## Inclusion: Teachers' Attitudes and Pedagogy

Submitted by

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#### **ABSTRACT**

Education is one of the keys to future prosperity and in principle inclusion offers access to quality education for all. The practice of inclusion has been made mandatory in Victorian schools however, reviews suggest that inclusion, as practiced in Victoria, has not been fully implemented (Meyer, 2001). With over 48,000 Victorian State Government Primary School students in need of special education assistance it was considered imperative to investigate the attitudes of teachers towards inclusion and the inclusive pedagogy they practise.

Based in the interpretive paradigm of social equity, this thesis aims to investigate the attitudes towards inclusion and the inclusive pedagogy practised by Primary State School teachers in Melbourne, Victoria. To understand the participants reality from their perspective a constructionist epistemology was utilised. The response of 225 fulltime primary school teachers to the BCSQ (Bender, 1992) and STATIC (Cochran, 1998a) questionnaires were analysed and compared with their personal background information. The database was tested for relationships between the variables. These results were used to develop questions for targeted interviews with ten selected respondents. The responses of the questionnaires and interviews were used to facilitate an understanding of the relationships between teachers' attitudes and their pedagogy.

The results indicated that while teachers philosophically embraced inclusion and practised a range of inclusive pedagogies a perceived lack of quality support and limited education in special needs continued to hamper the implementation of inclusion in Victorian State Primary Schools. Forty percent of teachers had no education in special needs and felt

challenged by inclusion and unsure about how to implement inclusion. Furthermore, teachers identified an urgent need to provide additional support for the teacher-diagnosed students who represent eighty percent of the special needs students present in the majority of classrooms. A range of recommendations are made for improvements to the implementation of inclusion in Victorian State Primary Schools.

STATEMENT OF AUTHORSHIP AND SOURCES

This thesis contains no material published elsewhere or extracted in whole or part

from a thesis by which I have qualified for or been awarded another degree or diploma.

No other person's work has been used without due acknowledgement in the main text

of the thesis. I wish to acknowledge the valuable assistance of Dr Charles Poole in the

preparation of the statistical analysis.

This thesis has not been submitted for the award of any degree or diploma in any

other tertiary institution.

All research procedures reported in the thesis received the approval of the relevant

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#### **CHAPTER 1**

# TEACHERS' ATTITUDES TOWARDS INCLUSION AND INCLUSIVE PEDAGOGY

"Equality" means everyone gets treated alike: "equity" means everyone gets what he or she needs." (Shapiro, 2000)

Over the past 20 years, changes in public opinion on social justice issues, together with studies regarding the benefits of inclusion in education, have led governments to enact legislation that guaranteed every student the right to attend their local neighbourhood school. This chapter begins with an account of the background to inclusive policies and the implementation of inclusion into regular State Primary Schools in Victoria. These policies were implemented without consulting teachers or indeed without eliciting teachers' attitudes towards inclusion. It was clear that few investigations have been undertaken in Victorian State Primary Schools, either to ascertain teachers' attitudes towards inclusion or to determine teacher's current inclusive practices. Inclusion is complex and requires a thorough understanding of the many diverse issues if it is to be successfully implemented.

The concept of inclusion, in theoretical terms, relates to the provision of normal educational experiences for all students in regular schools and mainstream classrooms (Loreman, Deppeler and Harvey, 2005a; Loreman, Sharma and Forlin, 2005b). Inclusion implied the acceptance of a student with a disability in a regular class, with appropriate changes being made to ensure that the student was involved in all class activities (Ashman & Elkins, 2005). A *regular school* was understood to be the designated neighbourhood school which was the school that was nearest to a student's permanent residential address (McRae,

1996). The Education and Training Reform Act (2006) ensures that all students have the right to attend their designated neighbourhood school. However, in Victoria the practice was different from the purists' definition of inclusion (Official Committee Hansard [OCH], 2002).

Victorian parents of children with special needs had a choice to send their child to either the designated neighbourhood school or, if necessary, to a special school. Special schools catered for students with more severe disabilities or specific types of disabilities. The mere existence of special schools was not consistent with the purists' definition of inclusion. Furthermore, in all Victorian State Primary Schools there were programs that removed some students from the classroom for special classes. These programs were strongly supported by parents and many teachers but were not consistent with the practice of full inclusion. Therefore, for the purpose of the present study, the term *inclusion* referred to inclusion as practiced in Victorian State Primary Schools.

There are certain other terms used in the present study where a common interpretation is required. For instance, the term *state schools* referred to schools run by the State Government of Victoria and excluded Catholic and Independent schools.

Approximately 70% of primary school students attended State Government schools. Also the terms *learning disability* and *learning difficulty* are technically different but are often used interchangeably. The term *learning difficulty* is preferred to the term *learning disability* as it is assumed that a difficulty can be overcome with assistance, whereas a disability is less amenable to change and is likely to be present for life (Dempsey, 2005). Similarly, the term *special needs* has been used in research studies and special education literature to refer to students who require additional support at school. This definition also included students with indigenous backgrounds, refugee status, languages other than English,

low socio-economic background, disadvantaged geographically, as well as students recognised as being gifted (Ashman & Elkins, 1998). For the purpose of the present study the term *special needs student/s* (SNS) is more limited. It refers specifically to students with physical, emotional or learning disabilities. It should be noted that the term *diverse abilities* is currently being used in preference to *special needs* in some educational circles within Australia (Ashman and Elkins, 2005, 2009).

Inclusion is the Department of Education and Early Childhood Development (DEECD) current policy as determined by the passing of laws such as the 1992 Disability Discrimination Act (DDA) and the Disability Standards for Education (2005). However, given reports that full inclusion had not been implemented in Australian schools it was timely to further investigate teachers' attitudes towards inclusion and the pedagogies they select (Meyer, 2001; Wills and Jackson, 2001). The role of teachers has changed considerably as a consequence of the introduction of inclusion. Teachers are now required to cater for SNS in a mainstream classroom. The report "In the Balance" prepared for the Australian Primary Principals Association, revealed that approximately 20% of students in the participating schools had either medically diagnosed disabilities or teacher identified needs (Angus et al., 2007). Angus et al. (2007) stated that the number of students with disabilities in mainstream schools had doubled in the last decade and that schools got virtually no support. Half of the teachers surveyed in the report had five or more such students in their classes (Angus et al., 2007). Teachers identified that 16% of students had special learning needs but did not qualify for funding. On average there were 3.8 SNS per class and these students required specialised instruction (Angus et al., 2007). These figures were similar to other research data such as Dempsey (2005) who suggested that 4% of the total school population in Victoria were identified as having a disability or impairment, with a further 10% estimated to have a

learning disability. This means that there were between 75,000 to 100,000 SNS in Victorian State Schools of which 48,000 were in State Primary Schools.

#### CONTEXTUAL BACKGROUND

Inclusive education was an agenda item in 1994 at the United Nations Education of Scientific and Cultural Organisation (UNESCO) Salamanca Conference. The Salamanca Statement, issued on Inclusive Education, was one of the most significant international documents in the area of special needs (McRae, 1996). UNESCO (1994) maintained that, inclusive education was the removal of all barriers to learning. It involved the participation of all learners who may otherwise have been vulnerable to exclusion and marginalisation.

Inclusive education is a strategic approach, designed to facilitate learning success for *all* students. UNESCO (1994) recommended inclusion as being the most effective means of combating discriminatory attitudes. Education for all has been an aim for UNESCO for more than sixty years (Hughes, 2009) and inclusion is regarded as the most effective means of achieving education for all, by providing an efficient education for the majority of students (Dempsey, 2005). As inclusion falls into the paradigm of equal opportunity and normalisation it is important to understand these fundamental foundations that underpin inclusion.

The concept of inclusion was founded on the principles of normalisation expounded in the seminal work by Nirje (1969). The normalisation principle underlies demands for standards, facilities and programs that support inclusive education. Nirje (1969) also suggested that the application of normalisation principles had profound implications on the public as a whole, particularly in the paradigm of social justice which included tolerance and acceptance. Hence, Australia as a member of UNESCO has adopted a policy of inclusion in education.

#### Government policies on inclusion.

The Australian Government passed laws such as the 1992, Disability Discrimination Act (DDA), the Disability Standards for Education (2005) and the Education and Training Reform Act (2006). Today inclusion is a legal obligation for all schools in Australia. Consequently, each of the Australian State Governments set out policies on inclusion that have evolved over the years (Dempsey, 2005). However some barriers, both local and international, have influenced the actual success of inclusion.

Historically, the Victorian State Government supported special schools for children with disabilities. The Education Act, 1958, amended in 1973 brought funding for the establishment of special schools (Dempsey, 2005). By the 1980s there was a change in the delivery of education to SNS (Forlin, 2006). A government inquiry into special education found that specialised schools had no relevance to the concept of inclusion or integration as it was then called (Ashman & Elkins, 2005; Dempsey, 2005). In the 1980s social justice continued to gain momentum, supporting the belief that people with disabilities should live a normative life style in conditions similar to those in mainstream society (Ashman & Elkins, 2005; Dempsey, 2005). The Victorian State Government followed this trend. In 2005, the Victorian Department of Education and Training (DET) supported, in principle, inclusive education as the preferred pedagogy, for the education of all students. This policy of inclusion continued to be preferred and implemented by DEECD. This led to substantial changes in the delivery of education to SNS. The Victorian Government still offered special school settings for severely disabled students. However, there was a significant transfer between 1984 and 2001 of students from special schools into mainstream classrooms (DEECD, 2008a).

The actual numbers of SNS enrolled in mainstream educational institutions in Victoria were difficult to determine because of varying definitions of the term disabilities. In 1999 there were a total of approximately 526,000 students in the Victorian state education system of which 2.26% were classified as SNS needing special funding (DET, 2006). In 2007, the year of the present study's survey, there were approximately 539,000 students in the Victorian State School system, of which 3.25% were classified by DEECD (2008a) as funded SNS. This percentage is well below the estimated 15% or more of the student population referred to in the literature as in need of special assistance in the classroom (Angus et al., 2007; Dempsey, 2005; Westwood & Graham, 2000). Based on these numbers the total number of SNS in Victorian State Schools equated to more than 80,000 but DEECD only funded 17,517 students. The difference between these numbers represented the students who failed to meet the criteria for funding or who had failed to apply. In the present study, these students are referred to as the teacher-diagnosed SNS. Typically, these students had the capacity to perform academically but had a learning disability or difficulty that impeded their academic progress. Also contributing to the differences in the numbers is the criteria and definitions for SNS were changed. Between 2004 and 2005, the number of SNS recorded by DEECD fell from 13,964 down to 8,824 with no significant change in the numbers of students in special schools (DEECD, 2006). This indicated that there were students in mainstream classrooms that did not have the extra support they once received.

The number of students without funding and in need of support directly affected teacher attitudes towards inclusion and their ability to successfully deliver an inclusive program. In the present study the term SNS referred to both funded and non-funded students. They were collectively the teacher-diagnosed SNS and the DEECD funded students. The funding or rather lack of funding for those students diagnosed by the teacher has remained a constant area of concern.

Education in Australia, had been heavily influenced by a neo-liberal policy that encouraged privatisation. The concept of "user pays" led to individuals paying for their education or parts thereof (Carnoy, 1999). In this environment it was suggested that students with disabilities may have become marginalised, due to the restrictions on expenditure as schools needed to be more cost effective and accountable. To some extent schools were orientated towards competition, parental choice and free markets (McCulla, 2009). The economic theories underpinning school management and responsibilities were applied to schools within the confines of regulated and accountability-driven environments orientated to competition, parental choice and free markets (McCulla, 2009). In this neo-liberal environment, schools had to compete for students on a global scale and demonstrate strong performance in areas such as literacy and numeracy (McCulla, 2009). This change shaped the way teachers taught. Teachers were implementing newly mandated policies, teaching, assessing, reporting, and undertaking Professional Development (PD). Teachers were responding to the demands of others (McCulla, 2009). These demands came from a myriad of levels: school, state, national and global (McCulla, 2009). Despite the many demands placed on teachers, the societal trends in Australians, including teachers, have embraced the philosophy of inclusion as a whole. Within this environment, teachers have been in the front line of implementation of inclusion.

