbolic Interactionists consider society to be an ever-changing network of communication, where it is considered interactive, and interaction is considered symbolic. It is through these interactions that people assign meaning to things, and will act, based on the meaning that things have for them. Symbolic interactionism is based on five central ideas:

1. "The human being must be understood as a social person and the constant search for social interaction leads us to do what we do. Social interactions are the basic units of study and are central to what we do. If we want to understand cause, focus on social interaction.
2. The human being must be understood as a thinking being. Human action is not only interaction among individuals but also interaction within the individual. If we want to understand cause, focus on human thinking.

3. Humans do not sense their environment directly; instead, humans define the situation in which they find themselves. An environment may actually exist, but it is our own definition of what it is that is important. Definition does not simply randomly happen; it results from ongoing social interaction and thinking.
4. The cause of human action is the result of what is occurring in our present situation. It is not society's encounters with us in our past that causes action; it is the social interactions of thinking, and defining situations taking place in the present.
5. Human beings are described as active beings in relation to their environment. In contrast to other social-scientific perspectives, humans are not thought of as being passive in relation to their surroundings, but actively involved in what they do." (Charon, 2010, p. 31).

Sitting alongside these five central ideas, are three premises of symbolic interactionism. The first is that each individual will interpret events in a way that is particular to them and their prior experiences. The second premise is that other people will have their own interpretation of events and these interpretations will be based on their prior experiences. The third is that through interaction, a common understanding and/or interpretation of events can develop (Charon, 2010). Using these premises assisted with understanding the case under study, particularly in relation to the tensions experienced by teachers and teacher-aides concerning inclusive policy.

Symbolic interactionism consists of two individual phases, exploration and inspection. Exploration being the action of exploring an unfamiliar area, inspection involving the careful examination or scrutiny of the data collected from the exploration phase. Blumer (1986) identified the exploration stage as having two distinct functions. The first provides opportunity for a researcher to become familiar with the empirical social world under study. In my study it assisted me to better understand the whole school and what areas required further inspection. The second is a familiarisation process, which allows the researcher to refine the inquiry process that will ultimately lead to the inspection stage. It was here that I was able to target recurring themes which developed from the exploration stage. The inspection stage includes isolating important elements in the empirical world or situation, portraying the situation in connection with these elements, and utilising this knowledge to examine other forms

of interaction (Blumer, 1986). Reinforcing Blumer's (1986) initial approach to this inquiry process, Charon (2010) detailed five principles of investigation that I was able to follow.

1. “The central principle of symbolic interactionism is that we can understand what is going on only if we understand what the actors themselves believe about their world” (p. 193). I designed the study to gather the voices of teachers and teacher-aides.
2. “Symbolic interactionists believe that it is important to gather data through observing people in real situations” (p. 193).
3. “Symbolic interactionists are critical of traditional social science, its use of scientific methodology for the study of human beings, and its definition of important causal variables.” (p. 194). The participants provided the basis of such definition.
4. “The symbolic interactionist regards a careful description of human interaction to be a central goal of social science” (p. 195). Again, this element was a core feature in the discourses of interaction that participants provided.
5. “The symbolic interactionist in studying human beings believes it is important to move away from mechanical models of causation (characteristic of natural science) to procedural models” (p. 195).

As this study allowed me to delve into how classroom teachers, teacher-aides and teachers from the Special Education Program experience tension between the expectations placed on them to implement inclusive practices required by policy, and their actual capacity to be supportive of students with ASD, a symbolic interactionist approach to investigation was adopted. Blumer (1986) states that “symbolic interactionism’s first principle is that human beings act towards things on the basis of the meanings that these things have for them” (p. 2). Such a perspective was appropriate for exploring the perceptions of the teachers and teacher-aides as to their beliefs and understandings of the concept of inclusion and the need to provide inclusive educational opportunities for students with ASD. “In symbolic interactionism, the focus is on how one interprets circumstances and chooses one course, or line of action, over another” (Oliver, 2012, pp. 2-3). This interpretative

perspective allowed me to focus upon the things that the participants actually do, why they do them and the purpose served by these actions (Bailey, 2007).

In this study I used a sequential approach to ensure qualitative data collection and analysis took place in phases rather than all at once. This is consistent with the theoretical perspective of symbolic interactionism, where data collection and analysis occur in two stages known as exploration and inspection (Charon, 2010). Within both the exploration and inspection stages, priority was given to the qualitative approach. The objective of the exploration stage was to obtain a perception of, “What is going on around here?” (Charon, 2010, p. 147), while the objective of the inspection stage was to focus on the investigation of specific issues identified during the preceding stage.

3.2.4 Case study

Creswell and Poth (2018) defined case study methodology as “an in-depth exploration of a bounded system based on extensive data collection” (p. 476), where Miles, Huberman and Saldaña (2014) interpret it as “a phenomenon of some sort, occurring in a bounded context” (p. 25). Both interpretations imply that each case should be studied within clearly defined limits or boundaries, and according to Stake (1995), integrated or in some way cohesive. Seeing that the teachers and teacher-aides at this particular location interact within a bounded system, which for this study was the tension between the expectations of teachers’ capacity to implement the inclusive practices required by policy, and their actual capacity to provide inclusive practices for students with ASD, it sanctions this study to be deemed a case study. Cognisant of this boundary, case study research provides the means by which one may explore and understand complex issues in a robust research methodology for holistic and in-depth investigations (Gulsecen & Kubat, 2006).

One reason for recognising case studies as a research methodology is that positivist researchers criticised the limits of quantitative methods in offering practical and thorough interpretations of the behavioural and social issues in question (Kroeze, 2012). In contrast to this perspective, qualitative researchers believe that by employing qualitative case study methods, a researcher is able to go beyond the quantitative statistical results to provide an in-depth understanding of the behavioural conditions through the participants’ perspective (Tellis, 1997). Case study research has become progressively accepted as an approach among qualitative researchers (Thomas, 2011) with eminent researchers contributing to the development of methodology, thus the

popularity of case study approaches across disciplines has increased (Creswell & Poth, 2018; Denzin & Lincoln, 2018; Merriam, 2009; Stake, 1995). Experienced qualitative researchers have identified case study research as a stand-alone methodological approach (Denzin & Lincoln, 2018), which has a degree of flexibility that other qualitative approaches, such as grounded theory or phenomenology, do not readily offer.

As a result, case studies are designed to address the case and research question, with published case studies demonstrating a wide range of study design. There are three main case study approaches with Yin (2012) taking a positivist perspective where he quantifies qualitative data. For Yin, a case is “a contemporary phenomenon within its real-life context, especially when the boundaries between a phenomenon and context are not clear and the researcher has little phenomenon and context” (p. 13). The second perspective on case study is that espoused by Stake (1995) where he proposes “that a case is a specific, a complex, functioning thing,” ... “an integrated system” ... “has a boundary and working parts” (p. 2). The third perspective is that adopted by Merriam (1998), which is the constructionist having specific applications for education. For her, the case is, “a thing, a single entity, a unit around which there are boundaries” (p. 27) such as a program, a group, a person, or a particular policy. It is Stake’s approach that most specifically aligns with my intent in this study.

Case study research correlates to the daily experience of the common reader and encourages an understanding of intricate real-life situations. This perspective has raised concern about case study research having limited and valid generalisations (Hammersley, 2012). Woodside (2010) defended case studies by arguing that the objective of case study research is not to generalise findings to a population, but to work with theory. This stance was supported by Ritzén, Sagen, Sjöberg and Thunstedt (2016) where they claimed that case studies are generalisable to theoretical claims but not to populations. The goal of the case study is to extend and generalise theories (analytical generalisation) and not to count frequencies (statistical generalisation) (Yin, 2009).

Alongside the issue of generalisability is that of rigour. Perceived lack of rigour is based on issues of human subjectivity (Burns, 2000; Robson, 2002). However, Simons (2009) believes that a lack of rigour may be the result of researchers' poor methodological practices rather than fundamental defects in case studies as a valid methodology. In qualitative research, rigour is related with being open to data,

adhering scrupulously to a specific philosophical perspective and ensuring a high degree of care in its collection (Simons, 2009). These elements are not edited out to find an average or a general picture, as qualitative research features them explicitly into its analyses and explanations. “This means that it has an unrivalled capacity to constitute compelling arguments about how things work in particular contexts” (Mason, 2002, p. 1). To build rigour in this study, the document analysis and survey questions used were effective in producing rich descriptions during the semi-structured interviews, where I could confirm, change, include, resolve and/or broaden what was found during the earlier phases of data collection.

Case study methodology was the focus of this research, with the case being the tension between the expectations of teachers’ capacity to implement inclusive practices required by policy, and their actual capacity to implement inclusive practices. This research was designed to study the particularity and complexity of this case, to come to understand its activity. Qualitative Case Study methodology allowed for the sharing of the perceptions of two distinctively separate groups of educators. The first consisted of 12 university-trained teachers, the second of four teacher-aides without any formal tertiary qualification. Both groups were involved in the educational instruction of students with ASD within a primary school setting where there was a SEP attached. Stake (1995) reminds us that case study “issues are never simple and clean, but are intricately wired to political, social, historical and especially personal contexts, all being equally important in studying cases” (p. 17). These issues led to the development of the conceptual framework that guided this research. The framework also helped identify who to include in the study; helped to describe the relationships that may exist on the basis of logic, theory and/or experience; and gave me the chance to gather general constructs into key concepts (Miles et al., 2014).

3.3 METHOD

3.3.1 Data collection

This study was conducted in two stages, exploration and inspection, which is in line with the theoretical perspective of symbolic interactionism. The methods chosen for data collection during the exploration phase were document analysis and an online survey. Before developing the survey, dialogue with the Principal and Head of Special Education Services (HOSES) of the SEP was established during March 2015 to

develop an understanding of the research site. Smeed et al. (2009) suggested that such interaction is compatible with the view that researchers should recognise the importance of understanding the research site's micro politics. Combining the data with the literature assisted with the development of a construct-specific and theoretically-based online survey (Appendix B). This was made available in May 2015 to teachers and teacher-aides who wished to participate. At the conclusion of the exploration stage, I analysed the participants' responses from the survey to formulate semi-structured interview questions in a style that would "promote a conversation with a purpose" (Mason, 2002, p. 67).

This analysis allowed me to elicit understandings and meanings regarding the concepts described by the teachers and teacher-aides who had completed the online survey. Thus, the inspection stage involved further qualitative data collection through semi-structured individual interviews with each of the participants. These data collection methods were considered to be a more effective means of collecting data from all participants in this study.

Table 3.1

Data Collection Outline

Phase	Step	Participants	Data collection	Timeframe	Relevant chapters for results
Exploration	Step 1		Document analysis	January 2015	Ch. 4
	Step 2	15 general teachers 1 SEP teacher 1 HOSES	Survey	May 2015	Ch. 5
	Step 3	5 general teacher-aides 2 SEP teacher-aides	Survey	May 2015	Ch. 6
Inspection	Step 4	11 general teachers 1 HOSES	Individual interviews	June–July 2015	Ch. 5
	Step 5	2 general teacher-aides 2 SEP teacher-aides	Individual interviews	June–July 2015	Ch. 6

3.3.2 Participants

Invitations for involvement in this research were provided to all participants by means of a fully-written description of the nature and purpose of the study, along with the processes of the study (Creswell & Poth, 2018). Nonprofessional language was used, which could be understood by all potential participants (Bailey, 2007). Anonymity was assured; however, respondents were conscious that through their participation, their responses could be made available for publication in this thesis with their names being themed so no one individual would be identifiable (See Appendix E for invitation).

Almost 20 years ago at ‘Willow Park Primary’ (pseudonym), the Department of Education sought available premises in order to accommodate three of their advisory visiting teachers (AVTs). AVTs are “teachers with specialist knowledge and skills who support the access, participation and achievement of students with disability” (Education Queensland, 2018b, p. 1). As ‘Willow Park’ had two rooms available, these were to become the home base for three AVTs. One of the AVTs specialised in the education of children with ASD, and she eventually became the Head of Special Education Services (HOSES) in charge of the newly established Special Education Program (SEP). As a result of the SEP’s formation, the school’s population of students with ASD increased, and as inclusive policy advocates, students with ASD were placed with their peers in class groups throughout the school.

Today, ‘Willow Park’ has a teaching staff of 15, and five general classroom teacher-aides. In addition to these teaching staff, the school still has an attached SEP specifically designed to support children with disabilities, which employs a staff of two special education teachers and two teacher-aides. The total teaching staff population for this school was identified as 17 teachers and seven teacher-aides. The student population was approximately 285, with 32 children presenting with disabilities, 25 being students with ASD. Whilst the SEP is largely responsible for evaluating the needs of these students, the greater part of their school day is spent with their peer groups in the mainstream classrooms.

In line with Stake’s (1995) approach to case study, the participant group of 12 full-time practising teachers and four teacher-aides was ideal. According to the participants and teacher-aides, who agreed to join in the second stage of the data collection process were those who interacted on a day-to-day basis with students with

ASD within a general classroom situation. This group was a selection of teachers and teacher-aides from whom information-rich data could be extracted (Patton, 2015).

3.3.3 Document analysis

The qualitative researcher should employ multiple (at least two) sources of data in order to substantiate findings through multiple data sets to decrease the impact of potential biases that can exist in a single study (Bowen, 2009). Document analysis is a methodical process for examining or assessing documents, such as electronic (Internet-transmitted) and printed (computer-based) material (Rapley, 2007). In the current study, document analysis was the first of three data collection types used. Like other methodical procedures in qualitative research, the analysis of documents involves the examination and interpretation of data to gain meaning, improve understanding and increase empirical knowledge (Corbin & Strauss, 2015).

Document analysis is applicable to qualitative case studies in that it can produce rich descriptions of a single phenomenon, event, organisation or program (Stake, 1995). Documents analysed in the current study enabled the researcher to “uncover meaning, develop understanding, and discover insights relevant to the research problem” (Merriam, 1998, p. 118). Specifically, document analysis enabled the researcher to develop an understanding of the training provided at the pre-service level for teachers and teacher-aides, and, assisted the development of background questions for participants in the survey and interview stages of data collection.

When information is linked from different data sources, confidence in the trustworthiness and credibility of the findings is established (Angrosino & Mays de Pérez, 2000). Findings from the document analysis enabled me to minimise bias in the questions used in the online survey, and credibility of these findings was further established during the interview stage. The processes of content and thematic analysis involved (1) skimming (superficial examination), (2) reading (thorough examination), and (3) interpretation of findings of the pre-service teacher and teacher-aide training course documents (Corbin & Strauss, 2008; Labuschagne, 2003). Documents analysed in this study were collected from university and teacher-aide training websites, where program enrolment guides and course outline documents provided by each institution were examined. Further description of the document analysis processes used in this study is provided in section 4.4 of the research paper in Chapter Four.

3.3.4 Surveys

Following the document analysis, an online survey was used as the second data collection tool during the exploration phase of this study. Commonly used in educational research, surveys are an established data-gathering technique (Neuman, 2014; Robson, 2002). Various survey methods are available, including online, phone and face-to-face surveys (Robson, 2002). When conducting surveys, the researcher solicits participants to reply to standard questions under similar settings. Online surveys enable communication among people who may be hesitant to meet face-to-face (Braithwaite, Waldron, & Finn, 1999; Wright, 2000). This was apparent in the current study, where almost the whole staff (24 participants – except the principal) opted to participate in the online survey.

As with other research methods, surveys have advantages and disadvantages. Some advantages of online surveys are (1) distribution is relatively cheap, (2) anonymity to participants is assured, and (3) participant responses occur without influence from the researcher (Burns, 2000; Neuman, 2014). Some disadvantages of online surveys are (1) they can lack flexibility, (2) they often have a low response rate, and (3) reasons for non-responses to questions are not available to the researcher (Burns, 2000; Robson, 2002). To overcome these disadvantages in the current study, I had flexibility in the semi-structured interview stage to address any non-responses to questions during the online survey. During a whole-staff meeting, I described the study and its purpose to all staff where any questions or concerns could be addressed to potential participants and a timeframe for the data collection was given. The issue of low-response was limited in that the majority of participants completed the online survey at the conclusion of the staff meeting, and a reminder email was sent to anybody who hadn't completed the survey one week after the survey was made available to participants.

My intention with the online survey was to emphasise significant statements, to define and conceptualise characteristics relating to the knowledge and aptitudes of each of the practising teachers and teacher-aides who interact daily with students with ASD. To achieve this intention, the survey provided the participants an opportunity to reflect upon their own experiences and philosophical understandings pertaining to the policy of inclusion of students with ASD in a mainstream school. The survey questions were divided into three parts by using both Likert items and open-ended questions throughout. The advantage of using the Likert items is that a simple 'yes' or 'no'

answer is discouraged and replaced by degrees of personal opinion (Hartley & Betts, 2010). For instance, when a question is based upon one’s current knowledge of a particular subject, a ‘True’, ‘False’ or ‘Unsure’ response is permitted. As a result, qualitative data can be obtained and analysed with relative ease. The process allowed me to measure people’s attitudes on certain topics, such as ‘inclusion’ as it applies to students with ASD in this particular case. Questioning along these lines allows for individual responses (Creswell & Poth, 2018), with the method being valid for any study where opinions and attitudes are required for analysis (De Vaus, 2014; Fraenkel, Wallen, & Hyun, 2015).

Findings from the document analysis, previous research literature and several existing surveys (see Table 3.2 below) enabled me to select and develop relevant questions for this study. The survey was given to five teachers to review for face validity, to ensure the readability and appropriate use of terms used by Queensland teachers. Following minor amendments, seventeen teachers and seven teacher-aides completed the online survey and were given ten days to complete this first phase of the data collection process. The survey used with teacher-aides was mostly identical in questioning, except for the removal of questions pertaining to parents, as parents working with teacher-aides is not common in Queensland schools. Outlined in the table below are the three sections of the online survey, the number of questions relevant to each of the sections, as well as descriptions of the purpose and previous studies where questions were obtained. A full list of the questions is provided in Appendix B.

Table 3.2
Survey Design

Survey section	Topic	Question/s	Purpose	Questions taken from previous studies
Section 1	Pre-service training	4 questions	To comprehend what ASD-related pre-service training participants received, what it involved in terms of duration and content.	These questions related to findings generated from the document analysis stage.
Section 2	Experience and in-service training	29 questions	To comprehend the teaching and teacher-aide experience of all participants in both the current school and previous schools where they were employed. Topic areas included: in-service training, such as what had been completed and what was needed; available resources and how they	Cassady, 2011; McGregor & Campbell, 2001; Praisner, 2003; Walker & Smith, 2015

			were utilised; collaboration among staff, students and parents; and attitudes on inclusion.	
Section 3	True/False/Unsure related to statements made about ASD	15 questions	To comprehend participant understandings of ASD	Furnham & Buck, 2003; Helps, Newsom-Davis, & Callias, 1999; Shah, 2001

3.3.5 Semi-structured interviews

The instrument at the third and final stage of data collection was a semi-structured individual interview. It was at this stage that the ‘inspection phase’ of the study began. Interviews are a meaningful source of information in case study research (Stake, 2005). Interviewing comprises a face-to-face personal meeting where the interviewer asks one or more participants to answer questions concerning the research topic. There is a range of interview types which can be generally categorised in three ways: fully-structured, semi-structured and unstructured interviews (Robson, 2002). Fully-structured interviews are planned with a fixed arrangement and phrasing of questions (Williamson, 2018). Semi-structured interviews have planned questions, but with versatility in phrasing and arrangement (Edwards & Holland, 2013). Unstructured interviews are more uncertain, containing wide-ranging topics of conversation in lieu of ordered questioning (Hammond & Wellington, 2012).

Semi-structured interviews were selected for this study to provide additional versatility over structured interviews: it gave me the opportunity to probe more deeply into the issues found in both the document analysis and online survey stages (Burns, 2000). Semi-structured interviews were also considered to be dependable with the constructionist paradigm and interpretivist theoretical perspective within which this research exists (Burns, 2000). It was also understood that while one school may share the same values, the interpretation and construction of meaning around these values may differ when considering the diverse backgrounds of each individual teacher and teacher-aide. In addition to this understanding, semi-structured interviews are reliable with symbolic interactionism in that it is “the interaction of the participants in the interview situation ... that creates knowledge” (Edwards & Holland, 2013, p. 3).

Interviewing has advantages and disadvantages that need to be considered by the researcher. An advantage is the chance provided me with the ability to discover information that is “not easily accessible using techniques such as surveys and

observations” (Blaxter et al., 2006, p. 177). Additionally, interviewing is not just a data collection tool, it is a somewhat regular way of communication that can take place in a variety of situations (Blaxter et al., 2006). In order to conduct interviews, the school principal provided a suitable location where I set up an appropriate environment away from the noises of the school. Another advantage of interviewing is “with the presence of the interviewer, mutual understanding can be ensured, as the interviewer may rephrase or simplify questions that were not understood by his/her interviewees. As a result, more appropriate answers and, subsequently, more accurate data will be reached” (Dörnyei, 2007, p. 143). Additionally, interviews can be recorded and reviewed numerous times by the researcher, facilitating accuracy-checks of what is found (Berg, 2007).

Some disadvantages of interviewing are that large amounts of data are expected to be revealed via interviews (Potter & Hepburn, 2005), and interviews can be time-consuming, considering the collection and analysis of the data, which have to be transcribed and coded (Robson, 2002). A further disadvantage can be that when done alone, “interviews are an insufficient form of data collection to study a case” (Walford, 2007, p. 147). To address these disadvantages, semi-structured interviewing was not the sole method to collecting data, rather, it was one of several compatible methods of data collection in the current study. Document analysis and surveys had been planned and conducted, giving me a clear understanding of the essentials of both the participants and the school. The data obtained during the semi-structured interviews further informed my understanding of the findings given in the earlier stages (Potter & Hepburn, 2005), allowing me to gain clarity relevant to issues found during the earlier stages of data collection and providing “in-depth information about participants’ inner values and beliefs” (Ho, 2006, p. 11).

Establishing the direction that the semi-structured interview would take required a more-planned structure than had a more structured technique been used (Boeije, 2010). Determining the sense of content, the formulation and the sequence of the questions to be posed permits the management of direction of the interview (Patton, 2015). In my case, this involved giving meaning to what impressions had been categorised and interpreted from the analysis of the online survey data, and, synthesising the frequent or significant categories in order to frame the questions for the semi-structured interviews directly. The interviews were preceded by a few moments of general conversation over

a cup of coffee intended to ensure that participants were comfortable and at ease with the interview process. All participants were assured of complete confidentiality in the storage, analysis and write-up of the data, and all individuals were coded in the manner of Participant A, Participant B and so on.

During the semi-structured interviews, the first premise of symbolic interactionism was realised. This allowed focus to be directly on the individual, and the meaning and actions each individual gave to aspects of reality as they interacted on a day-to-day basis within their particular school environment. Symbolic interactionism provided the means with which to “uncover people’s perspectives” on the perceived tension between the expectations of teacher capacity to implement the inclusive practices required in the Queensland policy, and the actual capacity of teachers to support their students with ASD (O’Donoghue, 2007, p. 20).

The use of semi-structured, open-ended questioning was based on participants’ responses to the online survey. Its intention was to provide information on authenticity and credibility by delving more deeply into the participants’ knowledge base, opinions and attitudes. Where a question was missed, or there was evidence of an ‘unsure’ response, further questioning on that subject was avoided. Where there was a minimal response, with little accompanying elucidation, I encouraged the participant to talk more freely upon the issue. These questions were intended to encourage participants to share their thoughts and opinions on their roles as teachers or teacher-aides in a school that had a disproportionately high enrolment of students with ASD. I based questions not only on what participants would be able to answer, but also upon the possibility of their answers providing richness and substance to the findings.

Interviews commenced one month after the participants had completed their online surveys and continued over a period of three days. This process necessitated releasing each participant, both teachers and teacher-aides, from their teaching duties for a period of 60-minutes. The participant pool comprised 12 full-time practising teachers and four teacher-aides. During the interviews, participants were given opportunity to reflect upon questions they had been asked in the online survey. This process helped activate memories that could be shared in more detail during the final stage of the study. During the period that the teachers and teacher-aides were being interviewed, their classes were being supervised by a visiting volunteer relief teacher.

As recommended in the literature, the face-to-face interviews were audio-recorded and transcribed (Patton, 2002; Sarantakos, 2013). Interviews occurred without the hindrance of note-taking as recording each interview permitted me to gauge an accurate account of what was being said (Silverman, 2010). Supporting notes were made at the conclusion of each interview, ensuring the data was not only recorded, but also clearly recalled (Patton, 2002). For recording the data, a palm-sized ‘H4 Handy Digital Recording Machine’ was placed discreetly out of sight with participants’ permission. The recording device appeared to have no limiting effect on the participants’ willingness to share confidences, perhaps because the device was small and unobtrusive. This particular device was chosen for its noted reliability and flexibility, as among its many features, it has two studio-quality condenser microphones configured in a K/Y pattern for true stereo recording. The H4 records data onto a Secure Digital (SD) media memory card. One of the big advantages of using the H4 was that it provided up to 34 hours of recording in 16-bit mode, which is considered studio quality. Transferring the final recordings was simplified by using the device’s USB mass-storage interface, and recording quality permitted me to transcribe with relative ease. Transcripts were an accessible resource of participants’ comments for direct quotation to illustrate results and underpin discussion, thus leading to a deeper, richer reporting of my understanding of the case.

The interview protocol consisted of 47 questions, categorised into seven subsections. The interview design is outlined in Table 3.3.

Table 3.3

Interview Design

Interview section	Topic	Question/s	Purpose	Related to findings from
Section 1	Introductory questions	3 questions	To generate a general start to the interview and to match demographic information about the participant with survey data.	Document analysis and survey (Section 1)
Section 2	Extra qualifications, professional development opportunities and collegial advice	10 questions	To gain a deeper understanding of pre-service and in-service training, and the relationships among staff.	Document analysis and survey (Section 2)
Section 3	Collaboration among colleagues	13 questions	Surveys revealed a general feeling of helplessness among teachers with little or no additional support. The questions in this section delved	Survey (Section 2)

			deeper into the issues surrounding this.	
Section 4	Teaching and learning	9 questions	To expand on questions related to attitudes towards inclusion, participant experiences of working with students with ASD.	Survey (Sections 2 and 3)
Section 5	School leader and teacher relationship	4 questions	Surveys revealed dissatisfaction with leadership in the school. Questions in this section delved more deeply into this issue.	Survey (Section 2)
Section 6	Parent involvement and the wider community	7 questions	To understand what role/s parent/guardians play in supporting the staff at this school. Surveys revealed parents removing children from the school due to the SEP and the presence of students with ASD.	Survey (Section 2)
Section 7	Closing of interview question	1 question	To understand any other factors that contribute to the issues in the education of students with ASD which weren't covered in the interview.	Document analysis and survey (Sections 1 and 2)

3.4 DATA ANALYSIS

Case Study research can generate considerable quantities of data (Sutton & Austin, 2015). In this study, substantial data were collected through document analysis, online surveys and individual semi-structured interviews. The term, 'data analysis', has different interpretations and can lead to different methods of analysis. Whilst "there is variety in techniques as a consequence of there being different questions to be addressed and different versions of social reality" (Coffey & Atkinson, 1996, p. 14), these "differing techniques are often interconnected, overlapping and complementary, and sometimes mutually exclusive – irreconcilable couples" (Miles, Huberman & Saldaña, 2014, p. 9). Such diversity and range in analytic techniques emphasises the understanding that there are no singular, correct ways to conduct qualitative data analysis (Punch, 2014).

As Punch (2014) noted, "In the expanding literature on qualitative analysis, terms such as 'transforming', 'interpreting' and 'making sense' of qualitative data are prominent, and it is the different ways of doing these things that lead to the diversity in methods of analysis" (p. 200). However, whilst such diversity is valuable, scholarly rigour and discipline are also important. "What links all the approaches is a central concern with transforming and interpreting qualitative data – in a rigorous and scholarly way – in order to capture the complexities of the social worlds we seek to

explain” (Coffey & Atkinson, 1996, p. 211). A description and justification for using the General Inductive Qualitative Method for analysing data is provided in the following section.

3.4.1 General inductive qualitative method

The general inductive qualitative method is a systematic method for analysing qualitative data. Its inherent purpose is to permit research findings to develop from the “frequent, dominant, or significant themes inherent in raw data, without the restraints imposed by structured methodologies” (Thomas, 2011, p. 238). This interpretation of inductive analysis is in accordance with Strauss and Corbin’s (1998) description: “The researcher begins with an area of study and allows the theory to emerge from the data” (p. 12). Using this method is accepted in numerous forms of qualitative data analyses and is dependable with the common forms of qualitative data analysis defined by other authors (Miles & Huberman, 1994; Pope, Ziebland & Mays, 2000; Punch, 2014).

This method was selected over other qualitative methods to data analysis due to (1) Its flexibility in comparison to established qualitative methodologies such as grounded theory, phenomenology or ethnography (Creswell & Poth, 2018); and (2) traditional methodologies can result in inadequate consideration of the central findings of social reality (Liu, 2016). Understanding the realities of participants in the current study enabled me to build clear connections between the research purpose and research questions. Additionally, the descriptive nature of the general inductive method supported me to comprehend the case, process, perspectives and views of the participants in this study (Cooper & Endacott, 2007).

The key component of the general inductive method is to develop themes using coding of the raw data (Thomas, 2006). In order to address the research problem and questions, the following steps were used to develop themes from the three stages of data collection:

1. Initial reading of text data to develop themes, derived from common word/s or short phrase/s to refer to the theme.
2. Generating a theme description, which may include key characteristics, scope, and limitations of the theme.

3. Re-reading the data to identify chunks of text associated with the theme, which may be examples of text coded in a category that illustrates the theme's meanings, associations and perspectives.
4. Reducing overlapping themes, which may indicate superior, parallel and subordinate themes where such links can be based on commonalities between themes or assumed causal relationships in meanings.
5. Determining the type of model, theory or framework in which the themes are embedded, however, themes may also not be incorporated into any model or framework (Thomas, 2006).

Although themes are developed using coding, coding is not explicitly separated into open coding and axial coding in the general inductive analysis method as it is in other qualitative methods, such as grounded theory (Lincoln & Guba, 1985).

Instead, during the initial reading of the data, notes were made listing emerging patterns such as events that kept repeating themselves and key phrases that participants used to describe their feelings. This helped identify specific text segments related to the problem, purpose and research questions of the study, as well as identify early themes. Initially, themes were categorised in three ways: (1) words of participants, (2) words of my own, and (3) words in the literature. Through subsequent readings, additional themes emerged by re-examining each sentence for clusters of relevant data, both within subjects and between subjects. Further analysis was conducted to locate survey and interview responses that appeared to match. Coded texts were re-coded if they appeared to be unfitting to the purpose and questions of the study. These segments of data were labelled either from participants' words or my own words based on their descriptions. When no new themes developed, I reduced overlapping themes and removed redundant themes. An example of coding and theming can be found in Appendix F. This final step ensured the findings reflected participants' realities of the perceived tension between the expectations of teacher capacity to implement the inclusive practices required in the Queensland policy, and the actual capacity of teachers to support their students with ASD.

3.5 TRUSTWORTHINESS AND CREDIBILITY

In qualitative research, trustworthiness and credibility are diversely understood. Trustworthiness refers to the representation of perceptions in the final account

(Creswell & Miller, 2000), and credibility confronts the concern of rigour applied to the research (Mateo, Kirchoff & Kirchoff, 2009). In order to demonstrate trustworthiness, it was imperative that I specified a comprehensive explanation of the the methodological technique used during the data collection and analysis process (Bailey, 2007). Given the data presented, attention was paid to whether the results were credible in order to create credibility in this qualitative research (Merriam, 2009). In the current study, several strategies were employed to foster both trustworthiness and credibility. This included triangulation, and member checks which are discussed further in the sections below. A useful method to create trustworthiness in qualitative research is by using a further three criteria: dependability, confirmability, and transferability (Lincoln & Guba, 1985).

3.5.1 Dependability

Dependability refers to the way in which research is conducted. In particular, if the research were repeated, will comparable results be concluded if the same methods and participants were involved (Shenton, 2004). Thorough explanations were given regarding the research design of this study by including the methodology, epistemology and theoretical perspective, as well as the methods that were used for data collection and analysis (Morrow, 2005).

Additionally, to enrich the dependability of the research, interviews were audio-recorded, transcribed and interview transcripts were given to the participants for verification. All participants were provided with the same online survey that lead to the development of the semi-structured interview questions. The teachers and the teacher-aides were interviewed using a similar set of questions, which provided the participants opportunities to express freely their own individual concerns, ideas and feelings. The questions differed only when a teacher's question was not applicable to the teacher-aide's work situation.

3.5.2 Confirmability

Confirmability is grounded in the awareness that research is not objective (Morrow, 2005). The views of the researcher should not be reflected in the findings, since confirmability is the result of the researcher's capacity to guarantee that the result of the findings reflect the participants' responses (Cope, 2014; Shenton, 2004). Through the provision of "rich quotes", researchers can validate confirmability (Cope,

2014). In order to prevent researcher bias, a statement acknowledging my position was made. As previously mentioned, interviews were transcribed and offered for verification by the participants. In addition to this verification, rich quotes from the participants were used to depict emerging themes.

Researcher bias is a significant issue in research (Creswell, 2018). This research was conducted within a primary school that had a SEP. As somebody who has worked in school settings with a SEP, I acknowledged my own understanding of inclusion and how a SEP should work within an inclusive school setting. Whilst this does present an opportunity for researcher bias, it does also present an opportunity for the researcher to interact fully with the participants during the data gathering process.

Throughout this research, an effort was made to focus on teachers', and teacher-aides' perceptions of the SEP, and how they understood the administrative processes necessary to include effectively, students with ASD into a mainstream school setting. The invitation letter to participate in the study (Appendix E) expressed interest in their experiences of working in a school with a SEP. Prior to the actual interviewing process, the school principal provided me with a suitable location where participants were ensured confidentiality well away from the noises and interruptions of the school. These conditions allowed the perceptions of the teachers and teacher-aides to guide the research in line with symbolic interactionism, as it allowed the most prominent "me" to be a supportive school teacher in their inclusive school context whereby they could present their perceptions freely.

3.5.3 Transferability

Transferability refers to the extent in which findings can be applied to other contexts (Merriam, 2009). Despite the researcher's ability to offer ideas as to how the findings are transferrable to other settings, ultimately this is up to the reader (Granehiem & Lundman, 2004). The researcher should offer adequate information on both the participants and research context in order to assist the transferability of the findings for the reader (Morrow, 2005).

Abundant descriptions enhance the possibility of results being transferable, and this is commonly used in research (Merriam, 2009; Shenton, 2004). Providing detailed descriptions of the phenomenon and offering many perspectives on a theme ensures the findings are more realistic and credible. (Creswell & Creswell, 2018). Detailed

descriptions of the phenomenon by using quotes from participants' interviews were included in this research, increasing the transferability and credibility of the findings overall (Merriam, 2009).

My aim in this research was to identify and examine the teaching methods and educational provisions that were being used to ensure equitable inclusion of students with ASD at one primary school that had a SEP attached. Trustworthiness in this research was supported by the strategies described and established within the design of this study.

Triangulation is a process used in research to maintain data trustworthiness (Robson, 2002; Stake, 2000). When studying some aspect of human behaviour, the use of two or more methods of data collection is considered triangulation (Burns, 2000; Robson, 2002). To enhance the rigour of the research, triangulation is used as a means of validating the relevance and importance of topics and examining viewpoints from a variety of positions to produce and bolster evidence in support of key claims. Triangulation ensures that reliance on one data collection method does not distort the researcher's image of reality (Robson, 2002; Simons, 2009; Stake, 2000). Accordingly, in this case study research in an inclusive primary school with an SEP attached, three sources and methods of data collection were conducted to improve the credibility of the data. These were document analysis, an online survey, and semi-structured interviews.

Member checks are an additional strategy used to enrich the credibility of research findings (Cope, 2014). Checking with participants that the data, which has been collected, represents what the participants intended is considered valid. Member checking can and did occur at numerous stages in the research, for example, during interviews (Robson, 2002; Simons, 2009). In order to prevent researcher bias, transcripts were returned to the interviewees for inspection following the transcription process.

3.6 ETHICAL CONSIDERATIONS

Given that I had been a teacher at another school in Queensland, it is assumed that there was a risk of indirect pressure upon the participants to be involved in this research and/or to demonstrate a researcher bias. To achieve this, participants were assured that their participation was voluntary and that they could at any time withdraw

from the study (Burns, 2000). In addition to opting out at any time, all participants were given the chance to review their interview transcript to confirm that their views were genuinely represented. As a result, no instances of change were experienced from this process.

The privacy of participants is often invaded when conducting research, as participants can be required to provide responses concerning their background, behaviours and opinions. Although participants may agree to participate in a research project, they may not know precisely what the researcher is investigating (Neuman, 2014). Anonymity is often used in research to safeguard participants' privacy (Burns, 2000). Identifying participants can alter the perceptions of those reading the research, restrict participant responses, and have unforeseen consequences for the identified person (Simons, 2009). The common technique of applying pseudonyms to participants and the school was employed in my study in order to protect the identity of participants (Simons, 2009). These codes included assigning a random letter to each teacher and teacher-aide. Despite the letters A to L being used for teachers, and the letters A to D being used for teacher-aides during interviews, these letters were not assigned in the order of the interviews given for added anonymity.

Confidentiality practices were provided to protect individuals involved. These practices included ensuring that the data was kept in a lockable cabinet and on an encrypted hard drive at all times, and that the data was published in aggregate form rather than in the comments of named persons (Neuman, 2014). The data gained from this research will not be made available to other researchers if the findings are to be published. This is because it is clear that the collection of data was for the specific purpose of this thesis. The written data will be safely stored and shredded after a five-year period (Creswell & Creswell, 2018).

Invitations for involvement in this research were provided to all participants by means of a fully written description of the purpose and nature of the study, along with the processes involved (Creswell & Poth, 2018). Nonprofessional language was used, which could be understood by all potential participants (Bailey, 2007). Anonymity was assured; however, respondents were conscious that through their participation, their responses could be made available for publication in this thesis with their names being themed so no one individual could be identifiable.

Prior to collecting data, a management plan was drafted, checked and implemented to ensure that the data would remain secure, confidential, and at no time at risk of being lost or destroyed. The data management plan called for a double storage of the research data and this was accomplished by duplicating the data recordings onto a separate hard drive. Upon reaching the end of the lengthy transcription stage of the data collection process, two complete copies were printed out, where one became the basis for my analysis with the facsimile being provided to the participant. At no time were data left open for scrutiny by others as they were locked away at the end of each data analysis session to ensure confidentiality.

3.7 CONCLUSION

To address the research questions developed in Chapter 2, constructionism was the epistemological focus chosen, as it provided means for the research participants to give voice to their stories and their experiences. From the viewpoint of Stake (1995), constructionism should be the epistemology that orients and informs the qualitative case study research since “most contemporary qualitative researchers hold, that knowledge is constructed rather than discovered” (p. 99).