Some of the issues that confronted teachers may have influenced teacher attitudes towards the concept of inclusive education. To increase awareness, especially in the education sector, the UNESCO (1994) recommended that further research needed to be undertaken on issues such as educators' attitudes towards persons with disabilities and their integration into society. In Victoria, the Department of Education and Training (DET, 2000) recommended that the Program for Students with Disabilities and Impairments be reviewed. In 2001, DET commissioned the review of educational services for SNS, known as the Meyer

report (Meyer, 2001). The Meyer report concluded that inclusion was not being fully implemented in Victorian schools. Teachers had a pivotal role in the implementation of inclusion and their attitudes need close examination.

#### The teacher's role in an inclusive classroom.

With the implementation of inclusion the role of the regular classroom teacher has been considerably altered. Whilst there existed a number of key players in inclusion, such as academics, parents, lobby groups, politicians and the media, it was the teacher that was expected to implement the day-to-day operation of inclusive educational practices (Dempsey, 2005). Regular classroom teachers were required to cater for students from a diverse range of abilities and to assume greater responsibilities (Loreman et al., 2005a). The classroom teacher was required to assume many different roles such as that of a caretaker, social worker, classroom manager, record keeper, motivator, student advocate and curriculum specialist. Other research studies suggested that regular classroom teachers were the most significant group with responsibility for ensuring successful inclusion of children with special needs (Mamlin, 1999; Westwood & Graham, 2002). The implementation of inclusion placed many demands on the regular classroom teacher.

Mamlin (1999) contended that implementing policies and practices for school reform such as inclusion occurred at multiple levels including the school, the community, the district or the state level. However, the most pivotal changes occurred at the classroom level. Fullan (2001) had a similar view. The suggestion was that teachers were the "moral agents of change" committed to making a difference in the lives of students. In this way the implementation of an inclusive classroom demanded more from the classroom teacher, in order to accommodate students with diverse educational needs (Giangreco et al., 1993;

Ingram, 1997). Not only were teachers now expected to do more, but also some teachers had an additional burden.

For inclusion to be successful, it was considered preferable for teachers to be tolerant, reflective, accepting and flexible (Watson & Bond, 2007). Some studies suggested that teachers with a higher perception of competency and self-efficacy towards inclusion had more positive attitudes (Guralnick, 2001). Teachers however had a host of concerns that were likely to generate negative attitudes. These concerns included: inadequate education, difficulty adapting to an individualised curriculum, lack of funding, lack of teacher aide support, lack of knowledge, lack of time, increased workloads and the severity of the disability (Mastropieri & Scruggs, 2000; Elbaum & Vaughn, 2003; Dempsey, 2005). These concerns as perceived by teachers, were germane to the present study. As such they deserved closer examination. Factors such as the specialised education necessary for successful inclusion, especially the ability to implement new pedagogy and aptitude towards SNS were especially relevant to the notion of inclusive practices.

#### **RESEARCH QUESTIONS**

The present study explores a number of fundamental questions pertaining to inclusion.

- 1. Do teachers with additional education in special education have a different attitude towards inclusion as opposed to those without education in special needs?
- 2. Do Victorian state primary school teachers use inclusive pedagogies?
- 3. What are the attitudes of teachers towards classroom support for students with special needs?
- 4. What do teachers perceive to be a "challenge" when implementing inclusion?

- 5. Are there differences in inclusion between schools with a high enrolment of SNS and schools with a regular enrolment of SNS?
- 6. To investigate the relationship between pedagogy and attitude.

These questions were investigated in order to identify ways in which to improve the implementation of inclusion in Victorian State Primary Schools. The results of the survey and interviews may reveal possible explanations for the reported limited implementation of inclusion.

#### PURPOSE OF THE RESEARCH

The objective of conducting the present study regarding attitudes of teachers towards inclusion and their teaching practices was to better understand how inclusion was practiced in the classroom as well as identifying where potential improvements could be made. The overall question was how can the existing system be fine tuned? There are many challenges for the satisfactory introduction of inclusion and teachers' attitudes are pivotal.

Implementing inclusion is dependent on making the changes or adaptations in the classroom necessary to give each student the education that they need. This required a number of key issues to be in place. These included funding and classroom support.

However, other issues such as the level of teacher education in the field of special needs were also important. Moore (2003) suggested that the benefits of inclusion could not occur without the purposeful and careful support of teachers who were at the coal face of implementing policies. Teachers were directly responsible for the classroom pedagogy and for the "dyspedagogia" (Westwood, 2004) that may have crept into classrooms due to the myriad of new teaching methods introduced over the past ten to fifteen years. This was particularly the case when dealing with the inclusion of SNS. Methods such as differentiation, cooperative learning and the implementation of the Individual Learning Plans were strategies that

encouraged inclusion. If teachers' attitudes and pedagogies could be better understood it would be possible to better support the implementation of inclusion.

#### THE RESEARCH PROBLEM

The Department of Education and Training (DET, 2001) commissioned an international expert, Professor Leuena Meyer, to provide an independent report into inclusion in Victorian State Schools. In Meyer's view there was a loss in commitment to inclusive education and a loss in state-wide consistency of quality programs. In response to this report the Better Services, Better Outcomes in Victoria Government Schools was produced (DET, 2001). Other bodies, such as the Senate (OCH, 2002) and UNESCO (Wills & Jackson, 2001), also claimed that inclusion was not being fully implemented in Australian schools.

A Senate report (OCH, 2002) provided evidence that Australian schools, including Victorian State Primary Schools, were not fully embracing inclusive education. The Senate commented that more needed to be done to identify the reasons for this lack of engagement (OCH, 2002). In discussing some barriers that may contribute to this reported lack of commitment to inclusion, Katz and Mirenda (2002) stated that effective inclusion provided optimal learning for all students, both with and without disabilities. This included improvements in the non-academic areas of social, emotional and behavioural progress, as well as the traditional academic areas of literacy and numeracy. Opponents to inclusive education believed that inclusion puts SNS into an environment that was not equipped to handle their needs and that it took away from the education for both disabled and non-disabled students (Ashman & Elkins, 1998). Whilst this was a concern, it could be addressed with changes to the structure and systems of local schools so that they met the needs of all students. The Integration/Inclusion Feasibility Study by McRae (1996) commissioned by the Minister for Education and Training in New South Wales, detailed the findings of a

comprehensive review of inclusive education practices in the state. McRae (1996) gave an assessment of the financial costs of differing education options. The suggestion was that the cost of educating a disabled student was twice as much as educating a non-disabled student. However, it cost less to educate disabled students in inclusive settings than in segregated settings. Some educationalists (Jefferson, 2003) saw the push for inclusion as a cost-saving tactic. They appeared to ignore the research showing the benefits of inclusion for all students. Others saw inclusive education as an expensive method of offering education to disabled students and taking funding away from the regular school system (Murik, 1997). Jefferson (2003) felt that lobby groups were skewing the concept of "equity" so that "adequacy" of funds had less of a chance with respect to the regular student population. Furthermore, Jefferson (2003) suggested that the demand for resources for students with different learning abilities had dramatically impacted educational finance planning. Jefferson (2003) contended that the regular students were missing out. Other programs such as those for gifted students or students with English as a Second Language also need funding which then becomes prohibitive as not all programs can be funded in addition to the funds being allocated to inclusion. Funding was not the only barrier to the successful implementation of inclusion. Other barriers included the non-acceptance of disability students who can be disruptive to a classroom. Both teachers and parents found this disruption difficult to accept.

There were some barriers to inclusive education in the Government and educational systems in relation to understanding the community benefits of inclusion. Even though inclusion was meant to be practised in Victorian schools, the introduction of such an initiative appeared to be limited (Meyer, 2001; Wills & Jackson, 2001). This lack of acceptance was apparently due to factors previously discussed, as well as support for teachers and students in the mainstream classrooms. There was a need for adequate staff Professional Development (PD) programs in special needs education, access to professional diagnoses, adequate

resources and the availability of effective practical educational programs for mixed ability classrooms. Teaching students with disabilities was difficult. Such a role added to the workload of teachers (Bender et al., 1995). Some students with disabilities can be disruptive. Presenting quality-learning programs to a wide range of diverse abilities in one classroom was a logistical challenge (Loreman et al., 2005a).

#### RELEVANCE OF PROBLEM

The relevance of the present study was to give insight into the attitudes of teachers towards inclusion and the pedagogies they selected. In this way it may be possible to identify what can be done to improve inclusion within the constraints of the current system. Three main factors that contributed to the relevance of the present study were:

- Inclusion was recommended by all Australian Government and major international bodies as best teaching practice.
- Limited research had been completed on the implementation of inclusion in Victorian State Primary Schools.
- Reports by the Senate and Victorian government found that inclusion had not been widely accepted in educational institutions in Australia and Victoria (Meyer, 2001; OCH, 2002).

It was anticipated that the present study would benefit teachers and educational administrators in the development of policies and programs that supported inclusion and identified, from a teachers' perspective, possible improvements. By enhancing their respective learning environments, the present study should be beneficial to both students with a disability and without a disability. Much of the burden of this challenge was carried by the classroom teacher, which affected their attitude and ability to implement inclusion. The

magnitude of the task should not be underestimated. As mentioned earlier, the number of SNS in the population was accepted as approximately 15% or more of the student population. In Victoria this equated to more than 80,000 students of which less than 20% received specific additional funding. It was therefore crucial to evaluate teachers' attitudes towards inclusion and the inclusive pedagogies they practised. It was also intended to focus on improvements to practical classroom implementation.

#### **SUMMARY**

The implementation of inclusive education in regular Victorian State Primary Schools was influenced by a variety of interdependent factors, including: public opinion, legislative reforms, policies, funding, support, education, the attitudes of teachers, the level of collaborative decision making between teachers and other professionals, and the use of inclusive pedagogy (Stainback & Stainback, 1984; Ward, Centre & Bocher, 1994).

Furthermore, as Giangreco et al. (1993) suggested, the attitudes of teachers, administrators, parents and other personnel were imperative in determining the development of policies, practices and resources related to the inclusion of SNS in regular schools. Research has consistently shown that positive attitudes of teachers will positively influence the implementation of policies and practices that are necessary for the implementation of inclusion of SNS in regular schools (Avramidis, Bayliss & Burden, 2000b; Foreman, 1996; Foreman et al., 1996; Scruggs & Mastropieri, 1996). By understanding the perceptions of teachers towards inclusion and their inclusive pedagogy, the possible barriers and difficulties inherent in implementing inclusion can be systematically addressed.

The implementation of inclusion is complex and exposes the challenge that inclusion has brought to an already diverse class of students. However, inclusive education is the removal of all barriers to learning, and the participation of all learners vulnerable to exclusion

(Loreman et al., 2005b). It is a strategic approach designed to facilitate learning success for all children. Inclusive education is aimed at enhancing access, participation and learning success through better quality basic education for all. Therefore, the present study explored why inclusion had reportedly not been fully implemented in Victorian State Primary Schools. Teachers' attitudes are important to a smooth and fundamental introduction of inclusive strategies into regular classrooms. Studies on inclusion indicated that a successful inclusive educational program could have a very positive effect on the learning outcomes of both SNS and students without special needs (Baker & Zigmond, 1990b; Bender et al., 1995; Bear, Minke & Manning, 2002; Avramidis, Bayliss & Burden, 2000a; Callingham & Spaulding, 2000; Cawley et al., 2002; Westwood, 2004). However, the present study did not specifically assess learning outcomes. Instead it focused on the attitudes of teachers towards inclusion of SNS and the inclusive pedagogy used by mainstream classroom teachers. In the present study, the construct of "attitude" was aligned with the views of Ajzen (1971). It was considered to be how one acts, either consciously or subconsciously, positively or negatively, due to prior experiences. Attitude was particularly relevant when discussing disabilities as it is suggested that attitudes affected pedagogy. Consequently, it was pivotal to examine how attitude can be measured from a teacher's perspective.

Each chapter covers a specific area of the current research. The literature review presents a range of literature that summarises our current understanding of the construct *attitude* and how to measure attitudes particularly in relation to teachers and SNS.