An interpretivist theoretical perspective of symbolic interactionism fitted with the constructionist ‘way of knowing’ in this study due to an appreciation of the fact that life is not objective, and that meaning can be created through interaction between each individual and their environment (Creswell & Poth, 2018). Case study methodology was chosen for this research due to its capacity to establish rich imagery of a case from multiple perspectives. Using an online survey and semi-structured interviews, case study methodology permitted me to engage in the world of teachers and teacher-aides, by listening to their constructed meanings surrounding the fundamental features of the inclusion of students with ASD in a mainstream primary school setting.

In the next chapters, data are presented in sections consistent with the research questions and in relation to the teacher and teacher-aide groupings.

Chapter 4: Teacher and Teacher-Aide Training Results

This chapter includes the published paper: Coates, M., Lamb, J., Bartlett, B., & Datta, P. (2017). Autism Spectrum Disorder Coursework for Teachers and Teacher-Aides: An Investigation of Courses Offered in Queensland, Australia. *Australian Journal of Teacher Education*, 42(11). <http://dx.doi.org/10.14221/ajte.2017v42n11.5>. The focus of this paper was to review course content and the structure of university and teacher-aide training in Queensland, Australia. The paper has been reformatted for consistency with the other chapters of this thesis, including the re-numbering of pages, figures and tables.

4.1 ABSTRACT

The content and structure of pre-service and teacher-aide programs has major implications for training, management, support and deployment of teachers and teacher-aides in mainstream schools working with students who have ASD. Data pertaining to course content and structure were collected from university and teacher-aide training websites, program enrolment guides, and through direct contact with institutions in Queensland, Australia. 101 education programs were narrowed down to 45 in early-childhood/primary education, and eight online teacher-aide training programs. Findings indicate the urgent need for academics in institutions to begin working towards redesigning programs that deliver best practices in ASD for pre-service educators.

4.2 INTRODUCTION

ASD is a developmental disability that can produce considerable social, communication and behavioural difficulties (CDC, 2012). People diagnosed with ASD range from those who are considered gifted, to others who have an intellectual disability (ID) which may impact learning, thinking and problem-solving as students in school. Other behavioural, developmental, psychiatric and medical diagnoses can co-occur with ASD, such as ID, epilepsy, and attention-deficit hyperactivity disorder (ADHD) (Jacobson, Mulick, & Green, 1998; Van Steijn et al., 2012). A sense of urgency exists among educators and parents to ensure students with Autism Spectrum Disorder (ASD) are provided with an appropriate education. This urgency is due to increasing numbers of students who have ASD attending mainstream schools, poor learning outcomes, an increase in lawsuits, and, an ever-growing knowledgebase of strategies that are deemed effective when working with this particular cohort (Robbins, 2010). Furthermore, increasing legislative demands emphasising teacher quality have positioned educators working with students who have ASD under intense scrutiny. Effective methods of educating both pre-service teachers and teacher-aides in the field of autism need to be recognised and implemented in order to better support them in addressing the educational needs of this growing population.

The latest quadrennial data collected by the Australian Bureau of Statistics (ABS), through the Survey of Disability, Ageing and Carers (SDAC) found that the number of people documented to have ASD in Australia increased 79% from 2009 to

2012 (ABS, 2012). This equates to at least 1 in 63 Australian schoolchildren having obtained a formal autism diagnosis. In considering how these children are progressing through education, further examination of the ABS data uncovered that of the children who have ASD and attend mainstream schools in Australia, 86% reported difficulties in areas such as learning, communicating and socialising (ABS, 2012). This increased prevalence and indications of major complications with schooling has generated significant pressure on education departments, creating a strong need for educators to be better qualified to teach students who have ASD.

Beginning teachers and teacher-aides of students who have ASD need a foundation of essential educational skills in the area of autism. Researchers have stressed the need for educator training as a priority to be developed in autism policy, suggesting that measures taken by state and federal governments are discouraging when considering the increased prevalence of ASD (Giangreco & Doyle, 2007; Hart & More, 2013). Without concentrated effort on improving pre-service teacher and teacher-aide training, both groups of professionals could continue to be inadequately prepared to craft and provide developmentally appropriate learning opportunities for students who have ASD, and many of these students will fail to progress. Developing carefully considered content for both pre-service teachers and teacher-aides, including an improvement in educator performance should result in better outcomes for this particular group of students.

4.3 LITERATURE REVIEW

Within the modern classroom, teachers often are supported by paraprofessionals such as teacher-aides. Teacher-aides play a vital role towards educating students, with a high proportion of students who have ASD receiving ongoing support from those in this role throughout their education (Alston & Kilham, 2004). Teacher-aides offer consistency when a student who has ASD changes from one teacher to another, which is important for children who require routine and predictability (Alston & Kilham, 2004). Often teacher-aides will have a more positive attitude towards students who have ASD in comparison with other staff, as many teachers have expressed anxiety regarding this particular cohort (Emam & Farrell, 2009). Teacher-aides have recognised in recent years their need for more training (Blatchford et al., 2009), and focused training has been a pivotal area of this discussion (Groome & Rose, 2005). There is certainly a disparity between the training received by teacher-aides and the

workload expected of them (Russell, Blatchford, Bassett, Brown & Martin, 2005). Teacher-aides who work with students who have ASD often begin their career with minimal or no training about ASD (Glashan, MacKay & Grieve, 2004). Merely utilising a teacher-aide without training or prior experience in working with students who have ASD is unsuitable if these students require specific support to reach their full potential (Humphrey, 2011).

There is a significant quantitative and qualitative international research base that has examined the roles, efficacy, and the factors that impact the performance of teacher-aides working in inclusive classrooms (e.g. Ashbaker & Morgan, 2012; Cajkler & Tennant 2009; Farrell, Alborz, Howes & Pearson, 2010; Giangreco, Suter, & Doyle, 2010; Saddler, 2014; Sharma & Salend, 2016). These studies imply that blurred professional roles, insufficient communication and opportunities for collaboration and training for teacher-aides and teachers results in teacher-aides managing substantial educational roles that unintentionally destabilise the professional responsibility of teachers and the inclusion of students with disabilities. Rather than assuming major instructional roles, teacher-aides should perform complementary roles and be well prepared and supervised.

Due to the increased prevalence of students identified as having ASD, it is more likely that pre-service educators will work with students who have ASD in both the classroom and wider community (Hart & Malian, 2013; Hart & More, 2013). Both teachers and teacher-aides need to have a comprehensive knowledge of ASD, often by simultaneously managing overt behaviours and supporting access to all aspects of the curriculum (Hart & Whalon, 2012). However, studies overseas have indicated that both universities and teacher-aide training facilities have been ineffectual in designing concentrated, first-rate courses and school-based practicum experiences as a necessary component of both pre-service teacher and teacher-aide training qualifications (Masterson, Dimitriou, Turko, & McPartland, 2014; Shyman, 2012; West, Jones, Chambers, & Whitehurst, 2011). A key element in this ineffectiveness has been an absence of widespread use of evidence-based practices to inform educators generally (Hempenstall, 2006), and those who will be teaching students who have ASD specifically (NRC, 2001), of ASD etiology, its manifestations in relation to learning, and, best practices in providing opportunities to learn.

In conjunction with a limited understanding of the disorder, lies the issue of an educator's inability to identify the initial warning signs and features related to ASD (Travers, Tincani, & Krezmien, 2013). Early intervention for children who have ASD is significant because it is often connected to better educational results and a decreased severity level of the ASD diagnosis over time (Hart & More, 2013). This in itself highlights the need to develop better training for pre-service educators in order to expand knowledge and awareness of ASD across cultural contexts. Towards achieving this challenge, a key concern is the limited time instructors have within universities and teacher-aide training facilities to cover course content associated with inclusion and other disabilities (Kennedy, Hart & Kellems, 2011).

Several studies have examined effective and efficient means of training teacher-aides (e.g. Brock & Carter, 2013; Rispoli, Neely, Lang, & Ganz, 2011; Walker & Smith, 2015). Training teacher-aides to utilise instructional strategies for the specific needs of individual students rather than choosing educational methods developed exclusively on a student's disability was a recommendation (Brock & Carter, 2013). They also found that teacher-aides who obtain sufficient training and provision might be able to apply instructional and support strategies correctly to improve educational outcomes for students who have ASD. Training protocols consisting of written and verbal descriptions, demonstrating, such as video demonstrations and role-playing may also be effective in training teacher-aides to implement successfully, appropriate interventions (Rispoli, Neely, Lang, Ganz, 2011). Walker & Smith (2015) highlighted the value of training for teacher-aides to improve their teaching skills for modifying behaviours or attitudes. It was also noted that the continued reliance of teacher-aides in inclusive settings and their reported concern in completing appropriate inclusion training should be examined in future research and included by schools as a priority when offering professional development opportunities.

Despite a need for evidence-based guidance in better praxis for preparing the educational service, few papers exist concerning how to conceptualise and organise content of ASD courses for undergraduate studies in education. Currently, many universities abroad offer a certificate in autism at the graduate level, particularly in education (Masterson et al., 2014) and conceivably, similar programs could be developed for undergraduates and those in teacher-aide training programs. The authors found three papers, which highlight ways that should be included for pre-service

programs to bridge the gap in ASD knowledge for teachers and teacher-aides in training.

One study (Masterson et al. 2014) concluded that an introductory course in ASD is of paramount importance for the field, and that it should be followed by a sequence of intensive courses. The proposed structure is to have an introductory outline of topics in ASD that are followed by intensive courses in Applied Behaviour Analysis (ABA), trial-supported treatments, and effective communication strategies. Masterson et al. (2014) stated that the main intention behind offering an introductory course in ASD is to deliver a concrete summary of the many facets of ASD, such as its biological, etiological, theoretical, diagnostic, assessment and treatment aspects. “Due to the increasing prevalence of ASD, there is a crucial need for both bachelor and graduate level teachers for these children” (Masterson et al., 2014, p. 2646). It was suggested that to achieve this type of course design would not only sanction duplicate courses at other universities, but would also create standards to ensure excellence in teacher and teacher-aide training.

According to Hart and More (2013), there are many reasons for courses in ASD being difficult to include in pre-service educator studies. These difficulties include; limited instructional time within existing pre-service education programs, rising prevalence rates, limited access that many diverse families experience in relation to early-childhood programming, restricted University budgets, variable attendance among students in instructional programs, and, competition for Faculty workload. In order to address these issues, Hart and More (2013) developed a research-based and technology-inspired instructional package, designed to enrich programs without jeopardising the scope and sequence of courses currently offered to pre-service educators. Their design had a marginal effect on institution resources, class attendance by students, and the workload of instructors. It incorporated use of narrated PowerPoints that had been developed by academics with expertise in ASD, with up-to-date key text, audio and visuals as an alternative to delivering information that may go otherwise unnoticed in inclusive-education based and/or generic courses based on disabilities. Further, they recommended that a Professional Development (PD) system be developed with education departments who oversee professional development in ASD. The advantage of using a PD system is the convenience of regular emails, video

conferencing, and/or live chat rooms with experts to help and guide educators who may value support as they practise the different strategies they are learning.

Shyman (2012) developed a blueprint for pre-service education programs. Based on available research, the paper outlined major areas pertaining to ASD that should be included throughout pre-service studies. He contended that pre-service education programs with key components in ASD must have practical, hands-on and theoretical information with a commitment to the concrete issues in the field of educating students who have ASD (Shyman, 2012). Such a program essentially would have a curriculum that facilitates studying through practice, meaning, community and identity, and that includes opportunity to ascertain authentic and workable professional knowledge through direct encounters with experienced professionals who have expertise in the field (Lieberman & Pointer Mace, 2008). Shyman (2012) outlined nine areas of ASD that should be taught to pre-service educators as the core of such opportunity. The topics he provided for these nine areas are *Characteristics of Individuals with ASD*; *Understanding of Current Research and Evidence-Based Practices in ASD*; *Multidisciplinary Approaches to Methodologies in ASD*; *Behaviourally-based Approaches*; *Emotional-based Approaches*; *Communication-based Approaches*; *Technology-based Approaches*; *Sensory-based Approaches*; and *Medically-based Approaches* (Shyman, 2012). For those preparing to work effectively with this cohort, these topics are an instalment in framing both a broad introductory understanding of ASD and a sense of need for adaptive use of that understanding as a knowledge base for the skilful, functional and competent enactment of their looming roles as educators with their students who have ASD.

The overview provided in the preceding review presents a vision of need for greater awareness of just what is happening in current provision of specific training in pre-service teacher and teacher-aide training programs in relation to ASD. Accordingly, research as reported, to address the following research question was undertaken: What insights can be gained pertaining to ASD courses currently offered to pre-service teacher and teacher-aide training programs in Queensland (QLD), Australia?

4.4 METHOD

For the purpose of this paper, both pre-service teacher education and teacher-aide training programs available in Queensland, Australia were identified. Data were collected by:

1. Collating a table of pre-service education programs offered in Queensland as listed on the Queensland Tertiary Admissions Centre (QTAC) website, and by gathering a list of approved teacher-aide programs offered online. The QTAC website lists every degree program offered in the state of QLD, Australia.
2. A course-design template from a national university in Australia was selected to use as a guide to analyse what was covered in each course from each Education program at the different universities. Our first step in its application was to examine the name of courses within each program for any indication of topic areas related to Inclusion, and/or ASD. We included 58 courses where this occurred. For those where it did not, we then checked the objectives, anticipated outcomes, curriculum content, assessment and the alignments of these components. An example of the template used can be found in Figure 4.1 below.
3. The scope of the current undertaking was so large that we began with all university programs in QLD, however focused on Early-childhood and Primary pre-service programs only. This will be discussed further in the limitations of the study.
4. Four colleagues were involved in interrater reliability and this provided a 100% agreed outcome. Additionally, three academics who currently are involved in teaching inclusion courses at university screened programs to be included in the current study to agree on the inclusion of early-childhood and primary education programs. Each of the authors rated the courses on a Yes/No/Maybe scale. In cases assigned to the Maybe classification subsequent discussion resolved the assignment to either Yes or No categories. There were no instances of the same course rated as “Yes” or as “No” by one or more raters. This initial allocation and resolution process provided a 100% agreed outcome.

5. In the ten cases where evidence that occurred from application of the national university course template was inconclusive, requests were sent to the university to be clarified. Academics who were teaching the programs for teacher-aides at different institutions, identified courses on offer for people interested in becoming teacher-aides in QLD.

An overview of programs found using these five steps is shown below for pre-service early-education and primary school teachers (Table 4.1) and teacher-aides (Table 4.2).

Table 4.1

Pre-Service Teacher Education Course Analysis from Universities in Queensland, Australia

Number of universities	Number of programs analysed	Number of courses analysed	Data collection methods	Number of inclusion/disability courses	Number of programs offering ASD-specific courses
10	45	295	Analysis of program-enrolment guides and contact with institutions	51	1

Table 4.2

Teacher-Aide Training Course Analysis from 8 Institutions in Queensland, Australia

Number of institutions	Number of programs analysed	Number of courses analysed	Data collection methods	Number of inclusion/disability courses	Number of programs offering ASD-specific courses
8	8	158	Analysis of program-enrolment guides and contact with institutions	17	0

UNIT CODE UNIT TITLE CREDIT POINTS DISCIPLINE CLUSTER (EDUCATION) PRE-REQUISITES: RELATIONSHIP TO OTHER UNITS UNIT DESCRIPTION LEARNING OUTCOMES GRADUATE ATTRIBUTES CONTENT TEACHING AND LEARNING STRATEGIES ASSESSMENT PROCEDURES		
Brief Description of Assessment Tasks	Learning Outcome/s Assessed	Graduate Attributes
Common Assessment Task		
Other Assessment Tasks may include		
REFERENCES		

Figure 4.1. Course design template example.

4.5 RESULTS

Data pertaining to course content and structure were collected from university and teacher-aide training websites, course enrolment guides, and contacting institutions in Queensland, Australia (Table 4.3). 101 education programs were narrowed down to 45 Early-Childhood (EC)/Primary (P) education programs currently offered in Queensland. University names have been removed as the purpose of this study was not to highlight which institution is producing the most ASD-related content, rather to demonstrate the inconsistencies between each university and the limited ASD courses that are offered.

Table 4.3

ASD Course Content for Pre-Service Educators Currently Being Offered by Universities in Queensland, Australia

University	Program name	Courses (Disability/Inclusion)	Year of study course/s offered	Course description summary
University A	1) B.Ed. (EC&P)	4	3 rd & 4 th	Course topics range from creating inclusive environments, family studies and disabilities and catering for diversity in the classroom.
	2) B.Ed. (P)	4	3 rd & 4 th	
	3) B.Ed. (P: Indigenous Studies)	3	2 nd & 3 rd	
	4) M.Teach.	1	2 nd	
University B	1) B. Learning Management (EC)	1	3 rd	How to manage diversity in the classroom.
	2) B. Learning Management (P)	1	3 rd	
	3) GradDip. Learning and Teaching (P)	0		
University C	1) B.Ed. (P)	2	3 rd & 4 th	Inclusive philosophy and practice and meeting the needs of diverse learners.
	2) B.Ed. (Middle Years)	2	3 rd & 4 th	
	3) GradDip. Ed. (P)	0		
University D	1) B.Ed. (P)	2 + 1 Elective	1 st & 3 rd	Adjusting and valuing learner diversity, and the elective is based on students with special needs. The M.Teach course relates to pedagogy for inclusive learning.
	2) B. Child & Family Studies + B. Ed. (P)	2 + 1 Elective	1 st & 3 rd	
	3) M.Teach	2	2 nd	
	4) GradDip. Ed. (P)	0		
	5) GradDip. Ed. (EC)	0		
University E	1) B.Ed. (EC)	1	3 rd	Inclusive Education for students with Special Needs.
	2) B.Ed. (P)	1	3 rd	
	3) B.Ed. (Primary Special Needs)	8+	1 st – 4 th	
	4) B.Ed. (Middle Years)	1	3 rd	
	5) B.A. + B.Ed. (P)	1	3 rd	
	6) B. Languages + B.Ed. (P)	1	3 rd	
	7) GradDip. Ed. (P)	0		
	8) GradDip. Ed. (Years 1-9)	0		
University F	1) B.Ed. (EC)	1	2 nd	Inclusion in early childhood settings and inclusive education studies that focus on disabilities, learning difficulties and inclusion.
	2) B.Ed. (Pre-service EC)	1	2 nd	
	3) B.Ed. (P)	1	4 th	
	4) B.A. + B.Ed. (P)	1	4 th	

	5) B.ASc + B.Ed. (P)	1	4 th	
	6) B.A. + B.Ed (EC)	1	4 th	
	7) B. A (LOTE) + B. Ed. (EC)	1	4 th	
	8) GradDip. Ed. (Early Years)	0		
	9) GradDip. Ed. (Middle Years)	0		
	10) GradDip. Ed. (P)	0		
University G	1) B.Ed. (EC)	1	1 st	Supporting learners with disabilities.
University H	1) B.Ed. (P)	1	3 rd	Diversity and inclusive education, and teaching for diversity in the classroom.
	2) B.Ed. (Middle Years)	1	2 nd	
	3) GradDip. Ed. (Middle Years)	0		
University I	1) B.Ed. (EC)	1	2 nd	Diversity and pedagogy, as well as educating for diversity. Courses covered in major: Introduction to special education, managing supportive learning environments, learning difficulties in literacy and numeracy, Autism Spectrum Disorders, teaching students with high support needs, and differentiating the curriculum.
	2) B.Ed. (P)	1	3 rd	
	<i>Students also have the option to choose 'Special Education' as a Major in the BEd course at this university.</i>	6 (one of which is a 9-week course focused on ASD)	All 6 courses offered in 3 rd	
	3) GradDip. Learn. & Teach. (P)	1	1 st	
	4) GradDip. Learn. & Teach. (Middle Years)	1	1 st	
University J	1) B.Ed. (P)	2	3 rd & 4 th	Diversity in the classroom and teaching exceptional children.
	2) B.Ed. (EC)	2	3 rd & 4 th	
	3) GradDip. Ed. (P)	0		
	4) GradDip. Ed. (Prep-Year 3)	0		

Previous studies (Masterson et al., 2014; National Professional Development Centre on ASD, 2008; National Research Council, 2001; Shyman, 2012; Volkmar, Rogers, Paul & Pelphrey, 2014; West et al., 2011) have highlighted the knowledge that mainstream educators require in order to work with students who have ASD. We developed the following table (Table 4.4) to outline courses pertaining to ASD, which should be included in all pre-service educator programs on a global basis, and how this may be achieved within the context of Australian universities. An incidental outcome of its creation is that it highlights the limited information and knowledge that currently is provided as essential coursework and practical experience to pre-service educators in Queensland, Australia.

Table 4.4

ASD Course Content for Pre-service Educators Based on Available Research

Year of study	Course topic	Course content	Course purpose	Course delivery
Second Year (Second Semester)	1. Understanding ASD: Knowledge of the Disorder	Foundations of ASD; including its history, models and theories which have developed, laws and policies, definitions and trends in practice, assessment of ASD.	As a broad introduction to ASD, this course should focus on the foundational information pertaining to ASD where pre-service educators receive the most current available research.	In-person and online
Third Year (First Semester)	2. Understanding ASD: Characteristics	Developmental characteristics associated with ASD, medical issues, communication issues with speech and language acquisition, behavioural difficulties, factors that affect learning. Multidisciplinary perspectives should be covered from education, psychology, medical fields etc.	This course should focus on the characteristics of ASD by understanding the broad ranges of the spectrum that can be present. Students should complete a practicum/field experience where written reports could be made about experiences with various children who have ASD.	In-person, online and practicum experience
Third Year (First Semester)	3. Supportive Learning Environments and ASD	An overview of instructional strategies which promote positive behaviour and reduce intrusive/negative behaviours, curriculum modifications, evidence-based practices, classroom management, teacher attitude and being realistic with expectations, transitions between activities and promoting inclusion.	As no single strategy will work for every child with ASD, the purpose of this course is to present a widespread collection of available strategies, where pre-service educators can assess how well each strategy is established with solid research evidence.	In-person and online
Third Year (Second Semester)	4. Supportive Learning Environments and ASD 2	This course should be an extension of content covered in Semester 1. It should focus on language enhancement, with ways to assist with miscommunication, instructional planning and using technology (such as iPad apps and websites), the role of teacher-aides, modifying and selecting appropriate content for a child who has ASD.	This course is needed for pre-service educators due to communication and language barriers often being a significant concern for people who have ASD. Coursework could comprise of the development of usual/expected language for different ages, and how this compares to the hypothetical differences of language development for people who have ASD. Another key component should be technology advancements for educators to use, covering video modelling, apps for tablets and interactive whiteboard applications.	In-person and online

Fourth Year (First Semester)	5. Ethical Practice and the student with ASD	How to collaborate professionally within a school to generate the best outcomes for children with ASD should be the purpose of this course. It should have a focus on working with people who have biases towards ASD, professional development opportunities, working effectively with teacher-aides, parents, and external professionals. Students should also complete a practicum/field-based component to gain first-hand experience of collaborating with a range of people in a professional sense.	Course content combined with practicum experiences will enrich learning outcomes where pre-service educators can reflect through class discussions and assignments (i.e. presentations, research papers and reflective journals).	In-person, online and practicum experience
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What is currently being offered to teacher-aide trainees undertaking a Certificate III in educational support is presented below (Table 4.5). Whilst this certificate is not compulsory for a person to be employed as a teacher-aide in Queensland, it is needed (Education Queensland, 2014). What is covered in this particular qualification does highlight several issues. Given that many teacher-aides work with students who have ASD (Alston & Kilham, 2004), it is concerning to see that while in training they are not taught anything specifically related to ASD. There appears to be more consistency in course titles and content across the eight training institutions for teacher-aides in comparison with the university programs. The distinction is in what an institution labels as compulsory or elective. The former underscores greater importance and essential content. Where electives in ASD studies are not taken, teacher-aides will receive training, which is only minimal in scope and general in focus – typically on ‘disabilities’. Some may receive none at all. As inclusivity is the norm in mainstream schools in Queensland, and the prevalence rates of ASD continue to rise, more teachers and more teacher-aides will encounter more students with ASD. Clearly, an overhaul of what currently exists as preparation is needed urgently if these encounters are to be evidence-informed, truly inclusive and productive for child learners in their learning, communication and social development.

Table 4.5

ASD Course Content Currently Being Offered by Institutions for Teacher-Aides in Queensland, Australia

Teacher-Aide qualification	Institution	Programs offered	Course names	Compulsory (C) or Elective (E) course	Course description
All of the institutions analysed offer the <i>Certificate III in Education Support</i>	A	2	1. Support students with additional needs in the classroom environment. 2. Support learning for students with disabilities in a classroom environment.	C E	1. Supporting students with additional needs/diversity: This course teaches the skills and knowledge required by a teacher-aide to support students with additional needs in classrooms where there are students with a mix of abilities and needs. 2. Support learning for students with disabilities in a classroom environment: This course describes the skills and knowledge required as an introduction to working with students who have a recognised disability.
	B	2	AS ABOVE	Both C	
	C	2	1. Work with diversity in the education environment. 2. Support learning for disabilities in the classroom environment.	C E	
	D	2	AS ABOVE	Both C	
	E	1	1. Work effectively with people with a disability.	C	
	F	2	1. Support students with additional needs in the classroom environment. 2. Facilitate learning for students with disabilities.	C E	
	G	2	1. AS ABOVE	Both C	
	H	2	1. Support students with additional needs in the classroom environment. 2. Facilitate learning for students with disabilities.	C E	

4.6 DISCUSSION

4.6.1 Generic coursework vs specific coursework

Whilst all ten universities listed in Table 4.3 offer courses relating to *inclusivity* and *disability*, only one addresses ASD specifically. This particular institution has a nine-week course on ASD as one of six courses constituting a major in Special Education. However, students need to wait until their third year of study to enrol in these six courses and no practicum component is attached to them, meaning students do not have the practical and hands-on experience to link with theoretical information that Shyman (2012) suggested as essential. More generally, each university appears to be addressing the phenomenon of ASD within the generic disability/inclusion courses offered, however, to what depth remains unidentified. Seven of the ten universities were presenting courses in the creation of '*inclusive environments*' with only one offering courses of study specifically related to the needs of students with ASD. A similar trend exists with '*diversity*', where eight of the 10 universities offer courses dealing with diversity, but only one of these explicitly focuses on ASD. Of the 10 universities surveyed, and of the 51 courses available across their campuses, only one institution was presenting courses in the '*high support and differentiated curriculum area*' specifically relating to students with ASD.

Given these findings, it is not difficult to see why so many in the profession have little or no knowledge of what to do about the complexities of teaching students with ASD. The pressing need for ASD-specific courses to become compulsory for pre-service educators was outlined in the literature review. However, the findings from the ten universities in Queensland show that ASD information is presented in generic topic areas, and often in elective courses rather than compulsory core studies. An understanding and an appreciation of both human *diversity* and *inclusion* not only are essential components of an equitable education system, but also form the foundation for responsible citizenship. Teachers for decades have welcomed children of all races, religions and cultures, and with the support of advisory teachers, have been effective in including such diversity within their classrooms. However, when the terms '*diversity*' and '*inclusion*' are applied to students on the autism spectrum, a vastly expanded understanding of the terms and a specific set of skills are required.

Educators should not be expected to enter the profession without being trained with the necessary skills and knowledge to enable them to offer a fully equitable education for all students. There is evidently a strong need for the development of specific ASD-focused courses to fill this void. Having one or two teachers trained in the complexities of ASD at any one school is no longer a sufficient contingency for immediate and long-term management of equity and excellence - the first of the goals from the Melbourne Declaration on the Educational Goals for Young Australians (2008). Nor is attendance at a one-day, one-off course adequate preparation for teachers of students who have ASD.

ASD-based courses for universities and teacher-aide training institutions to build upon and begin using within pre-service educator training programs are shown in Table 4.4. Affordability is needed in teaching pre-service educators about the myriad of facets related to ASD, evidenced-based supports that can be used within the classroom, and, opportunities to work one-to-one with students who have ASD (Thomson et al., 2009). The putative courses of study in Table 4.4 ostensibly should deliver such affordability much better than the current provision outlined in earlier tables. Certainly, this potential needs to be measured and checked for its fidelity in delivery and for outcomes it achieves. Assessing students' prior knowledge and what they have learnt after completing the courses, and obtaining ratings of their practicum experiences, are quantifiable ways in which to assess the courses immediate impact (Masterson et al., 2014). However, data are also needed both to indicate the portability and effectiveness of such outcomes as these students transition into professional practice and as the basis for an action learning approach to maintaining and strengthening the affordability of initial learning.

4.6.2 The importance of teacher-aide training

The literature reviewed here has highlighted the context of the professional training dilemma in that teacher-aides are often designated to assist students with behavioural, emotional and social difficulties, in addition to supporting the classroom teacher with management of student behaviour. The diversity of students within current, inclusive classrooms can present a myriad of learning difficulties and disabilities, and members of this collection of students often work in one-to-one situations or within small groups with teacher-aides (Groom & Rose, 2005). Several studies have found that qualifications held by teacher-aides vary considerably, that few

aides are university-educated and that many are employed with no training and experience in education or special education (Balshaw & Farrell, 2002; French, 2001; Giangreco, Broer & Edelman, 2002; Giangreco & Doyle, 2007; Riggs & Mueller, 2001). This literature foreshadows a solution in addressing this dilemma that rests in definitive action in recognising the significance and breadth of need for more and better focus on ASD in the preparation, deployment, management and in-service support of teacher-aides within schools.

In accordance with knowledge that teachers should obtain at the pre-service level regarding ASD (highlighted in Table 4.4), teacher-aides should also achieve a similar understanding surrounding the complexities of the disorder. Essential course content for teacher-aides should comprise:

1. Current, available research surrounding foundational information related to ASD, the use of particular strategies depending on the child's diagnosis, and using technology with students who have ASD in the classroom, such as specific apps and video modelling.
2. Complete hands-on practicum experiences with a collection of students who have ASD in order to demonstrate the complex differences, which can be found within each student.
3. How to effectively collaborate with classroom teachers to ensure successful outcomes for students who have ASD, and
4. Assessing the use of particular strategies that have a solid research base for students who have ASD where content could be taught and experienced during practicum placements.

4.6.3 Inclusion of ASD courses: At what cost?

Furthering the discussion earlier pertaining to the difficulties surrounding the inclusion of ASD specific courses in pre-service educator programs made by Hart and More (2013), we believe there is an added point to be made. The outcome from those providing the curriculum at each of the universities opens up opportunities for innovative and collaborative solutions such as nominating universities to particular areas where they might include ASD courses as a curriculum priority, with other universities following suit. Whilst time constraints and various content demands associated with teacher education curriculum can result in important content being

overlooked, (e.g. effectively working with students who have ASD in a classroom), we believe these changes are necessary. Education programs should begin to acknowledge the prevalence of ASD in comparison to other disabilities, such as a 289.5% increase in ASD diagnoses against other common disabilities such as Attention-deficit Hyperactivity Disorder (ADHD) 33% between 1997-2008 (Boyle et al., 2011; CDC 2012). General inclusive education courses can continue to include less prevalent disabilities that are more easily defined and managed by teachers and teacher-aides within the classroom. While the current study has not canvassed data on what basis those responsible for teacher education programs make these difficult choices, this is an important dimension in creating an evidence-led best mix of specific and generic courses which address disability and appropriate pedagogy and provide an imperative for further research.

4.7 CONCLUSION

There is an absence of comprehensive teacher education programs, which include vital information regarding ASD today in Queensland, Australia. Several implications are highlighted in this paper. Most importantly, the training of both teachers and teacher-aides at the pre-service level in Queensland, Australia, regarding foundational knowledge of ASD and follow-on professional development, needs to be addressed urgently. We have taken the evidence of prior research (e.g. Masterson et al., 2014; Shyman, 2012; Volkmar et al., 2014; West et al., 2011) as a first step in conceptualising such an address by outlining courses of essential study that Queensland institutions might begin implementing with those seeking state-of-the-art professional preparation.

In addition to pre-service training related to ASD, both student teachers and teacher-aides need to be instructed on how to work collaboratively in order for inclusion to be real and successful in its purpose. Training school staff to develop effective collaborative groups is fundamental to progressing equity and excellence in education, as is training teachers to be skilled in offering support, and in mentoring and learning from teacher-aides. Teacher-aides and teachers play key roles in the ease and success with which students who have ASD are genuinely included into mainstream schools. Teacher-aides should not be required to function as the primary teacher of students who have ASD, and will not need to do so if appropriate pre-service and in-service training is provided.

4.8 LIMITATIONS AND FUTURE RESEARCH

While findings have provided clarity about current provision and indicated particular shortfalls that require urgent redress, further research is needed to progress this work beyond its current limitations. Notably, we had not included secondary pre-service courses and programs or professional learning of in-service educators in our analysis. Nor had we sought and reported the perspectives of in-service educators who currently work with students who have ASD on the data we had gathered on ASD courses currently offered to pre-service teacher and teacher-aide training programs in QLD, Australia.

Certainly, further research is needed to address these limitations, and also to determine whether the scope of what has been reported here as shortfall is generalisable elsewhere in the preparation of pre-service teachers and teacher-aides for supporting students who have ASD. Additionally, there are important issues of process that require investigative report. For example, it would be useful to document what policies and mechanisms for implementation, monitoring and refinement exist in Universities and teacher registration authorities for consideration and decisions on evidence-based rationale for what could, should and would be included in courses and programs.

Such information has implications for ongoing improvement of teacher and teacher-aide training programs and can play a key part in supporting what teachers and teacher-aides in many studies have been reporting as their key challenges in recent years. Applicable training based upon research recommendations is essential if they are to meet these challenges within inclusive classroom environments. If institutions in Queensland, Australia, wish to have teachers and teacher-aides who are at the cutting edge of inclusive education for students who have ASD, consideration when creating pre-service programs should be in alignment with research evidence such as findings outlined in this paper.

Chapter 5: Teacher Results

5.1 INTRODUCTION

Following the analysis and interpretation of the data pertaining to pre-service courses for teachers and teacher-aides as presented in Chapter Four, five findings were presented. These findings were that:

- In Queensland, there is a lack of pre-service university courses, which encompass the nine areas of required knowledge pertaining to students with ASD, as suggested by Shyman (2012). Such courses would better enable teachers and teacher-aides to apply appropriate instructional and support strategies to improve educational outcomes for students with ASD.
- There is an urgent need for Bachelor and graduate level programs in ASD studies, in order to cater for the increasing prevalence of students with ASD in the general classroom population.
- There is a need for further investigation into regular, ongoing professional development for teachers and teacher-aides in ASD related studies.
- There is need for greater awareness of what is currently being provided for specific ASD training in pre-service teacher and teacher-aide courses.
- There is a need for both teachers and teacher-aides to be instructed in how to work collaboratively in order for inclusion to be real and to be successful in its purpose.

My purpose in this study was to develop a more sophisticated understanding of the perceived tension between the expectations of teachers and their capacity to implement the inclusive practices required by policy. My purpose in this chapter is to display the results, which relate to the teachers. This display covers the 17 teachers' responses to the survey, which was part of the exploration phase of the study. An analysis of these results informed the development of the interview protocol used for the face-to-face interviewing process of 12 of the initial 17 participants. The individual interview results that form the inspection phase of this study are also displayed in this chapter. The research questions were foremost in my mind throughout my data analysis, and as part

of the process of finding answers to these questions; the following paragraph establishes the manner in which this particular chapter is displayed.

The online survey, found in Appendix B, completed by the full staff of 17 teachers, contained three sections. The first section related to pre-service training (four questions), the second section related to their experience and in-service training (29 questions), and the third section contained 15 ASD-related statements which required selecting either 'True', 'False' or 'Unsure'. The display of results takes the following format: Section 5.2 displays teacher demographic details for gender, age, and ethnicity, in addition to teacher educational attainment and teaching experience. Section 5.3 displays support for teachers who work with students with ASD. Section 5.4 displays results for the teacher's perceptions of their interaction with the principal in regard to supporting the policy of inclusion for children with ASD. In Section 5.5, I report on the teachers' attitudes on inclusive education for students with ASD, and in Section 5.6, I conclude and report the findings from this stage of the study.

5.2 TEACHER DEMOGRAPHIC INFORMATION

This section relates to the gender, age and ethnicity of the 17 teacher participants who completed the online survey. It also provides data relating to their educational attainments, the year in which their qualifications were conferred, and whether such qualifications were awarded through Queensland, interstate or international universities. Data related to teaching experience and time spent in the present teaching location were provided, along with information apropos to ASD related training. The data displayed in Table 5.1 were gathered from the survey as part of the exploration phase of the study, which was subsequently followed by individual face-to-face interviews to further probe teacher levels of confidence and enthusiasm towards meeting the needs of students with ASD within an inclusive classroom situation.

Table 5.1
Demographic Data for All Teacher Participants

Characteristics	<i>n</i>	%
Gender		
Female	15	88.2
Male	2	11.8
Age		
25–40	4	23.5
41–50	6	35.3
>51	7	41.2
Ethnicity		
Australian	15	88.2
European	2	11.8

The data presented in Table 5.1 are representative of a typical distribution of staff demographic characteristics in Queensland primary schools. For example, the female to male ratio would be considered representative of most primary schools in Queensland. The same can be said for the ratio of nationalities of teachers on staff. There is a wide spread of age groups among the teaching staff and while this is also typical, it was thought prudent to categorise the teachers within the age ranges as presented in the above table as a way to protect the identity of staff who represented the only participant in a category on the survey. The data show that only four of the 17 teachers are under the age of forty.

Table 5.2 below shows that only one of the 17 teachers had completed a Master’s degree. Worthy of further note in Table 5.2 is that ten teachers indicated that they had not undertaken any training in ASD, with five claiming to have had ‘some’ ASD-related training. The online survey questions did not provide an opportunity for the participants to add specific information regarding ASD training, hence the ‘some’ category listed under the subheading of ‘ASD-related training’ displayed in Table 5.2. Two teachers indicated that they had had experience with ASD because there were children with ASD in their own families. The gaining of specific information regarding training became an aspect of the in-depth individual interviews.

Table 5.2

Participant Characteristics

Characteristics	<i>n</i>	%
Educational attainment		
Bachelor's degree	16	94.1
Master's degree	1	5.9
Qualifications obtained from universities in:		
Queensland	12	70.6
Interstate	3	17.6
International	2	11.8
Year teacher admitted to degree		
1970–1980	3	17.6
1981–1990	5	29.4
1991–2000	4	23.6
2001–2010	3	17.6
2011–2014	2	11.8
ASD-related training		
None	10	58.8
Family member with ASD	2	11.8
Some	5	29.4
Years of teaching experience		
<10	6	35.3
10–20	3	17.6
21–30	6	35.3
>30	2	11.8
Time spent in current school (years)		
<10	9	52.9
>10	8	47.1

Data in Table 5.2 revealed a wide range of teaching experience among the staff at the school. As there was a spread of teachers listed under the subheading, 'Time spent in current school', groupings were chosen to avoid identification of any particular participant, as one of the nine listed under the <10 group was a first-year graduate. When using two categories for 'time spent in the current school', an almost equal distribution of those who had spent less than ten years and those who had spent in excess of ten years was evident. Such statistics point to a high proportion of stable teaching staff who are experienced and culturally united. Table 5.3 below provides data related to pre-service ASD training for the 17 teachers who completed the survey. It is only reasonable to acknowledge that during the years 1970–1980, university

subjects dealing specifically with ASD were not available, as the phenomenon of ASD was only beginning to be understood by teachers during this time.

Only one of nine teachers who received a teaching degree between the years of 1981 and 2000 claimed to have studied between one and three units relating to ASD during their pre-service training. Consistent with the introduction of support for inclusion, the data indicates an increase in the number of teachers who believe that they undertook between one and three courses of study in ASD between the years 2001 and 2010. The remaining two teachers who graduated between the years of 2011 and 2015 both undertook courses in ASD related studies during their pre-service training. As it is indeterminate from the data whether such studies were simply part of a course or a full course, further investigation was undertaken during the individual interviewing phase of the data collection process.

Table 5.3

ASD-Specific Units Undertaken During Pre-Service Teaching Degree

Year awarded degree	Participants	No. of courses	ASD-specific units during pre-service training
1970–1980	3	0	0
1981–2000	9 (one of the nine studied between 1–3 units)	1	1–3
2001–2010	3 (two of the three studied between 1–3 units)	2	1–3
2011–2014	2	2	1–4

Whilst the data implies an increasing availability of courses in ASD for pre-service teachers, this is inconsistent with the data presented in Chapter 4, which evaluated ASD-related studies available in education programs within all tertiary institutions throughout Queensland. The data from this investigation found that many such courses were offered only as electives. To probe these demographic issues further, a more detailed profile of the 12 teachers who participated in the inspection phase of the study, which was the individual face-to-face interview, is provided. A coding system of A through L was implemented where TA is representative of Teacher A, TB representative of Teacher B, and so on. The following questions were put to the participants.

Question 1 of the interview was designed to obtain a clearer picture of the teachers' formal teaching qualifications by asking, 'What are your formal teaching qualifications?' Question 2 aimed at gauging opinions on professional development opportunities in the area of ASD by asking, 'Is there pre-service professional development focused specifically upon the special education needs of students with ASD within this inclusive setting?' Question 3 was an attempt to extend what had already been learned from the online survey about courses undertaken in ASD studies during the teachers' pre-service training. The question asked, 'Did you complete any study specifically designed for teaching ASD students during your pre-service training?'

These questions were designed to examine the teacher's preparedness to respond to the complexities associated with the needs of students with ASD in a general classroom situation. Below, Table 5.4 provides 12 participant responses to Questions 1 and 3, posed during the face-to-face interview stage of the data collection process. Teacher responses to Question 2 were consistent in their belief that there was a notable absence of pre-service training focused specifically upon the special educational needs of students with ASD within an inclusive classroom setting at their present teaching location.

Table 5.4

Participant Responses to Interview Questions 1 and 3

Teacher	Question 1: Qualifications	Question 3: ASD as part of pre-service training
A	Cert.T. KGTC; B.Ed.St. (UQ); B.A. (UQ)	No, none at all. ASD was not known as such when I was doing my university studies.
B	B.Teaching; Master's degree in Learning Innovation.	No, none.
C	B.A. (UQ); Dip. Ed. (UQ)	Yes, a very small and tightly compressed section on Special Education during the Dip.Ed.
D	Bachelor of Human Movement Studies (UQ); B.Ed.St. (UQ)	No, none.
E	B.Ed. (UK)	No, ASD was not a diagnosis as far as I know during the 70's.
F	B.Ed.St. (UQ)	No
G	B.Ed. (QUT)	Yes, one subject in 4th year, which focused on inclusion.
H	Dip.Ed. in Children's Services (Melb); B.Ed. (Melb)	Not that I can remember.
I	Diploma of Teaching (Early Childhood)	None
J	B.Ed. (Early Childhood)	No
K	Bachelor of Social Work. (Melb); Grad. Dip. (Primary Education) (Melb)	No
L	B.Ed. (Primary)	No

As displayed in Table 5.4, all teachers had obtained the prerequisite qualifications to undertake teaching as a profession, with credentials ranging from Bachelor of Education (Early Childhood), through to Bachelor of Education (Primary), Bachelor of Social Work with a Graduate Diploma in Primary Education, Bachelor of Human Movement Studies, to a Master’s degree in Learning Innovation. Question 3 confirmed the results displayed in Table 5.2 that ten of the 17 participants had not received any ASD-related training. One of the two remaining teachers, who had graduated within the past ten years, claimed to have studied one course on inclusion in the fourth and final year of study, with the other teacher claiming to have studied a subject in Special Education during her Diploma of Education year.

Table 5.5 provides a more comprehensive coverage of the demographic characteristics of the reduced numbers of 12 teachers who participated in the second phase of the data collection process, the face-to-face interview.

Table 5.5

Demographic Characteristics of the 12 Teachers Who Participated in the Second Phase of the Data Collection Process

Role	Gender (M/F)	Participant	Class student total	No. of students with ASD in class	No. of years teaching	Experience in years (Graduate=1; Early=2–7; Mid=8–14; Late=15+)
Prep.	F	Teacher E	19	3	16	Late-career
Prep.	F	Teacher I	21	4	13	Mid-career
Grade 1	F	Teacher G	24	4	12	Mid-career
Grade 2	F	Teacher J	25	3	10	Mid-career
Grade 2/3	F	Teacher C	27	4	5	Early-career
Grade 3	F	Teacher H	24	2	7	Early-career
Grade 4	M	Teacher A	24	2	46	Late-career
Grade 5	F	Teacher L	25	2	5	Early-career
Grade 6	F	Teacher K	26	1	1	Graduate
Physical Education	F	Teacher D	19–27	25*	24	Late-career
Music	F	Teacher F	19–27	25*	35	Late-career
HOSES	F	Teacher B	32	25*	17	Late-career

* The SEP works with all students with ASD and other disabilities based on what is stipulated within their IEP, hence the high number of students with ASD in this class.

*Specialist teachers D and F interact with all grades from Prep to Year 6, hence the high weekly number of students with ASD in their classes.

Table 5.5 indicates a high proportion of students with ASD in all but one of the classes. One Year 2/3 teacher, with five years of experience, had been allocated four students with ASD. This particular teacher, as has been recorded in Table 5.4, had received “only a very small and tightly compressed lecture covering special education within her Diploma of Education year” (TC).

When the issue of her preparation for including students with ASD was discussed during the interview, she stated:

I need training in how best to assimilate these children into the cohort. How a teacher goes about integrating students with ASD is surely indicative of the level of success a teacher will or will not have. (TC)

This level of concern for students was not confined to this teacher. Others were equally outspoken during their face-to-face interviews and willing to express their concerns for not being able to provide an equitable education for all students within their classrooms. One of the more senior teachers expressed her perspective in the following manner:

I desperately need strategies so that I can deal with student meltdowns during class time. Such meltdowns have a negative effect upon the remainder of the class, and the quicker these incidents can be resolved, the better for the student with ASD, for myself and for the remainder of the class. (TA)

Table 5.6

Further Questions and Responses Related to Teacher Training for the 12 Teachers in the Second Phase of the Data Collection Process

No.	Question	Category	<i>n</i>	%
1.	How long have you been teaching?	Total years of teaching for all participants: mean = 15.9	12	100
2.	Is your present appointment the first in which you have encountered children with ASD?	Yes No	2 10	16.6 83.4
3.	(a) Teacher qualification (b) During your pre-service training, did you complete any courses specifically designed for best practice for the teaching of students with ASD	Diploma/Bachelor’s degree Master’s Degree None One or more subjects	11 1 11 1	91.6 8.3 91.6 8.3
4.	(a) Professional Development (PD) Initiatives: Who has been responsible for your PD in the specialised field of ASD?	Initiative of the school Own personal initiative Initiative of Ed. Qld.	2 10 0	16.6 83.3 0

	(b) Incurred Costs of PD: Who has met the costs of such PD?	Personally paid	7	58.3
		School paid	5	41.7
5.	(a) What training have you undertaken which was specifically focused upon the modification of teaching materials for your student with ASD?	None	6	50.0
		Minimal	5	41.7
		Considerable training	1	8.3
	(b) Was this training helpful?	Yes	6	50.0
6.	(a) Do the IEP meetings help you gain a better understanding of your ASD student?	Yes	6	50.0
		No	6	50.0
	(b) Do staff meetings provide time for teachers to discuss educational issues associated with their students with ASD?	No time allocated	10	81.7
		Time allocated	2	18.3

All teachers indicated that in retrospect, they acknowledge that there was a notable absence of pre-service training regarding the special needs for students with ASD within an inclusive classroom setting. One teacher recalled having completed only one subject in her fourth year of study, which alluded to inclusion. The following quotations exemplify these points:

ASD was not known as such when I was doing my university studies. (TA)

There was a very small and tightly compressed section during the DipEd course. (TC)

ASD was not a diagnosis as far as I know during the 70's. (TE)

When asked whether the Individualised Education Plan (IEP) meetings helped, only six of the 12 teachers agreed. When asked to elaborate how they were helpful, they explained they had: learned useful strategies; acquired useful materials; benefited from regular discussion with the staff from the SEP and with the parents of the child concerned. Specifically, receiving more targeted information regarding a particular child from the HOSES and Guidance Officer was also mentioned by three of the teachers as a benefit towards gaining a better understanding of students with ASD.

Whilst the teaching staff have considerable experience and a wealth of knowledge both practical and academic, they seem to be at a loss as how best to support the students with ASD in their school.

5.3 SUPPORT FOR TEACHERS WHO WORK WITH STUDENTS WITH ASD

Subsection 5.3.1 displays the first theme, which defines the relationship between classroom teachers, specialist subject teachers and the teachers from the SEP. Subsection 5.3.2 displays the second theme, which emerged from the teachers' experiences of supporting students with ASD concerning their relationships with parents and teaching staff. Subsection 5.3.3 displays the third theme, which focuses upon the relationship between classroom teachers and the principal towards the process of supporting the policy of inclusion for children with ASD.

5.3.1 Relationship between classroom teachers, specialist subject teachers and the teachers from the SEP

Question 23 asked, 'Have you found that other teachers have been helpful in supporting you in working with a student with ASD', with Question 24 asking, 'How have other teachers been helpful?' This question provided the participants with an opportunity to select as many as were applicable from six options. Question 25 asked, 'If teachers have been helpful in ways other than those provided in the question above, provide further details'. Whilst responses to these questions provided information that suggest that teachers considered that they were receiving some support from their teaching colleagues, they considered that such support was minimal. In the words of one teacher: "Everybody is way too busy with their own classes to spend time assisting others" (TA). Concerning the question relating to how other teachers had been helpful; the survey data showed that 14 of the respondents indicated that they receive advice from other teachers, while three claimed that other teachers had assisted them with developing individual programs or lesson ideas for their students with ASD.

Relationships among the classroom, specialist teachers and the teachers from the SEP were expressed essentially in connection with collaboration in areas pertaining to planning and support, professional development (PD) and the availability of resource materials. Question 14 of the online survey asked, 'If you have had a student with ASD in your class, did you have access to professional support, such as an Advisory Visiting Teacher (AVT), or Teacher-Aide? If 'yes', in what specific areas did you have access to professionals?' The following comments are representative of teacher responses:

An Advisory Visiting Teacher was called in on occasions to make observations, which resulted in little to no follow up at all. (TH)

Initially, an AVT would visit me in class about once a month, but other than reviewing the student's IEP and making changes that were deemed necessary, little more assistance was provided. (TI)

Regardless of the assistance offered by AVTs, SEP teachers or other teachers who have students with ASD within their cohort, such support was deemed spasmodic. A slightly different perspective was evident with regard to the SEP teachers. Teachers found that whilst the teachers from the SEP are always willing to assist with their students with ASD, they often had to rely on their own resourcefulness. The following is a typical comment.

The teachers in the SEP are always there to assist in all areas pertaining to students with ASD. However, there are so many of these students enrolled at this school that time is scarce for these teachers. Sometimes it is necessary for us to battle on in the best way that we can. (TL)

The collaboration between the teachers who have more knowledge and experience with students with ASD, and those teachers who are experiencing difficulties with guiding their students to achieve to their fullest potential, appears to be a positive attribute of this teaching staff. The following comment was typical.

A member of staff, who works with students with ASD and is presently researching and studying independently, is an informal support network for behavioural issues concerning students with ASD. This teacher has been helpful in sharing with me modified resources and teaching materials. (TJ)

Through the survey, it became evident that in their efforts to achieve equity for the students with ASD within their classes, the teachers relied mainly upon the support of their teaching colleagues, and in particular upon the teachers and teacher-aides from the SEP. These findings were further probed in the face-to-face interviewing phase of the data collection process.

5.3.2 Extending to the individual interview

My analysis was concerned with identification and categorisation of the phenomena of inclusive education generally, and the inclusion of students with ASD more specifically. Each response was examined for clusters of information, which lead to the generation of the main issues of concern:

1. Planning and support

2. Professional development
3. Collaboration
4. Resources

Planning and support

In response to online survey Question 26, ‘What have you found to be most helpful from your school community’, where the respondents were asked to select as many options as applied to them, 15 of the 17 claimed that collegial advice was supportive, with two claiming that assistance with the development of individual programming to be helpful. In response to online survey Question 30, ‘How often do you have formal group meetings aimed at supporting students with ASD?’ Six of the 17 respondents claimed never to have had any formal group meetings, while eight of the 17 claimed to have group meetings less than once a month, with three claiming to have meetings once a week.

Question 33 of the online survey asked, ‘Are there any other comments you feel will support our understanding of how to support students with ASD?’ Responses revealed that the teachers were very open about their need for assistance with planning, claiming that they are often left to their own devices in this area. How best to modify the curriculum for their students with ASD was another concern, intensified by a lack of time for adequate preparation. These findings were further probed in the face-to-face interviewing phase of the data collecting process where three teachers considered the following:

Teachers of students with ASD require not only assistance with planning, but time to consider the specific needs of each of the students with ASD so that the student may be productively occupied with the curriculum requirements pertaining to each year level. (TH)

Teachers require knowledge, specialised techniques and support to be able to successfully incorporate and include children with ASD into their regular classrooms. (TA)

Nobody said that it is easy, but it can be made easier with the introduction of well-planned pre-service courses, especially designed to equip future teachers with the skills and knowledge that they will certainly require for the successful inclusion of ASD children in their classes. (TH)

Assistance with planning and the inculcation of skills and knowledge to successfully include students with ASD into a regular classroom situation, were high on the list of priorities for the teaching staff.

During the face-to-face interviews, teachers disclosed that opportunities did arise where they could discuss with staff from the SEP, areas concerning behavioural modification strategies for their students with ASD. With regard to such areas, Teacher K considered a need for effective strategies that could be specifically directed towards the management of the unpredictable behaviours often associated with students with ASD. She expressed her concern in the following manner:

Teachers who have children with ASD in their cohort are expected to take it on the chin whenever something occurs within the classroom which disturbs, disrupts or threatens the ongoing right of a teacher to teach and the students to learn. (TK)

Beyond unpredictable behaviours, Teacher B and teacher E acknowledged the work being done by the special education teachers in the SEP regarding social skill development for the students with ASD:

The SEP provides a quiet area where children can chill out and feel safe. Professional support with small groups of students with ASD is conducted almost every day to enhance their social skills and reinforce classroom behaviour. (TB)

Programming that supports students with ASD, which is based upon the work that the rest of the class is doing, goes a long way in ensuring that students with ASD will have a chance to achieve to their fullest potential. (TE)

It was clear that in general, the teachers acknowledged the supportive work being done by the staff in the SEP. Appreciation was shown for the social skill building activities undertaken by the special education teachers, and the support which was ongoing in association with the preparation and updating of a student's Individual Education Program (IEP). The teachers also acknowledged the presence of the 'chill out' area provided by the SEP for children at risk of 'meltdowns' and considered that this facility was a positive benefit to all concerned. As soon as the SEP staff was satisfied that the child was emotionally stable enough to re-join the class, the student was returned to the general classroom where the SEP staff member remained for a settling in period of ten minutes.

Of the 12 teachers interviewed, eight acknowledged that they were highly dependent upon support from the teachers from the SEP in order to meet the demands associated with the inclusion of a student with ASD. Six teachers admitted that they would not be able to cope without the presence of the SEP, and four of this particular group claimed to find it necessary to interact with the teachers from the SEP on a regular basis. When discussing how to plan for behavioural concerns pertaining to students with ASD, three teachers referred specifically to meltdowns. The teachers were concerned that the unpredictable and often impulsive behaviours associated with meltdowns could put the remainder of the class in a vulnerable situation. When such occasions occurred, these teachers had no option but to elicit support from the SEP. The following comments are representative of those made by the teachers interviewed:

Some teachers find it necessary to remove a disruptive student with ASD from their classrooms. Some have to call for a SEP staff member to come down to their classroom in order to remove the child, physically. Whilst this may be contrary to the philosophy of inclusion, it is necessary for the child's safety and for the safety of the other students in the class. (TG)

If I found that I was unable to cope in a meltdown situation, I would definitely ring the staff from the SEP for advice or assistance. (TI)

Without the SEP, I know that I would struggle with the students in my class with ASD and I am fully confident that I will get all the support I need from the staff up there. (TK)

These comments suggest a strong teacher dependence upon the SEP to subdue disruptions, such as when a child has to be physically removed from the classroom; when a child is displaying behaviours associated with an impending 'meltdown'; or when a teacher is struggling to accommodate equitably and inclusively, a student with ASD.

Teacher B from the SEP considered an IEP significant only when the class teacher, the Head of Special Education Services (HOSES), an additional teacher from the SEP, the school's guidance officer, the school principal or deputy, and one or both of the student's parents attend. This teacher stipulated that at the meetings which occurred twice a year, all facets of the child's needs are discussed, and timetabling is coordinated so that students with ASD will be accompanied and supported, whenever it was deemed necessary, by a SEP member of staff.

Both teachers in the specialist subject areas of Music and Physical Education (PE) claimed that it was not always within their capacity to put methods aimed at accommodating the anxiety and behavioural problems of some of the students with ASD into action. They considered that their main objective was to provide well-structured lessons for the class as a whole. In order to address this concern, timetabling was synchronised so that a staff member from the SEP could accompany students with ASD to these lessons. One specialist subject teacher, Teacher F, expressed her appreciation in the following way:

If there was not a SEP at the school, I do not think that I could cope. A SEP staff member, whether it be a teacher or teacher-aide, always accompanies the ASD students [sic] to my specialist lesson classes, and thanks to their active cooperation, I am able to include these students successfully into my activity-based programs. (TF)

If at any time during a semester a teacher were to find it necessary to revisit a student's IEP, they could be assured of helpful assistance from the teaching staff of the SEP. One teacher described the ease of such a process:

For children in my class who are on the spectrum, I am able to meet with teachers from the SEP every couple of months, if necessary, in order to change or adjust elements of a particular IEP. (TA)

Teacher C echoed this appreciation for the support available from the staff of the SEP:

I try to meet with teachers from the SEP every couple of months in order to discuss my student's progress in accordance with the expectations outlined on his IEP. I have found that the teachers in the SEP have a wealth of knowledge about the special needs of students with ASD and are very willing to share this knowledge. (TC)

Another teacher acknowledged that if she were to meet the educational needs of all students within the class, she would require more in-class support. She was clearly cognisant of the fact that the time dedicated to attending to the needs of her student with ASD, was essentially at the expense of her other students. She referred to those students who required an academically extended program. She described her concerns in the following way:

I would like the staff of the SEP to give me additional help to work out how I can be more successful in my attempts to teach two students with ASD as well

as equitably cater for the needs of the remaining 23 children within the class. Some of my students are entitled to extension programs in various subject areas that require additional hours of preparation time. (TD)

Whilst the two Prep. teachers were both mindful that their undiagnosed students were not officially entitled to support from the SEP until they progressed into Year 1 where they expected that the diagnosis of ASD would be forthcoming, they were appreciative of the assistance that was offered. This professional and collegial relationship between SEP staff and the prep teachers was evident when one of the Prep. teachers said:

Even though our students with ASD do not qualify for assistance from the SEP, the staff is very accommodating to our needs by providing for us with an unofficial safety blanket. (TE)

Conversely, not all teachers viewed the SEP in such positive terms. One teacher said:

I would like more help from the staff of the SEP as I consider that while they are dealing with students with ASD all the time, they seem to assume erroneously that the rest of us have our own ways of dealing with such students, whether our ways be right or wrong. (TG)

Another teacher seemed to be apprehensive about the actual physical presence of the SEP itself. The SEP comprises two classrooms in a single building, and quite isolated from the other general teaching areas:

I do not feel comfortable with the SEP at this school. Just the gates and things, and the fact that it's upstairs. I feel that there is a certain coldness about the SEP and the feeling starts as you go up those stairs. I feel that it is a locked-off place and does not have a good feel about it. Children have to go up there all the time, in and out. I really do not know what these children, or their parents, must think about this place at all. (TH)

While the discussion to this point has been mainly positive concerning the support provided by the SEP, there was evidence of differing perceptions of the usefulness of the SEP. The teachers claimed that they did not always receive the support they required from the specialist teachers in the SEP. When teachers were discussing their additional support requirements for their students with ASD, different types of support needs became evident. For example, one teacher was concerned about the lack of an appropriate forum where workable strategies could be shared among all

teachers who have students with ASD in their classrooms. Two teachers commented that:

In my opinion and within my experience at this school, one rarely gets a chance to discuss challenges that one may be having with a particular student with ASD. Not even in a staff meeting. (TK)

And:

It is a well-known fact that when new teachers come aboard, they are seldom, if ever introduced to the workings of the SEP. The administration should ensure that all new teachers are inducted into the workings of the SEP and its relationship with each member of staff. (TJ)

These comments suggest that new teachers are left to introduce themselves to the teachers in the SEP. Further, they perceived that they were being denied opportunities to resolve problems they may be experiencing in open forum situations, such as staff meetings.

Professional development

Data displayed within Table 5.4, addressing the question of pre-service university training in the special educational needs of students with ASD, indicated that all of the 12 teachers interviewed during the face-to-face data collection phase, agreed that there was a noticeable absence of such training. In this section, professional development in the area of ASD is discussed, as it applies to the practising teachers of students with ASD at the participating school. As was seen in the Planning and Support section preceding this, teacher dependence upon support from the staff in the SEP was evident.

The online survey responses to Question 11, which asked ‘How have you gained your knowledge about ASD?’ where the teachers were required to select as many or as few options from nine available possibilities, found that only five of the 17 teachers had gained some knowledge about ASD from Professional Development. Responses to this question also identified that five teachers had gained knowledge from conferences; nine teachers found ASD-related books helpful, and five teachers used the internet to gain a better understanding of ASD. The two most commonly selected responses were ‘having a child with ASD in my class’ (15 teachers) and ‘personal involvement’ (11 teachers). Question 13 asked of the participants, ‘Do you feel a need

for more specific training in any particular area in ASD? If 'yes', please outline the areas in which you feel you required more training'. Teacher responses to this question revealed a need to develop behavioural strategies related to 'meltdowns', and a need for training in methods to include students with ASD into an equitable classroom environment successfully.

As an extension to the survey data, fuller responses were obtained through the semi-structured face-to-face interviews:

I desperately need strategies so that I can deal with student meltdowns during class time. Such meltdowns have a negative effect upon the remainder of the class, and the quicker these incidents can be resolved, the better for the student with ASD, the better for myself and for the remainder of the class. (TA)

Yes, I need training in how best to assimilate these children into the cohort. How a teacher goes about integrating students with ASD is surely indicative to the level of success a teacher will or will not have. (TC)

I would like guidance and training in how to create a least restrictive environment and a positive atmosphere where all children within the class can feel comfortable and non-threatened. My aim is to achieve equity for every student in my care. (TH)

Being relatively new to the staff, I have found it very difficult to cope with the demands made by my student with ASD. I have asked the principal for PD opportunities, but none has been offered. The principal has never once been into my class to enquire how I am handling the situation, but will make a showing only if there is a physical element involved concerning the student with ASD. A meltdown will lead to the parent being rung and the child being taken home. (TK)

Another teacher sought specific training in class management strategies:

I would like assistance in developing strategies for dealing with student meltdowns effectively, while I have an entire class of students before me who also require my direction and guidance. (TA)

Teachers commented on creating peaceful environments within their classrooms. The following is an example of this need:

I would like some knowledge and assistance on how to adapt an environment and an atmosphere where all children within the class will feel comfortable

and non-threatened. The theory behind a least restricted environment should not only be considered for children with ASD, but should be fully understood and appreciated by all members of the peer group. (TG)

All responses indicated a need for more specific professional development in ASD. This professional development ranged from behavioural modification techniques, through to creating least restrictive environments within the classrooms. How the teacher deals with the special needs of students with ASD whilst teaching the remainder of the class was another area of concern.

While professional development was identified as an important issue for the teachers, it would appear that only a small number of teachers took advantage of a professional development opportunity, which was made available in after-school-hours by the HOSES. During a face-to-face interview, a teacher reflected upon the time when the HOSES made available two six-hour professional development opportunities to be held over six consecutive weeks at the beginning of the second and third terms. The aim of PD was to address the essential pedagogy associated with the successful inclusion of a child with ASD in the classroom. This particular teacher had a son with low-functioning ASD, and found this opportunity valuable:

I was most appreciative of this PD opportunity, which was to be conducted over a period of six consecutive weeks. Of the 20 or more staff members who stood to gain, only seven took advantage, with only five completing the first of these two courses. Unfortunately, the second six-week course scheduled for the beginning of the third term was cancelled through a lack of interest. (TJ)

The lack of interest in the PD by so many of her colleagues was clearly of concern for TJ, as she missed the opportunity to attend the remaining sessions. It would seem that while the teachers sought professional development opportunities, there were conditions, with one teacher stating:

I have other responsibilities outside of school, and to have to attend an afternoon PD in addition to a Tuesday afternoon staff meeting is expecting too much of us. Professional development should be undertaken during school time, not in our own time. (TC)

Such a cancellation was significant as it deprived those wishing to persevere the opportunity to do so. In addition, it devalued the validity for those who continued to request additional classroom support from the SEP.

In contrast to this lack of interest, other teachers expressed a greater need for a frequently upgraded list of best practice techniques for teachers who interact daily with children with ASD. One teacher's concern was not only for her present colleagues, but also for incoming teachers:

I think that each teacher should have a current list of the best practice techniques provided by the staff of the SEP. At this school, it is inevitable that incoming staff will have a child or children with ASD in their classes, and such a list will provide them with strategies to help manage the complex behaviours of these students. (TH)

Collaboration

Collaboration is a working practice whereby individuals work together towards a defined and common purpose. The online survey questions referring to collaboration, resulted in a range of responses from the participants. Question 15 asked, 'Were there any other areas in which you would have liked additional professional support? If 'yes' please specify the areas where you required additional support'.

Some of these points are exemplified in the following three statements:

Small cramped rooms are not conducive for the establishment of a least restrictive environment, but teachers are expected to follow the philosophy and do the best they can with what they have available. Really, more collaborative support is what I really need. (TL)

I would like to have somebody with the skills and knowledge of ASD to observe me on a regular basis in order to provide me with feedback. (TG)

Teachers who are prepared to sympathise with those of us who have students with ASD in our classes rarely offer to help resolve some of our issues. I think that my students with ASD should be a shared the responsibility of all staff members, not just the responsibility of one teacher. (TJ)

Modification of the environment to meet the needs of the students with ASD; regular visits from an Occupational Therapist based around the sensory needs of a child; and the need for more collaboration between members of staff to discuss ways to manage the behaviour of students with ASD, were among the concerns of the teachers. However, there was a feeling among some of the teachers that those who did not have students with ASD within their cohort offered them little more than sympathy. Such support needs, whilst being of the utmost importance to the individual teacher,

are strategies that may well have been covered within the professional development offered by the HOSES. This incident was discussed in the previous section on Professional Development.

Question 23 asked, ‘Have you found that other teachers have been helpful in supporting you in working with a student with ASD? Please list the roles of the staff only and not their names’. To illustrate, three respondents noted:

The very experienced teacher from the SEP who has a postgraduate degree in special education has been most helpful with regard to my student with ASD.

(TA)

The staff from the SEP have given me advice on how to improve matters for my student with ASD. They have given me support materials such as weight cushions and sloping desk supports. (TE)

The Head of Education Services is extremely helpful by taking my student with ASD, when necessary, for some time-out in a quiet corner in the SEP.

(TG)

The responses to this question confirmed the reliance on support from the SEP for teachers of students with ASD. Teachers acknowledged the value of the practical advice they received from the SEP. They also appreciated the support materials that were made available for them to borrow. The specialist subject teachers stated that they were dependent upon collaboration between the student’s classroom teachers, and from the SEP staff, if their Music and PE lessons were to be of benefit to all students. Such survey responses prompted further investigation during the interviews.

During the interview phase of the data collecting process, the Prep. teachers and the specialist subject teachers shared their opinions on the benefits of collaboration in response to the question, ‘In what areas do you consider collaboration between classroom teachers, staff from the SEP and parents important?’ The Prep. teachers lamented however, that whilst their Prep. students’ educational rights were protected by the Disability Standards for Education (Australian Government, 2005) Law, a part of the Commonwealth Disability Discrimination Act of (Commonwealth of Australia, 1992), the section dealing with Special Education Programs made no mention of funding for Prep. students who have an undiagnosed ASD. Whilst the Prep. teachers have accepted that their students who presented with ASD-type behaviours were not yet entitled to any support from the SEP, both were confident that the SEP teachers

felt strongly enough about assisting all teachers, that they could approach the SEP for assistance when necessary:

I am lucky in the fact that I have a number of parent volunteers who come early in the morning to take some of my Prep. children for story time. I also have others who assist with group language and maths work. Other than an occasional visit from a supportive SEP teacher, I am really left to my own devices. Any child that I have who presents with ASD characteristics, I rely totally on advice from the SEP staff as these children are not really entitled to support until they reach Year One. (TI)

Being rather isolated from the rest of the school, I find that I collaborate mainly with the parents of my students and at times, with staff members from the SEP. I also meet regularly with the other prep teacher and by so doing, have an opportunity to discuss issues that concern us both. (TE)

Although the main aim of the Disability Standards for Education (Australian Government, 2005) is to give students with disability the same educational opportunity and choices as other students, the full equity at the base of this policy is not fully realised until the child enters his or her first year of primary schooling. One Prep. teacher claimed that:

Even though there is a general feeling of isolation for the Prep. classes here at this school from the SEP staff, I have been able to arrange my own meetings with parents, and have found these meetings to be more beneficial than actually meeting up with the SEP teachers. However, I have also found that IEP meetings, with parents included, a more collaborative way for finding out as much as I can about any particular child in my care. Admittedly, I have a lot more contact with parents than I do with staff from the SEP, even though I know that if required, they will be there to help me. (TI)

The other Prep. teacher conceded that:

Even though our Prep students with ASD do not qualify for assistance from the SEP, the staff is very accommodating to our needs, and provides us with an unofficial safety blanket. I guess that I would be pretty stressed if it were not for the presence of the SEP within the school. (TE)

In contrast to the Prep. teachers, the specialist teachers receive considerable support with a SEP teacher at each of their classes for which they are very grateful.

Having the children for only half an hour a week, I look to the class teacher for hints on how best to handle students with ASD. I also depend upon an SEP teacher being present during my lesson so that I am better able to deliver the lesson incident free. (TF)

As part of my mission to support equitable rights for all students and especially those with ASD, I strongly encourage the presence of teachers from the SEP to attend my specialist subject classes. Their support and interaction throughout ensure that the lesson runs smoothly, with all students benefitting equally from the experience. (TD)

In contrast to these positive views, one teacher who was obviously unaware of the SEP staff's duty of care for all ASD students throughout both lunch breaks, made it very clear that in her opinion, the SEP teachers were non-collaborative. She observed that:

The barrier needs to be broken down between the SEP and the classroom as there appears to be a huge divide between what goes on in one place and then in another. It appears that the staff of the SEP elect to be isolated as they are seldom seen in the staff room with the classroom teachers and teacher-aides. It is here that collaboration really can be most effective. (TL)

Resources

Resources are usually understood to mean a stock or supply of materials, access to additional staff, money or other assets that can be drawn upon in order that a person may function effectively within his or her field of endeavour. The primary school, in which this research was undertaken, has enviable material resources in terms of two assembly halls, a state of the art 'Out of Hours Care' facility, tennis courts, a finely manicured oval, and a well-functioning computer laboratory.

However, this school, like many schools, relies on resources other than the material kind, when it comes to providing equitable learning opportunities for its students with ASD. These students have special needs; therefore, specific resources are required if these needs are to be met. Possibly the most valued resource for these students is the presence of an onsite SEP, which is able to provide teachers with hands-on learning materials, individually designed learning programs, and daily social skill-building sessions. Teacher ingenuity is also an important resource and two questions were posed to investigate the utilisation of such resources.

The two online survey questions referring to resources provided a spread of responses. The first of these two questions, Question 19, asked, ‘How do you modify teaching materials for students with ASD?’ The excerpts that follow are examples of the teachers’ responses:

I have visual timetables, visual reminders, coloured organisation for books and materials, sensory tent and I have instigated an individual reward system for my students with ASD. (TC)

It all depends where they are on the spectrum. High functioning students require extension work at times, while low functioning students require extensive modification of all content materials. (TB)

I break up tasks into smaller manageable pieces and make worksheets less ‘busy’. In subjects that are difficult to engage them in, I try to work out activities that involve something they are interested in. (TL)

These examples appear to suggest a professional degree of resourcefulness within the teaching staff. They represent those who use group work to support the student with ASD, those who adjust materials according to the degree of difficulty and in accordance to each individual student’s needs, and those who focused on the particular interest of the student to encourage engagement in learning.

The second question, Question 21 asked of the teachers, ‘Do you have the resources to modify teaching materials for children with ASD?’ The excerpts that follow are examples of the teacher responses:

The answer to the question is ‘yes’. I think that resources do not always have to be of a material nature but can often be internal. My greatest resource is my passion for teaching, my empathy towards those who are struggling, and my ability to look deeply into their needs, both physical and emotional. (TA)

Regular communication with parents is vital, as expectations can be levelled at the particular stage the child has reached, and the steps we plan to take in the days ahead. Parents are the best resource a teacher can have. (TD)

While these teachers seem to appreciate what they have, others demonstrated an alternative perspective with a typical comment being:

No, I do not have the resources to modify my teaching materials, and I am not sure which resources are available to me. (TH)

During the interview with Teacher B upon the subject of resource availability within the school, a summary of her comments is presented below:

The school's SEP, overseen by the HOSES, has access to a number of resources which include specialist teachers such as speech therapists, teachers for the hearing impaired, teachers for the visually impaired, teachers for the physically handicapped, and teacher-aides. There are also hands-on resources such as puzzles, maths games, language games, communication games that are all available for classroom teacher use... The main function of an SEP is to support the educational needs of students with a disability, so that they may more fully participate and enhance their achievement at school. When interviewing the teachers, it became clear that few teachers understood the makeup of the SEP or the availability of resources.

As a result, all teachers were asked to elaborate about their access to, or knowledge of available resources within the school, with only one responding in the affirmative. Whilst educationally based resources were constantly being used by the teachers and teacher-aides within the SEP, the majority of the teachers were unaware that they were available for classroom use as well. Two teachers made the following comments:

I was unaware that teaching materials housed in the SEP are in fact available for classroom use as well. (TL)

How am I to know that there are teaching materials available from the SEP if I am not told? The only time I go to the SEP is if I have to be part of an IEP compilation for one of my students. (TK)

It would appear that there was confusion surrounding the availability of and access to resources housed in the SEP.

5.3.3 Section summary and findings

The first of the four areas of consideration was 'Planning and Support' for teachers with students with ASD within their cohort. The findings for this are that the support received from the staff of the SEP was vitally important to an extent that:

- Some claimed that they would not be able to cope without the presence of the SEP.

- Others claimed that they found it beneficial to keep open contact with the teachers in the SEP with regard to reviewing their IEP documents.

The second area focused on ‘Professional Development’ for teachers with students with ASD within their class. Findings for this theme are summarised:

- All teachers considered that whilst there was PD in key subject areas of the curriculum, there was an absence of appropriate PD for teachers who had students with ASD within their classes.
- When PD was offered by the HOSES of the SEP, the majority of teachers failed to take advantage because it demanded an after-school commitment of one hour per week over a twelve-week period at the beginning of terms one and two.

The third area focused on ‘Collaboration’ between teachers, parents and the staff from the SEP. The findings for this theme are:

- The majority of the teachers interviewed considered collaboration between colleagues, parents and the SEP to be of the utmost importance, even though some of the teachers admitted to never having visited the SEP on any occasion other than to contribute towards the development of a student’s IEP.
- The teachers in the Prep. classes considered themselves somewhat isolated from these sources but were confident that the SEP teachers felt strongly enough about assisting all teachers that they could approach them for assistance if/when necessary.

The fourth area focused on ‘Resources’ used by teachers during the process of modifying their teaching and learning materials:

- An unfamiliarity with resource availability added to a belief that the SEP was viewed as an isolated domain working independently of the remainder of the classroom teachers.
- Few teachers were aware of the hands-on and educational materials that were available for classroom use from the SEP.

5.3.4 Relationship between teaching staff (including the teachers from the SEP) with parents

The online survey gave the classroom teachers an opportunity to respond to three questions involving their relationships with parents and teachers from the SEP. Question 28 on the survey asked, ‘How important do you think it is that parents of a child with ASD have involvement with the child’s teacher/s so that they can work together?’ There were four response categories with three of the 17 considered parental involvement as ‘often important’, with the remaining 14 of the 17 teachers regarding such involvement as being ‘very important’.

Table 5.7

Participant Responses to Survey Question 28

Option No.	Response	Summary	Percentage
1	Not important	0	0%
2	Occasionally important	0	0%
3	Often important	3	18%
4	Very important	14	82%

Question 29, ‘Please provide an explanation for your selection above’, gave the participants an opportunity to expand upon their response to the preceding question. Comments made by the teachers indicate their commitment to working with parents:

As a parent of a child with ASD, I know their strengths and weaknesses and what skills they come to school with. Together, parents and teachers can work on making sure these children show these skills at school, and together, parent and teacher can increase the development of these skills. (TJ)

I keep in very regular contact with my parents. It is a two-way street. By so doing, parents hear how their child is coping and performing at school, and I also get to hear of any family issues that could be significant for the child. I can also be made aware of how things are being managed at home. (TA)

Consistency is the best answer. (TL)

Parents can share so much of their child’s day-to-day requirements, and when changes are noted at home, they freely share these changes with the teacher so that they may be considered. (TC)

Often a student with ASD has academic or behavioural needs that require support and management from both home and school. It is also important that

parents and teachers be ‘on the same page’ so that the child does not experience conflicting or inconsistent management between the two settings.

(TB)

It is evident from the quotes that the teachers do acknowledge the value of involvement with the parents of their student/s with ASD. Through constant communication between teacher and parent, it follows that because both parties have a common understanding about the student; positive outcomes are more likely to be achieved. Question 31 asked the participants, ‘In what areas do you think parents of students with ASD and teachers can successfully collaborate?’ Five options were provided for the response to this question, with the 17 teachers being asked to select as many or as few from the five options. Table 5.8 reveals the results.