Furthermore, a review of the information found on teachers' attitudes, inclusive pedagogy, education in the field of special needs and other variables, is covered in support of the empirical and epistemological methods chosen. The methodology and methods are clearly outlined with full descriptions of the instruments utilised. The combination of qualitative and quantitative approaches has enriched the research by enabling a deeper probing and therefore

understanding of the survey responses and interviews. The present study presents a comprehensive account of the results and findings, including an analysis of the survey and the interviews are presented. The final chapters engage in a discussion along with limitations, which involved the core themes that emerged from the triangulation of the surveys and interviews. In conclusion the present study presented a critique of the findings of the present study and an analytical discussion, with recommendations on inclusion for policy makers and practising classroom teachers.

#### **CHAPTER 2**

#### LITERATURE REVIEW

The attitudinal barrier to inclusion is so great that the level of resourcing is irrelevant. It is people's attitude to resources and the way they utilise them, that is crucial to inclusive education. (Piji and Hegarty, 1997)

This chapter reviews existing literature relevant to teachers' attitudes towards inclusion of SNS and the pedagogies used. The literature review explores the concept and measurement of the construct attitude, inclusive pedagogy, and variables that influenced teachers' attitudes and pedagogy. These variables comprised of the education of teachers in special education, support, experience and age. According to the literature these variables appear to affect teachers' attitude and pedagogy. This review also discusses current research on attitude as a construct and inclusive education as a learning strategy in itself, highlighting how it affects the development of students. Lastly, inclusion is reviewed as it is understood by researchers and educators globally and its relevance to teaching in Victorian State Primary Schools.

#### THE CONCEPT AND MEASUREMENT OF ATTITUDE

It can hypothesised that teachers' attitudes affect the way in which they teach.

Therefore these attitudes must be examined closely since teachers are the people who implement inclusive practices. The success of any educational policy fundamentally lies with the teacher who directly delivers the policies of the school and government (Westwood, 2001). Without the teacher's full understanding and committed support, policies were less likely to be successfully implemented (Westwood & Graham, 2002). Teachers had the

capacity to significantly influence the introduction of inclusion (OCH, 2002) because they were in the classrooms where inclusion took place. Therefore, it was important to investigate teachers' attitudes towards inclusion. Before looking at the literature on teachers' attitudes and pedagogy it was necessary to understand the complex and often misused term *attitude*, particularly in light of how to measure the teachers' attitude.

#### The construct of attitude.

The understanding of attitude represented an important part of the present study as it looked at how to measure the attitudes of teachers towards one specific aspect of teaching, which was inclusion. Attitude also involved the relationship with behaviour. In particular, it focused on how the attitude of teachers affected their own pedagogy and consequently the students' performance. Thomas' (1971) collection of papers from initial studies on attitude, covering the years 1930 to 1971, laid the foundation of the current understanding of attitude. It included Allport's (1935) paper "Attitudes" and also Thurstone's pioneering work from the 1920s and 1930s which looked at the degree of positive and negative effects associated with attitude and how to measure attitude.

The logical status of the construct attitude and its role in student performance needed to be understood before measuring the actual attitudes of teachers (Allport, 1935). The background and circumstances that contributed to the formation of an attitude were covered in the various questionnaires given to the teachers in the present study. Loreman and Deppeler (2002) defined attitude "as the groups of thoughts, feelings and actions that affect how we react to individuals and to groups of people" (p. 49). Allport (1935) concluded that after considering numerous definitions and characterisations of attitude the following definition could summarise the concept of attitude: "An attitude is a mental and neural state

of readiness, organised through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related" (Allport, 1935, p. 19).

However, in Thurston's (1929) classic discussion on attitude, the idea that attitude can be positive or negative is expounded. A teachers' attitude can have either a positive or negative effect on a situation and on their selection of pedagogy.

The need to understand what an attitude was and how it affected the pedagogy of teachers required further investigation. Evidence in the literature to date suggested that attitudes existed and did indeed influence teachers' behaviour, either positively or negatively. Attitudes therefore played a role in pedagogy and ultimately students' performance. That is not to say that it was the dominant reason for student performance but certainly a factor in student performance.

Opposing Thurstone (1929) was Doob (1947). Doob (1947) suggested that an attitude is an implicit response, either positive or negative, which was evoked by a variety of stimuli as a result of previous learning or generalisations and discriminations. This interpretation treated attitude as a learned response rather than the precursor to behaviour. The behaviour that followed was believed to have been learnt separately as part of the situation in which it was learnt. Doob (1947) concluded that attitude may have been unrelated to behaviour. This would mean that regardless of a teacher's attitude towards inclusion he or she may still have behaved in an accepting manner towards inclusion, and therefore implemented inclusion successfully.

Ajzen and Fishbein (1977) explored the direction of attitude and behaviour from another point of view. That is, a person tended to bring his attitude into line with his

behaviour (Ajzen & Fishbein, 1977). While there is the belief that behaviour is a function of attitude (Cohen, 1960), the saying "actions speak louder than words" tended to support the theory that what one says can be totally different to what one actually does. This indicated that teachers could have displayed a completely separate thinking or attitude to how they said they acted. Therefore, attitude caused the behaviour regardless of the spoken words used to define it.

Eagly and Chaiken (2007) provided a more current definition of attitude "as a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour" (p.582). This encapsulated three features of attitude as tendency, entity (or attitude object) and evaluation. Eagly and Chaiken (2007) suggested that this conception of attitude distinguished between the inner tendency, that is attitude, and the evaluative responses that expressed attitudes.

#### Abstractness and Extensiveness.

To fully understand the construct of attitude a number of definitions have been reviewed. Antonak and Livneh (1988) discussed many of the commonly accepted definitions of attitude. Their exposition provided two main dimensions along which attitude definitions appeared to vary. The first dimension was represented by a continuum of abstraction, ranging from concrete to abstract. The second dimension was represented by the extensiveness of the three components of cognitive, affective and behavioural. Some researchers focused on a single component while others included all three components. For the purpose of the present study all three components were considered. The aforementioned and widely accepted definition of attitude provided by Allport (1935) included references to both cognitive and behavioural elements. Triandis (1971) had an all-inclusive definition applicable to the present

study. He stated "An attitude is an idea (cognitive) charged with emotion (affective) which predisposes (conative) a class of actions (behavioural) to a particular class of social situations" (p.9).

Much research has been done on the effect teachers can have on their students, in all areas of development including academic performance, attitude, behaviour and confidence (Westwood, 2001). Teachers' attitudes were important when looking at the implementation of educational policies. If a teacher was perceived in a negative light by students, students tended to perform lower than they would in more positive teaching environments (Hall, 2002). Likewise, students may have performed poorly if the teachers' expectations were not high enough. Alternatively, if the teachers own self-efficacy in the subject area was low, then the performance of the students was likely to be low (Oppenhiem, 1992). Breare (1985) contended that teachers' attitudes may be the fulcrum that determines the success in implementing policies and programs. The suggestion was that educators realised that one of the most important influences on a student's educational progress was the classroom teacher (Larrivee & Cook, 1979; Larrivee, 1982; Hattie, 2003).

#### The cognitive, affective and behavioural domains of attitude.

Eagly and Chaiken (1993) discussed the three main areas relevant to the concept of attitude of teachers towards students, who were at the lower end of the diverse abilities spectrum. These three areas dealt with were: the cognitive or knowledge of the disability; the behavioural, which was the intention to interact with the individual who had the disability and the affective, which were the feelings about the student's disability. Eagly and Chaiken (1993) referred to this as the ABC of attitudes: affective, behavioural and cognitive. The affective response is an emotional response that expresses an individual's degree of

preference for an entity. The behavioural intention is a verbal indication or typical behavioural tendency of an individual. The cognitive response is a cognitive evaluation of the entity that constitutes an individual's belief about the object. Most attitudes are the result of either direct experience or observational learning from the environment.

In the present study these three dimensions of attitude were systematically explored using specifically selected questionnaires. That is, the Personal Background of the teacher that may have contributed to the teachers' attitude. The Bender Inclusive Strategies

Questionnaire, which indicated what type of inclusive pedagogy the participants practiced.

And the third questionnaire which explored the attitudes of teachers' towards inclusion, and gave a picture of the teachers actual actions/teaching strategies in the classroom. Three main sources affecting the ABC of attitudes were; the direct experience with objects and situations, the explicit and implicit learning from others and the development of ones personality. These were also identified within the three questionnaires chosen for the present study.

#### Attitudes Influence Behaviour.

Broadly speaking, inclusion is a means of influencing positive attitudes through the socialisation process for both students with disabilities and students without disabilities, for teachers and ultimately the broader community. This process deals with the transformation of a child into an adult, a process that includes learning attitudes and values. The principle agents in socialisation are other people who include for example: parents, brothers, sisters, friends and teachers. Attitudinal and behavioural change occurs through learning at all stages. The school, peer groups, the community and the media all play pivotal roles in helping to form attitudes in individuals.

Socialisation is a continuing process. Socialisation does not stop at a certain age or stage, and therefore inclusion was a valuable pedagogy when it came to the acceptance of students with disabilities in regular classrooms and ultimately the academic, social and behavioural improvement of students with and students without disabilities.

#### Implications for students with special needs.

The concept of attitude was related to what was known as behaviour theory (Ajzen & Fishbein, 1980). Generally, it was agreed that attitudes were learned. This being the case, then the learning, retention and decline of an attitude were no different from learning of a skill or piece of information (Doob, 1947). Given this, it is reasonable to propose that attitudes can be changed. The suggestion was that if teachers' attitudes towards inclusion were negative, they could negatively affect student performance. The notion of investigating teachers' attitudes towards inclusion may have been instrumental in designing educational programs which addressed the attitudes and concerns of teachers. Studies on the formation of attitudes revealed three main sources of attitudes existed. These sources included: 1) direct experience with the objects and situations, 2) explicit and implicit learning from others, and 3) personality development (Halloran, 1970). In the present study, neither the formation nor change of attitudes were studied, but rather the inferred consequences of teacher attitudes towards inclusion and how the attitude of teachers may have affected the implementation of inclusion.

#### ATTITUDES AND RELATED CONCEPTS

#### Theory on Attitudes of Teachers.

From international and local studies on teacher attitudes it was clear that the attitudes of teachers towards the implementation of any program was crucial if it was to be successful in terms of student outcomes. The attitudes of teachers were researched because it was the regular classroom teacher who planned and implemented the inclusive classroom program. The teacher has become the essential front-line worker (Westwood, 2001). Extensive research on why teachers' attitudes were important has been done in various educational settings. Oppenhiem (1992) studied why teachers' attitudes towards mathematics were important. It was believed that if a teacher's self-efficacy was not strong in a subject area it was transferred to the student who in turn experienced lower performance and self-efficacy towards the subject. Researchers Specht et al. (2001) of the Research Alliance for Children with Special Needs collaborated with other sectors of the community including, Huon University and local schools to investigate factors that influenced teacher attitudes. They looked into the range of factors that might have influenced teachers and how these factors might have impacted on the educational environment. The indication was that positive teacher attitudes produced positive educational outcomes and negative teacher attitudes had a negative impact on student performance (Specht et al., 2001). However, Breare (1985) contended that teacher attitudes were difficult to change, due to variables such as available support and lack of specific education in special needs. Hence there appeared to be the need to systematically look at what teachers' attitudes were toward inclusion, with the forethought of producing quality educational programs that will specifically address teachers' negative attitudes.

### **Teacher Attitudes Towards Inclusion.**

Bender et al. (1995) found that favourable attitudes towards inclusion were held by more experienced teachers. Conversely, Forlin et al., (1996) suggested that less experienced teachers were more positive towards inclusion. Curtis (1991) contended that female teachers were more inclined than male teachers to accept inclusion. Mastropieri and Scruggs (2000) reported that secondary teachers were more negative about inclusion when compared to elementary teachers. Cochran (1998) maintained that the attitude toward inclusion, to some degree, was a reflection of attitude toward disabled persons in general. In Cochran's development of an instrument to measure teachers' attitudes towards inclusion, it was suggested that the performance of SNS were directly affected by teachers' attitudes (Cochran, 1998).

Research carried out in the UK and USA explored teachers' attitudes towards inclusion of SNS from various perspectives. Kuester (2000) looked at teachers' attitudes ten years after inclusion was first initiated and found that those teachers who had more education in special needs were inclined to be more positive towards inclusion. Forlin, Hattie and Douglas (1996) found that graduate and undergraduate teachers were more positive towards inclusion. Fakolade, Adeniyi and Tella (2009) suggested that negative attitudes of teachers towards inclusion resulted from lack of knowledge. They indicated that teachers felt inadequate when SNS were included in a regular classroom due to a lack of education in special needs. Likewise with the male teachers, Fakolade et al. (2009) also proposed the possibility for the negative attitude of the male teachers may be attributed to a lack of education in special needs.

Drawing on this information of various teacher characteristics enabled a profile to be created. This profile would provide an outline of the characteristics of teachers who were likely to be more suited to inclusion. From these previous studies the profile of a proinclusion teacher might be; female, primary school teacher with at least ten years experience in teaching SNS who was well educated in the field of special needs. Fakolade et al (2009) suggested that when teachers showed a significant increase in their belief that there is less resistance toward inclusion. In keeping with this research by Fakolade (2009) were researchers Berryman and Berryman (1981) who indicated that negative attitudes of teachers towards inclusion were based on issues of experience on the job. It was therefore expected that the present study, which specifically investigated these variables, would contribute to the existent knowledge.

### THE MEASUREMENT OF ATTITUDES TOWARDS INCLUSION

To measure the attitudes of teachers towards inclusion a research design was needed that was both reliable and valid. Analytical survey designs needed to specifically explore the associations between particular variables. The present study looked at finding associations and explanations between teachers' attitudes and the level of inclusive practices in the classroom. A critical analysis of the data from the present study was expected to identify factors that may have indicated why inclusion was reported as not being successfully implemented in Australian schools. The questionnaires and interviews were directed towards exploring the why (attitude) and the what (pedagogy) teachers have in their delivery of inclusion. A range of possible instrument designs are presented and briefly described in the following section.

#### How to measure teachers' attitudes towards inclusion.

Antonak and Livneh (1988) suggested that attitudes are best measured with the use of Likert scales, as they give the participant the opportunity to be given direct questions and to respond directly without interference or bias in the interpretation of the responses. Likert scales also allow for a range of feelings or opinions to be expressed. At the same time, Likert scales also remove the issue of participants feeling that they must respond in a more positive manner, especially when discussing their students.

### Scales that measure teachers' attitudes towards inclusion.

A number of surveys have been designed to measure the attitudes of teachers towards inclusion. Each scale was viewed with the intention of adding to the selection of an appropriate attitude scale for the present study. The Attitudes Towards Mainstreaming Scale (ATMS) by Berryman and Neal (1988) measured the attitudes of teachers towards inclusion and showed a range of reliability and validity. Antonak and Livneh (1988) suggested that the ATMS was a reasonably reliable scale that dealt with the feasibility of teaching non-disabled students and disabled students in a regular classroom. The study found that regular classes were the least restrictive educational environment. However, the ATMS was designed in the mid 1980s and was considered to be dated for use in the present study.

Schmelkin (1981) also developed the Mainstreaming Opinionnaire (MO) to study the attitudes of special education teachers, regular teachers and non-teachers (eg. administrators) towards inclusion. The results of this test showed that the MO measured meaningful differences among these three groups. Prior to this study Schmelkin (1981) suggested that surveys on inclusion only involved unitary acceptance-rejection issues and therefore did not allow a more in-depth analysis of attitudes held by the participants. Although, the MO did

allow the investigation of attitudes to be considered at a broader level than previous scales, it was thought to be limited in the results presented.

The Educational Attitude Survey (EAS) was created by Reynolds and Greco (1980a) to primarily provide educators and researchers with a measure for evaluating teachers' attitudes towards inclusion. The EAS included two sub-scales: one from an administerial aspect and one from an educational aspect. The results determined which aspect was more positive, the administerial or the educational, with indications as to what influenced the participants' responses. This particular survey was designed to demonstrate Reynolds and Greco's (1980a) suggestion that previous instruments measuring attitudes lacked sophistication and psychometric adequacy. However, the Reynolds and Greco (1980a) study contained outmoded terminology and concepts.

Other researchers such as Larrivee and Cook (1979) developed the Opinions Relative to Mainstreaming (ORM) to investigate teachers' attitudes towards inclusion of handicapped children into regular classrooms. The item selection procedure dealt with eight hypothesised dimensions of attitudes towards inclusion. The ORM presented a comprehensive coverage of the various areas involved when implementing inclusion. The results of this study found that successful perceptions by the teachers accounted for the variance in their attitude scores (Larrivee & Cook, 1979). This study also found that the higher the year level of the students, the less positive the teachers' attitudes were towards inclusion. Whilst the ORM scale was extremely comprehensive it was also considered to be outdated.

Van Reusen et al. (2001) used the Inclusion Survey (IS) to survey 125 secondary teachers on their attitudes towards inclusion. The survey covered four domains: 1. education in special needs, 2. academic climate, 3. academic content and 4. student social adjustment.

Van Reusen et al. (2001) found that the more experienced the teachers and the more they were educated in special needs, the more positive they were towards inclusion.

Avramidis et al. (2000a) surveyed 81 primary and secondary teachers using the Survey of Teacher's Opinions Relative to the Inclusion of Special-Needs Children in Mainstream Settings. The results of this survey indicated that teachers who had actively implemented an inclusive program were more positive towards inclusion. This study highlighted the fact that PD was important in the formation of positive attitudes towards inclusion. Although both these survey designs were relevant and current they often used local and negative terminology that was not suitable for the present study.

Bender et al. (1995; 1985) researched instructional strategies offered in regular classrooms for teachers implementing inclusive education. Bender et al. (1995) also asked the teachers to complete a questionnaire concerning their attitudes toward their own efficiency and their attitudes toward mainstreaming. However, both of these scales were minor in regards to quantity and depth. The final survey included in the Bender et al. (1995) study assessed teachers' utilisation of instructional strategies that facilitated mainstreaming.

Bender's (1995) survey was comprehensive in its makeup, consisting of 40 Likert items on research proven, inclusive instructional strategies and was selected for the present study.

All of the above studies contributed to the background information the present study intended to research in Victorian State Primary Schools. The choice of the three questionnaires and interviews covered a similar range of questions outlined above. In the analysis of the three questionnaires and interviews conducted in the present study, the issues covered have been researched in various studies overseas but very little research has been conducted in Victorian State Primary Schools. What is new about the present study is the

suggestion of a link between attitude and the selection of pedagogy by the individual teachers.

The above considerations on the construct attitude and the various forms of how to measure attitude, highlights the complexities of attitude. This led to the view that teachers' attitudes were an extremely important concept to be considered, particularly when illuminating on why teachers may not have embraced inclusion.

### **INCLUSION**

The term inclusion, in an educational context, fulfils the primal human need of acceptance. This stems from Maslow's (1943) theory of personality that has influenced a number of different fields, including education. Maslow (1943) was a humanistic psychologist, who identified our instinctoid needs that were the equivalent of instincts in other animals. Maslow's (1943) hierarchy of needs ranks the needs of belonging and esteem as fundamental needs for all humans. This need for esteem involves both self-esteem and self-efficacy. Humans have a need for a stable, firmly based, high level of self-respect and respect from others. When these are satisfied, the person feels self-confident and valuable. As suggested by Boeree (2004) when these needs are frustrated, the person invariably feels inferior, weak, helpless and worthless. Boeree (2004) outlined ten points where education could be responsible for developing these needs in students. Two points specifically addressed how teachers implemented inclusion. Teachers should strive to accept individual students as they are and try to ensure that they are accepted and valued. Inclusion was the mechanism by which teachers could deliver these needs. Not being included led to the dehumanising feelings of low self-worth such as inferiority and helplessness, which led to

poor performance. Hence inclusive teaching practices and the correct attitude towards SNS were essential in educational systems and in the classroom in particular.

However Rietveld (2003) raises the question of 'congruity' between the policy of inclusion and its implementation and the need to identify any processes which may interfere with optimal outcomes for the SNS. Rietveld suggested that inclusion may be positively accepted by teachers and policy makers but 'at the chalk face' it is not played out as one would expect or want it to be.

Originally, normalisation was aimed at enabling intellectually disabled individuals to operate as closely as possible to patterns and conditions of everyday life that are the same as the norms and patterns of the mainstream society. Consequently, normalisation has served as an example for educational and other fields in guiding society's decisions, policy and actions. Nirje (1969) formulated this principle after observing that children and adults with disabilities faired better and improved socially, behaviourally, emotionally and academically when placed in a normal environment. The normalisation process assists people with disabilities in achieving complete independence and social integration.

Loreman et al. (2005a) followed the philosophy that inclusion involved the full inclusion of all children in all aspects of schooling experienced by their like-aged peers. Inclusion involved both the regular school and classroom adapting and changing. Inclusion assumed that all children were a part of the regular school system from the very beginning of their schooling. It was this adaptation and change aspect that teachers' needed to embrace in order to fully implement inclusive education. Whilst teachers may have been seen to be positive towards and claim to implement inclusive pedagogies Reitveld (1991) noted that "independent data have indicated or suggested the children's [SNS] participation in less than

optimal educational contexts". This was also suggested by researchers Wilton and Pickering (1998) who agreed that inclusion didn't always deliver the outcomes anticipated or hope for when implementing inclusion.

Unfortunately, as quoted in the Senate Report (OCH, 2002) "inclusion has come to mean inclusion of place, whereas inclusion should be focused on programs" (p. 85). By way of example the Senate Report (OCH, 2002) included a statement from a physically disabled student who submitted that the special school sector should be given more consideration as an alternative to mainstream schools. The submission in the Senate Report (OCH, 2002) provided the following quote "...from my own experience, my time in a mainstream education system was a period of great fear, tension and stress..." (p. 33). The student elaborated that this was not due to any one person or the school as such. He recounted the memory "I do though remember that palpable feeling of relief when my family and I found a special school. This was where I belonged" (p.33). The real task was to make all students feel that way in their local neighbourhood school.

Full inclusion is an ideal position that some pursue but the Victorian Education

Department has chosen to offer special school settings for severely disabled students. This

was a practical compromise to the purists' objective of full inclusion. Also many schools

offer withdrawal programs for both students who are gifted as well as those with learning

difficulties or behavioural problems (DEECD, 2009). To some, both of these practices would

be considered a failure to fully implement an inclusive educational program. Many consider

these practices did however offer students excellent opportunities. This of course was only

one of the objectives of an inclusive educational system. The objectives of inclusion in an

educational setting included social acceptance, self worth and tolerance. This should allow

the SNS to become fully integrated into the community.

In 2008, there were approximately 539,000 students in State Government schools with 7,970 students reported to be in Special Schools and 9,901 funded SNS in regular schools (DEECD, 2008a). There was also another estimated 60,000 unfunded SNS in the state schools system of which approximately 35,000 were in primary schools. Within this setting, withdrawal programs were in place for students with both below or above age/grade levels. The withdrawal programs addressed various subject areas. A withdrawal program is when a small number of students or an individual are removed from the regular school program for specialised classes. The individuals are usually removed from the classroom to work together, with a specialist teacher, for a specified number of sessions per week over a period of time (Campbell & Verna, 1998). This is also known as withdrawal or an intervention program and can be for both gifted students and students with a disability (DEECD, 2009). One such program was the Reading Recovery Program (Clay, 1993) offered in Victorian State Primary Schools. Despite the fact that DEECD promoted inclusive education as the preferred pedagogy for the learning and teaching of all students, it embraced these programs of specific placement outside the classroom as a practical implementation of quality education (DEECD, 2009).

In addition to these withdrawal programs, Victorian State Primary Schools used individualised instruction, which was recognised as being well suited to SNS. The development of the Individual Learning Plan (ILP) has become an integral part of all teaching in Victorian State Primary Schools. The development of ILPs has progressed as good teaching practice for all students. These plans set out a specific program of learning for each student addressing both their educational as well as their social development. It specifically places the individual student's performance in one or more of the Key Learning Areas. From this, a plan is developed, discussed with the parents and carried out on a regular basis in the

classroom. The ILP also addressed the behavioural and social issues of students in a school environment.