Table 5.8

Responses to Options Regarding Methods in Which Parents of Students With ASD and Teachers Can Successfully Collaborate

Option No.	Response	Summary	Percentage
1	Parent volunteering within the classroom.	Six of the 17 teachers were in agreement with this option	35%
2	Joint decision making about the student.	Nine of the 17 teachers were in agreement with this option.	53%
3	Regular communication via email/phone.	Ten of the 17 teachers were in agreement with this option.	59%
4	Consistency with routines at school and at home.	Twelve of the 17 teachers were in agreement with this option.	71%
5	Sharing new information and resources related to ASD.	Nine of the 17 teachers were in agreement with this option.	53%

These findings were further investigated during the interviews phase of the data collecting process. In response to the question, ‘Do you feel that there is a good working relationship between parents and teachers of children with ASD in the school?’ Of the 12 teachers interviewed, nine seemed confident that a positive and cooperative engagement existed between classroom teachers and the parents of children with ASD.

Responses typifying this view are presented below:

I think yes, because parents of a child with ASD have to be positive with the teacher that is responsible for their child. They cannot choose who will be

teaching their child, so they just have to make sure that they are positive and supportive of whoever their child's teacher is. (TA)

Well, I get along with my parents OK, but I think being an older teacher has made it easier. If I tell them I have five kids, the eldest being 16, the youngest five, they tend to listen to me and are friendlier towards me. (TC)

At the beginning of the year, parents of my students with ASD are likely to advise me of things that may have occurred at home before the start of the day, or to state that they have to pick up their child from class early. By the end of the first term, these interactions seem to dwindle off. (TG)

I think there is a good parent-teacher relationship. The teachers at this school are great. They are compassionate and caring and they want the best for their students. Therefore, I think they have good communication between the parents, so I think that is important. (TE)

I believe that in general, the relationship between the teaching staff at this school and parents of children with ASD is sound and supportive. (TL)

I imagine that the teachers have a positive relationship with the parents of their students with ASD, but actually, I could not really be sure. (TF)

Those who tendered the more casual and uncertain responses, suggest that these teachers may have been paralleling their opinions totally based upon their own parent/teacher relationships, as in the case of Teacher C who may just assume that because she has a positive relationship with her parents, the rest of the teaching staff would have likewise. Replies such as these suggest that teachers, in general, had scant if any real trustworthy knowledge of the parent/teacher relationships of their colleagues. The staff from the SEP gave no indication of either positive or negative relationships with parents, indicating that such information may well fall under the heading of 'confidential'. Teachers D and F, both special subject teachers, indicated that interaction between themselves and the parents of students with ASD was rare.

However, responses of a positive nature are evident in the data, especially from those teachers who have students with ASD in their classes. Teacher G revealed that it was normal for anxious parents at the beginning of the year to be seldom seen towards the end of the year. This could well be the result of a graduated level of trust developed between teacher and parent as the months passed. Comments from teachers who did not have students with ASD in their classes suggested an assumption that

those teachers who have students with ASD in their classes must enjoy a positive relationship with the parents of their student. Responses such as these suggest that little knowledge of what is going on with the students with ASD is reaching those who do not have students with ASD in their cohort.

5.3.5 Classroom teachers and parental engagement

No specific question on the survey asked about parental engagement with classroom teachers. However, the subject was fully discussed during the interview phase of the data collection process. The analysis of the interview data, which pertained to parent engagement with classroom teachers revealed a paucity of professional confidence in having to cater for the divergent needs of their students with ASD. The teachers' responses to Question 46 of the face-to-face interview, 'Would you consider asking a parent of a child with ASD to assist you within the classroom as a volunteer?' indicated a considerable reliance upon such parental input, with one claiming that:

Discussions with such parents constituted the best PD that I could have received during this professionally challenging period of my career. (TK)

However, one of the specialist teachers attempted to encourage periodic engagement from parents of children with ASD in the following manner:

When children from Year 5 go off to camp, I invite the parents of children with ASD to accompany us so that their child may experience, more fully, the benefits of being an integral part of the peer group while being away from their everyday school situation. (TH)

Acknowledging the value of a parent's experience, one classroom teacher stated that:

From the very beginning of the year, I rely strongly upon those who know my students with ASD better than anybody else, their parents. I rely on the parents to assist me in putting into place everything that will support me in the teaching of their children. I think the problem can be that teachers do not have enough contact with other professionals who also have an in-depth knowledge of these students, for example, their Occupational Therapists and Speech Therapists. (TJ)

Teacher C recognised the value of parents of children with ASD who undertook the responsibility of addressing the cohort on the subject of individual differences. She expressed her appreciation in the following manner:

I think it is good when the parent of a child with ASD comes into my classroom to enlighten the neurotypical students about how an ASD child can respond differently in certain situations. These situations may include environmental elements such as lightning and thunder, loud noises and pungent smells. (TC)

Two teachers from the lower school considered that they benefited substantially from being able to communicate with parents on a regular basis:

There are not many of my parents who work five full days, so even if they have one day off, they make sure to come in, say hello, both morning and afternoon. We consider ourselves fortunate that we get to see the parents of our students on a regular basis. This is especially true for those parents who have children with symptom that later may be considered to lie somewhere along the autism spectrum. (TI)

Four teachers who confessed to relying heavily upon regular engagements with parents of children with ASD in their classes, with one teacher saying:

I like to meet up regularly with parents of my students with special needs. If I have a child with ASD, I arrange for a meeting with them and any other support network within the first or second week of school. This is to make sure that I may glean as much information as possible from as many sources as possible. I would like this to be an ongoing relationship developed gradually throughout the year, as I do not imagine a time when I would be glib enough to consider that I had a complete handle on any student with ASD. (TK)

One teacher recognised the value of engaging with the parents of her student with ASD, revealing empathy in what she had to say:

I have a very positive engagement with the parents of my students with ASD. These parents are forever willing to share their experiences with me and it has helped me to be more empathetic and understanding of their time poor lives. My compassion for them comes more to the fore when I am bidding my students a good afternoon and a safe journey home. As my day ends, theirs begins. (TH)

Of the seven teachers above who responded to this question, two recognised the value of firsthand knowledge regarding specific children with ASD. Another recognised the value of parents who were willing to share with their child's class, their own personal knowledge of ASD. This was usually done in a simplistic way so that the neurotypical students could understand and appreciate the individual differences in each one of us, thus reducing the instances of bullying. Teacher E and Teacher I, from the lower teaching areas in the school, considered themselves fortunate to be in a position to engage with parents on a regular basis. Four of the seven respondents admitted that they were reliant on parental input to assist them with tried and true strategies used at home to help keep their children with ASD on task. Consistent with the data presented above, the two specialist teachers did not seem to have developed any notable relationship with the parents of children with ASD, and as a result, engagement was limited or non-existent.

5.3.6 Staff from SEP and parent engagement

Whilst no specific questions were included in the online survey regarding parental engagement with staff from the SEP, the subject was discussed during Phase two, the interview stage of the data collection process. The HOSSES outlined that each morning; the students with ASD are brought into the SEP by a parent or carer and are supervised within the SEP until roll call at 9:00am. The staff at the SEP arrive at 7.30am to make themselves available for arranged or anticipated engagements with parents, but such meetings are usually brief. The HOSSES added that once a fortnight, the SEP conducts an evening where parents of students with disabilities can discuss concerns they may have regarding the progress of their child. These meetings, which are conducted by the HOSSES and the teachers from the SEP, are rarely attended by the classroom teachers of these students. She went on to outline that once a child had been officially diagnosed with a disability, HOSSES were to follow a strict procedure:

I ask parents who have a child on the autism spectrum to come along to their first meeting with a profile of what their child can and cannot do. I also ask them to list the child's strengths and weaknesses. In those early meetings, parents can provide us with much information considering that they are the experts on their child. At subsequent meetings, the child's class teacher attends so that she can advise the parent/caregiver on how the child is progressing academically. The meeting provides a forum for learning or

behavioural problems to be discussed. It is at such meetings that information is collated as the basis for creating the child's IEP. (TB)

The HOSES explained that the SEP provides a short period each morning where children with ASD who may present with anxiety, can 'settle down' before joining up with their cohort:

Parents will often chat to us when dropping off their child, phone us if necessary, or send us an email to warn of a personal upset that occurred before the child left the house. As this is likely to have a negative effect upon the student's day in class, the SEP staff will work one-on-one with the child before he is settled enough to join his peer group. (TB)

Once every two weeks, the parent or parents of students with ASD meet with the staff of the SEP for one and a half hours commencing at 6.30 pm, usually on a Tuesday evening. These meetings have multiple advantages as it provides the staff a better opportunity to meet in a less formal manner with these parents, and it gives the parents a chance to mingle and discuss differences and similarities among their children. (TB)

These data outline that the engagement between the staff in the SEP and the parent/s of students with ASD is of a supportive nature engagement is also evident in the once a fortnight evening meeting where parents of students with disabilities can discuss concerns they may have regarding the progress of their child.

5.3.7 Parent as a volunteer in day-to-day activities within the classroom

A common belief is that parental involvement is a crucial component in ensuring the success of their child at school (Education Queensland, 2018b). Today, in households that are dual income families, finding time to volunteer during the normal working day can be difficult. Nonetheless, parents are encouraged to become involved in their child's education and this can take the form of volunteering at the school, and in their child's classroom.

Question 31 of the online survey asked the participating teachers, 'In what areas do you think parents of students with ASD and teachers can successfully collaborate?' Only six of the 17 teachers who responded to this survey question stated that they would consider having parents as volunteers in day-to-day activities within their classroom. The remaining 11 participants offered a variety of reasons for why they would not be comfortable with parents of their students with ASD as volunteers within

their classroom. One considered that the classroom relationships that had been established between teacher and student might be challenged by parents whose children would revert to parent/home relationships, thus reducing the teacher's ability to monitor the student's progress.

Such findings were further investigated during the interviewing phase of the data collecting process where some teachers theorised that grandparents were now filling an ever-widening gap because of time poor parents.

The teacher who conjectured upon the scarcity of school volunteers suggested that:

Volunteers are now very hard to find because people just do not have the time. The few volunteers we have are usually from the grandparent brigade. However, some of these volunteers restrict themselves to reading groups and are reluctant to work with students with ASD. (TA)

Other views also surfaced with the ensuring comments being representative of these views. One compassionate teacher said:

Whilst I would love to have the parents of my students with ASD to come in as volunteers, I believe that they see the six hours their child is at school as 'their time', a time to be away from what must be a very stressful and tiring daily experience. (TG)

Another teacher expressing concern for parents of neurotypical students said that:

Having volunteers working in the inclusive classroom can be a two-edged sword. Whilst they may assist in some areas such as reading groups, play groups or with the library, many have difficulty understanding the challenging behavioural complexities often associated with students with ASD. (TB)

One of the teachers in the lower school was in two minds about encouraging volunteers into her teaching space by stating:

I rarely have to ask for volunteers as some parents just step forward to help. However, in Prep. all organisation is done by the teacher, and it is sometimes difficult for volunteers to accept this, with some unintentionally undoing that which has already been set into motion. The Prep. year is no longer a learn-by-play experience, something that is often misunderstood by volunteers. (TI)

5.3.8 Parent expectations for their child from the teachers' perspective

Whilst no specific questions were included in the online survey regarding parental expectations for their child, this topic was discussed during the interview stage of the data collection process. In this section, two types of parental expectations are discussed by the teachers - those that they considered 'reasonable' and those that they considered 'unreasonable'. Teachers agreed that parents of neurotypical children have both types of expectations, mostly based upon the academic, physical and artistic capabilities of their own child. While there was general agreement that the expectations of parents of children with ASD had similar levels of expectation, it was the unreasonable expectations that were of concern to the teachers of students with ASD.

The data associated with the question concerning parent expectations for their child revealed a varied level of responses. These were categorised under three headings: (a) Those who were happy that their child was attending a school along with neurotypical children, (b) Those whose expectations appeared to be unreasonable even after having been presented with evidence and accumulated data showing that their child had significant limits to his or her abilities, and (c) Those whose expectations for their neurotypical children required them to withdraw their child from the school altogether.

Of the 12 teachers interviewed on this question, seven made statements associated with their experiences of parents with realistic expectations of their child with ASD. Ten of the 12 teachers were able to comment about experiences that they had had regarding parents of children with ASD who had unreasonable expectations for their child. Of the teachers who made comment, four experienced both levels of parental expectation. The ensuing remarks are typical of these viewpoints:

So far, in my limited experience with students with ASD, I have found that their parents just seem to be happy that their child is at school and is able to stay within the confines of the classroom. However, if the situation did arise where a parent had unreasonable expectations of me and of her child, I would seek out support from more experienced members of staff. (TH)

Another member of staff discussed how she would deal with a parent who had unreasonable expectations of her child's abilities by summoning support from administration:

If a parent of a child with ASD considers that her child is achieving such and such at home on a one-on-one basis, my recourse would be to advise her that from my own observations, this is what your child is capable of within this particular school environment. If the situation became one where I suspected a very unreasonable expectations being made of the child, I would call for support from the principal, the guidance officer and teachers from the SEP. (TE)

While on this topic, one of the specialist subject teachers recounted an experience she had had with a parent who had both unrealistic and unreasonable expectations for her son with ASD.

There was an occasion when a parent of a student with ASD insisted that he be entered into the school's instrumental program. To do this, he would have to learn an instrument. It was clear to all concerned that the child was incapable of handling such a disciplined task, but the parent insisted, quoting the policy on equity word by word. The school complied with the parent's request, however after a few weeks of observation at both school and home; the parent agreed that the activity was not in the best interest of the child. (TF)

The same teacher recounted another situation where a parent of a child on the autism spectrum had unrealistic and unreasonable expectations for her child as well as for the child's teacher:

I recently had a boy with ASD join the junior choir, but before long, his disruptive behaviour was undermining the musical experience for the other members. I spoke to the parent about it, but she insisted that I persevere. This parent, obviously in denial, had no understanding that a choir could only work within a disciplined environment. Eventually the principal stepped in and advised the parent that the child was gaining nothing from the choir experience, and that her child was no longer required to attend. (TF)

Teachers also spoke of the alternative situation. One teacher outlined a situation in which parents of neurotypical children made the decision to remove their children from the school because they considered that the teachers were unable to help their children reach their fullest potential due to the number of children with disabilities in each classroom:

It is just natural that parents want the very best for their children, whether their child has ASD or not, parents will have high expectations for the child.

Expectations fall under the reasonable and unreasonable categories. Teachers at this school where there is a high enrolment of children with special needs, have encountered both types of expectations from parents. For instance, there are already twelve children with special needs enrolled for next year. Rumour has it that some parents have already made it clear to the administration that they will be moving their child/children from our school and sending them to another nearby school. Their reasons for doing so may be many. (TI)

This same concern has been expressed by teachers who were also parents at informal settings and recounted during the interview:

One of our own teachers here at this school, has already decided not to enrol her pre-schooler with us next year as she claims that her child will be disadvantaged. She considers that if her child were to be placed in a class with one or more special needs students, the teacher's one-on-one with the other students would be greatly limited. (TG)

Throughout the interviewing process, it became clear that it was common knowledge among the teaching staff that over a period, some parents had chosen to withdraw their neurotypical children from the school. The reason behind their decision was based upon a belief that their children were being disadvantaged because of the number of students with ASD in many of the classes. One teacher expressed this perspective clearly:

I think that if parents of ASD children would volunteer more often within and around the school, they may better understand why it is that some parents are choosing to remove their children from the school. These parents would soon realise that the presence of some of these students with ASD within the general classroom might well be detrimental to the learning of the other students. (TD)

5.3.9 Section summary and findings

This section of the data analysis revealed findings on parental relationships and their engagement with teachers, and parents working as volunteers on a day-to-day basis with the classroom teachers within the classroom situation. Five themes were identified:

Classroom teachers' relationship with parent/s

- The relationships between the parents of students with ASD and the classroom teachers suggested limited interaction between the parties concerned.

Classroom teachers and parent engagement

- Parent engagement with the classroom teacher was important to only some of the teachers who relied heavily on information, which they considered only the parent could provide.

SEP staff and parent engagement

- In general, teachers were hesitant to comment one way or another on the relationships between their teaching colleagues, the staff from the SEP and their respective parents through an obvious lack of knowledge in this area, and opportunities to discuss such matters were rare.

Parent as volunteer in day-to-day activities within the classroom

- Few teachers commented positively upon having parents of students with ASD as volunteers within the classroom.
- One teacher acknowledged that whilst many were time poor, others were in need of a period of respite from their child/children.

Parent expectations for their child

- In general, the parents' expectations for their child/children with ASD were similar to the expectations of parents whose children were neurotypical. Most teachers agreed that their expectations were reasonable and in keeping with their understanding of their child's capabilities.
- Examples of expectations that were quite unreasonable were minimal.

5.4 TEACHER PERCEPTIONS OF THEIR INTERACTION WITH THE PRINCIPAL WITH REGARD TO SUPPORTING THE POLICY OF INCLUSION FOR CHILDREN WITH ASD

Discussed in this section is what is required for teachers to make 'inclusion' a reality within their classrooms. Analysis of the data has shown that professional development in ASD was offered by the HOSES and after a short period, it had to be

cancelled because of a lack of attendance. Since then, teachers describe that little professional development in the area of ASD has been forthcoming for the teachers at the school. Because the spectrum relating to ASD is indeterminate and that at any time of the year a teacher may have a child enrol in the class with ASD, it is important that the remainder of the class accept the child and their differences. This can cause concern for teachers who may have had little or no induction into the protocols associated with dealing with an inclusive classroom situation.

Whilst no direct questioning associated with the principal's relationship, expectations, and support for teachers of students with ASD was included in the online survey, analysis of comments made during the interviews has led to consideration of these responses to the teachers' perceptions on the relationship between teachers and the principal. These were categorised in the following four areas:

- The teacher's interactions with their principal;
- The teachers' understanding of the principal's expectations of teachers with students with ASD;
- The teachers' expectations of the school principal; and
- Support for teachers of students with ASD.

5.4.1 The teachers' interactions with their principal

Dyadic relationships encompass an assortment of personal characteristics, so physiognomies such as trust, respect and mutual obligation need to be at the root of every working relationship if desired outcomes are to be attained. The online survey did not include any direct question concerning the principal's relationship with teachers of students with ASD, but it was discussed during the face-to-face interview phase of the data collection process. Even though the principal declined to participate in this study, the principal was happy for the study to be undertaken within the school.

Of the 12 teachers who commented about their connection with the school principal during the semi-structured, face-to-face interviewing phase of the data collection process, two claimed to have had trouble with their working relationships. The remaining ten providing no concrete evidence that the principal had made or was making any effort towards developing effective relationships with them. Some

appreciation of the principal's relationships with the staff is represented in the following comments:

A teacher from the lower school said:

I do not feel that I have any relationship with the principal at all, as the principal rarely speaks. The principal never comes up to the Prep. classes. Perhaps because I am seen to be doing a good job, I am left to do it on my own. (TE)

Another teacher from the lower school agreed that:

The principal has shown no interest in supporting me with the concerns I have for the children in my group who show signs of being on the autism spectrum. (TI)

Another commented:

There has been little support offered to me by the principal for my three students with ASD, so I have given up going to the administration for advice on how to work with problems relating to these students. Been there, done that. (TH)

The two teachers who made claim to having a constrained working association with the principal made the following statements:

The principal has a bit to do with some of the more challenging children in my class, but only on a one-on-one basis. I reckon I could deal with ASD child on a one-on-one basis too if I did not have to deal with 25 other children at the same time. (TF)

Being a fully qualified special education teacher and working in the SEP, I discussed with the principal six months ago the possibility of piloting some much-needed professional development in order to meet the educational needs of children with ASD. I proposed that this could be accomplished during a pupil-free day. I am still waiting to hear back from her on that score. (TB)

It would appear that teachers responsible for the education of students with ASD were obliged to rely upon their own resourcefulness in meeting the complex needs of their students with ASD. Teachers agreed that any approach to the principal for assistance was not forthcoming, and that much-needed professional development was being denied.

5.4.2 The teachers' understanding of the Principal's expectations of teachers of students with ASD

Expectation is defined as “an act or instance of expecting or looking forward. A strong belief that something will happen” (Moore, 2007, p. 373). Leadership literature stresses that leaders must collaborate with the teachers to ensure that all are on the same page before a vision can be realised. When asked to comment upon the principal's expectations of teachers who had students with ASD in their classes, two chose to make no comment at all. However, the remaining teachers considered, that as they had not received any form of framework from the principal with reference to his expectation of them as teachers of students with ASD, they would have to ‘go it alone’ in their endeavours to meet the needs of these students. This decision was based upon a perception that the principal was indifferent to the needs of teachers who had students with ASD within their cohorts:

It would seem that the school principal considers that the teachers with children with ASD should just get on with the job of teaching. The theory of inclusion certainly is not foremost within this school community and I fear that we may be losing the battle. (TD)

A teacher from the Prep. area assumed that:

The principal seems to consider that as a Prep. teacher, it is my job to be on duty all the time with my class. During any break that I have, I am either tying shoelaces or doing one of a multitude of other things associated with the care of children in this age group. My situation really needs to be understood by the principal so that the principal can arrange a fairer distribution of away-from- class-time for me. (TE)

Supporting this line of argument, a teacher made the comment that:

The principal seems to think that because there are students with ASD in almost every class in the school, that the administration is running an inclusive school setting. Really, we are just being left to our own devices most of the time with no monitoring or any checks to see whether we are following the philosophy of inclusion equitably for every student in our classes. (TH)

With minimal understanding of the appropriate response techniques required to deal appropriately with a ‘meltdown’, the term used when an autistic child becomes

overwhelmed by an external stimulus overload, a teacher expresses her anxiety in the following manner:

No teacher has all the answers when it comes to dealing with meltdown situations. Something as minor as having the wrong pair of socks on, or the wrong spoon with which to eat lunch, is often enough to set off a student with ASD. How could any principal expect a teacher with little to no knowledge of intervention strategies to cope by herself in such a situation? (TJ)

Concerning the principal's expectation of a teacher with a student with ASD in the class:

This principal has never suggested any particular method for me to use while interacting with my students with ASD. Such expectations usually come from the staff in the SEP, but it is my impression that the principal is quite happy just to leave it that way. (TK)

It would appear that the teaching staff who have students with ASD in their classes have little confidence in their principal, claiming that they receive very little support from that area of the administration. As a result, these teachers appear to have decided to go it alone, in an attempt to provide an inclusive environment for their students with ASD. One teacher made the comment that by just having so many students with special needs and ASD distributed throughout so many classes, had identified the school as being an inclusive institution.

5.4.3 The teachers' expectations of their school principal

In response to the question, 'Are your expectations of the principal being met regarding the support provided for your students with ASD?' the teachers' responses all indicated that their expectations in many areas were not being met. The teachers believed that a professional who had been selected to be a leader within their school community, would have been more apposite to filling such a leadership role.

From the data analysed from the teachers' responses regarding their expectations of the principal, it became evident that: qualities such as clarifying goals and objectives; the ability to include stakeholders in the planning stages of teaching children with ASD; and the recognition and praise for a job well done, were all absent. One teacher from the middle school expressed her expectations of the principal succinctly in the following manner:

The principal should be the driving force behind instilling the philosophy of inclusion throughout the school community. Inclusion will not work without shared values. The staff must be given opportunities to learn from others and from those who are more experienced. Inclusion has to be a major part of the school and community culture. (TL)

In the absence of whole-of-school professional development opportunities where teachers could learn strategies to enable them to accommodate students with ASD in their classes, one teacher's expectation of the principal was expressed in the following manner:

I have been here for less than ten years, and when I first arrived, the teachers were asked if they would like some ASD training. We were each provided with a little tick sheet where we could choose the areas we would most like PD – i.e. sensory needs, behaviour modification strategies etc. We could also choose where we would like to have the PD. I for one was most enthusiastic and ticked just about every box but no professional development in the areas of ASD was ever to eventuate. (TJ)

Supporting this line of argument, two teachers resonated the foregoing sentiments:

Even though the principal may have received little to no training in ASD, just recognising the crucial need for PD should be obvious. As the teachers of students with ASD, we should be given the opportunity to identify the areas in which we need the most support, and this support should be provided by means of regular professional developments sessions. This would help create the supportive relationships that are at present absent between principal and teachers. The principal should be the driving force. (TA)

I should have thought it the responsibility of the principal to arrange PD sessions for those teachers who have children with ASD in their classes. In the past, the HOSES did offer courses after school, but I was unable to attend because of family commitments. In my opinion, if the administration were really committed to the philosophy of inclusion, they would alternate the staff meetings to include PD based upon the education of students with ASD. (TH)

One teacher's expectations referred to the principal's claim that the school is an inclusive institution:

In my opinion, it is the principal's responsibility to open up communication between every parent and more constructively within the entire community. By so doing, everyone should feel more confident to come forward to learn more about what it is like to live with ASD. Unless such an initiative is undertaken, there will be little chance for the inclusion policy to be taken seriously in our school community. (TA)

Another teacher commented upon the same subject:

Because the principal has made little or no effort to spread the inclusion philosophy to the parent body, parents of atypical children are commenting that the behaviours of some of our students with ASD, as observed by class parents or class volunteers, have led to their belief that the very presence of these children is damaging to the school. Such opinions are totally in opposition to the aims of an inclusive environment. (TD)

Another teacher expresses her frustrations with the principal in the following manner:

It puzzles me that for a school that identifies as being inclusive has a principal who rarely comes into classrooms to observe inclusive strategies in practice. This principal takes things too much for granted. (TG)

The absence of support for stressed teachers of students with ASD was the subject of another teacher's concerns:

It is obvious that teachers are stressed over their perceived lack of confidence in being able to provide their ASD children with the assistance they require. One would expect that the principal would provide some time during staff meetings to vent these issues. This never happens. (TC)

A teacher's expectation of the principal's commitment to staff is expressed in the following way:

My expectation of the administration is that the principal should be arranging at least one meeting a term with all teachers so that issues that arise regularly within the classroom can be discussed, but unfortunately, these meetings never occur. (TE)

Teachers expressed some level of expectation that they had of the principal, with some commenting on the lack of communication between principal and staff, with others commenting on the lack of interest shown in their students with ASD. The

continuing absence of professional development in the area of ASD featured as another major concern. As communication was rarely instigated by the principal, the teachers were reluctant to approach on matters of importance, tending to attend to the matters of concern on their own.

5.4.4 Support for teachers of students with ASD

Nowhere in the data was there evidence of mentoring being undertaken within the school by more experienced teachers, teachers from the SEP or from any member of the administration team. There was no mention of teachers being observed during their interactions with their students with ASD, and no mention of teachers receiving assistance with their evaluation of students with ASD. The following quotations exemplify these points:

A teacher who advocated for a total-school-awareness program in order to engender support for all students with ASD, made the following statement:

It should be the responsibility of the principal to ensure that all teachers are aware of the presence of children with ASD enrolled at the school. This could be done quite simply by spending some time during a staff meeting, showing projected images of these children, accompanied by information relating to their particular behavioural patterns. For example, the boy I worked with last year had a meltdown in the schoolyard. The teachers on duty did not know who he was, and nobody knew how to respond to his needs. For a school that is supposed to be inclusive, how sad is that? (TK)

Whilst all children are entitled to enrolment in any school of their choice, except perhaps for those who live out of a certain school catchment area, one of the teachers considered that there were examples of irresponsible enrolments based solely on the fact that the school has a SEP attached. This is what the teacher had to say:

Even though the principal espouses the benefits of having children with ASD in the school, the acknowledgment ends there. The administration appears to be more than happy to enrol these students and then promptly palm them off to teachers, many of whom have had minimal training in the area of special education, to do the best they can with them. (TB)

Six teachers complained about a general lack of support for their children with ASD, and especially from the school principal. Here are some examples taken from the data:

The principal, nor any other member of the administration team, have ever come up to the SEP to assist or support us in any way. Not even to check up on how things are going. However, the principal did visit us on three occasions this year, but these visits were not in connection to any of our children with special needs. (TB)

Another claimed that:

The principal has never called up to my Prep. building to enquire how I am getting along with any of my students. This is a concern to me as I have children who have obvious signs of being on the autism spectrum, and who may require a diagnosis later in the year. (TE)

A middle school teacher expressed her concern for the lack of support she was receiving for her students with ASD in the following manner:

The principal has been in my classroom twice since I have been at the school. Both times was for periods of no more than 15 minutes. As the principal's focus is on reading, the administration was only interested in installed the 'Reading to Learn' program. The principal paid no heed to my ASD students. There was no feedback on either visit, or no recommended advice on my teaching strategies. (TG)

One teacher indicated her appreciation for the presence of the SEP:

It seems to be up to me to monitor the day-to-day progress of the children with ASD in my class, but I must admit that the teachers and teacher-aides from the SEP are most willing to help whenever a problem arises. (TE)

Teachers spoke freely about their support needs regarding their students with ASD. One teacher saw a need for a whole-of-school awareness to the presence of each of the students with ASD within the school environment. Another was critical of what she believed to be indiscriminate and irresponsible enrolments of children with special needs by the principal. Six of the 12 teachers questioned on the subject of support for teachers of students with ASD alluded to the absence of administrative visits to their classrooms. The need for a collegiate approach between all members of staff concerning the education of students with ASD was another suggestion put forward by a concerned teacher.

5.4.5 Section summary and findings

Four areas of concern were investigated in this section, all of which involved principal/teacher relationships, principal/teacher and teacher/principal expectations and the level of principal support for teachers of students with ASD. These results were based upon the perspectives and perceptions of the teachers and the findings are presented as follows:

‘The teacher’s interactions with their Principal’

- Teachers considered that the principal had limited relationship with the teachers on staff on any level.

‘The teachers’ understanding of the principal’s expectations of teachers with students with ASD’

- Teachers claimed that the principal seldom entered their teaching space in order to enquire about the progress of their students with ASD. Such infrequent visits were concerned with issues disassociated with student progress.
- Teachers were discouraged on the occasions when students have to be removed temporarily from the classroom because of a misbehaviour or a meltdown. Their discouragement is based upon the absence of any follow up support from the principal. Directing teachers to the SEP staff for assistance appeared to be administrative policy.

‘The teachers’ expectations of the school Principal.’

- The absence of a school Principal initiated school-based or external professional development (PD) opportunities was a continuing issue of concern to all teachers.
- As the majority of the teaching staff had received little or no instruction in ASD during their pre-service training (Table 5.1; Table 5.2), the teachers considered it the responsibility of the principal to acquiesce with the SEP to provide regular PD opportunities towards the process of filling basic gaps in their knowledge.
- While some teachers absented themselves from any after school hours PD, as evidenced by the lack of attendance at the HOSES’ two six-week ASD

seminars, they did express willingness to be involved in a professional learning community.

- Their reasoning was that such a community would provide them with opportunities to share ideas, observe one another in action, and provide and receive feedback upon teaching and behavioural modification strategies. However, these opportunities had not been made available to them.

‘Principal’s support for teachers of students with ASD.’

- Some teachers indicated that they no longer relied upon any assistance or guidance from the Principal and had resigned themselves to a situation where they were working in virtual isolation with their students with ASD.
- Teachers readily acknowledged the planning assistance and support that was readily available to them from the SEP, but missed opportunities to have a more congenial collegial working relationship with the administration and their peers.

5.5 WHAT ARE THE TEACHERS’ ATTITUDES ON INCLUSIVE EDUCATION FOR STUDENTS WITH ASD?

The online survey did not include any specific questions in order to elicit teacher attitudes on inclusive education for students with ASD. However, during the face-to-face interview phase of the data collection process, questions were posed where the objective was to elicit teacher attitudes towards inclusion. Responses were analysed revealing the teachers’ attitudes towards inclusion in four defining areas related to attitudes:

- The inclusion of students with ASD in the mainstream classroom.
- Special provision for students with ASD in the classroom.
- Advantages and disadvantages of having students with ASD in the classroom.
- Towards shared responsibility for students with ASD.

5.5.1 Inclusion of students with ASD in the general classroom

Following analysis of the interview data, it was evident that some teachers were still adjusting to teaching in a school with a substantial population of students with

special needs, particularly students with ASD. These attitudes can be appreciated in the following comments:

A child with ASD suddenly has a meltdown and my attention immediately goes to that child. Before long, I have lost the remainder of my group as they start doing bizarre things as well. It can be a very stressful for me as the teacher as well as stressful for many of the other children in the group. (TE)

Beyond creating stress for the teacher, this middle school teacher considered that students with ASD had the ability to affect the work of the other students:

Having to deal with meltdowns when students with ASD throw themselves down onto the floor, or start screaming and yelling out, generally disrupting the rest of the class when they have just settled down to work. (TG)

While other teachers discussed safety concerns with one teacher's comments typical of this perspective:

Sometimes my student with ASD will shout at the top of his voice, "Shut up! I hate you!" He will throw things across the room and throw things at other students. He will even throw things at me. He will then indiscriminately tip over desks. He just seems to be focused upon himself with no concern for anybody else in the room. I worry about the effect it must be having upon the other members of the class, and I am concerned for their safety. (TH)

The attitudes of the teacher, who had reservations about the placement of students with ASD and children with special needs in a mainstream setting, had this to say:

Children with an intellectual disability are being enrolled into our school and being placed into classes with teachers who have had no training in special education strategies. This is the result of a parent-preferred placement, where the parent of the child has the last say on what is appropriate for her child. No consideration is made for what is appropriate for the teacher. (TB)

At the other end of the spectrum, there were teachers who supported the student with ASD's right to equal educational opportunities, but such support came with a condition:

I firmly believe that all children have equal rights to a mainstream education, until it is recognised that the child can no longer cope in an inclusive setting. Then, and only then, should the child be considered for an alternative more appropriate placement. (TA)

A teacher's comment that sums up this discussion is:

I think that there are two opposing camps at this school as far as the practice of inclusion is concerned. There are those of us who embrace the concept of inclusion and there are those who do not want the school to become known as a special needs' institution within the community. (TJ)

Of the 12 teachers interviewed on their attitudes regarding the inclusion of students with ASD in mainstream classrooms, six offered an opinion, whilst the other six had no specific views. Of the six who expressed an opinion, three were concerned for the lack of social skills, the occasional behavioural outbursts and the unpredictable meltdown situations often associated with students with ASD. The teachers' lack of professional training in the area of ASD was also a concern, accompanied by a scarcity of collegial support. However, teacher A's positive attitude towards inclusion which stipulates that students with ASD had equal rights to a place in a general classroom, came with a condition. Teacher B expressed reservations about having students with ASD in regular classrooms at all, with teacher J commenting on opposing opinions concerning the inclusion of students with ASD.

5.5.2 Attitudes associated with having to make special provisions for students with ASD in the classroom

Making special provision for children with special needs is a legal requirement and part of a teacher's professional responsibility and obligation. In the case of students with ASD, there can be a vast range of special provisions, which have to be addressed. These were discussed with the teachers during their interviews. Withdrawal spaces were important for some teachers:

Because space is limited in most of our classrooms, I think that teachers with children with ASD require some sort of withdrawal space. If the child becomes anxious, often leading to a meltdown, he needs to be able to go to a safe area where none of the other children in the class can be seen and he can leave his anxieties behind him. (TA)

Taking these points one-step further with a call to action.

A more meaningful communication between the whole staff and the administration needs to happen on how to modify the environment effectively for sensory overload and meltdowns. The need to provide a LRE [least restrictive environment], while a most worthwhile project, for so many

students with ASD attending the school, the chance of achieving this for each child is quite improbable. (TH)

Lesson modification was also discussed.

As a special subject teacher, I can modify my lessons by taking into consideration of what I know of each student with ASD. For example, if the child does not want to sing or play an instrument, he is not forced to do so. (TF)

However, the issue of the other children in the class keep coming back to the discussion. In classes of the sizes we work with, it is difficult when we have to make special provision for students with ASD who may have very high needs. There are also those who are non-verbal. What are we to do with these children whilst at the same time attempting to teach the remainder of the class? (TG)

It is clear that being able to provide the support required by students with ASD on a daily basis, and at the same time equitably cater for the needs of the remainder of the class, had presented difficulties for many of the teachers.

5.5.3 Advantages and disadvantages of having students with ASD in the classroom

Discussions with the teachers revealed that there were advantages and disadvantages to having children with ASD within a regular classroom environment. When asked to elaborate, the teachers did so by considering both the advantages and the disadvantages for the classroom teacher, the neurotypical students, and the students with ASD themselves.

Examples from teachers who recognised the advantages follow. The first example discusses teacher growth as a positive outcome.

I think that having a student with ASD in the class makes me think more flexibly. It helps me to think outside of the box and encourages me to develop strategies that I may not have bothered developing before. It certainly takes one out of their comfort zone. (TB)

These next two quotes discuss growth for students:

The advantage of having children with ASD in the class is that it gives the neurotypical students an opportunity to see firsthand, that intellectually and academically bright people can be quite quirky. The spin-off to this is that

when the children leave school, and are mixing socially outside of the school setting; they are conditioned to knowing that the concept of what is typical does not really exist. (TC)

And:

Inclusion gives the other children a chance to see that everybody is different. They all learn to accept others for who they are and what they are. (TE)

I think it is important for all children to learn the difference between making fun of someone who is a bit different to just appreciating that they can be interesting and nice to be around. I think the children do amazingly well at this. (TH)

While the teachers were positive about the advantages of having students with ASD in their classrooms, there were those who voiced alternative views. The following examples emphasised the disadvantages to having students with ASD within a regular classroom environment. These comments reflect concern for the educational advancement of the neurotypical students:

Whilst I am mindful that students with ASD are entitled to the same level of education as everybody else, because of their constant disruptive behaviour, I have to modify my program drastically at times, to the detriment of the other students. (TC)

Concerns for behaviour seem to be an issue:

Because of the disruptive behaviour of many of these students with ASD, I really cannot say that I see too many advantages to having them in mainstream schools. The only way to control their behaviour is to give into them, and this is often seen as favouritism by the remainder of the class. You just cannot win under these conditions. (TG)

While behaviour problems remain the issue, there is also concern for the wellbeing of the student and their peers:

Some of the students with ASD just do not like music. They cover their ears and their teacher-aide puts earmuffs over their heads to block out the sounds. In situations such as these, I cannot understand the reasoning behind having these children in the music room at all. In my opinion, their dislike for the lesson outweighs any good that may come from them being in the room. Personally, I would prefer them not to come. (TF)

This suggests that in the opinion of the teachers interviewed there were both advantages and disadvantages to having students with ASD within a general classroom environment.