Moore (2003) found that it was necessary to pay specific attention to learning social behaviour. This was consistent with Vygotsky's (1978) Zone of Proximal Development (ZPD), where Vygotsky believed that the life long process of development was dependent on social interaction and that social learning actually led to cognitive development. Vygotsky (1978) described it as the difference between the level of development determined by independent learning and the level of potential development as determined through problem solving or in collaboration with more capable peers. The suggestion was that learning was more likely to take place when the learner was with an adult or with peer collaboration and that the student will learn more in such an educational setting than would be achieved alone (Vygotsky, 1978). Vygotsky focused on the connections between people and how they acted and interacted in shared experiences. This was precisely what inclusion promoted, a field of learning for all students.

Nirje's (1969) normalisation process laid the basic foundations for inclusion.

Vygotsky (1978) encouraged "work spaces" in classrooms suitable for peer instruction, collaboration and small group instruction. A study of reciprocal teaching was conducted by Brown and Palincsar (1987) using the Vygotskian approach in reading where students began to assume the teaching role. Results of this study showed significant gains over other instructional strategies. The Brown and Palinscar (1987) study took place over a period of 20 school days. They measured the effectiveness of cooperative learning by placing students who were performing at least two years below grade level with higher level readers. The effectiveness was evaluated by having the students read passages of approximately 450 to 500 words in length and then answer ten comprehension questions. Performance on the

assessment passages indicated that all but one achieved criterion performance of 70% accuracy, while none of the control group achieved criterion performance. This was repeated in larger class sizes where 71% achieved criterion performance as opposed to 19% of the control group. Clearly the concept of students both with and without a disability can experience improvement in some form or other, whether it is socially, academically or behaviourally when included in a mainstream classroom.

The Vygotsky (1978) philosophy matched in theory and practice the philosophy of inclusion. That is, by placing students operating at different levels together, they could learn from each other. The theory was that individuals participating in peer collaboration must share the same focus in order to access the zone of proximal development which was necessary to create a process of cognitive, social and emotional interchange (Vygotsky, 1978).

Whilst inclusion is reported to be the optimal method of learning (UNESCO, 1994) for both students with and without disabilities, research by Rietveld (2003) observed both active and passive exclusion of students in mainstream settings. She described three settings where negative attitudes towards SNS were observed. They were; active exclusion, passive exclusion/ignoring and teasing. The ineffective or illusory inclusion as recorded by Rietveld (2003) involved eight types of interaction. These consisted of; assigning inferior roles (e.g. such as baby, pet or object), including SNS to take risks (e.g. throw rocks or steal) and engagement in a narrow range of roles (e.g. saying hello or occasional playmate). These were not directly associated with inclusive pedagogy, as such, they play a definite role in the expected positive outcomes of inclusion.

Some studies have shown that while teachers may have been receptive to inclusive education they did not accept those students that had an emotional or behavioural disability as they were perceived to be too disruptive (Alghazo, 2003; Kauffman & Hallahan, 2005; Staub & Peck, 1994). However, Hollowood, Saligburly, Rainforth and Palomaro (1994) demonstrated that, despite the occasional disruption, students with severe disabilities or behaviour problems did not negatively impact on the amount of engaged learning time for regular students. Hollowood et al. (1994) found that students with disabilities learnt as well as their peers in cooperative groups that did not include a student with a disability.

Contrary to Hollowood et al. (1994) study of SNS, researchers Smith and Smith (2000) suggested that students, particularly with hearing impairments and learning disabilities may have been placed at even greater disadvantage by being placed in full inclusion. Despite the benefits of inclusion mentioned earlier, its implementation has been limited.

# Various states of inclusion.

There existed three possible versions of inclusion (Cochran, 1998). The first was full inclusion, which referred to SNS in the regular classroom, using the regular curriculum. This could be referred to as a zero-rejection model with each class having a natural proportion of SNS. Peer tutoring and co-operative learning were implemented along with teacher instruction (Cochran, 1998).

The second version is called partial inclusion, which referred to SNS in the regular classroom using a modified curriculum. In addition to the full inclusion pedagogy, partial inclusion used support staff to assist the SNS (Cochran, 1998). Partial inclusion as discussed in the Official Committee Hansard, Senate report (OCH, 2002) was acceptable to educational authorities as a practical way of handling the diverse range of students present in a regular

classroom. The Senate report (OCH, 2002) suggested that there was a degree of utopianism in the "full inclusion" model because of the inherent difficulties associated with some disabilities that could not be addressed in current mainstream classrooms. The Senate report (OCH, 2002) felt that the inclusive practices in Australian schools leant towards partial inclusion.

The third version called integrated activities reflected the mainstreaming model and included the SNS in the regular classroom as much as appropriate (Lipsky & Gartner, 1997; Stainback & Stainback, 1984). Views of most professionals, however, fall somewhere between the extremes with the belief that the most effective inclusive model is one that places the least limits on the potential of the SNS and integrates them into regular classrooms as much as possible (Fuchs & Fuchs, 1994).

Supporters of the full inclusion model believe that basic human rights issues should take precedence over empiricism (Kauffman & Hallahan, 2005). They did not accept the practical argument that regular educators were not able nor equipped to cope with and accommodate the diverse range of all students, let alone students with severe disabilities and special needs (Loreman & Deppeler, 2000). There was no substantial body of literature that established and supported full inclusion models (Foreman, 1996). Additionally, there was no acknowledged literature which identified how all the competitive objectives of the fully inclusion model were addressed (Foreman, 1996). It appeared that there would always be a conflict between the social and academic development and acceptance of learners. By the very nature of diversity, students will develop at different academic and social rates. Just as placing a gifted student with much older students created difficulties in terms of social integration, so too did the placement of an academically slow learner create difficulties in the

classroom even if their social development was at the appropriate level. There may always be a compromise.

## Teacher diagnosed SNS.

There were difficulties in determining the number of students with disabilities because of variations in the definition and data collection techniques (Foreman, 2005). A learning disability was when learning had been assessed and diagnosed as being dysfunctional in some way, thus preventing the student from actual learning in a competent manner. Learning disabilities were specific, not global impairments. As such, they were distinct from intellectual disabilities. A further difficulty involved the students identified by teachers as needing special consideration but who fell outside the additional funding selection criteria. For the purpose of the present study these students were referred to as teacher-diagnosed SNS. When mild to moderate disabilities, including learning difficulties and behaviour disorders, were included in the definition, the number of SNS in regular schools was reported to be 16.15% (Ashman & Elkins, 2005). This definition then included the teacher-diagnosed SNS, students who required extra assistance, often one-to-one from the teacher. It was estimated that 1-2% of students had severe disabilities. These students required placement in a special school (Baker, Wang & Walberg, 1994).

### Inclusion is educationally best practice for students.

Inclusion has been shown to improve the academic, social, behavioural, self-efficacy of some students (Hall, 2002; OCH, 2002). There was an argument that the concept of inclusion alone had a strong impact on the improvement of students both with and without a disability as long as it was implemented appropriately (Katz & Mirenda, 2002). Inclusion must address the specific needs of the students within any one classroom (Vaughn et al. 1996;

Vaughn et al. 1998). Studies that compared outcomes for mainstream and special schools reported higher academic achievements for children in an inclusive environment (Fletcher-Campbell, 2000).

Klinger and Vaughn (1999b) looked at the perceptions of 4,659 students from kindergarten to year 12, both with and without a learning disability, in an inclusive environment. The results of the Klinger and Vaughn (1999b) study indicated that students with and without learning disabilities strongly preferred working with others in a cooperative inclusive setting, and in that context their academic progress improved. Klinger and Vaughn (1999b) predominantly used qualitative interviews and surveys as the principal sources of data. The surveys were based on questionnaires and the results were put on scales. They supported the conclusion that students, both with a disability and without a disability, preferred learning together and receiving the same activities, books, homework, grading criteria and grouping practices. All students demonstrated that they valued teachers who explained concepts and assignments clearly, taught learning strategies and presented the same material in different ways. To allow students to fully develop, teachers needed to value the concept of thinking differently and learning differently. This attitude allowed the teachers to commit to making changes to their teaching practice of students with and without a disability.

Whilst the improvement of academic achievement by students with a disability was paramount, the second factor of social acceptance was also important. It was difficult for any student to make academic progress if they lacked self-efficacy and self-esteem. Cawley, Hayden, Cade and Baker-Krozynski (2002) monitored the effect of inclusive education on academic achievements, social acceptance and behaviour. The 114 students in the Cawley et al. (2002) study were monitored over a period of two years. The results suggested that the students with learning difficulties had increased their academic success and were comparable

to a pass rate of the general students. More of the students with a learning disability were able to pass the district exam. However, it was consistently reported by the teachers and all students that the behaviour of SNS and regular students was better and that the social acceptance of the students with difficulties had increased. These students were now being included in social dances and in activities outside of school. The SNS reported that they were enjoying a much higher social acceptance with their general peers inside and outside the classroom and school. Social acceptance was important for a number of reasons. For example, positive social acceptance aids learning for both students with and without learning disabilities (Cawley et al. 2002; Hall, 2002). This evidence is not consistent with the use of withdrawal programs.

Victorian State Primary Schools use withdrawal programs, particularly at the early years level, where schools have been allocated funding specifically to implement the previously mentioned Reading Recovery Program (Clay, 1993). This was a program based on withdrawal. Students who had been assessed as not meeting the necessary reading level at the start of Year One were removed from the classroom for a half an hour each day and had one-to-one tuition with a trained Reading Recovery teacher. Rea et al. (2002) compared inclusive education with withdrawal programs and found that students with learning disabilities in inclusive classrooms earned higher grades, achieved higher scores on standardised tests and had improved behaviour and attendance. These students were also involved in fewer infractions and attended more days than students with learning disabilities in withdrawal programs.

Other research indicated that programs such as the Reading Recovery Programs do in fact improve the reading ability of the students who attend (Centre et al. 1995, Rowe, 1995). This was consistent with research on withdrawal programs in general (Schwartz, 2005). For

example, in a comparison between 39 separate class programs and 18 withdrawal programs, in 57 schools in metropolitan New York, the results indicated that the withdrawal programs were more closely monitored, were better provisioned and were more successfully administered than the traditional programs (D'Agostino & Murphy, 2004). These results supported the teaching practice of inclusion as practised also in the UK.

In the UK the term inclusion has come to mean effective schooling. It no longer refers only to the needs of children with impairments. This supports the findings of Hall (2002) who compared the academic outcomes of students with learning disabilities with the number of hours exposed to an inclusive educational setting against the hours of learning not in an inclusive setting. The academic outcomes in mathematics and reading were higher, particularly in reading in the inclusive setting. The results indicated that those who spent more time in regular classrooms gained higher assessment scores. As a result of Hall's (2002) work, links have been made between inclusion in regular classrooms and academic outcomes. Hall (2002) suggested that inclusion could improve mathematics and reading scores but Hall did not cover student self-esteem or social acceptance. This was in keeping with Fletcher-Campbell's (2000) contention that the academic achievements of SNS were higher when included in mainstream classrooms.

### **PEDAGOGY**

When taking into account the teacher's pedagogy and expertise, Putman et al. (1996) researched one of the key pedagogies for inclusion, that is, cooperative learning and compared it with competitive learning. They were exploring the hypothesis that cooperative learning was successful for all students in terms of social acceptance by students without a disability. This study looked at 417 regular students and their acceptance of 41 students with

learning disabilities in inclusive classrooms, over a period of eight months. The results indicated that students without disabilities were more positive towards students with a disability. Not only did the students with a disability enjoy their cooperative experiences, they found that cooperative learning helped them to learn better, gain peer acceptance and make friends with students without a disability, which they hadn't been able to do prior to the cooperative learning setting. The teachers in the Putman et al. (1996) study also felt that cooperative learning increased student learning and self-esteem. The students without a disability displayed a more positive attitude towards learning-disabled students than in competitive learning classes (Putman et al., 1996). These factors seemed to suggest that cooperative learning and role modelling by regular students may need to be a necessary component of inclusion. These activities also increased the self-esteem of the regular students rather than hindering the progress of regular students as suggested by some educators (Melloy et al. 1998; York et al. 1992).

Another key teaching strategy that was said to cater for inclusion was differentiation. This approach, described by Ashman and Elkins (2005), advocated the use of curricula, teaching and assessment alongside knowledge of individual students and their needs. Individualisation was closely associated with differentiation as a major inclusive pedagogy. This method of teaching was evident in Victorian primary state schools in the form of Individual Learning Plans (ILP). However the ILP depended on the local schools and teachers' interpretation of the particular learning goals for each student. Whilst differentiation was indeed implemented in some form in most classrooms in Victorian State Primary Schools this did not mean that it was fully embraced by all teachers. It may not have been an effective pedagogy. Westwood (2001) questioned whether complex systems of differentiation in the mainstream may in fact have hindered the progress of students with

learning difficulties or disabilities in inclusive classrooms. Differentiation was seen by some as teaching concepts differently or presenting teaching and learning curricula differently (Westwood, 2001). However, Cowley (1996) who has written programs for including students with disabilities stated "that the teacher must have the knowledge and skills of the individual students and the curricula to be able to adapt and provide the correct instructional methods" (p.98). Westwood and Graham (2000) suggested that effective inclusion was possible for no more than five students, in a regular class at a time. Once the number of SNS in a class was above that limit the teachers' efforts to differentiate would be diminished. Gigorcelli, L. (personal communication, June, 2007) felt that the maximum number of SNS in a mainstream classroom should be three and that any more than this would have compromised the benefits of inclusion for all students.

The concept of individualising learning mentioned earlier, occurred at many levels of the education process including assessments, program placement and plans for specific interventions (Chan & Van Kraayenoord, 1998). The ILPs that existed in Victorian State Primary Schools provided the initial planning for the differentiation of SNS. This included the cohort of SNS that existed at both ends of the learning continuum. Differentiated instruction was when the curricula, goals, methods, pace or concepts in activities were varied according to individualised needs (Bender, 2002). It has been suggested that this teaching practice was one of the most effective methods for including SNS (Vygotsky, 1978).

Metacognitive teaching and learning strategies were considered to be another valuable pedagogy for teaching students with disabilities. Metacognitive instruction was described as teaching the student to think about their own thinking (Hempenstall, 2009a). Metacognitive instruction was particularly relevant to students with learning disabilities, which included dyslexia and some behavioural disabilities, such as Attention Deficit Disorder (ADD).

Studies have shown that the use of self-dialogue associated with metacognition improved the retention of new information (Blakey & Spence, 1990; Chan & Van Kraayenoord, 1998). Self-instruction as an instructional strategy aimed to teach cognitive skills. Relevant processes and strategies identified in the literature involved think-aloud verbal rehearsal of the process, strategy, and a final internalisation of the strategy by the learner (Wong, 1992). This was done by the fading of the verbalisations from overt to covert speech (Wong, 1992). Bender and Ukije (1989) believed that metacognitive learning strategies were supported by Vygotsky's (1978) ZPD. The distance between the learner's actual development and the level of potential was determined through the guidance of the teacher or with more capable peers (Vygotsky, 1978). Self-dialogues created a ZPD that operated at first in collaborative interactions at the upper potential level of development (Vygotsky, 1978). However, gradually as the cognitive processes were internalised, these processes became part of the learners' independent development level (Chan & Van Kraayenoord, 1998). The interactive dialogues were modelled on Socratic dialogues, of questioning activities that encouraged students to clarify, elaborate, justify and test their ideas and understandings (Chan & Van Kraayenoord, 1998). In this way students' own strategies were made explicit and could be reflected on and modified if necessary (Vygotsky, 1978). The use of metacognitive strategies was a valuable learning technique for students who struggled with the basic understandings of reading, writing and mathematics (Vygotsky, 1978).

Bruce and Robinson (2004) suggested that specific metacognitive instruction in word identification strategies could significantly enhance the effectiveness of reciprocal teaching procedures for readers who were experiencing difficulty in word study and reading. These procedures were a method of teaching reading proposed by Vygotsky (1978) and researched by Brown and Palincsar (1987). A study by Bruce and Robinson (2004) suggested that

metacognitive word identification and reciprocal teaching could be successfully undertaken in classrooms, as long as teachers were adequately educated in special needs. The possibility of a different quality of teachers may result in some teachers being more effective than others, especially if appropriate education in special needs have not been provided (Huang & Wheeler, 2006).

Metacognition is not limited to SNS or older students. Young children can also employ the act of "thinking about their thinking," by vocalising their strategies, enabling each child to hear a variety of ways to solve a problem (Chan & Van Kraayenoord, 1998). Using metacognition as a method of learning enables students to talk about how they learnt as well as describing what they had learnt (Bolich & McLaughlin, 2001). Further studies have found that self-management instruction needed to be closely followed up by teachers if it was to be successful for SNS (King-Sears, 2006). This was the case in the study of two students trained to use self-management (King-Sears, 2006). However, King-Sears (2006) noted that when the teachers were not available to follow up, the students did not successfully monitor their behaviour. Consequently, when correctly monitored by the teachers, the self-management instruction was seen to be successful. Self-monitoring or self-management strategies were one of the best evidence-based interventions that were widely used by specialists and professionals in the US (Vygotsky, 1978). Other metacognitive strategies such as, using mnemonic strategies as an instructional procedure to assist children with learning disabilities were highly recommended (Bolich & McLaughlin, 2001; Hempenstall, 2004; Wilkins & Nietfeld, 2004).

The theories on inclusion as one of Maslow's (1943) hierarchy of needs and Vygotsky's (1978) theories in educational settings set the ground work for the development of the inclusive practices outlined earlier. There was a large body of research that had

identified effective instructional options for inclusive classrooms. This body of research included specific pedagogies such as co-operative learning, peer tutoring, metacognitive learning, individualisation, withdrawal programs, differentiation and inclusion in itself. The use of these strategies appeared to have facilitated the academic and social success of students with disabilities and students without disabilities.

### The importance of teachers' attitudes.

Clearly teaching SNS in an inclusive environment places a higher workload on teachers (Bender, 2004). Within the educational environment that existed at the time of the present study the successful implementation of inclusion was dependent on many issues. These included the attitudes of principals and teachers towards SNS and their willingness to gain knowledge and skills that were required to include SNS in their regular classrooms (Avramidis & Norwich, 2002). Many people believed that teaching was a rewarding and satisfying vocation, one that contributed directly to the future. The New Zealand Teachers' Council (2005) quoted Lee Iacocca as saying:

In a completely rational society the best of us would aspire to be teachers and the rest of us would have to settle for something less, because passing civilisation along from one generation to the next ought to be the highest honour and highest responsibility anyone could have (p.1).

The suggestion was that teachers' attitudes were an influential factor in the success and lives of students. Martin (2003) contended that enhancing teacher effectiveness in a number of key areas would have an immediate effect in the students' ability to learn, to gain higher academic achievements and to become more socially functional in the wider community. Some of the most compelling work comes from Hattie (2004) who suggested

that what the student intrinsically brought to the learning environment in the classroom was about 50%. Hattie (2004) put the teacher's influence at approximately 30%. Other factors such as the school, the peers and the principal were less than 10%. Hattie (2004) contended that it was necessary to ensure that the teacher's influence was optimised, so that it had a powerful and positive effect on the learner. One factor that contributed to effective teaching was attitude. Attitude was expressed in the form of motivation and enthusiasm.

Brandsford et al. (1999) suggested that teachers' attitudes were important in determining a student's all round performance, that is, academically, behaviourally and in their social acceptance. Branden (1973) contended that self-evaluation had profound effects on one's thinking processes, emotions, desires, values and goals. This was one of the fundamental issues that underpinned inclusion. This was also the case for the self-efficacy and self-esteem of all students. Research suggested that teachers played a positive role in influencing student outcomes in all areas of learning and development (Hattie, 2004). Teachers needed to have a positive or enthusiastic attitude, a flexible approach in the classroom and a willingness to assume responsibility for the learning of the child.

Although there were studies which did not establish a relationship between a student's academic performance and the teachers' attitude (Hattie, 2003) it was generally believed that a dynamic interaction between teachers' knowledge and pedagogy could motivate students to learn. The present study supported the co-constructivist model of learning and teaching. That is, students did not construct their own knowledge and skills in isolation from the teaching and learning context.

Learning was a partnership between students and their teachers. Bransford et al. (1999) used the term "Learner-centred teaching" to refer to environments that paid careful

attention to the knowledge, skills, attitudes and beliefs that learners brought to the classroom. They drew on research to demonstrate the importance of teachers building a supportive classroom environment. Hattie (2003) concluded that it was the dimensions of teaching and the attitudes, along with pedagogy of the teachers that made the most difference to student outcomes. Teachers spent over 15,000 hours of schooling with the student and they were responsible for interpreting the policies (Hattie, 2003). Once the classroom door was closed teachers did the teaching and went about implementing their understanding of the policy (Hattie, 2003).

Teachers typically had a sense of social justice and caring attitudes. In Wilkins and Nietfeld's (2004) study, student teachers were asked to identify the main reasons for choosing teaching as a career. In the eight areas covered in the responses, five of the main reasons for choosing to teach were: having influential experiences, seeing children learn, teaching to learn, making a difference and overcoming deficits in children's lives. Regardless of whether these ideals could be proven or realised the suggestion was that teachers themselves believed that they carried a significant role in the learning outcomes of their students.

A study of 407 in-service teachers found that teachers with more positive attitudes towards mathematics were more likely to believe in the effectiveness of how they taught maths and were more comfortable in implementing the maths curriculum in their classroom (Comber, 2002). Comber and Kamler (2004) commented on a longitudinal research project involving two young male primary school teaching graduates. The study looked at the quality of teaching and the impact on children's learning. The study suggested that these two teachers made concerted efforts to re-connect their most at-risk students in literacy. In order to make a difference to the learning of those students these two teachers used what Comber and Kamler (2004) referred to as turn-around pedagogies. They emphasised that positive

teachers made a difference with respect to children and their learning. This concept of turnaround pedagogies was not possible without a positive turning-around of ones attitude.

Comber and Kamler (2004) contended that the most crucial factor was respect for and genuine interest in the student. This respect needed to be demonstrated overtly and might require repeated re-enforcement. Teachers demonstrated this through specific response and reciprocal conversations. This relational work, as Comber and Kamler (2004) called it, could not be fostered unless the teacher had a positive attitude and empathy for the student.

Otherwise it was seen as being simply tokenism and the trust between the student and teacher was seriously undermined. Fakolade and Adeniyi (2009) suggested that teachers should attend seminars and conferences to improve their knowledge and acceptance of inclusion for SNS with the vision of creating a better tomorrow for SNS.

Staub and Peck (1994) argued that, to advance an understanding of the issues associated with implementing inclusive practices, we must conceptualise research in terms of what influenced practice. Some of the key influences highlighted include: the school policy, the policy of the educational departments, the level of funding, the level of support and the education of teachers. Teachers' attitudes were also one factor that was important in determining which pedagogies a teacher chose to use. Attitudes related to inclusion were believed to be formed by teachers on the basis of their personal experiences. Personal experiences were used to develop expectations about how a child might function in the classroom, or about outcomes of inclusion. Attitudes influence teaching processes and learning outcomes. Examining attitudes towards inclusion was essential since previous studies had linked attitudes to educational practices (Bender et al., 1995).

# Variables that affect teacher attitudes towards inclusion.

In the literature there was a lack of conclusive results in defining the crucial variables affecting teachers' attitudes towards inclusion and implementation of inclusive pedagogy.

The literature has identified many factors that influence teachers' attitudes such as, gender, age, school type, teacher education, experience and support. These factors seem to have complex inter-dependent relationships.

Gender. The impact of gender on teacher attitudes towards inclusion has been largely inconclusive. Some studies such as Curtis (1991) suggested that female teachers were more inclined than male teachers to accept inclusion. Parasuram (2006) found that there was some tendency for female teachers to express more positive attitudes towards the concept of inclusion of students with behaviour problems than male teachers. Harvey (1992) suggested that male teachers' attitudes towards inclusion were more negative than those of female teachers while no gender difference was reported by Jones et al. (1997) or Sharma (2001). In general, studies have reported that gender is not a significant predictor of educators' attitudes toward inclusion (McKenzie, 2003; Sharma, Leong Choo & Desai, 2003). Dupoux, Wolman and Estrada (2005) also did not find any correlation between attitudes and gender.