5.5.4 Shared responsibility for students with ASD

Data from this study has already demonstrated that teachers who do not have students with ASD within their cohort are unlikely to offer advice or assistance to those teachers who do. It was considered by some, that teachers generally are just too busy with their own class preparation to have the time to be of assistance or support to other teachers on staff. Because of the lack of professional development in the area of ASD, and the lack of collegiate support and administrative support, teachers struggle to meet the needs of both their students with ASD and the remainder of students in their class. Two examples of the five comments made by teachers who assumed that their colleagues were too busy to share responsibility for students with ASD are as follows:

Because all teachers on staff appear to me to be in survival mode, they do not seem to pay much attention to the needs of those who have students with ASD in their classes. (TC)

I really believe that everyone is preoccupied in the process of just getting through their own day and teaching their own classes. There is just not enough time left to assist anybody else. (TF)

A specialist subject teacher was critical of the classroom teachers but acknowledged support from her colleagues in the SEP:

Teachers have shown little evidence of being pro-active on my behalf as a special subject teacher, being content to let me battle away on my own with little more than a nudge and a wink as they leave their classes with me. However, the staff from the SEP has been supportive in terms of accompanying children with ASD to most of my classes. The SEP is a great example of shared responsibility for all of our students, including those with ASD. (TC)

Beyond concern for their own teaching, Teacher H expressed concern for another, while noticing the disparity; it seems she has not taken any action to initiate support:

I do not think that anyone thinks outside of his or her own classroom. Though having said that, I worry about the teacher next door to me. She has a little

undiagnosed boy who is obviously on the spectrum, but she does not have any support for him at all. I have ASD assistance for most of the day for my diagnosed student, so I am concerned about her. (TH)

Going one-step further, the Teacher A suggested the existence of an injudicious attitude:

I think that the problem within our school is that once the child has been diagnosed with ASD and receives funding; the administration and many of my colleagues seem to be of the opinion that it now the responsibility of the specialist teachers in the SEP to deal with all facets of the child's education. This seems to be an impediment to the true meaning of inclusive education. (TA)

This mistake may rest with the way the principal established the school culture with Teacher D suggesting that collegiate responsibility for students with ASD should stem from the principal and as far as the teacher was concerned:

The principal should always set the tone in any school, and for whatever reason, different principals are better at doing that than others. Whilst some may espouse the benefits of having children with disabilities in their school, what is more important is how they go about integrating them within the school community and how they go about encouraging their staff to take group responsibility for the overall welfare of these students. (TD)

The role of the principal is central with Teacher L extending the argument:

Whilst inclusion is being practised within the school, there is an obvious lack of vision. The principal needs to be more involved in a process of creating a culture of inclusion, and should value what it is that is going on within the classrooms. The principal needs to set up the processes and the structures and opportunities for staff to get together to learn and share together. It all must start with leadership. I think both the principal and the HOSES could be more proactive in this most neglected area. (TL)

The leadership of inclusion should not just rest with the titleholder leaders, but all teachers, with Teacher L recommending that shared responsibilities for students with ASD rest with the entire staff. She considers that:

We as teachers should not be sitting around complaining about the absence of PD on the subject of ASD as that is just a lazy excuse. We have to take the

initiative and make it a shared thing between ourselves. We have special education teachers here at the school who are very knowledgeable about students with ASD, so we just need to encourage them to share their expertise with us on a regular basis. (TL)

5.5.5 Section summary and findings

This section has the following findings:

- The main concerns for having a student with ASD was the variability of their social skills, the occasional behavioural outbursts and the unpredictable meltdowns associated with students with ASD.
- Dealing with these issues was made more difficult because of the teachers' lack of professional ASD training and a deficiency in collegial and administrative support.
- Teacher expressed concern for the need for environmental modifications and the special educational planning.
- Teachers acknowledged both the advantages and disadvantages to having children with ASD in their classes.
- Claims made that teachers showed little interest or failed to offer support for teachers who had students with ASD.
- A lack of ownership from the top down could be responsible for a lack of shared responsibility for students with ASD.

5.6 CONCLUSION

The collection, analysis and interpretation of data during this stage of the study was presented in line with the research questions identified at the beginning of this chapter. Findings surrounded the issues of planning and support; professional development; collaboration; resources; interaction or otherwise between staff and principal; modification of environment; and shared responsibility. In summary, this stage of the study generated the following findings:

There are limited opportunities for planning and support for teachers of students with ASD.

Overall, the teachers believed that because of the limited planning and support opportunities available to them, there were varying levels of efficacy among them. Discussion with the teachers revealed fluctuating levels of anxiety, according to the years of experience of the individual. Whilst many claimed to be comfortable with the assistance they were receiving from the staff of the SEP, others considered that this support was limited and not available to them when it was most required. The majority of the teachers indicated that they would appreciate opportunities where staff meetings could be seen as a suitable forum through which current inclusive-practice teaching and behavioural modification strategies could be shared.

There are limited opportunities for collaboration with other members of staff.

Whilst data collected during this stage of the study confirmed that teachers of students with ASD collaborated with the staff of the SEP at least twice a year in association with the compilation of a student's IEP, there was a small number who claimed to collaborate on other occasions when changes to a student's IEP were to be considered. The absence of regular collaboration between staff members was justified by claiming that everybody was just too busy to become involved in regular teamwork activities.

There is a paucity of professional development for teachers in the area of ASD.

This study also exposed a paucity of professional development in ASD related issues. It would appear that there were PD opportunities available in support of all the Key Learning Areas, except in the area of ASD. Considering the high number of students with ASD enrolled at the school, it is not surprising that the failure to provide such PD in ASD related areas has affected the implementation of operative inclusive practice within the institution. However, it was revealed through discussion with the participants, that a 12-hour PD in ASD related issues had been offered by the HOSES of the SEP, but as it required participants to stay back after school, the attendance dramatically dropped until the project was cancelled.

Teachers are unaware of the availability of resource materials.

An inspection of the SEP facility had revealed an abundance of resources of a material nature; all fastidiously referenced and available for members of staff.

However, many of the younger and more recent members of the teaching staff claimed that they were unaware of the presence of such materials.

According to some of the more recent staff members, particularly those who had no prior experience with students with ASD, information about the availability of visiting special education professionals had not been shared with them. The failure to provide information pertaining to such vital and available resources has affected the implementation of proficient inclusive practice for these teachers.

There is a low level of interaction between teachers of students with ASD, and their parents.

The data indicated that in general, there was a low level of interaction between teachers of students with ASD and the parents of these students. Rather these students commenced their day with the staff in the SEP. Any problem that may have transpired throughout the day would be immediately passed on to the staff of the SEP, and it would be the responsibility of the HOSES to inform the parent at the close of the day.

There exists a minimal degree of teacher/principal relationship or principal/teacher support for teachers of students with ASD.

Even though the principal had not agreed to be involved in the processes relating to this study, the data relevant to teacher/principal relationships was restricted to a series of one-sided opinions – those of the teaching staff. Nonetheless, the teachers were united in the view that they had experienced little interaction, socially or otherwise, with their principal. They considered that the principal had also displayed little interest in their students with ASD, and had shown little interest in the wellbeing of either these students or their teachers.

There exists an element of caution for those teachers who have students with ASD in their classrooms.

Clearly, the special subject teachers approached each of their lessons with caution. As was defined in Chapter 1, many students with ASD respond poorly to noisy environments or surroundings they may observe as being disordered or confusing. Music and physical education lessons can be representative of just such settings, enjoyable for the majority, but often distressingly chaotic for students with ASD. It is within such surroundings that students with ASD may present with negative and disruptive behaviour, often leading to a meltdown situation. Whilst inclusion

encourages all students to participate in all areas of the learning experience, but many of the teachers adopted a cautious approach to the presence of students with ASD within their classrooms.

There is a high level of concern associated with having to provide a modified environment for the students with ASD.

Successful inclusion for students with special needs necessitates a least restrictive environment (LRE), where the students can progress at their own levels in each of the key learning areas. Included in the concept of LREs is a need for a ‘chill out’ space, or an ‘away from others’ space. The reality is that many of the classrooms consist of a single room, accommodating up to 28 students. Creating LREs in such a restricted setting causes considerable concern for teachers of students with ASD. Providing numerous modified curricula in all of the KLAs is also a time-consuming activity, thus causing further concern for teachers.

Teachers appreciate both advantages and disadvantages of having students with ASD within the general classroom.

The data generated a wide spectrum of opinions regarding the advantages and the disadvantages of having students with ASD within the general classroom. In most cases, the advantages outweighed the disadvantages, where the latter was closely aligned to unpredictable and disruptive behaviours. The absence of support in planning, professional development opportunities, the lack of collaboration and the scarcity of classroom working space, contributed towards much of this concern.

There exists a lack of shared responsibility in association with the education of students with ASD.

Whilst teachers recognised that the other teachers were all too busy with their own classes to have time to assist one another, the data indicated that many of the teachers who made this comment, did not appear to include themselves within this cohort. With such little support in so many areas pertaining to the equitable inclusion of students with ASD, it is not surprising that teachers, as individuals, are obliged to cope on their own in the very best way that they can.

Chapter 6: Teacher-Aide Results

6.1 INTRODUCTION

My purpose in this study was to develop a more sophisticated understanding of the perceived tension between the expectations of teachers and their capacity to implement the inclusive practices required by policy. To support this purpose, Chapter Five displayed the analysis of the teacher data. From my analysis, the following findings were generated as follows:

- There are limited opportunities for planning and support for teachers of students with ASD.
- There is a paucity of professional development for teachers in the area of ASD.
- There are limited opportunities for collaboration with other members of staff.
- There is an unawareness of the availability of resource materials for teachers of students with ASD.
- There is a low level of interaction between teachers of students with ASD, and their parents.
- There exists a minimal degree of teacher/principal relationship or principal/teacher support for teachers of students with ASD.
- There exists an element of caution for those teachers who have students with ASD in their classrooms.
- There is a high level of concern associated with having to provide a modified environment for the students with ASD.
- There are both advantages and disadvantages of having students with ASD within the general classroom (as perceived by the teachers who work with students with ASD).
- There exists a lack of shared responsibility in association with the education of students with ASD.

My purpose in Chapter Six is to report on analysis drawn from the responses made by seven teacher-aides to the online survey, and face-to-face interviews with four of those teacher-aides who agreed to a follow-up interview. To identify the four interviewees, the letters A, B, C and D were applied, together with “T-A” to distinguish teacher-aide data from that of the teachers.

The teacher-aides also were asked to provide online responses to preliminary questions, which asked them to document demographic data pertaining to their training, years of experience as teacher-aides, and, time spent in their present location (Appendix B). These data are displayed in the same way the teacher data was displayed in Chapter Five. That is, the online data for each section of the survey are presented and then questions from this analysis are developed. The interview data is then displayed allowing for further probing to gain a deeper understanding of the teacher-aides.

The results pertaining to these participants are presented in four sections. Section 6.2 reports on the teacher-aides’ demographic information. Section 6.3 reports on supports available to the teacher-aides working with students with ASD. The relationship between teacher-aides and the principal is presented in Section 6.4 and Section 6.5 is comprised by participants’ accounts of their perspectives of inclusive education for students with ASD. In section 6.6, I conclude the chapter, with a coordinated summary of all of the results chapters in section 6.7.

6.2 TEACHER-AIDE DEMOGRAPHIC INFORMATION

As was the case with the teacher, this section explores the demographic details of gender, age and ethnicity of the seven teacher-aide participants who completed the online survey. This section also explores details related to the participants’ educational attainment levels and their experience and time spent in their present location, along with data considered apropos to ASD-related training. These data are displayed in Table 6.1.

Table 6.1

Teacher-Aide Demographic Information from the Online Survey (N=7)

Characteristics	N
Gender	
Female	7
Male	0
Age	
40–50	4
>50	3
Ethnicity	
Australian	7
Teacher-aide qualifications	
No formal qualifications	3
Cert. III in education support	3
Advanced-level integration aide	1
Qualifications awarding authorities	
No formal teacher-aide qualifications	3
Queensland TAFE	3
Interstate TAFE or similar	1
Units of study in qualification that address ASD	
None	3
1–3 units	3
4–6 units	1
Years of experience as a teacher-aide	
1–3 Years	3
4–7 Years	2
>8 years	2
Years spent as a teacher-aide in current position	
1–3 years	1
4–7 years	4
>8 years	2

The display of data shown in Table 6.1 indicates that three of the seven teacher-aides did not hold any formal teacher-aide qualification, with three having completed Certificate III in Education Support through Queensland TAFE. Another had a qualification in ASD studies at an advanced level from an interstate institution. Of the three teacher-aides who had completed the Certificate III in Educational Support, between one and three units in ASD related studies defined the limit to their exposure in this area. Three of the teacher-aides indicated one to three years of experience. Two others reported four to seven years of experience, and the remaining two had in excess of eight years of experience. The data indicate that all teacher-aides were over the age

of forty, with three having no formal teacher-aide qualifications. Regardless of the educational background of the teacher-aides, all were expected to support the learning of students with ASD. These particular year groupings were chosen to maintain anonymity of the participants. The data indicate that in the setting of the study, teacher-aides who responded were a relatively diverse group demographically, with the exception of gender. There was also no clear indication that prior training, or experience in the job, had given them a common core. In Table 6.2, a clearer focus on the individual lengths of a teacher-aide’s experience was obtained during the follow up interviews:

Table 6.2

Demographic Characteristics of Four Teacher-Aides Who Participated in the Second Phase of the Data Collection Process

Role	Gender (M/F)	Participant	No. of years as teacher-aide	Experience in years: (Early=2–7; Mid=8–14; Late=15+)
General TA	F	T-A A	15	Late-career
General TA	F	T-A B	11	Mid-career
General TA	F	T-A D	8	Mid-career
TA from SEP	F	T-A C	22	Late-career

6.3 SUPPORT FOR TEACHER-AIDES WHO WORK WITH STUDENTS WITH ASD

In this section, the teacher-aides’ responses are reported on the online questions from the survey. This is followed by interview questions that relate to support from teachers in the work they do with students with ASD. This information is presented in two subsections; the first concerning relationships amongst classroom teachers, specialist teachers and the SEP teachers, and the second, on the relationship between teacher-aides and their principal.

Two questions were asked to understand the perspectives of the teacher-aides who have taught, or who are currently engaged in teaching students with ASD. To elicit these viewpoints, responses to questions involving: planning and support, professional development in the area of ASD, and collaboration with other staff members and resource availability were examined. These analyses were aimed at establishing factors perceived by the teacher-aides as promoting or hindering the

inclusion of students with ASD in a mainstream school setting promoting itself as inclusive.

Three of the survey questions, Question 22 and Question 23, (Appendix B) were particularly appropriate to the subsectional report, as they provided opportunity for participants to reflect on their experiences and philosophical understandings of the policy of inclusion for students with special needs, and particularly as it related to those with ASD.

6.3.1 Relationship between classroom teachers, specialist teachers and the SEP teachers

Question 22 of the survey was, ‘Have you found that teachers have been helpful in supporting you in working with students with ASD and if so, how?’ Question 23 provided the participants with six response options relating to Question 22 where they were able to select any appropriate options. Five of the seven participants responded to it as shown in Table 6.3.

Table 6.3
Teacher-Aide Responses to Survey Question 23

Response number	Response options	Number of participants selecting this option
1	Providing advice	5
2	Providing materials	5
3	Recommending professional development	1
4	Supporting my student/s during particular lessons	2
5	Supporting me during interviews with parents	1
6	Assisting in the development of individual program/lesson ideas	1

Participants’ responses to Question 22 and Question 23 were positive, indicating that the teacher-aides were receiving some level of support from the teachers. There was general agreement that support from classroom teachers was mainly in an advisory capacity and in providing materials. Few nominated other options.

The analysis of interview data was concerned with identification and categorisation of the phenomena of inclusive education generally, and the inclusion of

students with ASD more specifically. Each response was examined for clusters of information, which lead to the generation of three main themes:

- Planning, support and collaboration.
- Professional development (PD) in the areas specifically related to ASD.
- Resources.

Planning, support and collaboration

During the interviews, teacher-aides defined their understanding of the function of their role as being essentially a support person within the continuing process of teaching and inspiring student learning. T-A B stated that:

When I first became a teacher-aide, I worked mainly within the classroom, supporting students who required assistance in certain areas of learning. I also, under the direction of the classroom teacher, spent time preparing charts and flash-card materials. I am now doing less of that type of thing as I and have been directed to work with students with learning disabilities, such as those with ASD.

T-A C who worked predominately with students with special needs stated:

As most of my teacher-aide experience has been within the area of special needs, I have been accustomed to preparing appropriate learning materials according to the learning needs of the individual. My function has always been to support the special education teachers within the SEP, and to inspire students throughout their process of learning.

In addition to the expectations of close collaboration with professional educators, and being resourceful and technically proficient, the respondents spoke of having to occasionally undertake supportive administrative duties and be involved in the supervising of students on particular occasions. T-A A made the following comment in regard to administrative duties:

On the rare occasion when the front desk in the administration building is left un-manned, I have been called off class to answer the phone, or address the needs of students who may present with problems such as a scratch or a headache.

T-A D provides examples of when she has been expected to supervise students:

I have supervised students with special needs during their assessment tasks, and regularly supervise students with ASD during their attendance at the weekly assembly. I am also been expected to supervise particular students with ASD during their music and physical education lessons.

All teacher-aides indicated that they were involved in a broad spectrum of activities that were mostly aimed at supporting students with ASD to achieve educational outcomes within an inclusive learning environment. The comments by three of the four respondents were particularly suggestive of a planning and support theme, with one commenting:

I do not think that there is enough overall support for students with ASD, and I certainly do not feel that as a teacher-aide, I get very much support at all for what I do with these students. I sometimes think that my function is just to keep the lid on things and to prevent some of the teachers from losing the plot for a couple of hours while I am working one-on-one with their students. Because I have had minimal training in ASD, the best way that the administration could support me in my role as teacher-aide would be by giving me neurotypical students to work with. As far as I can determine, these children are really missing out because of the amount of support hours being absorbed by students with ASD. (T-A A)

Another described her perceptions in the following manner:

I often feel that I am working in isolation. I think that teachers could support me in my role as teacher-aide by being more trusting of my own judgements when working with the students with ASD. I would also appreciate time to debrief with some of them at the end of the day or before school. (T-A B)

T-A A expressed her concern at not being provided opportunities to access collaborative support with other members of staff by saying:

I may interact with four or five students with ASD during the period of one day, but rarely is there an opportunity to debrief with the child's teacher. On a rare occasion, there may be a five-minute chat in the staffroom at morning tea, but no specific time is ever set aside for progress reports. (T-A A)

The absence of opportunities to debrief with classroom teachers at the end of each day was a concern for all of the interviewed teacher-aides with T-A C stating that:

When I find a strategy that is working for me with certain students with ASD, I have no opportunity to discuss it with other T-As or the teachers of these children. T-As should be given an opportunity to attend staff meetings so that such things can be shared. (T-A C)

One teacher-aide stated what she considered the benefits of collaborative support:

Working with students with ASD most of the time entitles me to attend IEP meetings twice a year for each student. At such meetings, I am able to collaborate with a variety of professionals who also work with these students. The Occupational Therapist and the Speech Therapist often have great ideas on how to modify programs, and I have learnt a great deal from these people along with the HOSES and the children's parents. (T-A C)

She went on to indicate what, in her opinion, were the classroom teachers' perceptions of her role:

I would like to think that the classroom teachers of students I am supporting were more knowledgeable about what I am doing, and why I am doing it. Some of them seem to expect me to take the child out of the room to read them a book – anything just to get them out of the classroom. (T-A C)

Analysis of the data found that the teacher-aides expected support; guidance and assistance with their planning for the students with ASD, and considered that such support and guidance should emanate from their supervising teachers, from the HOSES and from the special education teachers attached to the SEP. It was also found that these expectations were not currently being met.

The interviews generated a range of concerns from the teacher-aides. Individual Education Plans (IEPs) for students with ASD are formulated twice a year in small group sessions. These meetings are chaired by the Head of Special Education Services (HOSES). Also, in attendance are the child's parents, the guidance officer, the classroom teacher, a speech therapist and an occupational therapist if required. However, teacher-aides are rarely included. It is at these meetings that the child's individual learning program is compiled from the contributions of all those in attendance. Using the document as a guide, the teacher frames appropriate lesson plans for the student, and regularly uses it for evaluation and adjustment purposes.

With regard to inclusive planning, the following comment was made:

As it is not a requirement for teacher-aides to attend staff meetings, nor IEP meetings, we are dependent upon the classroom teacher to share with us any knowledge or instruction they may have been given at these meetings. This does not always happen however, with us being totally left in the dark too often. This means that we have to manage the behaviour of some of the more difficult students with ASD on our own. We do this by taking it upon ourselves to adjust and modify the teaching program, to the best of our ability, in an attempt to keep the students on task. It is all just a process of trial and error as far as I am concerned. (T-A A)

T-A B offered her opinion on how to implement a successful planning strategy:

I have noticed that the teachers who appear to have the most success with their students with ASD are those who have a more structured approach to the day. From my own experience, I have found that students with ASD like to know exactly what is coming up at any given point of their day. In most classes, this is achieved by having a daily calendar or planner up on the board, or in the case of the student with ASD, on his or her desk. At the start of the day, the teacher explains to the entire class what they can expect to achieve by the end of each period. (T-A B)

In contrast to the lack of support expressed by the other classroom teacher-aides, the SEP teacher-aide presented an alternative perspective that works well for her:

As I am the only teacher-aide who works almost full time with the SEP, I receive a great deal of support from the HOSES, both emotional support and with the planning of my lessons for the students with ASD as well as for other special needs students. (T-A C)

An achievable reality in the area of support for all TAs is evident in the response from the teacher-aide who is in constant contact with the SEP staff.

Professional development

Whilst three of the four teacher-aides were in possession of qualifications associated with teacher-aide practice, only one had obtained qualifications linked to the inclusion of students with ASD. These same teacher-aides indicated that they have had no previous experience in working with ASD students prior to their current employment.

Whilst a teacher's right is to teach, and a student's right is to learn is indisputable (Canter & Canter 2001), achieving activation of this axiom depends largely on a number of factors. This ought to include evidence of appropriate pre-service training, extensive on-going in-service experience, and regular and relevant professional development in many areas, including the knowledge of ASD. During the face-to-face interview discussions, it became clear that all four teacher-aides agreed that only with expert training in the area of ASD, and inclusive practice for both teachers and teacher-aides, would the best interests of all children be met. T-A A expressed her preference for professional development in the follow manner:

I like the prospect of being able to do PD altogether as a group so that we can all share appropriate language and relevant to students with ASD. We could all be on the same page for a change. (T-A A)

T-A B elected to share a highpoint of a professional development opportunity that she had attended independently:

I recently did some PD on 'Essential Skills for Classroom Management' where we were told that when working with students with ASD, we should not hesitate to tell these students at the end of the lesson that they had done well. Also, to thank them for having done so. This is in order to make them feel better about themselves. (T-A B)

T-A D indicated that she has gained insightful knowledge of students with ASD through interacting with them in her paraprofessional capacity:

I consider that I have gained considerable confidence in working with students through learning the importance of listening and developing an understanding of what is going on behind a particular behaviour. Most of the time the child will not be having a meltdown about something trivial, but about something that may have happened earlier in the day. Perhaps something may have occurred before the child had left home, something that had yet to be resolved in the child's mind. This [understanding] has made it less likely that I will fall into the trap of making false judgements of children in the future. (T-A D)

Resources

The school's main resource is its Special Education Program (SEP), which consists of two large classrooms and an additional activity centre that is housed in one separate building where support staff and students reside. Within this facility, students

with educational disabilities are given direct specialised instruction individually, or in small groups. The facility is supervised by the HOSES, who is assisted by a teacher with special education qualifications, and a full-time teacher-aide who has 22 years of experience in the area of special education. The main purpose of this team is to advance the learning experience of students with special needs. With this objective in mind, there is a large range of educational equipment, designed specifically to enhance both the social and academic advancement of each student. The SEP also provides ‘chill-out’ zones where students, especially those with ASD, can settle down, in order to achieve a calmer return to their inclusive classroom environment.

The school’s teacher-aides are also an important resource. Any teacher-aide who has worked with students with ASD is acquainted with students who will occasionally, or in some cases frequently, present with behaviours that inhibit their academic and social progress. Students who are unable to control their ‘acting-out’ behaviours will often, at the request of the classroom teacher, be removed by one of the teacher-aides to a ‘chill-out’ zone for the safety of the student and others in the class. When discussing safe and inclusive resources for students with ASD, an alternative approach adopted by some very inclusive teachers was discussed by T-A B.

Providing appropriate resources for students with ASD can be a nightmare. Classrooms are rarely big enough to provide space for anything other than a fair arrangement of desks. Most rooms are cluttered with resource materials. However, some teachers seem to be able to work around their limited space to provide little ‘chill-out’ areas for their students, and these areas are often just what students with ASD need when they become over anxious. (T-A B)

In contrast to this supportive perspective, and with a sense of failure evident, T-A A doubted whether the school was capable of providing the type of environment required for equitable inclusion for students with ASD:

I just think that physically, the school is too old and that its design does not lend itself to providing the type of resources necessary to provide students with ASD a least restrictive environment. You find some students with ASD just sitting in the hallway outside the classroom. How inclusive is that? (T-A A)

The same teacher-aide went on to make the following comment:

It is a great concern to me that I am often called to a classroom where a student with ASD has become unsettled. The classroom teacher's intention is to use me as a resource to remove the child from the room to another area of the school. Considering that I am a teacher-aide, I am being given a responsibility that I consider belongs to the classroom teacher or a member of the administration team. Whilst I consider myself as being an integral part of the education system, my role, to a large degree, is uncertain. (T-A A)

The teacher-aide from the SEP considered that:

It would be nice to be recognised for the hard work that the staff from the SEP put in to the students who have special needs. We cannot help becoming emotionally involved with these kids, even though people say that it is not professional. However, sometimes, if we do not cross that line, we do not get anything back. We just have to develop these relationships, as we have to get close. We have to be an advocate for these students. I feel that the most important role of a teacher-aide who works with students with ASD is to be able to stand up and speak on their behalf, to be their voice and to work towards changing things for their benefit. (T-A C)

6.4 TEACHER-AIDE PERCEPTIONS OF THEIR INTERACTION WITH THE PRINCIPAL WITH REGARD TO SUPPORTING THE POLICY OF INCLUSION FOR CHILDREN WITH ASD

Discussed in this section is 'inclusion', and what teacher-aides consider they require to be collaborative and pro-active in making inclusion a reality within the school. No direct questioning associated with the principal's relationship, expectations or support for teacher-aides of students with ASD was included in the online survey. However, during the face-to-face interviews, the teacher-aides volunteered information reflective of their relationships with the school principal.

"Other than for formal evaluation observations, how often has the principal come to the classroom where you have been working with a student with ASD?" The following comments show that the teacher-aides perceive that the principal is not interested in them or their work.

Unlike principals who have been here before, I have yet to be evaluated by the present principal on my inclusive practice with students with ASD. (T-A A)

The principal drops in sometimes when I am working with a student in the classroom, but it is not to check on what I am doing, more to see what the whole class is doing. (T-A B)

Other than giving me a nod every now and again, the principal has never asked me how I was going, and how I was handling the job of working with students with ASD. It would be great if the principal showed a little more interest in our ASD kids. I used to have a good relationship with the principal who was here before. (T-A D)

The teacher-aides went on to explain what they think the principal should do to be supportive of inclusion in the school. Restricting the intake is one suggestion:

I think that the best thing that the principal could do is to refuse entry for those students who do not live within the catchment area. In my opinion, we are getting too many students with special needs at this school, and we do not have enough funding for them. We need to stick with the kids that are in our area, so we can better manage the kids we have. (T-A A)

While gaining a deeper understanding of the requirements of inclusion is another suggestion:

I think that the principal should have an in-depth understanding of the needs of students with ASD. They need to educate themselves in the area so that they know what it takes to become a fully inclusive community. Just putting a child with ASD into a classroom does not mean that it is an inclusive class. (T-A D)

Celebration is also considered important:

I think that the principal should celebrate the achievements of our students with ASD. Little recognition is ever given of what they [the student] can do and what they are striving to achieve. (T-A C)

These recommendations for the principal suggest that the teacher-aides would like to see more recognition of their work, and that the community should come closer together to celebrate their successes.

6.5 TEACHER-AIDES' PERCEPTIONS OF THE ADVANTAGES AND DISADVANTAGES OF INCLUSION

Two of the teacher-aides spoke freely on what they perceived as being the advantages or disadvantages of inclusion, whilst the other two were more circumspect

in their responses. During the face-to-face interview, the teacher-aides were asked about what they considered were the advantages and disadvantages in having students with ASD in the classroom. Their considerations were based on the advantages for the teachers as well as the advantages for the neurotypical students, and the students with ASD. Table 6.4 below shows the opinions of the four teacher-aides interviewed concerning the perceived advantages to having students with ASD in a general classroom situation.

Table 6.4

Semi-Structured, Face-to-Face Interview Data of Teacher-Aides' Opinions on the Perceived Advantages to Having Students with ASD in a General Classroom Situation

Response option	T-A A	T-A B	T-A C	T-A D
Extra planning for student with ASD. For example: 'Daily Planner' as this can be beneficial to all students.		*		*
Encourages some of the teachers out of their comfort zones.			*	
Encourages teachers to recognise the individual needs of all students within their cohort.			*	*
Encourages teachers to expand their knowledge in the area of needs for students with ASD.			*	*
The neurotypical students may learn the importance of empathy.		*		
The neurotypical student is exposed to all types of personalities and characteristics.			*	
The neurotypical student learns to distinguish that all students are different in some way or another.	*			*

Examples from the interviews of those who recognised the advantages had a focus on embracing diversity with all groups represented, the student with ASD, the neurotypical student and the classroom teacher:

The student with ASD is able to develop friendships, and as they proceed through their education, they will learn, through observing their neurotypical peers, strategies that will help them to resolve a multitude of awkward social situations. (T-A B)

I also think that it is good for teachers to be able to work with a wide range of children of low to high abilities, which means that they can no longer just teach to the middle level of the class. (T-A C)

I consider that one main advantage of having students with ASD in the classroom is that it gives other students the chance to understand the varying levels of diversity that exists among us all. (T-A D)

Whilst all of the four teacher-aides responded to the seven options presented in Table 6.4, which alluded to the advantages to having students with ASD within an inclusive classroom setting, only one teacher-aide responded to the options on the survey that asked about the disadvantages, as shown in Table 6.5.

Table 6.5

Semi-Structured, Face-to-Face Interview Data of Teacher-Aides' Opinions on the Perceived Disadvantages to Having Students with ASD in a General Classroom Situation

Response option	Participant
No advantages to having students with ASD in the classroom.	*
Neurotypical students miss a lot of teacher time and learning time if the students with ASD are not being managed well.	*
Too much time taken from the other students in the class.	*
Too much time spent managing behaviour of the student with ASD.	*
The disruptions caused by students with ASD in the class tends to have a knock-on effect with other students in the class, which can cause further disruption to teaching and learning.	*

To protect the identity of the teacher-aide, this comment is not identified.

I do not think that there are any advantages to having students with ASD in the classroom. It appears to me that too much time is being taken away from the rest of the class while the teacher is trying to manage the unpredictable and often disruptive behaviour of these students.

6.6 CONCLUSION

In line with the questions identified at the beginning of this chapter, the data collection, analysis and interpretation during the survey and interview stages of the study focused on the issues of: planning and support, professional development, collaboration, resources, interaction with staff and modification of environment. In summary, this stage of the study identified the following findings:

There are limited opportunities for teacher-aides to consult with supervising teachers concerning the planning and support required to ensure success in their daily interventions with students with ASD.

Overall, the teacher-aides in this study believed that they were not receiving sufficient planning support from their supervising teachers. Three of the four who agreed to participate in the face-to-face interview phase of the data collection process claimed to be involved with a number of students with ASD, thus bringing them into contact with more than one supervising teacher. The other TA worked predominately within the SEP. Discussions with the teacher-aides on this subject created a sense of uneasiness, however, experienced teacher-aides were more open about their decreased capacity to effectively teach students with ASD. Opportunities for the TAs to have briefing sessions with the supervising teachers were minimal, and very often, the TAs were left to adjust learning programs where they considered it appropriate.

There is a lack of acknowledgement for the work being done by the teacher-aides with the students with ASD.

The study found that teachers were often working ‘in the dark’ when it came to interacting with students with ASD. Considering that these paraprofessionals are the least qualified to be dealing with students with such complex requirements, they considered that their contribution towards the education of students with ASD continually is unrecognised and appreciated. During discussion, it was clear that the teacher-aides had the impression that they were being used as babysitters, just to get the students out of the classroom for a period to give the teacher a break. They also objected to the situation that when there was disruption within the class, sometimes caused by a student with ASD, they would be called to suppress the behaviour. None of these TAs had received any significant pre-service training or professional development in the area of ASD.

There is a paucity of professional development for teacher-aides in the area of ASD.

Overall, the teacher-aides involved in this study believed that they were being unethically deprived of professional development in the area of ASD. With such a high percentage of students with special needs within the school population, aligned with the reality that the TAs were in daily contact with these students, it would follow that appropriate professional development in the area of ASD should be unconditional. However, when six hours of after-hours professional development was offered by the HOSES, some of the TAs failed to attend because of other commitments.

There are limited opportunities for collaboration with other members of staff.

The data revealed a situation where teacher-aides had scarce opportunities to collaborate with other paraprofessionals or supervising teachers, as they were obliged to cover playground duties every day for at least 30 minutes. As it has been established, collaboration with supervising teachers was on such an irregular basis that the valuable work of teacher-aides was being inadvertently diluted.

Teacher-aides perceive a minimal degree of teacher-aide/principal relationship or principal/teacher-aide support for teacher-aides who work with students with ASD.

The data revealed no evidence of a teacher-aide relationship with the school principal either on a social or curriculum-based level.

Advantages and disadvantages to having students with ASD within the general classroom (as perceived by the teacher-aides who work with students with ASD).

In line with the data relating to the teachers, the teacher-aide data also revealed a range of opinions regarding the advantages and the disadvantages of having students with ASD within the general classroom.

6.7 COORDINATED SUMMARY OF CHAPTERS FIVE AND SIX

My purpose in this study was to develop a more sophisticated understanding of perceived tension between the expectations of teachers' capacity to implement the inclusive practices required by policy, and their actual capacity. To that end, 17 teachers and seven teacher-aides agreed to respond to an online survey, which was the second of three data collection procedures. This process required teacher and teacher-aide participants to provide details of a demographic nature; to reflect upon their relationships with other members of the teaching and paraprofessional staff; and to comment upon issues of planning and support, professional development, collaboration and resource availability and application.

Teachers, and teacher-aides alike, provided insights into their relationships with, and their expectations of the school principal. All participants shared their opinions on the concept of inclusion generally, and on the concept of inclusion of students with

ASD more specifically. The participants were also given the opportunity to comment upon what they considered advantages and disadvantages for teachers and other members of the class, as well as the advantages and disadvantages of inclusion for the students with ASD.

Neither the online survey nor the face-to-face interview probed the teacher-aides on their relationships with parents of students with ASD, nor on questions that involved parental engagement. Teacher-aides were not required to comment upon any special provisions that could or should be made for the benefit of students with ASD. They were also not asked to remark upon whether the teaching of students with ASD, within an inclusive school environment, should be a shared responsibility.

Chapter Seven is a critical assessment of the issues associated with the successful inclusion of students with ASD in one school setting, and an attempt to develop solutions to problems based upon a logical synthesis of the findings. The purpose of this discussion is to formulate a deeper, more profound understanding of the research problem, and to illuminate what the findings tell us about inclusion in this school setting.

Chapter 7: Discussion and Conclusion

7.1 INTRODUCTION

My purpose in this study was to develop a more sophisticated understanding of the perceived tension between the expectations of teachers and their capacity to implement the inclusive practices required by policy. The research question directing this study was, “What tensions exist between teacher capacity to implement inclusive practices for students with ASD in mainstream schools and their actual capacity?” Additionally, analysis of the literature supported the development of four sub-questions that guided the study:

1. What are the teachers’ experiences of supporting students with ASD?
2. How do these teachers develop the necessary skills to support students with ASD?
3. How do these teachers enact that support?
4. What are the relationships between classroom teachers, specialist subject teachers, teachers from the SEP and teacher-aides?

Given the interpretive nature of this study, it is not the intent to answer these questions definitively, rather to develop theoretical propositions based on the findings that emerged from Chapters Four, Five and Six. Following a synthesis and interpretation of results from each chapter, the following five findings were identified:

- There is a lack of appropriate pre-service training for teachers and teacher-aides, with a need for graduate level teachers and teacher-aides to have studies in ASD.
- There is a paucity of internal and external professional development opportunities for teachers and teacher-aides in ASD-related studies.
- There are limited opportunities available for teachers and teacher-aides to collaborate in order to support one another with planning for students with ASD.

- There is a low level of interaction between classroom teachers, teacher-aides, parents and the school principal concerning the education of students with ASD.
- There is a high level of concern, caution and scepticism among teachers and teacher-aides on the advantages and disadvantages of having students with ASD within the general classroom.

In this chapter, these findings will be explored in light of the personal, social and situational context of each participant, using the symbolic interactionist lens to guide the discussion. The three premises of symbolic interactionism guided the complex process of concentrating on each individual participant, and the meaning and actions given to aspects of their reality within the professional community of one specific school environment. The three premises are represented in Figure 7.1 below:

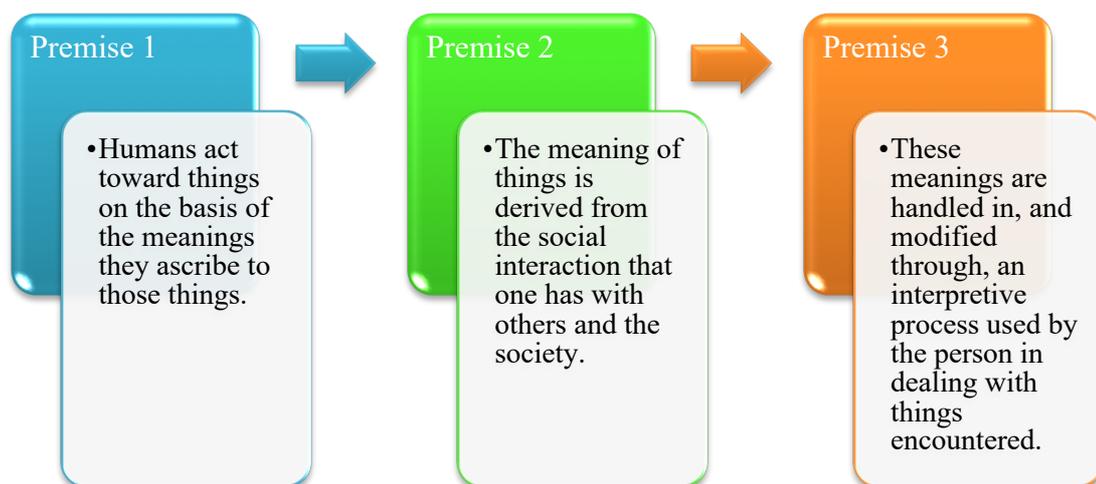


Figure 7.1. Premises of symbolic interactionism (Blumer, 1969, p. 179).