Fromm (1949) addressed the issue of biological gender differences on the formation of male and female personality. Given that male and female stereotypes were generally accepted to be different, the suggestion was that gender differences could be and were noted between male and female teachers. This could be observed in respect to how a male or female teacher acted, their use of voice and their general demeanour towards students. It was the element of caring that often distinguished female teachers from male teachers. The mothering quality was more evident, particularly when dealing with young children or students with a

disability. The personality stereotypes attributed to this mothering included qualities such as patience, calmness, more understanding and a gentle manner (Fromm, 1949).

Age. The relationship between age and teacher attitudes towards SNS was inconclusive. According to Sharma (2001) the relationship of age and attitude revealed contradicting results. He suggested that teachers who were less than 35 years of age could hold significantly more positive attitudes in comparison to teachers who were over 40 years of age.

A recent study of 391 teachers by Parasuram (2006) indicated that teachers with the most positive attitudes towards inclusion belonged to both the youngest and the oldest teacher groups. Negative attitudes towards inclusion were evident in teachers between 40 to 50 years of age. Smith (2000) highlights similar trends. The suggestion was that younger teachers between the ages of 20 to 30 years old and older teachers more than 51 years of age, were more accepting of inclusion than the middle age group of 31 to 50 years of age. The correspondence between younger age and educators' positive attitude was explained in part by Forlin et al. (1996) who felt that the difference in attitude may have been due to the fact that the younger teachers were recent graduates and would have had more knowledge about inclusion and be more aware of social reforms in the field of education.

Conversely, other studies have revealed the opposite to be true. Avissar (2000) researched the views of regular teachers in Israel, and found that older teachers were more accepting of inclusive education than their younger counterparts. According to Avissar's (2000) study teachers with more years experience were more positive. These results imply that older teachers with more years experience hold more positive attitudes than those with few years of teaching experience.

A further study by Avramidis et al. (2000a) suggested that there was no significant relationship between age of teachers and their attitudes towards inclusion. Similarly Riley (1997) found that the age of teachers had no effect on teacher attitudes.

It was these inconsistencies in the findings that led to the premise that age may not be a strong predictor of teacher attitudes towards the inclusion of SNS. However, the level of special education held by teachers may contribute to the age and experience factors from a different perspective.

The concept of moral social justice as observed by Piaget (1965) was affected either positively or negatively by direct experiences. These experiences not only formed one's personality but one's attitude, which in turn affected one's actions (Taylor, Goldstein & Schlitz, 1997). It could also be expected that cognitive maturation would influence moral and social judgements and actions. Consequently, by the time a teacher has matured and completed their basic teacher education in special needs, attitudes towards the disabled are most likely to have been formed. Another effect that age might have on attitude was the fact that tertiary institutions did not cater for inclusion in their syllabus until the 1992 Disability Discrimination Act (DDA). Following this enactment all educational institutions were legally required to implement inclusion at all levels. Based on the findings of Beh-Pajooh (1992) and Shimman (1990) college teachers who had been educated to teach students with learning difficulties or disabilities expressed more favourable attitudes than those who had no such education. Younger teachers were therefore expected to be aware of the issues surrounding inclusion but not have the teaching practice and skills to implement an inclusive classroom program.

School type. Dupoux et al. (2005) found that teachers who had a special education credential correlated with positive attitudes. It was also suggested that changes in school types which is described in the current study as 'school type' could affect teachers' attitudes. Some schools might have a more favourable attitude towards inclusion in the same way that the more experienced teachers had shown more favourable attitudes. However, other schools indicated that the more experience with SNS, the more burnt-out and unfavourable teachers attitudes become.

Burn-out among special education teachers was higher than in those teachers in general education (Mungai & Thornbury, 2002). Breare (1985) suggested that the lack of education in special needs contributed greatly to teachers' attitudes. Therefore, teachers in an inclusive environment would benefit greatly from the whole school culture where one would expect there to exist a high level of education in special needs and experience in inclusion and the necessary support services to deliver inclusion. As Halloran (1970) indicated, three main sources affected attitudes these were: direct experience, explicit and implicit learning from others and personality development.

Teacher education in special needs. The degree to which schools provided effective inclusive education depended to a large extent on the attitudes and concerns teachers held. The teachers' willingness to assume responsibility for the achievement of SNS was crucial for successful inclusion (Avramidis & Norwich, 2002). Consequently, education and knowledge about inclusive education should have been provided to all teachers. Increasing teachers' knowledge of inclusive education and pedagogies suited to SNS might have been a means of minimising negative teacher attitudes and improving teaching outcomes (Bender, 2004).

Understanding how children learnt was fundamental to teaching and curriculum development. Knowledge of learning processes helped teachers anticipate the difficulties some students encountered in certain subjects. When it came to learning, Westwood (2001) suggested that it had become popular to say that "one size does not fit all" as there were many different types of learning necessary for the acquisition of knowledge. Different types of learning may involve different processes and different teaching methods. To be an effective teacher, one needed to be able to identify the different types of learning for each area and then select the most appropriate method for teaching each student. This was particularly the case for SNS (Westwood, 2004).

Watson and Bond (2007) insisted that there existed the need for radical changes in teachers' education in inclusive strategies. They found an alarming number of secondary teachers in Queensland not only held negative attitudes towards inclusion but approximately 50% of participants had fundamental misunderstandings about the characteristics of students with learning disabilities. This included a failure to recognise that these students were intellectually able. These findings led to Watson and Bond (2007) recommending that mandatory special education courses be taken by all pre-service and in-service teachers. Studies have indicated that teacher acceptance or resistance to the inclusive programs was related to the knowledge base and education of teachers. It was clear that the type and extent of education must be considered before conducting PD if it was to be effective in implementing a successful inclusive education program (Dupoux et al., 2005).

Leyser et al. (1994) conducted a cross-cultural study of teacher attitudes towards inclusion and found that teachers who had had extensive education in special needs and preparation in teaching SNS had the most positive attitudes towards inclusion. This correlation was very clear when comparing the positive attitudes of German teachers

compared to very negative attitudes of teachers from less developed countries where there was limited or non-existent education in special needs for teachers in inclusion. Centre and Ward's (1987) study on the attitudes of Australian regular classroom teachers indicated that their attitudes to inclusion reflected a lack of confidence in their own instructional skills. Clearly, these teachers were in need of education in special needs if they were to feel confident about their teaching skills. Other studies indicated that among a number of factors that may have led to a more positive attitude was that teachers felt more confident with increased expertise and improved teacher preparation (Smylie & Kahne, 1997; Bender & Ukije, 1989; Callery, 2006).

Kuester (2000) looked at teachers' attitudes ten years after inclusion was first initiated and found that those teachers who had more education in inclusion were inclined to be more positive towards inclusion. Clough and Lindsay (1991) researched the attitudes towards inclusion of 584 teachers. They also detected that the attitudes of these teachers had shifted in favour of inclusion over a ten year period. They suggested that this could have been due to the fact that teachers developed competence, and therefore felt more confident and accepting of SNS.

The previous findings are similar to Parasuram (2006) who revealed that the level of education greatly influenced the teachers' attitudes towards inclusion. Parasuram's (2006) study highlighted the fact that participants with a Master's or a Bachelor's degree had more positive attitudes than those with a high school certificate or a Diploma in Education. The existence of well-qualified teachers proved to be an important factor in increasing SNS achievements (Dupoux et al., 2005). Dupoux et al. (2005) highlighted the finding that teachers with graduate degrees had more positive attitudes towards inclusion than teachers with less than a Master's degree. Similarly Antonak and Livneh (1995) found that teachers

with advanced degrees in special education were more positive. This was also the case with Avramidis et al. (2000a) who conducted a study of 81 primary and secondary school teachers and established the finding that teachers with a university-based education in special needs appeared to hold more positive attitudes and were more confident in delivering the individual learning program commitments of their SNS than teachers with no education in special needs. It appeared that teachers with university based PD were more confident and more positive.

Cawley et al. (2002) contended that teachers who completed a 100 hour educational program in special needs were more skilled at implementing inclusion than other regular classroom teachers who had no education in special needs. Similarly Dickens-Smith (1995) found that after in-service education in special needs teachers were more favourable towards SNS than they had been before the education in special needs. Larrivee and Cook (1979) also found that education in special needs generated more positive attitudes towards inclusion. In their study they found that teachers who had received an extensive year-long education in special needs were more positive compared to teachers who had only received PD over a month. Avramidis et al. (2000a) suggested that the importance of PD in the formation of positive attitudes towards inclusion was crucial. Successful inclusive PD led to improved attitudes and pedagogy in inclusion.

Professional Development (PD) that enables teachers to make more substantive modifications to their pedagogy was vital for successful inclusion (Avramidis et al., 2000a). For example, the use of strategies such as using lower grade level texts were not as substantive as varying the instruction format and using alternative testing procedures such as those described by Bender (2002). The distinction between effective teaching practices and ineffective teaching practices was also shown in a study by Vaughn et al. (1998). This study found that particular teaching adaptations were highly desirable. These included the use of

reinforcement and inclusion of students with disabilities in whole class activities. It was this type of education that teachers needed. This would enable teachers to implement a successful inclusive program and help to improve teaching outcomes. Bender (2002) found that negative attitudes towards inclusive education had been directly linked to less frequent use of effective inclusive strategies. Teachers who were favourably disposed towards inclusive education reported more consistent utilisation of effective teaching strategies than did teachers with less positive attitudes (Bender et al., 1995).

Other studies in Australia (Sharma et al. 2003), the UK (Avramidis et al., 2000b) and the USA (Bender, 2001) substantiated the belief that special education qualifications acquired from pre-service or in-service courses contributed to stronger positive attitudes towards inclusion. Bender (2002) suggested that teachers who had participated in special education held high levels of confidence and competence, which in turn improved their attitudes towards inclusion. This was also the case with Yuen, Westwood and Wong (2005) who investigated 345 teachers in 39 secondary schools in Hong Kong and suggested that teachers with education in special needs generally held more positive attitudes towards inclusion.

Teachers' lack of education in the field of special needs led to many issues such as poor self-efficacy and lowered ability to implement an inclusive environment (Ali, Mustapha & Jelas, 2006; Rea et al., 2002; Smith, 2000; Wilkins & Nietfeld, 2004). Wilkins and Nietfeld (2004) researched the effect of a school-wide inclusion educational program on teachers' attitudes, confidence and ability. They compared survey responses from schools that had undergone education in special needs with teachers from schools that had not undergone education in special needs. They found that those teachers who had undergone education in special needs were more positive towards inclusion, more knowledgeable about inclusive teaching strategies and knew more about various disabilities. The teachers with

education in special needs had a higher self-efficacy in their ability to teach SNS and carry out inclusive teaching programs.

While some studies found that PD failed to improve teachers' attitudes (Boe, Bobbits & Cook, 1997) it was likely that the type of PD, duration and level of education in special needs offered, was a strong factor in influencing the teachers' attitudes. Brinker and Thorpe (1985) concur that teachers' negative attitudes were a function of a lack of teacher education. In line with the level of education in special needs was the experience of teachers with SNS.

Experience. In 1984 the number of students with disabilities enrolled in regular state schools was reported to be zero. By 2001 the number of students with disabilities in regular state schools was 10,953 (DEET, 2006). Clearly the increase in number of SNS registered in government schools during those years was in part due to changes in the definition of what constituted SNS but there were also changed expectations. Teachers had indeed increased their exposure to SNS over this period. How this increase affected teachers, their attitudes and their ability to handle inclusive classrooms was dependent on other variables such as their own education and the support mechanisms put in place to cope with this increase and change in classroom environments. Avramidis et al. (2000a) found that teachers who had implemented inclusive programs, and therefore had active experience of inclusion, possessed more positive attitudes. The contention was that as teachers' experience with inclusion increased, their confidence to teach these children also increased. Dupoux et al. (2005) also found a correlation between years of teaching experience and positive attitudes towards inclusion.