Case study was chosen as the research methodology because case study provides a particularly useful way of obtaining an in-depth appreciation of an issue, an event, or a phenomenon of interest, particularly in its natural real-life context (Crowe et al., 2011). Qualitative research data collection techniques assisted with interpreting meanings, to gain an understanding of how people make sense of their world (Merriam, 2009). The purpose of collecting qualitative data from the document analysis, online survey and face-to-face interviews was to generate results about the perceived tension between the expectations of teachers' capacity to implement the inclusive practices required by policy, and their actual capacity. Analysis of the data was conducted using the general inductive qualitative method. The key component of

the general inductive method is to develop themes using coding of the raw data (Thomas, 2006). Examples of coding and theme development can be found in Appendix F.

7.2 USING SYMBOLIC INTERACTIONISM TO INTERPRET THE FINDINGS

As symbolic interactionism (SI) was used to interpret the findings of this study, presented below in Figure 7.2 is a model based upon the five findings outlined in the preceding section.

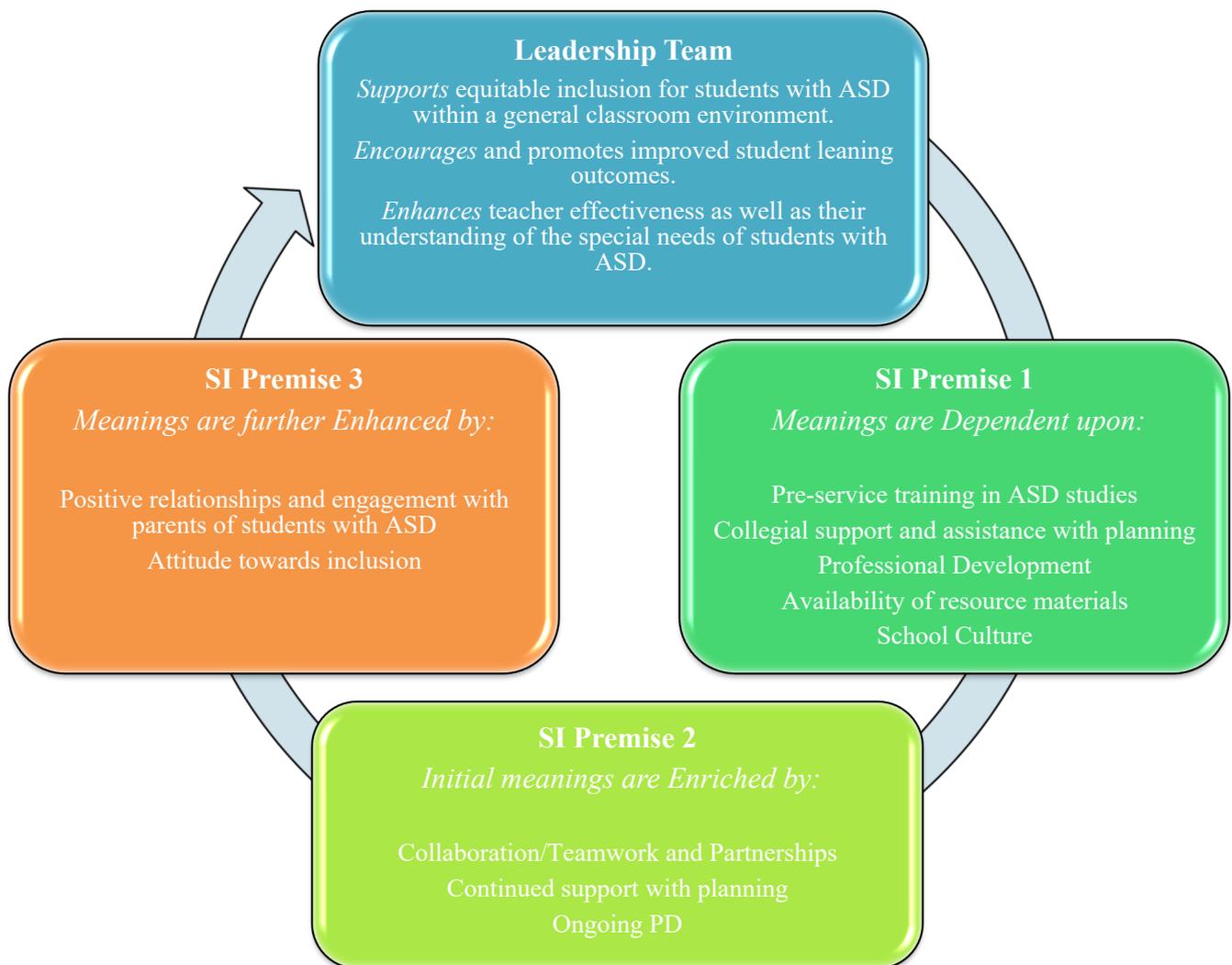


Figure 7.2. The premises of symbolic interactionism providing a workable process towards creating successful inclusive school environments.

Figure 7.2 embodies the premises of symbolic interactionism by providing a workable process towards creating successful inclusive school environments, one in which students with ASD can strive to achieve to the best of their abilities. The model

gets its strength by outlining the responsibility of the Leadership Team in the areas of support, encouragement and enhancement as a way to stimulate the three vital elements towards accomplishing equitable inclusion for students with ASD.

SI Premise 1: This premise provides a basis for where an educator's meanings and understandings of the phenomenon of ASD rest. This level of meaning and understanding can be the result of a combination of one's pre-service training, collegial support and assistance with planning, resource availability and professional development opportunities. These initial meanings and understanding can have a direct effect upon the attitudes towards the policy of inclusion. Furthermore, these initial meanings and understandings can be increasingly enriched if the teachers and teacher-aides are exposed to ongoing training in an equitable and professionally inclusive environment, which links to Premise 2.

SI Premise 2: This premise provides a basis for how teacher and teacher-aide meanings and understandings of ASD will be enriched through their collegiate social interactions among staff. It also provides a basis for their involvement in teamwork and the impact made upon them from ongoing professional development. All of these collaboratively supportive structures serve to create an environment where differences in opinion can be shared and common understandings generated.

SI Premise 3: This premise represents the commonly held understandings of the members of the school community. This model includes all stakeholders, including the parents of the students with ASD, sharing as a team through the process of interpretation, discussion, modification and handling of the understandings involved in inclusive practice.

These three premises will now be reflected in the discussion below, in relation to the five findings outlined at the beginning of this chapter.

7.2.1 Lack of appropriate pre-service training with need for graduate level teachers with studies in ASD

In this section, I discuss the first finding concerning the pre-service training of both teachers and teacher-aides, which has been a main line of enquiry in this study. Despite the release of the Salamanca Statement over two decades ago, which highlighted a need for more inclusive school settings (UNESCO, 1994), this study found that teachers and teacher-aides in Queensland, Australia are still being poorly

trained when it comes to teaching children with ASD. As discussed in Chapter Four, pre-service teachers and teacher-aides are currently exposed to brief introductory content not attuned to the teaching practice they will undertake, with additional subjects in the area of ASD available only as electives in many institutions in Queensland. Some researchers have argued that this lack of specified training is largely due to the diverse nature of ASD (Blackwell et al., 2017; Bond et al., 2016). This finding is supported by previous studies, which encourage more specialised training for all pre-service teachers in strategies associated with the education of students with ASD (Hahn, 2010; Hourigan, 2007; Salvador, 2010; Shirk, 2008).

The lack of training identified during the document analysis stage of this study was further supported by data generated from the online survey and semi-structured interviews. Teachers and teacher-aides in the present school had limited knowledge of the diverse skills required to teach students with ASD. This finding is consistent with what researchers have reported in recent years that teachers and teacher-aides are lacking ASD-specific knowledge (Blackwell et al., 2017; Bond et al., 2016; Sansosti & Sansosti, 2013). There was a high element of anxiety and bewilderment in both teachers and teacher-aides, regarding their attempts to provide equitable educational opportunities for students with ASD. Entering the profession of teaching with little or no pre-service training in ASD-related studies had placed the teachers and teacher-aides in a situation where they were obliged to seek assistance from more experienced staff, and from staff members in the SEP.

The majority of teachers at the participating school had in excess of one student with ASD in their classes, with one having four. When students with ASD were included into certain classes, their presence placed additional pressure and responsibility upon the teacher who often had minimal knowledge regarding ASD, and scant familiarity with the strategies designed to facilitate appropriate inclusion. Most teachers and teacher-aides interviewed openly admitted to being poorly trained and ill equipped to meet the diverse needs of these students. Among their major concerns, was the scarcity of suitable resources, both material and human, generally considered integral to successful inclusive practice.

These concerns would be beneficial to university course content creators, as well as school administrators, whose business it is to eliminate any obstacle standing in the way of a truly inclusive education for all students. However, preparing pre-service

teachers, let alone inculcating Queensland school principals with a comprehensive understanding of ASD, and an understanding of the inclusive strategies that promote an equitable and harmonious environment for students with ASD, is yet to be reached. Unlike the few teachers who had undertaken specialised training in areas of special education, all teachers were still working with insufficient guidelines on how to effectively include students with ASD. As long as these valuable resources remain scattered around the states and territories of Australia, their combined skills and knowledge will remain in isolation. Such untapped knowledge and experience could form the basis for future compulsory pre-service courses in ASD studies. Until universities acknowledge the importance of including well researched and up-to-date courses in ASD in their pre-service training domains, students will be graduating without the skills and strategies required to meet the complex needs of students with ASD. This first finding has led to the following proposition:

- Teacher and teacher-aide training must have its focus on current, evidence-based best-practice strategies to adjust and adapt curriculum requirements fittingly, to ensure equitable inclusion for all students with ASD.

7.2.2 Paucity for internal and external professional development opportunities

In this section I discuss the second finding regarding the paucity of internal and external professional development opportunities for teachers and teacher-aides in this school. Acknowledging that pre-service teachers and teacher-aides should enter the profession embracing some level of understanding in inclusive education philosophy; it must similarly be acknowledged that practicing teachers and teacher-aides should have a comparable knowledge. In an era where there is so much worldwide information available in the area of inclusive strategies for students with ASD, so little appears to have filtered through to teachers and teacher-aides in the current school. The teacher-aides voiced opposition to what they considered common practice for some of the teachers to summon them when they wanted a student with ASD to be removed from the classroom. This would occur whenever the teacher was confronted with disruptive behaviour, or perceived signs of a possible meltdown of one of the students. Whilst the teacher-aides appreciated how difficult it was to teach with disruptive students in the room, it also highlighted the fact that these teachers were not in possession of the evidence-based practices that could well have circumvented such behaviour.

School environments and mainstream curricula may present unique challenges for students with ASD. An awareness of these challenges and the skills and strengths of students with ASD can assist teachers to address these needs within an inclusive approach that celebrates diversity within their classrooms (Saggers, Carrington & Harper-Hill, 2016). In order for teachers and teacher-aides to put into practice what they have learned, it is recommended that participation in professional development occurs over time (Conway, 2012), as well as the engagement of sharing activities (Reid & Kleinhenz, 2015). It was noted that few opportunities have been made available for teachers and teacher-aides to share their activities with their colleagues in this study. Professional development and training needs to be an ongoing event because the support-needs of students with ASD will change over time (Waldron & McKlesky 2010).

While the Head of Special Education Services (HOSES) had been granted the occasional opportunity to discuss teachers' concerns at staff meetings, time constraints resulted in these discussions being an infrequent occurrence. The HOSES had also organised a professional development opportunity for the entire staff, one hour a week, for twelve-weeks, from 3:15pm to 4:15pm. Initially, the attendance proved encouraging, but after the third week, the numbers had dropped considerably. This was to occasion the cancellation of this learning experience, thus denying the conscientious with an opportunity to continue with their training. These findings certainly did not align with previous research, which found that the best professional development training practices should always be collegial and community oriented (Darling-Hammond & McLaughlin, 2011). The general consensus from teachers revealed that they had limited time remaining of their day for formal training, when having to consider the extra planning involved for their students with special needs. Whilst such barriers appear to resist in-house professional development opportunities, these barriers did mirror what was found in existing literature (Abbott, McConkey & Dobbins, 2011; Mavropoulos, 2005). All teachers claimed to have attended 'one shot' workshops, but considered them mainly theory based, and only moderately effective. What these teachers were seeking were evidence-based strategies, which would enable them to improve their inclusive practice, and to cater more effectively to the complex needs of their students with ASD.

A professional development pathway proposed by Desimone (2009), considered to be essential for attitudinal change through a professional development process, rely on five core features (Figure 7.3 below). These features aim to increase educator knowledge; to improve professional skills through content focused and active learning; and to change attitudes and beliefs through collective participation. Such a pathway should eventually lead to a change in process, a change in instruction and an improvement in student learning. Should the administration at the current school consider encouraging a professional development pathway, such as the one proposed by Desimone (2009), it would be a step towards fulfilling the tenets of the Queensland Government’s commitment to inclusion. It would also ensure that both teachers and teacher-aides could successfully negotiate their students with ASD into a safe and all-embracing inclusive school setting.

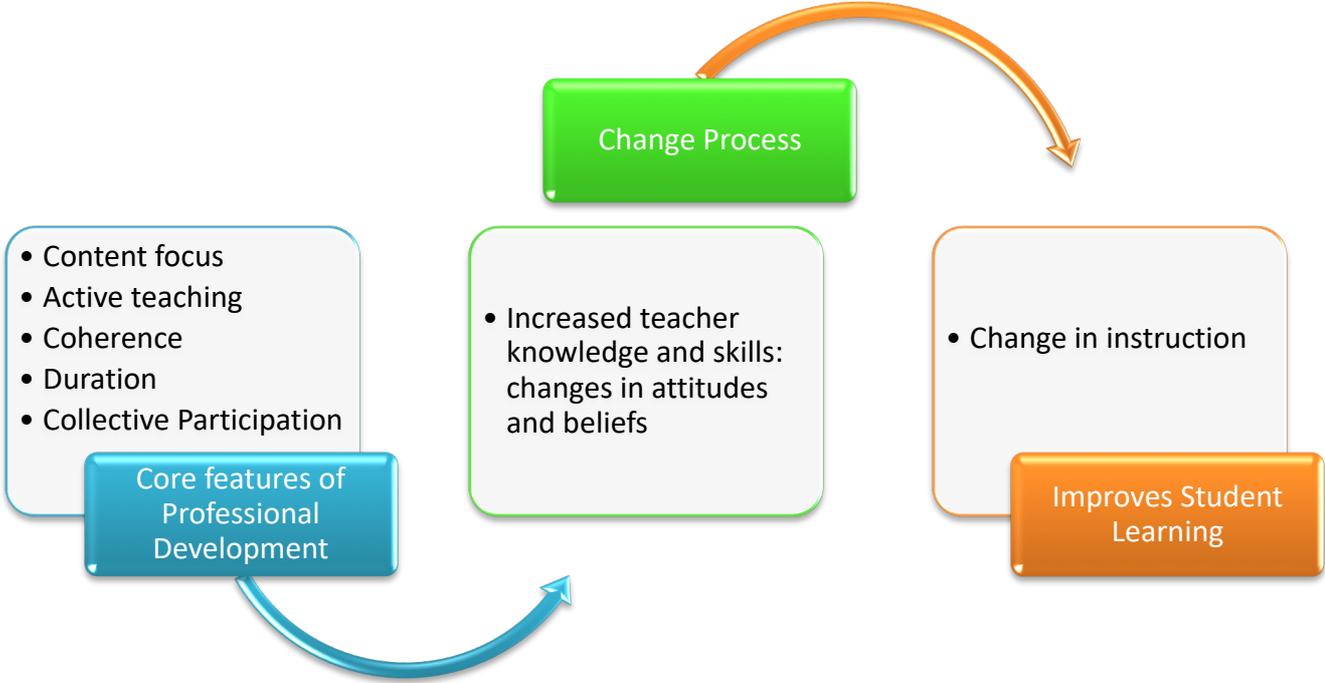


Figure 7.3. Professional development pathway.

The reality, in which the participant teachers and teacher-aides struggled to provide an inclusive environment for students with ASD, is reflected in Blumer’s interpretation of symbolic interactionism (Blumer 1969). The first premise acknowledges that “human beings act toward things on the basis of the meanings that things have for them” (Blumer, 1969, p. 179), and that such meanings will have an effect upon the manner in which children with ASD are included. It is evident that a lack of administratively directed professional development in the area of ASD and an

undefined and unclear attitude of all stakeholders towards the policy of inclusion is responsible for this school remaining in the first premise. This means that with limited interaction with others, the teachers and teacher-aides were responding to the inclusion of students with ASD in a way that was reflective of their own limited understanding. This second finding has led to the following proposition:

- Inclusive mainstream schools must take further action to continually train teachers and teacher-aides about best evidence-based practices through the provision of professional development, in order to increase positive educational outcomes for students with ASD.

7.2.3 Limited opportunities for collaboration

In this section, I discuss the third finding concerning the limited opportunities that teachers and teacher-aides had to collaborate in the current school. Plausibly, in the interest of the student with ASD, best practice occurs with collaborative consultation between all parties, which must include the teacher-aides who will be involved in the education of these students (Loreman, Deppeler & Harvey, 2011). Such practice involves the assessment of individual support needs, which will consequently lead to the development and the implementation of an Individual Education Plan (Davis, 2013). The expertise of the SEP staff is vital in this area of collaboration, as it is their duty to conduct appraisals of the needs of all students with ASD. Teacher-aides should also be part of this process, as the experience would be a contributing factor towards their professional development as highlighted in the previous section. In an ideal educational environment, teachers and other support personnel, such as the teacher-aides, should work in partnership as part of a collaborative consultation process, which underpins successful inclusive practice (Poon, Ng, Wong & Kaur, 2016).

The teachers acknowledged that they had received some support from more experienced members of the teaching staff, but claimed to have received little from Advisory Visiting Teachers (AVTs), the visiting Guidance Officer or the school's Principal. It was evident that collaboration among teachers and the SEP was spasmodic at best. A common regret of the majority of the teachers was based upon what they saw as limited opportunities to share with other members of staff, strategies that had proved to be effective whilst working with their students with ASD. They also considered that they were being deprived of opportunities to problem solve with other members of the teaching staff because everybody appeared to be just 'too busy'.

It was found that the general education teachers received no support from the music or physical education (PE) teachers, since their particular fields of endeavor were somewhat disassociated from their own more varied day-to-day activities with students with ASD. In contrast, the music and PE teachers required weekly support from all teachers with students with ASD, with such support being forthcoming in the form of teacher-aides or SEP staff accompanying the students to their lessons. Limited research has been undertaken on the working relationships between teachers and music and physical education teachers, especially in the area of inclusion for students with ASD (Hammel & Gerrity, 2012). The frequency of music and PE lessons being disrupted by a student with a negative reaction to noise, such as the banging of percussion instruments or the blowing of a whistle, is responsible for the specialist teachers' insistence upon support from teacher-aides or staff from the SEP.

The teacher-aides looked for support for their planning and teaching strategies from the classroom teacher and the staff from the SEP, but claimed to be often left to their own devices where this was concerned. They also expressed their frustrations at not being invited to participate in composing Individual Education Plans for students with ASD. Teachers had little time to explain the contents of these documents, and the teacher-aides lamented that briefing and debriefing opportunities with the classroom teachers was almost nonexistent. One described her relationship with a particular classroom teacher as being negative, causing her to feel continually frustrated and stressed. These situations are consistent with the findings of previous research (Saddler, 2014; Symes & Humphrey, 2012), where it was found that teacher-aides who were the recipients of effective teacher interaction were much more likely to feel confident to complete their duties. All but one of the teacher-aides acknowledged that they considered themselves grossly underqualified to work with students with ASD, which contributed to feelings of incompetence. The teacher-aide assigned to the SEP had considerable experience working with students with ASD, both in Victoria and Queensland, but this knowledge was not being disseminated among her paraprofessional peers.

The literature suggests collaborating with and supervising teacher-aides on a regular basis by teachers and the administrative staff should always be seen as a priority (Giangreco, Suter & Hurley, 2013). The intention is that such a collaboration, undertaken in a general educational setting, should flexibly, and deliberately, meet the

learning needs of all students (Friend, Cook, Hurley-Chamberlain, & Shamberger, 2010). Whilst these collaborative considerations appear to be logical and desirable, this study has found such practices are more the exception than the norm. In the current school, teachers would collaborate with families and caregivers when adjusting programs for their students with ASD. The more experienced teachers interviewed, appeared comfortable with this level of collaboration, but less experienced teachers may require assistance with their communication skills.

Many of the communicative and collaborative skills of teaching are learned through experience. Pre-service teachers should receive instruction during their university courses in the skills of effectively communicating with a range of stakeholders (see Figure 7.4 below), in both the oral and the written form. This would provide beginning teachers with the collaborative skills to solve problems and resolve possible conflicts with others. Skills in collaboration help teaching professionals to work as an effective team and should be very much part of any pre-service teacher training course (Giangreco et al., 2013; Nellis, Jones & Ball, 2012; Stormont & Reinke, 2012). The figure below places the student with ASD at the very center of supports provided. Surrounding the student are those who will be required and involved in the process of providing equitable learning opportunities for the child. The amount of intervention of any one of these support teams will rely on the severity of the student's disability, but all should be readily available to ensure the best possible outcomes for the student.

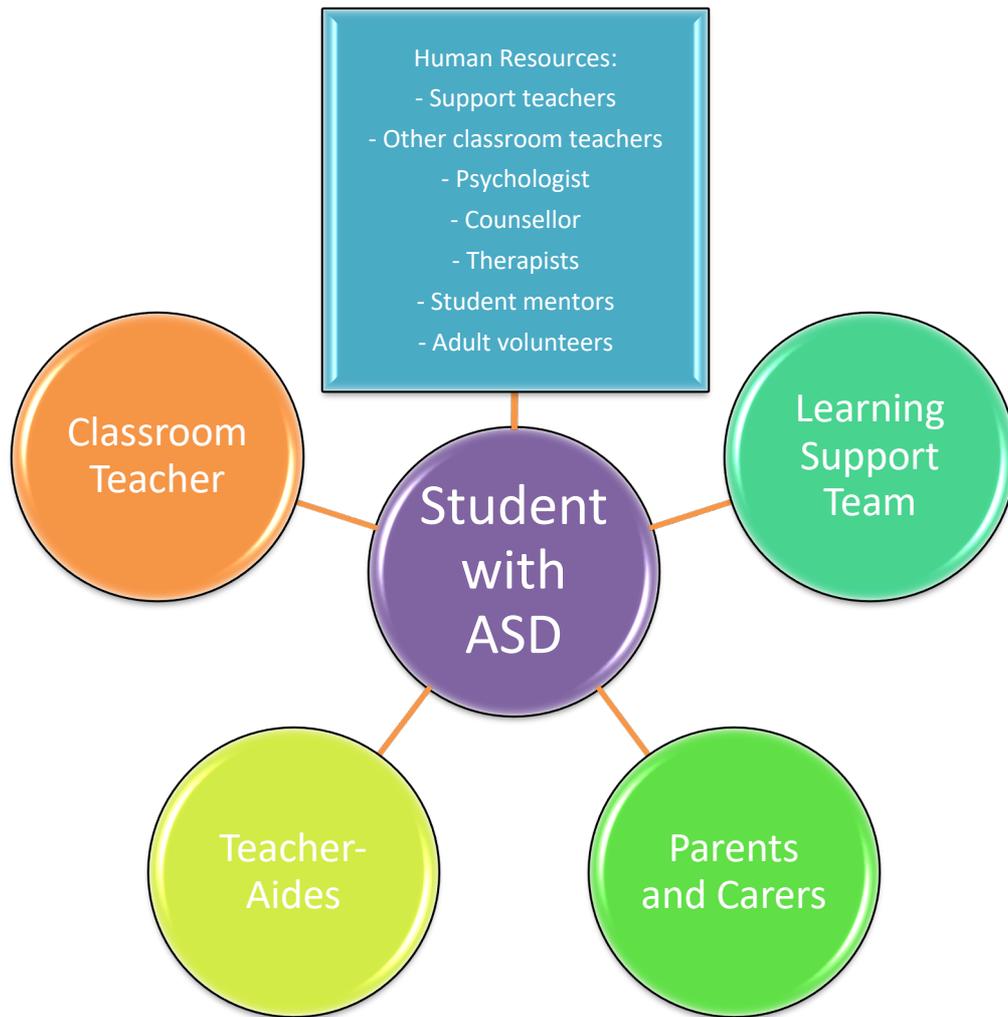


Figure 7.4. A collaborative, child-centred model for the effective inclusion of students with ASD.

What appears to be missing in the current school is a collaborative environment where asking for information is supported and aligned with the chance for all staff members to collaborate on how to better support their students with ASD. The lack of any meaningful, collaborative relationship between staff and principal also highlighted a major barrier to providing an inclusive setting. This relates to the second premise of symbolic interactionism, which emphasises the significance of people assigning different meanings based on their social interactions. It was evident that teachers were not learning anything new in isolation and could have developed better understandings of each student by collaborating as a team in order to achieve common goals.

Effective, interactive and in-house professional sharing of ideas could see this participating school environment as a learning organisation in its own right. Such a transition towards a learning community, where colleagues are mutually supportive,

can lead only to improved teaching and, in turn, improved learning for all involved. The administrative team needs to show its capability to address the absence of collaborative teamwork and partnerships, and to encourage combined and collaborative efforts towards planning and support for both the teachers, teacher-aides and the students with ASD. Until this has been achieved, reaching premise three of symbolic interactionism, which enables all stakeholders to handle in and modify their beliefs and meanings through an interpretive process (Blumer, 1969) appears to be a long way off. The literature supports this finding on inclusive school culture, which should “represent a whole-school concern that works to align special education with general education in a manner that most effectively and efficiently imparts quality education to all students” (Grima-Farrell, Bain, & McDonagh. 2011, p.118). This finding emphasises the importance of a collaborative working environment where all members of the school community are working towards making the policy of inclusion a reality. This has led to the following proposition:

- Schools with Special Education Programs attached need more training in the area of collaboration to improve and promote successful outcomes for students with ASD.

7.2.4 Low levels of interaction in the school community

In this section, I discuss the fourth finding concerning low levels of interaction in the school community. Despite the fact that the participating school has its own SEP, there were teachers who admitted to being unaware of what was available within the SEP facility. It was clear that ample resources were available for all teachers who had students with ASD, but a lack of interaction between staff members resulted in these teachers being deprived of valuable resource materials. The HOSSES from the SEP rarely allowed staff to leave the unit, other than for the purpose of playground duty, as the students with ASD were required to start each day in the SEP, eat their morning tea in the SEP, and to spend their lunch hour in the facility’s playroom. Students who were able to interact externally with their peer group were exempt from this lunchtime requirement, but were always accompanied by a teacher or a teacher-aide. Such an isolationist approach to inclusion has resulted in the SEP staff having limited opportunities to have any worthwhile interaction with classroom teachers, music and PE teachers, and with members of the administration staff. Teachers alluded to the possibility that the geographical distance of the SEP from the remainder of the

school may account for their feelings of isolation and helplessness. It was evident that interaction with the SEP staff was restricted to a phone conversation if a teacher had to call for assistance for a behaviour or meltdown occurrence.

The teacher-aides, whose primary function is to support the teachers of students with ASD, considered that they were being denied the support they required to interact effectively with these students. The teacher-aides admitted to expecting guidance and advice in relation to their tasks from the classroom teacher, and this finding aligns with findings from a previous study related to teacher-aides (Sharma & Salend, 2016). The teacher-aides in this study claimed that they gained some insight into how to complete their duties by observing the classroom teacher, which demonstrates the important role teachers can play in supporting teacher-aides. However, the teacher-aides provided no evidence that the classroom teachers were providing support or training in accordance with their needs.

This problem led to misunderstandings concerning the role of the teacher-aide within the school, and limited research exists concerning how teacher-aides currently support students with special needs (O'Rourke, 2014). This anomalous situation is in line with existing literature regarding roles and responsibilities of teacher-aides (Cremin, Thomas, & Vincett, 2003; Sharma & Salend, 2016; Wallace et al., 2001). In Australia, suitable assessment of the usefulness of the intervention programs, models and methods that teacher-aides use is also limited (Tatum, 2018). This could well account for the fact that the work undertaken by teacher-aides continues to be described as varied and difficult to quantify, and to a large degree under acknowledged. Clearly, the service provided by teacher-aides is a multifaceted topic which requires and improved understanding if they are to remain an integral part of the process of including students with special needs (Symes & Humphrey, 2012). One of the fundamental problems associated with the heavy reliance on poorly prepared teacher-aides, is that teachers keep appointing the least trained staff to the students who have the most complex learning needs.

Such dependence upon the classroom teacher for guidance would suggest that teachers should feel responsible for the supervision of their teacher-aides, but neither the teachers themselves, nor the teacher-aides, characterised the teachers as being their supervisors. The implication arises that if teacher-aides are not being supervised or supported adequately, it casts a shadow of doubt over the very quality of services being

provided for the students with ASD. A possible reason for this dearth in effective teacher to teacher-aide supervision, may be the result of a lack in teacher training on how to interact effectively with other staff. This assumption aligns with the literature (Dymond et al., 2007; Leblanc, Richardson, & Burns, 2009).

The participants of this study also revealed that new staff members were not being inducted, often being assigned to classes containing students with ASD with no instruction on how to address their complex needs. Such a demand upon a beginning teacher or teacher-aide can simply be cushioned by a strong support network of in-school mentors who regularly interact with them. Inclusion can only succeed when all teachers on staff are united in their philosophy for equitable opportunities for all students. Two of the teacher-aides were convinced that due to a lack of direction and effective supervision, their contributions towards the education of students with ASD was not being valued. Conversely, the teacher-aide from the SEP appeared to have no doubts about the value of her contribution to her student, nor did one of the more general teacher-aides who projects a most positive disposition towards her responsibilities.

With the exception of the music and PE teacher, the general teaching staff occasionally interacted with the parents of students with ASD. Teachers were appreciative of any information parents shared with them, particularly if their child had had a bad start to the day. Such knowledge allowed teachers to adjust their programs if necessary, in order to accommodate the emotional needs of the student. The closest relationships between parent and teachers occurred between the parents of children with ASD, and the staff in the SEP. The process was that each child with ASD would be delivered to the safety of the SEP before the commencement of school, and taken individually to their respective classrooms ten minutes into the first lesson. It was during these early periods of the day that the SEP staff could brief the teachers on any incident that may have occurred with the child that could have an effect upon how the student settled down to work.

The barrier that appeared to exist between staff and principal, made it difficult for staff members to interact with the principal on matters pertaining to their students with ASD. At no time during the data collection process was the school principal involved, and the principal never enquired into the progress of the study. Comments regarding the principal's absence from the classrooms were evident, along with the

lack of opportunities to vent issues related to their problems at staff meetings. It was revealed that the SEP had only been visited by the principal on three occasions, where none of those occasions were related to any of the children with ASD. Many staff indicated that they no longer relied upon any interactions with the principal, and had resigned themselves to a situation where they were working in virtual isolation with students. The participants agreed that an effective principal should be able to inspire the trust and respect of the teaching staff and to be able to stimulate confidence within the workplace. They also considered that clarity of goals and objectives were essential for successful inclusion, but neither were provided by the principal. These findings have made it apparent that school principals must be proficient in all factors concerning students with ASD, and committed to meeting the requirements necessary for successful inclusion of students with any form of disability. A clear vision for effective inclusion must be regarded as a prime requisite for the positioning of any school principal. The findings related to low levels of interaction in the current school has led to the following proposition:

- Special Education Programs should be centrally located within a school to ensure everybody within that school community can regularly interact with it.

7.2.5 Concern, caution and scepticism surrounding the inclusion of students with ASD

In this section, I discuss the fifth and final finding regarding the concern, caution and scepticism that participants described in connection with including students with ASD in mainstream schools. This finding represented the tensions experienced between the expectations of teachers and the actuality of their practice. It was not surprising that attitudes on inclusive education for students with ASD varied. While inclusion can be beneficial, students with ASD often present complex challenges within inclusive mainstream classrooms. The literature emphasises that complicated behavioural, social and educational needs, often accompanied by sensory processing difficulties, can cause challenges for the effective inclusion of such students (McLaren, 2013). The right attitude to address these challenges demands the need for time to be allocated to training and resources in order to execute inclusion programs effectively. Furthermore, ensuring that the chosen programs are serving the needs of each student with ASD is considered vital (McLaren, 2013).

The teachers' perceived advantages to having students with ASD in an inclusive classroom situation mainly came under the headings of: opportunities to develop friendships; peer role modelling for academic, social and behavioural skills; an increased social initiation into relationships and networks; a greater access to the general curriculum; an increased achievement of Individual Education Plan (IEP) goals and an enhancement in skill acquisition. It was found that teachers who had undertaken special training, and had experienced previous interaction with students with ASD, were likely to hold positive perceptions towards inclusion.

The perceived disadvantages to having students with ASD in an inclusive classroom were associated with disruptive behaviour; language and communication barriers; sensory-sensitivity problems; reorganisation of the curriculum, and having to deal with the negative attitudes of other students. Feelings of guilt were also described, relating to spending too much time catering for the needs of the student with ASD at the expense of neurotypical children in the class. The literature supports this finding, which describes that providing adequate attention and time management of all students in an inclusive setting are key challenges faced by all teachers (Hemmings & Woodcock, 2011; Jordan, Schwartz & McGhie-Richmond, 2009; Lambe & Bones, 2006). Through a lack of understanding and a deficit in observation, some teachers chose to consider the varied interest and fascinations of students with ASD as unconventional and totally in opposition to the demands of the curriculum. For a school that is expected to support the philosophy of 'inclusion', here is disturbing evidence of a severe lack of staff solidarity, based primarily upon a crucial lack of understanding of the tenets associated with teaching students with ASD.

In this school, the teacher-aides spent a substantial amount of time with students with ASD, but were denied the opportunity to participate in the decision-making and planning processes, which impacted their attitudes. It was clear that teacher-aides were equipped to give valuable information concerning the fundamental support structures for each student with ASD, both within the classroom and within the school community itself. Certain teacher-aides believed they were competent in their abilities to support students with ASD, and also considered that they had a significant function with regards to the school's approach to inclusion. Several advantages of including students with ASD were also highlighted by teacher-aides. One considered that the extra planning involved for students with ASD could be beneficial to all students, and

that the neurotypical students may learn the importance of empathy. Another considered that inclusion encourages some of the teachers out of their comfort zones, and encourages teachers to recognise the individual needs of all students within their cohort. This teacher-aide claimed that inclusion encourages teachers to expand their knowledge in the area of needs, and especially for students with ASD. It was also considered that there is benefit to neurotypical students being exposed to all types of personalities and characteristics. Only one teacher-aide discussed disadvantages. These disadvantages were aligned to negative viewpoints expressed by teachers, in that neurotypical students lose support due to the management of disruptive behaviours. Additionally, this teacher-aide observed a ripple effect with neurotypical students who became disruptive after witnessing negative behaviours displayed by students with ASD. Similarly to the teachers, it became clear that a negative disposition from teacher-aides presented a barrier to effective inclusion.

Whilst it is not surprising that the advantages and disadvantages mentioned above are predictable to a certain extent, it was disclosed that some parents had removed their children from the school due to the negative impact students with ASD were having on them. This situation was a direct result of a lack of community education concerning the benefits and responsibilities of the community as a whole to embrace the tenets of inclusion within the school. Such community education could be considered the responsibility of the school principal. This assumption is supported by the literature, where positive attitudes towards students with ASD must begin with the principal and should not be the sole responsibility of the classroom teacher (Horrocks, White & Roberts, 2008; Lynch, 2012). Changes in attitude may have occurred through regular participation in professional development pertaining to ASD, but this was not provided by the principal, and only once by the HOSES.

Without collegial support, community support, and the backing of the principal, many of the teachers and teacher-aides remained sceptical about inclusion. It would be unrealistic to suggest that inclusion is never difficult or problematic. The enrolment of a child with ASD requires considerable adjustment by all staff, but a staff without the right attitude can clearly result in the positive facets of inclusion not being achieved. It was evident that many things in this school contributed to the concern, caution and scepticism surrounding the inclusion of students with ASD. A lack of pre-service training; in-service training; prepared teaching materials; rigid timetabling;

scarce time for planning and updating ASD-related knowledge; and continual specialist support impacted the participants' attitudes. This is in line with the literature, which highlights that several factors impact attitudes, including age; educational background; years of teaching experience and a background of general or special education, and specialised ASD training (Abu-Hamour & Muhaidat, 2013; Cassimos et al., 2015; Thaver & Lim, 2014; Engstrand & Roll-Pettersson, 2014).

The various results which contributed to the finding discussed in this section have had a direct impact on the teachers and teacher-aides inability to move beyond the first premise of symbolic interactionism. Premise two or three cannot be reached within the current school until all stakeholders, including the parents of the students with ASD, are sharing as a team through the process of interpretation, discussion, modification and handling of the understandings involved with inclusive practice. In light of this finding, the following proposition is provided:

- Attitudinal concerns surrounding the inclusion of students with ASD in schools can only improve when pre-service training for teachers and teacher-aides is updated to reflect current practice; ASD-related professional development is regularly provided; and special education programs are centralised (both physically and mentally) by all members of the school community.

7.3 ADVANCING THE D.I.S.I DILEMMA

The findings from this study indicate that the state of inclusion may well be morphing into a state of delusion. In an attempt to throw light upon this educational dilemma, four 'states of being' associated with the inclusive paradigm are discussed in my interpretation of what I see as 'The D.I.S.I. Dilemma', an acronym for Delusion, Inclusion, Seclusion, and Intrusion.

'D' is for Delusion

Most inclusion policies stipulate that all children with special needs have the right to attend a regular school within their own school district, where they will be included into a class of peers. Sometimes this means that a child of nine years might find himself in a class of seven-year old's, where it is envisaged that he will be able to work alongside children of his own developmental level. However, in the case of children with ASD, this does not always work out for the betterment of that particular

child, nor for the benefit of the remainder of the class. Whilst teachers and teacher-aides do their best to include students with ASD into everyday activities, there are certain issues pertaining to some of these children that cannot be predicted, and with the very best of intentions, the child may become suddenly anxious, fidgety and gradually work himself up into a meltdown situation on a regular basis.

There are also those children with ASD who object to even being in the classroom, and may do everything within their means to avoid being involved in classroom activities altogether, leading to ‘meltdowns’. If there is no extra assistance for the teacher, he or she may be left on their own to deal with a highly anxious student with the remainder of the class wondering what is going on. Whatever effort the teacher has put into preparing the lesson, and whatever enthusiasm the neurotypical students had demonstrated prior to the meltdown situation, can soon be lost. The real dilemma here is, that in many such cases, the student’s specific needs are not being sufficiently met, and as a result, the teacher, lacking in the appropriate strategies to accommodate such students, finds themselves in the unenviable position of dealing with the situation alone.

It is at times like these that teachers may question whether they may be ‘deluding’ themselves into believing that the stratagem of inclusion is actually working. Considering that the vast majority of teachers have had little or no specific training in the area of ASD, most endeavor to accommodate students with ASD within their regular classrooms. However, in so doing, teachers may be found guilty of overlooking the needs of the other students in the class. Many teachers confessed their concern of short-changing other students, but taking into consideration regular verbal outbursts, meltdowns and various other behaviours associated with ASD, equity and impartiality within the classroom may well become distorted.

What appears to be missing is an acceptance that ‘inclusion’ has necessitated a need for theoretical knowledge and specific strategies aligned to the varied and sometimes complex needs of students with ASD within a mainstream setting. “The knowledge base of special education includes a wide range of disciplines and contributions, supplemented by related research and methods informing evidence-based practice” (Farrell, 2010, p. 50). When there is an absence of these important and necessary aspects, the true benefits associated with inclusion will not be achieved.

'I' is for Inclusion

The impact of inclusion felt by mainstream schools will continue to increase as the prevalence rate of ASD continues to rise. Unless general classroom teachers and teacher-aides are properly trained, inclusion will continue to push these educators to face daily challenges without effective solutions. It was evident from the school under study that inclusive education requires a considerable proportion of preparation and teamwork among all personnel, yet the resources and time needed to make it work was not being provided. Increased numbers of students with ASD currently being educated in mainstream classrooms has occurred almost subtly; and teachers can be heard whispering their concerns in staff rooms, fearing that if their anxieties should attract the attention of those who are advocating for 'inclusion', they may present to others as being uncaring or unfeeling.

There is a concern with existing participation and achievement levels for students with ASD and the insufficient degree in which support is provided. The purpose of our education system is to educate all students, including those with ASD, and it is not good enough to support students with ASD by 'just being' in our schools. Once students with ASD reach school, they need to attend full-time, in settings appropriate to the individual student, as most students with ASD will require some individualized programming in their education.

This study highlighted that many students with ASD were unable to access behavioural elements of their program by being supervised by a qualified behavioural professional. The lack of behavioural services and properly trained behaviour specialists is considered a major contributor to some students with ASD having abysmal education outcomes. Students with ASD do not learn in the same way as other students, with many requiring to be taught 'what to do' when a teacher says, "Do this" before demonstrating the required skill. There are, in many situations, skills that students with ASD have difficulty assimilating. These skills need to be taught explicitly so that a student with ASD can continue to learn in a mainstream schooling situation.

'S' is for Seclusion

There are many successful stories being told by teachers who have enthusiastically embraced the philosophy of inclusion, and it is to these teachers that we have so much to be thankful for and from whom we have so much to learn. It is

generally agreed that in an ideal learning situation where students with ASD feel safe and unprovoked, they will prosper, and incidences of explosive meltdowns will be significantly reduced. Conversely, there are those with ASD who find being close to others totally overwhelming and indeed quite stressful. Any number of noises or smells can be a trigger for a meltdown.

Occasionally a class of students may be witness to a student with ASD throwing him or herself onto the floor, screaming, hitting and kicking out at anyone who tries to restrain him. Windows may be broken or a chair hurled into the air before an adult is able to remove the child from the classroom, or remove the other students away to safety. Finding an appropriate place where the student can calm down is often a problem in itself, and requires an adult to supervise the calming down process. Here we have the dilemma associated with isolation or seclusion, something that is opposite to the philosophy of inclusion.

'I' is for Intrusion

Let us consider a classroom of 25 students where the teacher is in possession of the acquired appropriate strategies to satisfy the needs of students with ASD. Ideally, the students would enjoy a non-threatening least restrictive environment where all students can work at their own pace. However, in a classroom where such inclusive practices are not evident, students with ASD can often cause havoc. This usually occurs when the teacher and the teacher-aide have received little or no training in inclusion strategies. In a situation where the needs of a student with ASD are not being met, a normally well-disciplined class can suddenly be thrown into turmoil. When a teacher presents as being deficient in empathy, lacking empirical understanding and inclusive approaches, it will not be long before some of the cohort will exhibit similar, negative traits. In a setting such as this, the student with ASD may be regarded as a usurper or intruder. Effective management results in increased academic achievement and in turn, decreased problem behaviours, lessening the likelihood of a teacher viewing the student with ASD as intrusive to the mainstream classroom. The D.I.S.I. Dilemma, presented as Figure 7.5, consists of these four important elements that should be considered before the philosophy underlying inclusion can be ardently incorporated into the working mechanism of all schools. When these four elements are combined, they create a whirlwind of problems that pushes people and policies in all directions, impacting the level of inclusive education being provided.

The D.I.S.I Dilemma

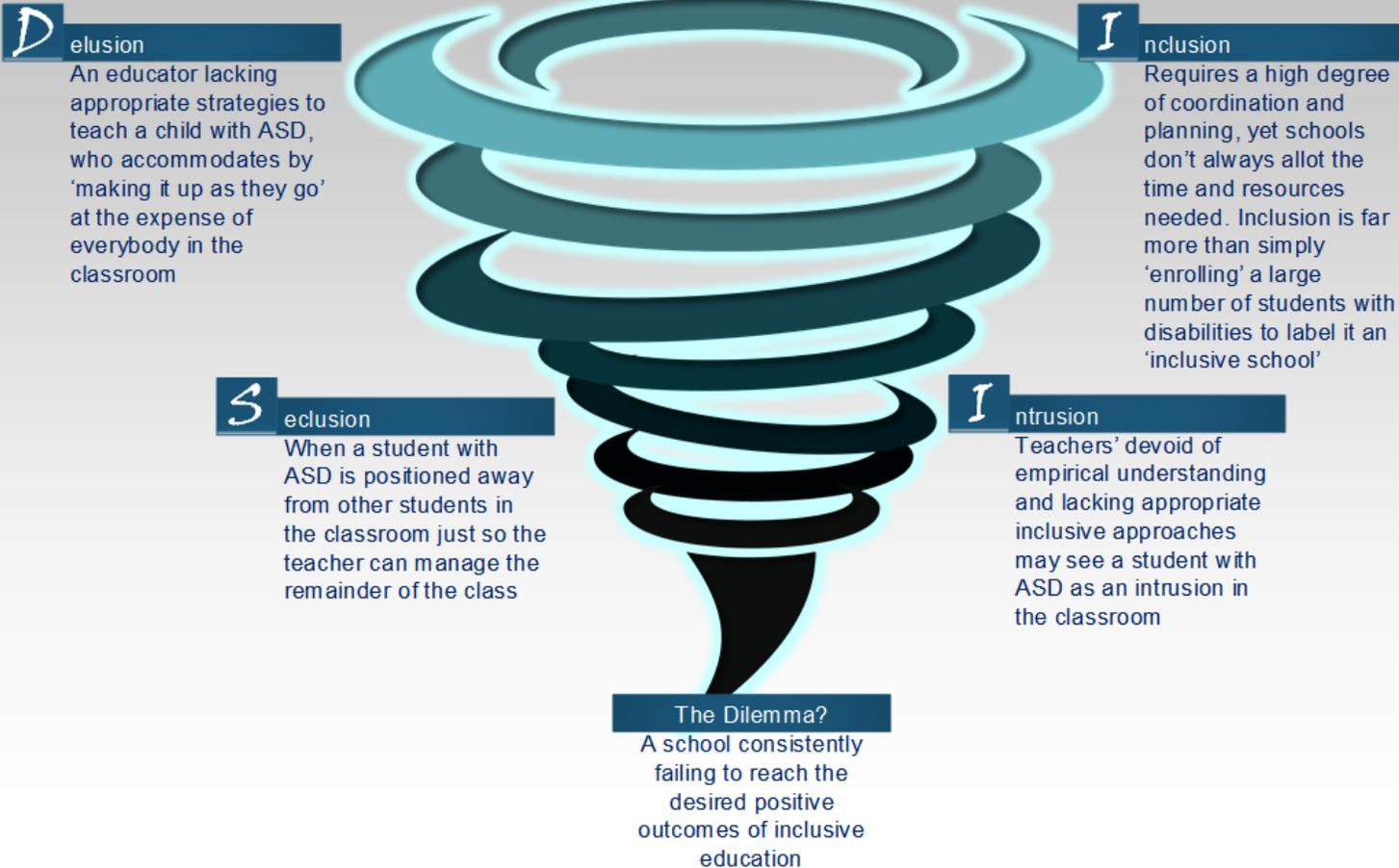


Figure 7.5. The D.I.S.I Dilemma.

7.4 IMPLICATIONS OF THE STUDY

7.4.1 Implications for teacher and teacher-aide education

The findings from this study have implications for both teacher and teacher-aide education. The most significant implication is the emergent need for a more focused approach to the development of pre-service university course work in the area of ASD studies. Whilst the cross-categorical courses pertaining to special education should remain, there needs to be additional offerings in ASD related studies which move from the mere theoretical to a more practical and strategy-based approach. Practicum experiences, specifically within classes where students with ASD are included, should be made compulsory during training, as such experiences would be of substantial value to the accumulation of knowledge affecting ASD strategy-based university courses.

However, such a proposal implies that practicum supervisors will need to be experienced teachers of students with ASD, but not necessarily ‘expert’ teachers in the field. Such a reality further implies a need for consistency among the type of pre-service experiences pre-service teachers, and to a lesser extent, teacher-aides will have. This would necessarily depend upon additional training and uniformity associated with the evaluation procedures among supervisors and cooperating teachers to ensure quality experiences for pre-service teachers in the field with students with ASD.

All participants reflected varying levels of frustration to not having been given more opportunities to participate in coursework or professional development in behaviour modification relative to students with ASD. Such pre-service courses for both teachers and teacher-aides should include evidence-based approaches, as these would prove invaluable towards the process of developing better understanding of how to cater for the individual needs of each student with ASD.

7.4.2 Implications for educational policy

Current educational requirements for teachers of students with ASD remain largely unspecified within the state of Queensland, and this lack of consistency has a direct effect on students with ASD, both in the primary sector and in higher educational institutions. This irregularity in certification leads to an anomaly in teacher education practice and policy, and directly affects the knowledge, skills and quality of general classroom teachers of students with ASD.

Findings from this study indicate the need for teachers of students with ASD, and teacher-aides who assist teachers of students with ASD, should be involved in coursework and experiences, which are focused on the educational needs of these students. Through the implementation of a standard of practice for the state of Queensland, such coursework and experiential opportunities could be better regulated, thus leading to consistent measures of the effects of teacher education upon students with ASD.

7.5 RECOMMENDATIONS FOR FURTHER RESEARCH

As this was the first study to attempt to identify and examine the perceived tension between the expectations of teachers' capacity to implement the inclusive practices required by policy, and their actual capacity, similar studies must be carried out. Replicating the current study would advance the validity of the online survey, and also validate the data that were collected within this particular school. Although this study was designed to advance the growing body of knowledge in regard to how teachers and teacher-aides develop the necessary skills to support children with ASD in the classroom, and how they go about enacting that support, it is in fact a small-scale study engrossed within one school.

Further research should also explore the hypothesis that the feelings teachers and teacher-aides have towards their personal competencies to provide equitable teaching and learning experiences for students with ASD, can be directly tied to their levels of effective teaching and learning. Such research could also include the exploration of disposition characteristics of teachers and paraprofessionals who have received appropriate levels of professional learning in areas pertaining to ASD, against those who (as has been found to be the case in this study), have received inadequate levels of professional development and introductory training. These findings have allowed me to come to several conclusive recommendations. These are:

Recommendation 1:

There is a need to address the uncertain and often negative attitudes educators have towards students with ASD through the availability of appropriate university courses and ongoing professional development for pre-service teachers, teachers in practice, teacher-aides and school principals.

The findings from this study have implications for both educators and education authorities in Queensland. As research indicates that the successful inclusion of students with ASD is often dependent on positive educator attitudes, there is a need to address the uncertain and often negative attitudes educators have towards students with ASD. Delivering regular professional development in all facets of ASD so that educators can feel proficient in working with students with ASD in mainstream settings, could improve teacher attitudes. Classroom teaching requirements have certainly expanded in the last decade due to an increasingly diverse population of students being present in mainstream settings. Pre-service teacher education must include current ASD-related information, which can be utilised with students with ASD to increase both understanding of the disorder, and to overcome misconceptions and negative attitudes.

Recommendation 2:

There is a need to develop clearer policies for how inclusion should work within all school settings.

Education authorities need to develop clear policies for how inclusion should work within schools (Prior & Roberts, 2012). Additionally, it is recommended that education authorities assess their policies and procedures concerning inclusion to strengthen the support network for each child with ASD. Despite a SEP being present in the participating school, there appeared to be an unclear structure for how to cater effectively for the needs of students with ASD.

Recommendation 3:

Departmental policies on inclusion must become procedural guidelines so that schools can collaboratively adapt, according to their individual school settings.

This study highlighted that working in isolation is a considerable concern for the current teachers in the research setting, who are working with students with ASD. Collaborative team building and policymaking, aligned to effective practices, which offer individual support for students with ASD to improve their inclusion within school communities is necessary. Collaboration should focus on singular programs for each child; instructions for individualised learning; how teacher-aides can better assist teachers to manage classrooms; behaviour management plans and current professional development concerning all of the above.

Recommendation 4:

A systematic exploration concerning the formation of consistent professional learning communities in order to better support teachers and teacher-aides, and in particular, how to implement the extensive range of strategies required for the inclusion of students with ASD.

As each suggestion is complex, representatives of educational authorities will need to develop and make available, appropriate resources for school communities to ensure that support roles, teaching practices and procedures for professional development, remain current and applicable to the classrooms of today. Such issues have a profound influence upon the daily functioning of classroom practitioners, and can affect how students with ASD are included or excluded within the school community.

Recommendation 5:

Additional research is required to define what an expert in ASD needs to be, and how teachers and teacher-aides can become such experts in the field.

The role of an expert educator in determining the quality of special education teachers of students with ASD will require further qualitative exploration into the underlying values and beliefs of all individuals involved in this field. Research along such lines was recently completed by Australian Catholic University's Institute for Learning Sciences; in collaboration with 13 other universities. This research project was undertaken as part of an industry-based push to lift the standard of teachers. October 2018 saw the launch of a rigorous new test to be used by all Queensland universities, to prove that pre-service teachers can plan lessons, communicate effectively and measure student learning, or risk not graduating. All universities, apart from one in QLD, have begun introducing the Graduate Teacher Performance Assessment (GTPA), which has been predicted to provide a consistent measure across institutions, to determine whether a pre-service teacher is in fact fit to teach.

It is now time for an equally rigorous assessment to be developed to test whether these same pre-service teachers are equally capable of demonstrating proficiency in the planning of lessons, in communicating effectively and being able to measure the learning of students with ASD within an inclusive classroom setting. Those who

successfully pass the GTPA will at some time in the future, find themselves in an inclusive classroom where there will be students with varying levels of ASD.

7.6 LIMITATIONS

The participant sample was selected from a small, mostly similar group of teachers and teacher-aides from a specific geographic location. This restricted the degree to which the findings of the study may be generalised outside this individual school context. As this was a qualitative study, the research cannot and does not seek to generalise. By using an online survey during the first phase of the data collection process, some of the information provided could not be verified until the semi-structured interview stage. As not all answers provided by participants could be verified in terms of honesty, the interpretation of results could have been impacted by the inability to have controlled conditions surrounding these responses. Participants can mislead themselves and others by falsifying a precise report of the phenomenon, which can impact the validity of results. However, the self-report responses were considered to be well-balanced when examining the online survey and semi-structured interview data, which implies that the participant responses were true portrayals of their reality.

Transferability is frequently used as a substitute to legitimise a study beyond its context, notwithstanding that not all qualitative studies can be generalised. For findings to be applied to other contexts, transferability is a qualitative standard of reliability. However, transferability can only be reached when concrete best-practice portrayals are provided, and this was attempted in order to support the analysis of the multifaceted topics addressed. The suitability of applying the findings beyond the current setting permits the reader to conduct further research and make a transferability judgement (De Vos, 2005).

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Appendices

Appendix A: Research Portfolio

Publication

Coates, M., Lamb, J., Bartlett, B., & Datta, P. (2017). Autism spectrum disorder coursework for teachers and teacher-Aides: An investigation of courses offered in Queensland, Australia. *Australian Journal of Teacher Education*, 42(11), 65-80. doi:<http://dx.doi.org/10.14221/ajte.2017v42n11.5>

Copyright Declaration

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Statement of Contribution of Authors

In this paper (which was also Chapter 4 of the thesis), the nature and extent of my contribution to the work was to:

- a) Conduct the search, identify the articles, apply the selection criteria, review the articles, and
- b) Draft the paper and make edits. The extent of my contribution was 80%. The following co-authors contributed to the work:

Name	Nature of contribution
Associate Professor Janeen Lamb	• Provided advice on the direction of the paper
Professor Brendan Bartlett	
Dr Poulomee Datta	• Reviewed, revised and provided feedback and edits on the paper

Candidates Signature:



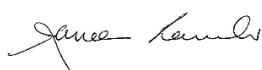
Date: 14/01/19

Declaration by Co-Authors

The undersigned hereby certify that:

The above declaration correctly reflects the nature and extent of the candidate's contribution to this work, and the nature of the contribution of each of the co-authors

Signatures:



Date:
14/01/19



14/01/19



14/01/19

Appendix B: Online Survey for Teachers and Teacher-Aides

1. The teacher survey protocol
2. The teacher-aide survey protocol

Autism and Inclusive Education Questionnaire (AIEQ)

Teacher Copy

Welcome

The Autism and Inclusive Education Questionnaire (AIEQ) has been developed as part of a PhD study by Mitchell Coates. The purpose of this questionnaire is to respect and explore the lived experience of educators who support students with Autism Spectrum Disorder (ASD) in mainstream classrooms. This questionnaire aims to discover new insights into the phenomenon of how to support students with ASD in inclusive settings. Your assistance by completing the AIEQ is requested. The benefit of this questionnaire will provide other educators with opportunities to gain from your insight and experiences. Please answer all questions as honestly as possible. All comments and responses are anonymous and will be treated confidentially. Thank you.

Questionnaire Section	No.	Question
University Training	1	What year were you awarded your teaching degree?
	2	Which university did you attend?
	3	How many units did you complete in your teaching degree that addressed ASD? <ul style="list-style-type: none">▪ 0 units (1)▪ 1-3 units (2)▪ 4-6 units (3)▪ 7-10 units (4)▪ 10+ units (5)
	4	Can you provide a brief description of the units completed?
	5	Time in current teaching position <ul style="list-style-type: none">▪ 1-3 years (1)▪ 4-6 years (2)▪ 7-10 years (3)▪ 10+ years (4)
	6	Have you held positions other than a classroom teacher, in any school, where you have worked with children? E.g. After-school care, Guidance Counsellor, Advisory Visiting Teacher (AVT) etc.
Teacher-Training and Experience	7	How many years of teaching experience do you have? <ul style="list-style-type: none">▪ 1-5 years (1)▪ 6-10 years (2)▪ 11-15 years (3)▪ 16-19 years (4)▪ 20+ years (5)
	8	Are you certified in Special Education? E.g. a graduate degree in Special Ed. (Graduate Diploma/Masters/Doctorate?) If yes , please explain (including the duration of the training). If no , have you had training in

Special Ed., such as professional development regarding disabilities or ASD specifically?

- 9 Have you had training to educate students specifically with ASD? If **yes**, please explain.
- 10 Have you had specific experience working with or educating students with ASD other than through a formal qualification? If **yes**, please explain.
- 11 How have you gained your knowledge about ASD? (Select as many that apply)
 - University Qualification (1)
 - Professional Development (2)
 - Conferences (3)
 - Books (4)
 - Television (5)
 - Radio (6)
 - Internet (7)
 - Child with ASD in my class (8)
 - Personal involvement with ASD (9)
- 12 If you have gained knowledge about ASD in ways other than those provided in the question above, please provide further details.
- 13 Do you feel a need for more specific training in any particular area in ASD? If **yes**, please outline areas you feel that you need more training.
- 14 If you have had a student with ASD in your class, did you have access to professional support? Such as an Advisory Visiting Teacher (AVT) or Teacher-Aide? If **yes**, in what specific areas did you have access to professionals? E.g. assistance with behaviour management, academic skills etc.
- 15 Were there any other areas in which you would have liked additional professional support? If **yes**, please specify the areas where you required additional support.
- 16 What do you think are the main needs of a student with ASD, both in the classroom and at school generally?
- 17 Do you feel it is important to modify the classroom environment for students who have ASD? If **yes**, how do you think this could be done?
- 18 Do you feel you have received enough training about ASD on how the classroom environment can be modified? Please comment further, if you have/have not received enough training about ASD and how the classroom environment can be modified.
- 19 How do you modify teaching materials for students who have ASD?
- 20 Do you have the knowledge to modify teaching materials for children with ASD? If **no**, please comment further.
- 21 Do you have the resources to modify teaching materials for children with ASD? Please comment further, regarding whether or not you have the resources to modify teaching materials for children with ASD.
- 22 Have you received any training about how to modify teaching materials? If **yes**, please explain more about how you received that training and what it involved?

- 23 Have you found that other teachers have been helpful in supporting you in working with a student with ASD? Please list the roles of the staff only, NOT their names.
- 24 How have other teachers been helpful? (Select as many that apply)
- Providing advice (1)
 - Providing materials (2)
 - Recommended professional development (3)
 - Supported my student/s during particular lessons (4)
 - Supported me during interviews with parents (5)
 - Assisted in the development of individual program/lesson ideas (6)
- 25 If teachers have been helpful in ways other than those provided in the question above, provide further details.
- 26 What have you found to be most helpful from your school community? (Select as many that apply)
- Collegial advice (1)
 - The provision of materials (2)
 - Recommendations for professional development (3)
 - Supporting my student/s during particular lessons (4)
 - Supporting me during interviews with parents (5)
 - Assisting in the development of individual program/s (6)
- 27 If support has been provided in ways other than those provided in the question above, please provide further details.
- 28 How important do you think it is that parents of a child with ASD have involvement with the child's teacher/s so that they can work together? (Please select one)
- Not important (1)
 - Occasionally important (2)
 - Often important (3)
 - Very important (4)
- 29 Please provide an explanation for your selection above
- 30 How often do you have formal group meetings aimed at supporting students with ASD?
- Never (1)
 - Less than once a month (2)
 - Once a month (3)
 - 2-3 times a month (4)
 - Once a week (5)
 - 2-3 times a week (6)
 - Daily (7)
- 31 In what areas do you think parents of students with ASD and teachers can successfully collaborate? (Select as many that apply)
- Parent volunteering in the classroom (1)
 - Joint decision-making about the student (2)
 - Regular communication via email/phone (3)
 - Consistency with routines at school and at home (4)
 - Sharing new information and resources related to ASD (5)

32 If parents and teachers can collaborate in other ways other than those provided in the question above, please provide further details.

33 Any other comments you feel will support our understanding of how to support students with ASD?

**True/False/Unsure
ASD Questions**

Select TRUE or FALSE for the following statements based on your current knowledge of ASD. Please do not guess. If you are unsure of an answer, please select UNSURE.

34 All children with ASD are aggressive (T/F/U)

35 Most children with ASD have cognitive abilities in the intellectually disabled range (T/F/U)

36 Traumatic experience very early in life can cause ASD (T/F/U)

37 Behaviour therapy is an intervention most likely to be effective for children with ASD (T/F/U)

38 Children with ASD are very similar to one another (T/F/U)

39 ASD is a development disorder (T/F/U)

40 Medication can alleviate the core symptoms of ASD (T/F/U)

41 The core deficits in ASD are (1) Impaired social understanding, (2) Language abnormalities, (3) Impaired sensory functioning (T/F/U)

42 Most children with ASD have special talents or abilities (T/F/U)

43 Early intervention demonstrates no additional benefit to children with ASD (T/F/U)

44 ASD exists only in childhood (T/F/U)

45 With proper intervention, most children with ASD will eventually “outgrow” the disorder (T/F/U)

46 If an intervention works for one child with ASD, it will definitely work for another child with ASD (T/F/U)

47 Genetic factors play an important role in the cases of ASD (T/F/U)

48 In many cases, the cause of ASD is unknown (T/F/U)

Autism and Inclusive Education Questionnaire (AIEQ)

Teacher-Aide Copy

Welcome

The Autism and Inclusive Education Questionnaire (AIEQ) has been developed as part of a PhD study by Mitchell Coates. The purpose of this questionnaire is to respect and explore the lived experience of educators who support students with Autism Spectrum Disorder (ASD) in mainstream classrooms. This questionnaire aims to discover new insights into the phenomenon of how to support students with ASD in inclusive settings. Your assistance by completing the AIEQ is requested. The benefit of this questionnaire will provide other educators with opportunities to gain from your insight and experiences. Please answer all questions as honestly as possible. All comments and responses are anonymous and will be treated confidentially. Thank you.

Questionnaire Section	No.	Question
Teacher-Aide Training	1	What Teacher-Aide qualification/s do you have?
	2	Where did you receive this qualification?
	3	How much study in this qualification addressed ASD? <ul style="list-style-type: none">▪ 0 units (1)▪ 1-3 units (2)▪ 4-6 units (3)▪ 7-10 units (4)▪ 10+ units (5)
	4	Please provide a brief description of the topics you completed during your study.
	5	Time in current position <ul style="list-style-type: none">▪ 1-3 years (1)▪ 4-6 years (2)▪ 7-10 years (3)▪ 10+ years (4)
	6	Have you worked in other schools? If so, please provide details. E.g. 6 years in a Special School, 4 years as a TA, Advisory Visiting Teacher (AVT) etc.
Teacher-Aide Experience	7	How many years of teacher-aide experience do you have? <ul style="list-style-type: none">▪ 1-5 years (1)▪ 6-10 years (2)▪ 11-15 years (3)▪ 16-19 years (4)▪ 20+ years (5)
	8	Have you had training in Special Education, such as professional development regarding disabilities or ASD specifically? If yes , please explain including the duration of the training.

- 9 Have you had specific training to educate students with ASD? If **yes**, please explain including the duration of the training.
- 10 Have you had specific experience working with students with ASD? If **yes**, explain.
- 11 Have you accessed other formats to gain your knowledge about ASD? (Select as many that apply)
- University Qualification (1)
 - Professional Development (2)
 - Conferences (3)
 - Books (4)
 - Television (5)
 - Radio (6)
 - Internet (7)
 - Child with ASD in my class (8)
 - Personal involvement with ASD (9)
- 12 If you have gained knowledge about ASD in ways other than those provided in the question above, please provide further details.
- 13 Do you feel a need for more specific training in any particular area in ASD? If **yes**, please outline areas you feel that you need more training.
- 14 Were there any other areas in which you would have liked additional professional support? If **yes**, please specify the areas where you required additional support.
- 15 What do you think are the main needs of a student with ASD, both in the classroom and at school generally?
- 16 Do you feel it is important to modify the classroom environment for students who have ASD? If **yes**, how do you think this could be done?
- 17 Do you feel you have received enough training about ASD on how the classroom environment can be modified? Please comment further, if you have/have not received enough training about ASD and how the classroom environment can be modified.
- 18 Do you modify any teaching materials for students with ASD, or does the classroom teacher make the modifications? Please explain.
- 19 Do you feel you have the knowledge to modify teaching materials for children with ASD? If **no**, please comment further.
- 20 Do you have the resources to modify teaching materials for children with ASD? Please comment further, regarding whether or not you have the resources to modify teaching materials for children with ASD.
- 21 Have you received any training about how to modify teaching materials? If **yes**, please explain more about how you received that training and what it involved?
- 22 Have you found that other teachers have been helpful in supporting you in working with a student with ASD? Please list the roles of the staff only, NOT their names.
- 23 How have other teachers been helpful? (Select as many that apply)
- Providing advice (1)
 - Providing materials (2)
 - Recommended professional development (3)

- Supported my student/s during particular lessons (4)
 - Supported me during interviews with parents (5)
 - Assisted in the development of individual program/lesson ideas (6)
- 24 If teachers have been helpful in ways other than those provided in the question above, provide further details.
- 25 What have you found to be most helpful from your school community? (Select as many that apply)
- Collegial advice (1)
 - The provision of materials (2)
 - Recommendations for professional development (3)
 - Supporting my student/s during particular lessons (4)
 - Supporting me during interviews with parents (5)
 - Assisting in the development of individual program/s (6)
- 26 If support has been provided in ways other than those provided in the question above, please provide further details.
- 27 How important do you think it is that parents of a child with ASD have involvement with the child's teacher/s so that they can work together? (Please select one)
- Not important (1)
 - Occasionally important (2)
 - Often important (3)
 - Very important (4)
- 28 Please provide an explanation for your selection above
- 29 How often do you have formal group meetings aimed at supporting students with ASD?
- Never (1)
 - Less than once a month (2)
 - Once a month (3)
 - 2-3 times a month (4)
 - Once a week (5)
 - 2-3 times a week (6)
 - Daily (7)
- 30 In what areas do you think parents of students with ASD and teachers can successfully collaborate? (Select as many that apply)
- Parent volunteering in the classroom (1)
 - Joint decision-making about the student (2)
 - Regular communication via email/phone (3)
 - Consistency with routines at school and at home (4)
 - Sharing new information and resources related to ASD (5)
- 31 If parents and teachers can collaborate in other ways other than those provided in the question above, please provide further details.
- 32 Any other comments you feel will support our understanding of how to support students with ASD?

**True/False/Unsure
ASD Questions**

- Select TRUE or FALSE for the following statements based on your current knowledge of ASD. Please do not guess. If you are unsure of an answer, please select UNSURE.**
- 33 All children with ASD are aggressive (T/F/U)

- 34 Most children with ASD have cognitive abilities in the intellectually disabled range (T/F/U)
 - 35 Traumatic experience very early in life can cause ASD (T/F/U)
 - 36 Behaviour therapy is an intervention most likely to be effective for children with ASD (T/F/U)
 - 37 Children with ASD are very similar to one another (T/F/U)
 - 38 ASD is a development disorder (T/F/U)
 - 39 Medication can alleviate the core symptoms of ASD (T/F/U)
 - 40 The core deficits in ASD are (1) Impaired social understanding, (2) Language abnormalities, (3) Impaired sensory functioning (T/F/U)
 - 41 Most children with ASD have special talents or abilities (T/F/U)
 - 42 Early intervention demonstrates no additional benefit to children with ASD (T/F/U)
 - 43 ASD exists only in childhood (T/F/U)
 - 44 With proper intervention, most children with ASD will eventually “outgrow” the disorder (T/F/U)
 - 45 If an intervention works for one child with ASD, it will definitely work for another child with ASD (T/F/U)
 - 46 Genetic factors play an important role in the cases of ASD (T/F/U)
 - 47 In many cases, the cause of ASD is unknown (T/F/U)
-

Appendix C: Semi-structured Interview Protocol

1. Interview Protocol (Teacher)
2. Interview Protocol (Teacher-Aide)
3. Interview Protocol (HOSES)

**Willow Park Primary (pseudonym)
Teacher Protocol**

Introduction: Interview Purpose

Thank you for taking the time to meet with me today. As you are aware, my supervisors and I am interested in understanding how teachers implement inclusive practices to support their students with ASD. I am going to be asking you questions about your teaching responsibilities, how you interact with your teacher colleagues, your attitudes and beliefs, goals, and past experiences with regard to educating students with ASD. Other questions will be related to how you work with your principal and parents, and the supports and resources that have been provided to you as a teacher.

Consent Process:

Before we begin the interview, I want to remind you that participating in this study is voluntary and your responses are completely confidential. At any point during the interview, if you would like to turn off the recorder, please press the red button on the recorder to pause the recording process, and press it again to resume recording. Do you have any questions about the study before we begin?

****Turn the recorder on****

This is Willow Park Primary (pseud.). It is (date) at (time). This is (interviewer's name) and I am interviewing (teacher's code) who teaches Grade (level).

Introductory Questions:

1. (Just to clarify) how long have you been teaching?
 - a. How long have you been teaching at this school?
 - b. Is your current teaching position the very first position in which you have taught children with ASD?

2. During the questionnaire phase of this study, some participants have completed 1-3 units at university that related to ASD, while others stated between 7-10 units.
 - a. Did you complete any study towards ASD in your pre-service teacher training?
 - b. *The questionnaire revealed that there is a notable absence of pre-service training regarding techniques required for students with ASD. Would this be true regarding your pre-service training?*
 - c. *If 'no', how did the learning experiences at University help prepare you for teaching students with ASD?*

3. Have you worked in other roles outside of teaching that involved people who have ASD?
 - a. *If 'yes', did such experience prior to teaching make it easier for you to accommodate students with ASD into your classroom in an equitable and inclusive manner?*

Extra qualifications, Professional Development opportunities and Collegial Advice

Now I am going to ask you about the opportunities you have had to collaborate with other staff, any PD opportunities you have attended, and extra study that you have completed.

4. What university qualification/s do you have?
5. If you have a student/s with ASD in your classroom, do you consider that it is your responsibility to obtain appropriate training or qualifications in order to successfully support your student/s with ASD?
 - a. If 'yes', is the training you have had or have been given paid for by the school/Ed Department, or are you financially responsible?
 - b. If 'no', why?

Note to interviewer before asking Question 5.

Least Restrictive Environment (LRE) means that, to the maximum extent appropriate, schools must educate students with disabilities in the regular classroom with appropriate aids and supports, unless a student's IEP requires some other arrangement. This requires an individualised inquiry into the unique educational needs of each student with ASD, to determine the possible range of aids and supports that are needed to facilitate the students' placement in the regular educational environment before a more restrictive placement is considered.

6. Has your acquired knowledge regarding ASD, from whatever source (books, university, colleagues etc.) helped you to create for your students with ASD a Least Restrictive Environment?
 - a. Were there other professionals available to assist you in your planning for student/s with ASD?
 - b. Are you happy with the manner in which you have modified your room to cater for your student/s who have ASD?
 - c. Can you provide some examples of how you have modified your classroom to cater for that child/those children's needs?
7. One of the ways that participants mentioned learning the most about ASD, was through having a child with ASD in their class. Roughly, how long does it take before you know the child well enough to plan for them?
 - a. If you have needed assistance, is collaboration with other staff your first option? *If 'yes/no' why?*
8. Do you think you need any further training, considering that our understanding of ASD is constantly developing?
 - a. If you feel that you **haven't**, what do you feel would be the best way to receive this training? *Anticipated answers – at university, PD, or whole school approach.*
 - b. If you feel you **have**, what did the training involve?
9. Do you consider that your preferred training would be better undertaken individually, or as a *whole-school* approach? *i.e. Staff meetings where visiting specialists in the area of ASD provide and demonstrate specific teaching and management techniques.*
10. Removing a child for any reason could be seen as contrary to the philosophy of inclusion, are there any other strategies teachers could use?
 - b. If you are unsure or need assistance, how could you find out?

11. If available, would you be prepared to attend PD where the modification of teaching materials for children with ASD was addressed?
12. Do you consider that there is enough experience within the present staff at your school to initiate such a PD opportunity?

****Some teachers have received some training at this school regarding tasks related to students with ASD.*

13. Did you attend. If so,
 - a. What did this training involve?
 - b. How long was the training?

Collaboration Among Colleagues

Throughout the questionnaires, there was a general feeling of helplessness among those teachers who have little or no additional support with students with ASD. Things mentioned included the following:

- *Children in Prep. who have been diagnosed are not specifically supported until Year 1 and this puts stress on early-childhood teachers,*
- *More meaningful communication between the whole school,*
- *How to modify the environment effectively for sensory issues,*
- *OT support, and*
- *Flowchart for dealing with meltdowns.*

**Note to Interviewer: Ask this series of questions for each type of meeting in which teachers meet.*

- IEP Meetings
- Whole-school Staff Meetings
- General Meetings with same year-level staff

14. Depending on the type of meeting they identify (if any), ask this series of questions for each type:
 - a. How often do you meet?
 - b. Who leads these meetings?
 - c. Who attends these meetings?
 - i. Does an administrator attend these meetings?
 - ii. What does he/she do in these meetings?)
 - d. What's the most helpful discussion or activity that you've had/done in these meetings?
 - i. How does that compare to *what typically happens* in these meetings?
 - ii. In these meetings, do you ever discuss challenges you've had teaching the child with ASD?
 1. *If so*, can you give me an example of such a discussion?
 - iii. Is there any specific protocol that is followed in these meetings? (e.g. for common planning, for looking at data)
 1. How is the protocol used? Can you tell me about a recent meeting in which it was used?
 - iv. Do you ever analyse student data during these meetings?

- e. How, if at all, does participation in such meeting/activities influence your teaching of students with ASD?
15. Have any of the desired '*professional support needs*' been discussed at a staff meeting or a '*Special Needs*' meeting where all teachers are present?
- For those teachers who have not yet had a child with ASD in their class* – “do you consider that when in the future you will have a student with ASD in your class, you will be well supported?”
 - If '**yes**', what have you observed in the past that convinces you that you will be well supported.
 - If '**no**', what have you observed in the past that convinces you that you will possibly not be well supported?
16. Do you consider that implementing strategies in order to meet the needs of children with ASD should be the responsibility of the teacher to find/create, or the responsibility of all staff members as a combined effort?
17. Should all teachers in the school be expected to take responsibility for students with ASD?
- If your answer is '**yes**' to the above, how do you consider that this could best happen?
 - If your answer is '**no**', then how do you justify your response?
18. If you have found that one thing in particular has worked well for you, have you shared this with other members of staff, particularly those with students with ASD in their classes?
- If **yes**, how is it shared?
 - If **no**, why not?
19. Is there a written list of best practice techniques available for all staff?
- If **no**, would you consider it an advantage to collate a list of the best practice modification techniques by all staff members so that it could be made available to all incoming teachers?
 - Would such a document have assisted you when you began teaching at this school?
 - Would this document assist you now?
20. Do you consider that teachers who do not have children with ASD in their classrooms are interested in how you are managing with those who are in your classroom?
21. *Interestingly, most teachers considered that chatting with colleagues was helpful, but it was often too infrequent.*
- With this in mind, wouldn't some additional input from other teachers who are associated with the education of your Students with ASD (i.e. Music teacher, PE teacher, Art and Drama teacher, LOTE teacher OT, Speech Therapist etc.) be of help during your planning/IEP Meetings/Day-to-day teaching of students with ASD?

22. *The questionnaires revealed that support is generously provided by those teachers who are trained in Special Education, but little by members of the general teaching population of the school.*
- Why don't teachers support one another?
 - How would you cope if your school did not have an SEP attached and there were no specialist teachers readily available?
23. Do you consider that there is enough communication between and among other members of the teaching staff aimed specifically at assisting and supporting teachers who have students with ASD within their classes?
- If no, what do you think needs to happen?
 - If yes, in what ways do staff communicate? i.e. staff meetings, general conversations, ongoing support in classrooms.
24. Have you found that teachers are generally proactive on your behalf, when dealing with the specific planning and coping needs associated with having a child with ASD in your class?
- If you are a **teacher who does not have a child with ASD** in your class, do you consider that it may be your obligation to try to assist, in some way, those teachers who have children with ASD in their classes?*
 - If you are a **teacher who does have a child with ASD** in your class, do you consider that teachers are obliged to try to assist you in some way?*
25. Even if you are a **teacher who has no Students with ASD** within your cohort, do you consider that you would gain anything useful by attending regular meetings which were aimed at supporting students with ASD?
- Do you consider that such meetings could be advantageous and professionally developmental for you personally, so that when you do have a child with ASD within your cohort, you will be better prepared to meet the needs for partially or totally including the student in accordance to Education Queensland's Inclusion Policy?*
 - Would it be professionally beneficial for you?*

***Clarify here that Education Qld declares that 'all Australian governments and all school sectors must provide all students with access to high-quality schooling that is free from discrimination based on gender, language, sexual orientation, pregnancy, culture, ethnicity, religion, health or disability, socioeconomic background or geographic location'

26. Has it ever occurred to you that the specific Teacher-Aide's assigned to your class may never have received any formal/specific training in the area of ASD?
- With this in mind, do you think that TA's should also be given the opportunity to attend meetings/PD to better their understanding of ASD?

Teaching and Learning

I am now going to ask you some questions in relation to the teaching and learning of children with ASD.

27. In your opinion, at what stage do you think a child should be placed into a mainstream school as opposed to a special school?
28. Do you consider that the inclusion of students with ASD can impose a disruptive element within the general classroom?
 - a. If yes, in what ways?
29. In your own experience with inclusion and students with ASD, what advantages have you recognised for:
 - a. The classroom teacher;
 - b. The neurotypical students; and
 - c. The student with ASD?
30. Do you consider that enough time is spent during the school day on socialization of all students, including those with ASD, within the classroom situation?
 - a. *If yes, how are children with ASD socialised in the mainstream classroom?*
 - b. *If no, in what ways could students with ASD be better socialised with their peers?*
31. ***If you are currently teaching a child with ASD, how well do you think you have managed with what has been expected of you, in order to ensure a true and equitable inclusion for students with ASD?***
32. *Have you taught students with ASD in previous years/other schools and how did you manage expectations?*
 - a. *If the participant has never taught a child with ASD (as 5 teachers claimed in the questionnaire), is he/she being prepared professionally for the inevitability of having a child with ASD in their class in the future?*
 - b. *If yes, in what way? If no, what does he/she feel they need, to be adequately prepared?*
33. In general, do you feel supported in your role as a teacher who is planning, supporting and catering for the specific needs of a child/children with ASD?
34. Do you modify all teaching materials for students with ASD yourself or do you have assistance to do this?
 - a. Do you get a chance to share your modified materials with others, or do others share their modified materials with you?
 - b. Do you ever plan with another teacher so that the modification of materials becomes a more collegial activity?
35. Are you aware of the range of materials available within the special education program running within the school?

****After response indicate, Resources such as modifying materials for children with ASD such as language, mathematics, social skill development games etc.*

 - a. If not, why?
 - b. If yes, how does the Special Education Program assist you?

School Leader-Teacher Relationship

Now I'm going to ask you about your relationship with your principal, his/her expectations for your job, and specifically how s/he supports you when a child with ASD is present in your classroom.

36. Other than for formal, evaluative observations, how often has your principal come to your classroom to observe/assist you when working with students who have ASD?
 - a. How long does he/she usually stay?
 - b. What specific things is he/she looking for?
 - c. Does he/she use a form? *If so*, what does the form focus on?
 - d. What kind of feedback do you receive after your principal observes your teaching?
 - i. *Probe on the **content** of feedback.*
 - ii. Is the feedback written and/or oral?
 - iii. Did you change your teaching practice in any way because of the feedback you received? If so, in what ways?
37. Do the current or previous principals expect you to teach/interact with students who have ASD in a certain way? *If so*, how?
38. With regards to the principals with whom you have worked at this school, has the support been the same?
 - a. If **yes**, in what ways?
 - b. If **no**, in what ways?
 - c. In your view, how should a principal best support the policy of inclusion and students with ASD?
 - d. Have any of the principals achieved this?
39. Have you been observed for a formal evaluation of your inclusive practices in the classroom? *If yes*:
 - a. What did your principal look for in this observation? Did you know what he/she was looking for?
 - b. After this formal observation, how did your principal follow up with you?
 - i. *If feedback is provided*, can you give an example of feedback that you received?

Parent Involvement and the wider community

It has been mentioned that this school has had students removed due to the existence of an SEP and students with Special Needs within classrooms.

40. Do parents of a child with ASD provide information which helps you better prepare for your day to day contact with their child?
 - a. Have parents shared any special techniques which have proved invaluable to your teaching children with ASD?
41. How do you think the school could better promote community awareness on what it is achieving by having the SEP and staff supporting students with ASD?
42. In your opinion how do you think you could involve more parent participation?
43. Do you consider that if you had more volunteers associated with day to day activities, the community would be more supportive towards what you are aiming to achieve?
 - a. Or is there another way that they could be involved?

44. Regarding parent-teacher relationships, is there a good working relationship with parents of children with ASD and teachers at this school?
45. How do you deal with a parent who has unrealistic expectations about the capabilities of their child with ASD?
 - a. Do you seek other professional assistance to help outline what his/her child can handle or not handle throughout their day to day development?
46. Would you consider asking a parent of a child with ASD to assist you within the classroom as a volunteer?
 - a. If the answer is 'yes', how would you plan to involve such a parent?
 - b. If the answer is 'no', what reason can you give for not wanting a volunteer in the classroom?

Closing Question

47. Is there anything we haven't discussed that you feel is important toward our understanding of your work as a classroom teacher of student/s with ASD in this school?

****Thank you for your involvement in this research. This interview was a great success, as your honesty during responses will be an immense benefit to my thesis. Again, I cannot thank you enough.*

End of Interview

**Willow Park Primary (pseudonym)
Teacher-Aide Protocol**

Introduction: Interview Purpose

Thank you for taking the time to meet with me today. As you are aware, my supervisors and I am interested in understanding how teacher-aides implement inclusive practices to support their students with ASD. I am going to be asking you questions about your teacher-aide responsibilities, how you interact with your teacher colleagues, your attitudes and beliefs, goals, and past experiences with regard to educating students with ASD. Other questions will be related to how you work with your principal and parents, and the supports and resources that have been provided to you as a teacher-aide.

Consent Process:

Before we begin the interview, I want to remind you that participating in this study is voluntary and your responses are completely confidential. At any point during the interview, if you would like to turn off the recorder, please press the red button on the recorder to pause the recording process, and press it again to resume recording. Do you have any questions about the study before we begin?

****Turn the recorder on****

This is Willow Park Primary (pseud). It is (date) at (time). This is (interviewer's name) and I am interviewing (teacher's code) who teaches Grade (level).

Introductory Questions:

1. (Just to clarify) how long have you been a teacher-aide?
 - a. How long have you been a teacher-aide at this school?
 - b. Is your current position the very first position in which you have taught children with ASD?
 - c. What Teacher-Aide qualification do you have?
2. What was your first impression of what was going to be expected of you through working with students with ASD?
3. In your own experience with inclusion and students with ASD, what advantages have you recognised for
 - a. The classroom teacher,
 - b. The neurotypical students, and
 - c. The student with ASD?

Extra qualifications, Professional Development opportunities and Collegial Advice

Now I am going to ask you about the opportunities you have had to collaborate with other staff, any PD opportunities you have attended, and extra study that you have completed.

4. *Did you have any induction when you started at this school?*
 - a. *If yes, what did it involve?*
 - b. *If no, why?*
5. *In order to be a teacher-aide, are you required by the department to have any formal certifications in Education Support?*
 - a. *How do you feel about this? Why?*

- b. Have you ever been questioned by Education Queensland or the school leadership team about working towards obtaining a certificate 3 in Education Support?

I have researched what subjects are taught for the Certificate 3 in Education Support at all institutions, and there appears to be a lack of specific information provided in relation to ASD in mainstream settings within these subjects.

6. **Only ask this question if the TA has a Certificate 3...**From your own personal experience do you agree that this was the case for your specific qualification to becoming a teacher-aide?
 - a. are my findings correct that you received only a brief overview addressing Students with ASD in your Teacher-Aide training?
7. Do you think having certified training in working with students with ASD would be beneficial? Why?
 - a. How do you believe your Teacher-Aide training could have better prepared you for the reality of working in a classroom with students who have ASD? Why?
8. If you have worked with student/s with ASD in a classroom, do you consider that it is your responsibility to obtain appropriate training or qualifications in order to successfully support your student/s with ASD?
 - a. If 'yes', is the training you have had or have been given paid for by the school/Ed Department, or are you financially responsible?
 - b. If 'no', why?
9. Has your time as a teacher-aide in your current position been different to your other previous teacher-aide appointments?
 - a. If yes, in what ways?
 - b. *After response suggest to interviewee*
 - i. does your limited/lack of pre-service training on the inclusion techniques associated with Students with ASD whilst working in a regular classroom situation, play a role here?

****Some teacher-aides indicated on the questionnaire that they have worked in other schools before their current position. With that in mind:*

10. For those **teacher-aide's who have only worked at this school**, has your experience with students with ASD (within the general classroom population) strengthened your professional opinion of the importance of inclusion for all students?
 - a. For those Teacher-Aide's who have worked at schools where there have been no students with ASD, have you found that working with Students with ASD is more challenging? Why?
11. Do you consider that you would have completed PD sessions specifically on ASD had you not been working at a school with an SEP?

****The questionnaires also revealed that Teacher-aides have had to seek out relevant PD or undertake their own research upon the subject of ASD because of their lack of specific training in this area.*

12. Some Teacher-Aide's indicated on the survey that they have received little or no specific training in the education of students with ASD. How confident are you when you are required to work and interact with Students with ASD within the general classroom situation?
13. Have you found that the knowledge you personally accessed through sources other than the formal Certificate 3 or University qualification has been advantageous to your professional functioning as a Teacher-Aide with children with ASD?
 - a. Through which particular source do you think you benefited most?
****Prompts after response: books, colleagues, own research at home, parents etc.*
14. Do you prefer to be trained individually or as part of a *whole-school* approach?
****Studying a unit at a university or collaborating at staff meetings where visiting specialists in the area of ASD provide and demonstrate specific teaching and management techniques.*
15. Some respondents said that each student with ASD will require a variety of teaching and behavioural modification techniques that depend on the needs of that student. What are your thoughts on this?
16. When a behavioural modification technique is seen *to have had a positive effect*, is this technique discussed, recorded and shared among other teachers and Teacher-Aides?
 - a. If 'yes', how is it shared?
 - b. If 'no', how do you think this could be done?

Collaboration among colleagues

Throughout the questionnaires, teacher-aides responded that their classroom teachers provided them with:

- *Materials*
- *PD*
- *Supporting them in particular lessons*
- *Supporting them during meetings with parents*
- *Development of individual programs and lessons*

****Note to Interviewer: Ask this series of questions for each type of meeting in which teacher-aides meet.*

- IEP Meetings
- Whole-school Staff Meetings
- General Meetings with same year-level staff

17. Depending on the type of meeting they identify (if any), ask this series of questions for each type:
 - f. How often do you meet?
 - g. Who leads these meetings?
 - h. Who attends these meetings?
 - i. Does an administrator attend these meetings?

1. What does he/she do in these meetings?)
 - i. What's the most helpful discussion or activity that you've had/done in these meetings?
 - i. How does that compare to *what typically happens* in these meetings?
 - ii. In these meetings, do you ever discuss challenges you've had teaching children with ASD?
 1. *If so*, can you give me an example of such a discussion?
 - iii. Is there any specific protocol that is followed in these meetings? (e.g. for common planning, for looking at data)
 1. How is the protocol used? Can you tell me about a recent meeting in which it was used?
 - iv. Is student data ever analysed during these meetings?
 - j. How, if at all, does participation in such meetings/activities influence your teaching of students with ASD?
18. How do you consider that teachers can be most helpful towards making you feel more confident in your role as a teacher-aide with students who have ASD?
19. Would you appreciate an opportunity to be involved in more regular group meeting situations where you could all share what has, and has not worked for you all whilst working with your students with ASD?
20. Would you consider it beneficial if the teachers with whom you worked during the day would spend some time debriefing and examining what had transpired throughout the day?
 - a. If yes/no, why?
 - b. How often do you feel that this should occur?
21. Is there a written list of best practice techniques available for all staff?
 - d. If **no**, would you consider it an advantage to collate a list of the best practice modification techniques by all staff members so that it could be made available to all incoming teachers?
 - e. Would such a document have assisted you when you began teaching at this school?
 - f. Would this document assist you now?
22. In general, do you feel supported in your role as a teacher-aide who is planning, supporting and catering for the specific needs of a child/children with an ASD?

Teaching and Learning

I am now going to ask you some questions in relation to the teaching and learning of children with ASD.

23. Do you consider that the inclusion of students with ASD can impose a disruptive element within the general classroom?
 - b. If yes, in what ways?
24. In your opinion, at what stage do you think a child should be placed into a mainstream school as opposed to a special school?

25. How do you feel when you are left totally in charge of a student with ASD (if this is ever the case?)
 - a. Are the expectations of you too high/low?
 - i. In what ways?
 - b. How could you be better supported?

26. Do you consider that by removing the child with ASD from the classroom situation that this is beneficial to the child?
 - a. If yes, provide examples of when it has been beneficial.
 - b. If no, provide examples of how supporting the child within the classroom works.

27. Do you consider that enough time is spent during the school day on socialization of all students, including those with ASD, within the classroom situation?
 - a. *If yes, how are children with ASD socialised in the mainstream classroom?*
 - b. *If no, in what ways could students with ASD be better socialised with their peers?*

28. Does the available classroom space allow for meaningful modification to take place?

29. Do you consider that it is within your field of responsibility to modify materials for children with ASD?
 - a. Does the classroom teacher assist you with this?

School Leader and Teacher-Aide Relationship

Now I'm going to ask you about your relationship with your principal, his/her expectations for your job, and specifically how s/he supports you when a child with ASD is present in your classroom.

30. Other than for formal, evaluative observations, how often has your principal come to the classrooms where you work to observe/assist you when working with students who have ASD?
 - e. How long does he/she usually stay?
 - f. What specific things is he/she looking for?
 - g. Does he/she use a form? *If so*, what does the form focus on?
 - h. What kind of feedback do you receive after your principal observes your teaching?
 - i. *Probe on the **content** of feedback.*
 - ii. Is the feedback written and/or oral?
 - iii. Did you change your teaching practice in any way because of the feedback you received? If so, in what ways?

31. Do the current or previous principals expect you to teach/interact with students who have ASD in a certain way? *If so*, how?

32. With regards to the principals with whom you have worked at this school, has the support been the same?
 - a. If **yes**, in what ways?
 - b. If **no**, in what ways?
 - c. In your view, how should a principal best support the policy of inclusion and students with ASD?
 - d. Have any of the principals achieved this?

33. Have you been observed for a formal evaluation of your inclusive practices in the classroom? *If yes:*
- a. What did your principal look for in this observation? Did you know what he/she was looking for?
 - b. After this formal observation, how did your principal follow up with you?
 - iv. *If feedback is provided*, can you give an example of feedback that you received?

Closing Question

34. Is there anything we haven't discussed that you feel is important toward our understanding of your work as a teacher-aide of student/s with ASD in this school?

****Thank you for your involvement in this research. This interview was a great success, as your honesty during responses will be an immense benefit to my thesis. Again, I cannot thank you enough.*

End of Interview

**Willow Park Primary (pseudonym)
HOSES/SEP Protocol**

Introductory Questions:

1. (Just to clarify) how long have you been teaching?
 - a. How long have you been teaching at this school?
 - b. Is your current teaching position the very first position in which you have taught children with ASD?

2. During the questionnaire phase of this study, some participants have completed 1-3 units at university that related to ASD, while others stated between 7-10 units.
 - a. Did you complete any study towards ASD in your pre-service teacher training?
 - b. *The questionnaire revealed that there is a notable absence of pre-service training regarding techniques required for students with ASD. Would this be true regarding your pre-service training?*
 - c. *If 'no', how did the learning experiences at University help prepare you for teaching students with ASD?*

3. Have you worked in other roles outside of teaching that involved people who have ASD?
 - a. *If 'yes', did such experience prior to teaching make it easier for you to accommodate students with ASD into your classroom in an equitable and inclusive manner?*

Extra qualifications, Professional Development opportunities and Collegial Advice

Now I am going to ask you about the opportunities you have had to collaborate with other staff, any PD opportunities you have attended, and extra study that you have completed.

4. What university qualification/s do you have?

Note to interviewer before asking Question 5.

Least Restrictive Environment (LRE) means that, to the maximum extent appropriate, schools must educate students with disabilities in the regular classroom with appropriate aids and supports, unless a student's IEP requires some other arrangement. This requires an individualized inquiry into the unique educational needs of each student with ASD, to determine the possible range of aids and supports that are needed to facilitate the students' placement in the regular educational environment before a more restrictive placement is considered.

5. Has your acquired knowledge regarding ASD, from whatever source (books, university, colleagues etc.) helped you to create for your students with ASD a Least Restrictive Environment?
 - d. Were there other professionals available to assist you in your planning for student/s with ASD?
 - e. Are you happy with the manner in which you have modified your room to cater for your student/s who have ASD?
 - f. Can you provide some examples of how you have modified your classroom to cater for that child/those children's needs?

6. One of the ways that participants mentioned learning the most about ASD, was through having a child with ASD in their class. Roughly, how long does it take before you know the child well enough to plan for them?
 - c. If you have needed assistance, is collaboration with other staff your first option? *If 'yes/no' why?*

7. Do you think you need any further training, considering that our understanding of ASD is constantly developing?
 - a. If you feel that you **do**, what do you feel would be the best way to receive this training? *Anticipated answers – at university, PD, or whole school approach.*
 - b. If you feel you **don't**, what did the training involve?

8. Do you consider that your preferred training would be better undertaken individually, or as a *whole-school* approach? *I.e. Staff meetings where visiting specialists in the area of ASD provide and demonstrate specific teaching and management techniques.*

9. Removing a child for any reason could be seen as contrary to the philosophy of inclusion, are there any other strategies teachers could use?
 - d. If you are unsure or need assistance, how could you find out?

10. If available, would you be prepared to attend PD where the modification of teaching materials for children with ASD was addressed?

****Some teachers have received some training at this school regarding tasks related to students with ASD.*

11. Did you attend. If so,
 - c. What did this training involve?
 - d. How long was the training?

Collaboration Among Colleagues

Throughout the questionnaires, there was a general feeling of helplessness among those teachers who have little or no additional support with students with ASD. Things mentioned included the following:

- *Children in Prep. who have been diagnosed are not specifically supported until Year 1 and this puts stress on early-childhood teachers,*
- *More meaningful communication between the whole school,*
- *How to modify the environment effectively for sensory issues,*
- *OT support, and*
- *Flowchart for dealing with meltdowns.*

****Note to Interviewer: Ask this series of questions for each type of meeting in which teachers meet.*

- IEP Meetings
- Whole-school Staff Meetings
- General Meetings with same year-level staff

12. Depending on the type of meeting they identify (if any), ask this series of questions for each type:
- k. How often do you meet?
 - l. Who leads these meetings?
 - m. Who attends these meetings?
 - i. Does an administrator attend these meetings?
 - 1. What does he/she do in these meetings?
 - n. What's the most helpful discussion or activity that you've had/done in these meetings?
 - i. How does that compare to *what typically happens* in these meetings?
 - ii. In these meetings, do you ever discuss challenges you've had teaching the child with ASD?
 - 1. *If so*, can you give me an example of such a discussion?
 - iii. Is there any specific protocol that is followed in these meetings? (e.g. for common planning, for looking at data)
 - 1. How is the protocol used? Can you tell me about a recent meeting in which it was used?
 - iv. Do you ever analyse student data during these meetings?
 - o. How, if at all, does participation in such meeting/activities influence your teaching of students with ASD?
13. Have any of the desired '*professional support needs*' been discussed at a Staff Meeting or a '*Special Needs*' meeting where all teachers are present?
- d. *For those teachers who have not yet had a child with ASD in their class* – “do you consider that when in the future you will have a student with ASD in your class, you will be well supported?”
 - e. If '**yes**', what have you observed in the past that convinces you that you will be well supported.
 - f. If '**no**', what have you observed in the past that convinces you that you will possibly not be well supported?
14. Do you consider that implementing strategies in order to meet the needs of children with ASD should be the responsibility of the teacher to find/create, or the responsibility of all staff members as a combined effort?
15. Should all teachers in the school be expected to take responsibility for students with ASD?
- c. If your answer is '**yes**' to the above, how do you consider that this could best happen?
 - d. If your answer is '**no**', then how do you justify your response?
16. If you have found that one thing in particular has worked well for you, have you shared this with other members of staff, particularly those with students with ASD in their classes?
- a. If **yes**, how is it shared?
 - b. If **no**, why not?
17. Is there a written list of best practice techniques available for all staff?
- g. If **no**, would you consider it an advantage to collate a list of the best practice modification techniques by all staff members so that it could be made available to all incoming teachers?

- h. Would such a document have assisted you when you began teaching at this school?
 - i. Would this document assist you now?

- 18. Do you consider that teachers who do not have children with ASD in their classrooms are interested in how you are managing with those who are in your classroom?

- 19. *Interestingly, most teachers considered that chatting with colleagues was helpful, but it was often too infrequent.*
 - b. With this in mind, wouldn't some additional input from other teachers who are associated with the education of your Students with ASD (i.e. Music teacher, PE teacher, Art and Drama teacher, LOTE teacher OT, Speech Therapist etc.) be of help during your planning/IEP Meetings/Day-to-day teaching of students with ASD?

- 20. *The questionnaires revealed that support is generously provided by those teachers who are trained in Special Education, but little by members of the general teaching population of the school.*
 - c. Why don't teachers support one another?

- 21. Do you consider that there is enough communication between and among other members of the teaching staff aimed specifically at assisting and supporting teachers who have students with ASD within their classes?
 - c. If no, what do you think needs to happen?
 - d. If yes, in what ways do staff communicate? i.e. staff meetings, general conversations, ongoing support in classrooms.

- 22. Have you found that teachers are generally proactive on your behalf, when dealing with the specific planning and coping needs associated with having a child with ASD in your class?
 - c. *If you are a **teacher who does not have a child** with ASD in your class, do you consider that it may be your obligation to try to assist, in some way, those teachers who have children with ASD in their classes?*
 - d. *If you are a **teacher who does have a child** with ASD in your class, do you consider that teachers are obliged to try to assist you, in some way?*

- 23. Has it ever occurred to you that the specific Teacher-Aide's assigned to your class may never have received any formal/specific training in the area of ASD?
 - a. With this in mind, do you think that TA's should also be given the opportunity to attend meetings/PD to better their understanding of ASD?

Teaching and Learning

I am now going to ask you some questions in relation to the teaching and learning of children with ASD.

- 24. In your opinion, at what stage do you think a child should be placed into a mainstream school as opposed to a special school?

25. Do you consider that the inclusion of students with ASD can impose a disruptive element within the general classroom?
 - c. If yes, in what ways?
26. In your own experience with inclusion and students with ASD, what advantages have you recognised for
 - d. The classroom teacher,
 - e. The neurotypical students, and
 - f. The student with ASD?
27. *If you are currently teaching a child with ASD, how well do you think you have managed with what has been expected of you, in order to ensure a true and equitable inclusion for students with ASD?*
28. In general, do you feel supported in your role as a teacher who is planning, supporting and catering for the specific needs of a child/children with ASD?
29. Do you modify all teaching materials for students with ASD yourself or do you have assistance to do this?
 - c. Do you get a chance to share your modified materials with others, or do others share their modified materials with you?
 - d. Do you ever plan with another teacher so that the modification of materials becomes a more collegial activity?

School Leader-Teacher Relationship

Now I'm going to ask you about your relationship with your principal, his/her expectations for your job, and specifically how s/he supports you when a child with ASD is present in your classroom.

30. Other than for formal, evaluative observations, how often has your principal come to your classroom to observe/assist you when working with students who have ASD?
 - i. How long does he/she usually stay?
 - j. What specific things is he/she looking for?
 - k. Does he/she use a form? *If so*, what does the form focus on?
 - l. What kind of feedback do you receive after your principal observes your teaching?
 - i. *Probe on the content of feedback.*
 - ii. Is the feedback written and/or oral?
 - iii. Did you change your teaching practice in any way because of the feedback you received? If so, in what ways?
31. With regards to the principals with whom you have worked at this school, has the support been the same?
 - a. If **yes**, in what ways?
 - b. If **no**, in what ways?
 - c. In your view, how should a principal best support the policy of inclusion and students with ASD?
 - d. Have any of the principals achieved this?
32. Have you been observed for a formal evaluation of your inclusive practices in the classroom? *If yes*:
 - c. What did your principal look for in this observation? Did you know what he/she was looking for?

- d. After this formal observation, how did your principal follow up with you?
 - ii. *If feedback is provided*, can you give an example of feedback that you received?

Parent Involvement and the wider community

It has been mentioned that this school has had students removed due to the existence of an SEP and students with Special Needs within classrooms.

- 33. Do parents of a child with ASD provide information which helps you better prepare for your day to day contact with their child?
 - b. Have parents shared any special techniques, which have proved invaluable to your teaching children with ASD?
- 34. How do you think the school could better promote community awareness on what it is achieving by having the SEP and staff supporting students with ASD?
- 35. In your opinion, how do you think you could involve more parent participation?
- 36. Do you consider that if you had more volunteers associated with day-to-day activities, the community would be more supportive towards what you are aiming to achieve?
 - a. Or is there another way that they could be involved?
- 37. Regarding parent-teacher relationships, is there a good working relationship with parents of children with ASD and teachers at this school?
- 38. How do you deal with a parent who has unrealistic expectations about the capabilities of their child with ASD?
 - b. Do you seek other professional assistance to help outline what his/her child can handle or not handle throughout their day-to-day development?
- 39. Would you consider asking a parent of a child with ASD to assist you within the classroom as a volunteer?
 - c. If the answer is 'yes', how would you plan to involve such a parent?
 - d. If the answer is 'no', what reason can you give for not wanting a volunteer in the classroom?

Closing Question

- 40. Is there anything we haven't discussed that you feel is important toward our understanding of your work as a classroom teacher of student/s with ASD in this school?

****Thank you for your involvement in this research. This interview was a great success, as your honesty during responses will be an immense benefit to my thesis. Again, I cannot thank you enough.*

End of Interview

Appendix D: Ethics

1. Australian Catholic University – Human Research Ethics Committee



Human Research Ethics Committee **Committee Approval Form**

Principal Investigator/Supervisor: Dr Janeen Lamb
Co-Investigators: Sr Dr Geraldine Larkins
Student Researcher: Mr Mitchell Coates

Ethics approval has been granted for the following project: Inclusion Practice for Students with an ASD in a Mainstream Primary School
for the period: 16/09/2014-30/09/2016
Human Research Ethics Committee (HREC) Register Number: 2014 218Q

Special Condition/s of Approval

Prior to commencement of your research, the following permissions are required to be submitted to the ACU HREC:

Education Queensland and School Principals

The following **standard** conditions as stipulated in the *National Statement on Ethical Conduct in Research Involving Humans (2007)* apply:

- (i) that Principal Investigators / Supervisors provide, on the form supplied by the Human Research Ethics Committee, annual reports on matters such as:
 - security of records
 - compliance with approved consent procedures and documentation
 - compliance with special conditions, and
- (ii) that researchers report to the HREC immediately any matter that might affect the ethical acceptability of the protocol, such as:
 - proposed changes to the protocol
 - unforeseen circumstances or events
 - adverse effects on participants

The HREC will conduct an audit each year of all projects deemed to be of more than low risk. There will also be random audits of a sample of projects considered to be of negligible risk and low risk on all campuses each year.

Within one month of the conclusion of the project, researchers are required to complete a *Final Report Form* and submit it to the local Research Services Officer.

If the project continues for more than one year, researchers are required to complete an *Annual Progress Report Form* and submit it to the local Research Services Officer within one month of the anniversary date of the ethics approval.

Signed:  Date: ... 18/09/2014.....
(Research Services Officer, McAuley Campus)

Appendix E: Letter/s and Consent Form

1. Invitation (Principal)
2. Information letter (Teacher and Teacher-Aide)
3. Consent form (Teacher and Teacher-Aide)

Research Invitation

PROJECT TITLE:

Inclusion Practice for Students with an ASD in a Mainstream Primary School

PRINCIPAL INVESTIGATOR: Dr Janeen Lamb

ASSOCIATE INVESTIGATORS: Professor Brendan Bartlett, Sr Dr Geraldine Larkins and Dr Poulomee Datta

HDR STUDENT: Mr Mitchell Coates

Dear Principal,

You are invited to participate in the research project described below.

What is the project about?

The purpose of this study is to develop a more sophisticated understanding of how teachers implement inclusive practices to support their students with an ASD. Within this purpose, educators' attitudes and beliefs, goals, and past experiences with regard to educating students with ASD will be investigated. This study also seeks to determine parents' goals and desired outcomes for their own children with ASD. The results from this study will form a dissertation that will fulfill the research requirement of the PhD program in the Faculty of Education and Arts at Australian Catholic University.

Who is undertaking the project?

This PhD project is being conducted by Mr Mitchell Coates and supervised by Dr Janeen Lamb and Professor Brendan Bartlett.

Are there any risks associated with participating in this project?

There are no foreseeable risks associated with this project.

What will this study involve?

It is proposed that this project will be conducted during Term 1, 2015 in your school. The research project will involve two data-collection phases.

Phase one:

1. A short online questionnaire for all staff at the school (approximately 30 minutes).

N.B Staff who are interested in further participation in the study will be involved in the following phase.

2. Parents with and without a child who has been diagnosed with an ASD will also be asked to complete a short questionnaire.

Phase two:

1. Semi-structured, individual interviews for participants who indicated further interest in phase one (approximately 45-60 minutes).

2. One classroom observation of the teachers involved in the individual interviews (approximately 30-60 minutes).

3. As a way to ensure researcher accuracy with interpretation of data, the researcher will conduct one focus-group interview with the administration team, and one focus-group interview with the staff who were observed where interpretation of data will be discussed. (Approximately 45-60 minutes).

What are the benefits of the research project?

1. Participants will have the opportunity to discuss their experiences associated with the teaching of children with ASD in their regular classrooms.
2. Participants will have opportunities to engage with the purpose of the study, that will encourage them to reflect on, and question their own practice as a way to benefit their students.
3. All teaching staff will be provided with access to research findings.

Can I withdraw from the study?

Participation in this study is completely voluntary. You and the staff at your school are not under any obligation to participate. 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?

The results of this project will be presented in a report to you and if you wish, to your staff at a staff meeting. My colleagues and I will also be reporting results in research and professional journals as well as at research conferences. All data collected will be stored on an encrypted computer using non-identifiable coded pseudonyms to protect confidentiality. The survey is being conducted using Qualtrics software which is based in the United States of America. Information you provide on the questionnaire will be transferred to Qualtrics' server in the United States of America. By completing the questionnaire, you agree to this transfer. Participants' responses will indefinitely be confidential.

Will I be able to find out the results of the project?

Mitchell Coates will present the research finding to you in a report once results are finalised. If you would like the results to be presented at a staff meeting Mitchell will be happy to present these results.

Who do I contact if I have questions about the project?

Please contact Dr Janeen Lamb by phone on 3623 7318 or email janeen.lamb@acu.edu.au, or Mr Mitchell Coates by phone on 0423 581 699 or email mitchell.coates@acu.edu.au if you have any questions about the project.

What if I have a complaint or any concerns?

The study has been approved by the Human Research Ethics Committee at Australian Catholic University (approval number 2014 218Q). 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).

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

Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

I want to participate! How do I sign up?

Please complete the attached consent form by signing both copies. Keep the copy labeled "Copy for Participant to Keep" and one of the researchers will collect the copy labeled "Copy for Researcher".

Yours sincerely,

Dr Janeen Lamb
Senior Lecturer in Education (Mathematics/Leadership)
Principal Investigator
March 1, 2015

Mr Mitchell Coates
PhD Student Reseracher

PARTICIPANT INFORMATION LETTER

PROJECT TITLE:

Inclusion Practice for Students with an ASD in a Mainstream Primary School

PRINCIPAL INVESTIGATOR: Dr Janeen Lamb

ASSOCIATE INVESTIGATORS: Professor Brendan Bartlett and Dr Poulomee Datta

HDR STUDENT: Mr Mitchell Coates

Dear Teacher/Teacher-Aide|

You are invited to participate in the research project described below.

What is the project about?

The purpose of this study is to develop a more sophisticated understanding of how teachers implement inclusive practices to support their students with ASD. Within this purpose, educators' attitudes and beliefs, goals, and past experiences with regard to educating students with ASD will be investigated. The results from this study will form a dissertation that will fulfill the research requirement of the PhD program in the Faculty of Education and Arts at Australian Catholic University.

Who is undertaking the project?

This PhD project is being conducted by Mr Mitchell Coates and supervised by Dr Janeen Lamb, Professor Brendan Bartlett, Sr Dr Geraldine Larkins and Dr Poulomee Datta.

Are there any risks associated with participating in this project?

There are no foreseeable risks associated with this project.

What will I be asked to do?

It is proposed that this project will be conducted during 2015. The research project will involve three data-collection phases.

Phase One:

1. A short online questionnaire for all staff at the school (approximately 30-40 minutes).

N.B Staff who are interested in further participation in the study will be involved in the following phase/s.

Phase Two:

1. Semi-structured, individual interviews for participants who indicated further interest in phase one (approximately 45-60 minutes).

2. One classroom observation of the teachers involved in the individual interviews (approximately 30-60 minutes).

Phase Three:

1. As a way to ensure researcher accuracy with interpretation of data, the researcher will conduct one focus-group interview with the staff who were interviewed and observed where interpretation of data will be discussed (approximately 45-60 minutes).

What are the benefits of the research project?

Faculty of Education
Level 8, 250 Victoria Parade
East Melbourne, VIC 3065
Locked Bag 4115 | Fitzroy MDC | Fitzroy Victoria 3065
T: Telephone F: Fax E: Email

Australian Catholic University
ABN 15 050 192 660
CRICOS registered provider:
00004G, 00112C, 00885B

1. Participants will have the opportunity to discuss their experiences associated with the teaching of children with ASD in their regular classrooms.
2. Will have opportunities to engage with the purpose of the study and encourage them to think about, and question their own practice as a way to benefit their students.
3. All teaching staff will be provided with access to research findings.

Can I withdraw from the study?

Participation in this study is completely voluntary. You are not under any obligation to participate. 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?

The results of this project will be presented in a report to you and if you wish, to your staff at a staff meeting. My colleagues and I will also be reporting results in research and professional journals as well as at research conferences. All data collected will be stored on an encrypted computer using non-identifiable coded pseudonyms to protect confidentiality. By completing the questionnaire, you agree to this transfer. Participants' responses will indefinitely be confidential.

Will I be able to find out the results of the project?

I will present a report of the findings either at a staff meeting or to you directly once the data has been collected.

Who do I contact if I have questions about the project?

Please contact Dr Janeen Lamb by phone on 3623 7318 or email janeen.lamb@acu.edu.au, or Mr Mitchell Coates by phone on 0423 581 699 or email mitchell.coates@acu.edu.au if you have any questions about the project.

Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

What if I have a complaint or any concerns?

The study has been reviewed by the Human Research Ethics Committee at Australian Catholic University (review number 2014 218Q). If you have any complaints or concerns about the conduct of the project, you may write to the Manager of the Human Research Ethics Committee care of the Office of the Deputy Vice Chancellor (Research).

Manager, Ethics
c/o Office of the Deputy Vice Chancellor (Research)
Australian Catholic University
North Sydney Campus
PO Box 968
NORTH SYDNEY, NSW 2059
Ph.: 02 9739 2519
Fax: 02 9739 2870
Email: res.ethics@acu.edu.au

Any complaint or concern will be treated in confidence and fully investigated. You will be informed of the outcome.

I want to participate! How do I sign up?

Please complete the attached consent form by signing both copies. Keep the copy labeled "Copy for Participant to Keep" and one of the researchers will collect the copy labeled "Copy for Researcher".

Yours sincerely,

Dr Janeen Lamb
Senior Lecturer in Education (Mathematics/Leadership)
Principal Investigator
March 1, 2015

Mr Mitchell Coates
PhD Student Researcher

CONSENT FORM
Copy for Participant to Keep

TITLE OF PROJECT: Inclusion Practice for Students with an ASD in a Mainstream Primary School

PRINCIPAL INVESTIGATOR: Dr Janeen Lamb
ASSOCIATE INVESTIGATORS: Professor Brendan Bartlett and Dr Poulomee Datta
HDR STUDENT: Mr Mitchell Coates

I (*the participant*) have read and understood the information provided in the Letter to Participants. Any questions I have asked have been answered to my satisfaction. I agree to participate in this project and as an administrator interested in inclusion practices for students with ASD I am willing to participate in an individual interview for approximately one hour at a time which is convenient to both myself and the researcher. At a later stage, I am willing to be a part of a focus-group interview for approximately one hour. At the end of the project, the researchers will present a final report to me (if requested), and the researcher will report only aggregated data.

I realise that I can withdraw my 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 me in any way.

	I am willing for the school to participate in this research
	I am willing to be interviewed at the beginning and conclusion of the project

NAME OF PARTICIPANT:

SIGNATURE

DATE

SIGNATURE OF PRINCIPAL INVESTIGATOR DR JANEEN LAMB:

DATE:.....

Appendix F: Coding Sample

Interview # 5 with Teacher D	Coding	Possible themes
<p>33:15 MC: Do you consider that if you had more volunteers associated with day-to-day activities that the community would be more supportive towards what you are aiming to achieve?</p>	More volunteers	<ul style="list-style-type: none"> - Positives & Negatives of Inclusion - 2 parent groups "us" vs "them"
<p>33:25 TD: I think parents of ASD children should volunteer more, because we'd have to be very careful, that your atypical parents weren't seeing more than what they would already see. Because what they see, the bottomline is what they see is definitely damaging the school.</p>	Parent group 1 Parent group 2 Negative experience	<ul style="list-style-type: none"> - Isolation of <ul style="list-style-type: none"> * SEP * Staff * Students - Ways to make interaction more positive
<p>33:41 MC: In what way is it damaging the school?</p>	Witness meltdowns?	
<p>33:42 TD: They only see the negative in the kids with ASD. They don't see the strengths, they don't see the heart, the brains of it. They don't see how bright the kids with ASD are. So maybe we need to give them more opportunity to show how smart they are, show the positives.</p>	Possible strengths to inclusion	
<p>34:00 MC: Is there a way that you could do it, do you think? To highlight the positives you mentioned?</p>		
<p>34:07 TD: We probably need more clubs in the school, such as an environment club, something that we are all working in together with these kids and their families.</p>	Positive ideas Collaborative approach	
<p>34:14 MC: That sounds like a good approach – have you mentioned this to members of the SEP or parent volunteers?</p>	Regular interaction	
<p>34:16 TD: Not officially. The kids in the SEP don't often get much time in the playground, like every other kid during lunch hour. And I think for too long they are just brought inside, at lunch time, when there's no need for that. I mean, they can be completely isolated from the rest of the school.</p>	Negative experience Negative outcome of position of SEP	
<p>34:36 MC: The kids are completely isolated?</p>		
<p>34:37 TD: Most of the SEP staff and kids are isolated. So it'd be a good thing in lunch hours for the kids to get out more.</p>	Negative outcome Positive = interaction of all	

POSITIVE

NEGATIVE

OTHER