A commonly held belief was that personal experience of people with disabilities generated a less negative attitude (Centre & Ward, 1987; Parasuram, 2006). The aspect of

personal experience was often more complex than it first appeared. According to Leyser Kopperman and Keller (1994) overall teachers' contact and interactions with people with disabilities promoted positive attitudes towards inclusion. Studies examining teachers' experiences noted that teachers' acceptance of inclusion was related to previous experience with children with disabilities, particularly those with a close family contact (McLesky & Waldron, 1995).

Some studies have indicated that teachers with a family member or close contact with people with disabilities were more inclined to accept inclusion (Parasuram, 2006). This was found to be the case in a study by Harvey (1992) who found that Victorian teachers who had direct personal experience with SNS tended to express more favourable attitudes. However, these teachers were not necessarily more willing to include SNS into their classrooms. Forlin's (1998b) study indicated that teachers with close personal contact with SNS believed that it would be more stressful coping with a child who had special needs than dealing with a mainstream child. This study suggested that experience of a special needs child might not lead to a favourable attitude due to the stress factor.

Bender et al. (1995) researched teachers' attitudes towards increased mainstreaming, and found that more experienced teachers had more favourable attitudes towards inclusion. Bender et al. (1995) felt that experience played a major role in teachers having a positive attitude towards inclusion. Parasuram (2006) again suggested that the least experienced teachers (those who had taught for 5 years or less) and those with the most experience (who had taught for more than 25 years) were more positive compared with the teachers who had taught between 5 to 25 years. Parasuram (2006) contended that the younger generation were more positive because they had witnessed and experienced more major changes in their life experiences, such as globalisation, the rise of technology and exposure to the world via the

internet and media, than their older counterparts. However, the older teachers were more positive due to their years of experience. They were more confident and had a higher self-efficacy when it came to their teaching skills (Smylie & Kahne, 1997). The results of Leatherman and Niemeyer's (2005) study also suggested that teachers' attitudes towards inclusion appeared to be influenced by their previous experiences in inclusive classrooms.

Avramidis et al. (2000a) suggested that teachers surveyed in the UK who had been implementing inclusive programs for some years held more positive attitudes than those teachers who had little or no experience with SNS. Foreman (2005) suggested that fear of the unknown was often a factor when dealing with SNS. Therefore, until a teacher had experienced teaching SNS they were not confident teaching these students and so may be less positive towards inclusion. Studies have indicated that the more contact teachers have with SNS, the more positive their attitudes (Hammond & Ingalls, 2003; Parasuram, 2006). Conversely Forlin, Douglas and Hattie (1996) did not find this to be the case.

Some research has shown that experience with SNS had no effect on teachers' attitudes (Martinez, 2003). Sharma's (2001) study found that teachers who had been teaching for less than 10 years were more inclined to integrate SNS than teachers who had taught for more than 10 years. These results indicated the inconsistency on how much experience with SNS could influence teacher attitudes and their pedagogy.

Stoiber et al. (1998) contended that the experience factor greatly impacted on teacher attitudes towards inclusion. Their findings indicated that teachers with greater experience in the field of special education had more positive attitudes than those with less experience (1 to 4 years of experience).

LeRoy and Simpson (1996) over a three year study on the impact of inclusion on teachers found that as teachers' experience with SNS increased, so did their confidence and positiveness to teach these students. The results of a study by Van Reusen et al. (2001) which investigated 125 secondary teachers' attitudes towards inclusion also supported a positive corelation between a teacher's attitudes towards inclusion and experience in working with or teaching SNS. However, they did not find a link between years of teaching experience and teacher attitudes. Consequently, working with SNS was seen to be more important than the number of years of teaching experience. In this study the teachers who completed the survey and gained high negative scores had the least amount of experience in teaching SNS.

Support. In the mid 1990s inclusion was a very contentious issue. One of the main areas under rigorous review was the question of adequate support, and in particular the use of teacher aides for SNS. Hurley (1994) contended that the second highest factor that correlated with teacher attitude towards inclusion was support from teacher aides. Hurley's (1994) study reported a "Pearson r" correlation (Thomas, 2003) of 0.21 between the two variables of teacher aide support and positive teacher attitudes. This supported the claim that teacher aides were vital to the development of positive teacher attitudes. However, Hurley (1996) went on to point out that teacher aides required direction and support from the teachers who were qualified in special education. Teacher aides should not be expected to design and implement programs. Their primary concern should be to assist the SNS as instructed by the classroom teacher. In Hurley's (1996) study many of the teachers reported that teacher aides lacked sufficient experience and had little education in special needs to adequately support the SNS.

Along with the lack of trained teacher aides, Hurley (1996) found that support via school support centres or other ancillary staff was insufficient or nonexistent. This appeared to account for the teachers' general dissatisfaction with support services provided for

inclusion in Victorian schools. This was also the case in the study completed in the Australian Northern Territory by Keighran (2001), which suggested that teachers did not feel adequately supported by the support services available.

When ascertaining the need for additional personnel support in regular classrooms, teachers indicated that the diverse range of students required specialised support personnel. This was particularly the case for students who displayed a range of intellectual disabilities. The more severe the disability, the more assistance required. Praisner (2003) suggested that inclusive programs may be hindered by inadequate levels of collaborative support from colleagues and administration. He found that a lack of support from others within their immediate school culture, contributed to negative attitudes held by teachers. Consequently, the implementation of a successful inclusive program strongly depended on the provision of support both in the classroom and from the school administration and other staff.

Westwood (1997) contended that if teachers were not adequately supported within the classroom, there would be a danger of stress and burn-out. "This potential seems to be the greatest where children with high support needs, combined with aggressive and challenging behaviour, are placed in regular classrooms with too little support" (p.20). Westwood (1997) also believed that teachers needed to have sufficient knowledge, education in special needs and understanding of specific disabilities. This was supported by Forlin et al. (1996) in the article "Inclusion: Is it stressful for teachers?" The article discussed the level of stress placed on teachers coping with the demands of SNS.

In New South Wales, a bill was passed in November 2008 acknowledging that these students with teacher-diagnosed learning disabilities do require extra support in the classroom and therefore funding. The pre-requisite the state of NSW defined as acceptable for funding

was either the teacher's diagnosis or an assessment from a recognised educational specialist. In this case the student's learning disability would be recognised and consequently funded. The introduction of this bill will play an important role in the assistance made available to the teacher-diagnosed SNS. Along with the three variables of support, experience and education, a fourth variable of aptitude may have influenced teachers' attitudes towards SNS.

Empathy. As Antonak and Larrivee (1995) succinctly pointed out, the physical access and educational opportunities may be legislated but acceptance cannot be legislated. Baker and Zigmond (1990a) categorically stated that teachers who were locked into a rigid mind-set of conformity were more likely be unsuccessful with any student who could not conform. This study identified how inclusive education should be implemented in order to make an obvious difference to SNS in a regular classroom. The results of this work suggested that fundamental changes to mainstream instruction must occur if inclusive education is to be successful. It stated that teachers needed to include more interactive tasks that involved students in the learning process.

Short and Martin (2005) suggested that attitudes could be made positive with teachers who were caring and accepting of SNS. The secondary students in a rural environment commented that they felt more positive working on set tasks when a teacher took the time to explain and assist with the work. Furthermore, they reported that they developed a negative attitude to their schooling when the teacher could not help or give them extra time. This lack of willingness or ability to adapt and teach SNS was also found to be a contributing factor to the overall success of inclusion

In Comber's (2002) longitudinal study on Teachers Making a Difference to Children's Learning, it was suggested that the most crucial factor was respect for and genuine

behind the real acceptance of inclusion. A small study by Angelides (2005) was based on an astute observer of two students. The teacher and consequently other students were unconsciously alienating the students. Whilst these students had difficulties with their learning they were also the only students in the class to be referred to by their surnames by the teacher and other students. Once this was pointed out and appropriate names were put in place (not surnames but local family nick names) it was noted that the students were more readily accepted by their peers and their behaviour and learning began to improve.

Watson and Bond (2007) emphasised the importance of establishing trust, and developing respect and empathy for SNS, as well as providing an appropriate learning environment. According to Watson and Bond (2007) these qualities were crucial if the student was to achieve their potential and become engaged in school.

### **CHALLENGES FOR TEACHERS**

Ingram (1997) contended that the demands of extraordinary efforts made by teachers, such as making changes in instructional methods, classroom routines, finding additional planning time, accommodating additional support staff or teachers for team teaching in their classes, were just some of the additional challenges that regular classroom teachers were required to address on a daily basis. These demands occurred in an environment where teachers were made more personally accountable, not only to the school but also to the whole school community.

Factors such as collaboration with ancillary staff, parents and administrators go handin-hand with developing the necessary skills required for discussion, negotiation and areas such as conflict resolution. There was a need for commitment by teachers to exert considerable effort and maintain strong values and acceptance of the organisation's goals and values. These were essential skills and qualities required of regular classroom teachers working with SNS (Lipsky & Gartner, 1997).

### **SUMMARY**

After the reviews of the literature, in light of best learning strategies for SNS, it became evident that inclusive education had been thoroughly researched and demonstrated to be the best learning environment for students with a disability and students without a disability. Whether it was passive learning or active learning, the research indicated that by just being included a student with a disability could improve in their academic performance, social acceptance and general behaviour if they were accepted and respected. More importantly these studies recommended that inclusion combined with hands-on cooperative learning, withdrawal programs, individualised instruction and a differentiated curriculum would maximise the learning of all students.

However, the research indicated that teachers needed to be educated in a range of inclusive strategies. Education enabled teachers to be able to recognise, understand and learn how to adapt their classrooms in order to cater for the diverse range of learning styles and abilities inherent in any classroom.

Whilst there have been studies done overseas on teachers' acceptance and concerns about SNS in regular classrooms, not many studies have been performed in Victoria investigating teachers attitudes and their current inclusive practices. The research mainly in the USA and the UK indicated that the concerns of the teachers would ultimately determine the success or failure of any government policy. Therefore, it was imperative that the attitudes and practices of regular classroom teachers who are ultimately responsible for

implementing inclusion in their classroom were more fully explored. What is new about the present study is the suggestion of a link between attitude and the selection of pedagogy by the individual teachers.

This review has concentrated solely on studies that researched educational environments that implemented inclusion. Inclusive education must be more fully investigated because inclusion is vital to the learning of students with disabilities, as opposed to semi-inclusive education or a non-inclusive learning environment (Parvi & Luftig, 2000). It has been found that inclusive education significantly affected the self-esteem, social acceptance, academic performance, behaviour and attendance of SNS (Baker & Zigmond, 1990b; Luster & Durrett, 2003). Being accepted by one's peers was a mighty encouragement for learning, particularly as this directly affected one's self-efficacy. It was largely agreed that self-concept was often associated with problems such as poor school performance, higher risk of school dropout and depression (Elbaum & Vaughn, 2003).

## **CHAPTER 3**

## **METHODOLOGY AND METHOD**

Inclusion is a method of identifying, understanding and breaking down the barriers to participation.

(Early Childhood Forum with

National Children's Bureau of London, 2007)

This chapter details the aims of the study, as well as the methodology utilised to achieve these aims. The research method is described along with an outline of the present study, the description of the data collected and issues related to reliability and validity. The ethical stance and limitations of the present study are also considered.

The present study was a combination of qualitative and quantitative research which gave rise to more complicated and competing theories. Although the epistemology for the present study was fundamentally from a constructionist perspective, it did at times include a cross-over between some aspects from positivism and postmodernism that were intricately woven throughout the research.

The present study consisted of two phases: Phase 1 comprised three questionnaires and Phase 2 covered ten interviews. Phase 1 was completed first and highlighted the need to interview a sample of participants. Also, the comments written in the open-ended section of the Personal Background Questionnaire (PBQ) in Phase 1, warranted more in-depth questioning of participants. Consequently Phase 2, which consisted of ten structured and semi-structured interviews, was developed.

### **METHODOLOGY**

# Rationale of Study.

The research questions arose from the varied reports, highlighted in Chapters 1 and 2, regarding the successful implementation of inclusive education by teachers in Australian schools. These reports did not address teachers' attitudes nor the type of pedagogy teachers used. They also did not explore how teachers perceived they were implementing inclusive education.

# Theoretical Approach.

Using a blend of qualitative and quantitative methods, the study looked at the attitudes and pedagogy of teachers. However, aspects of the study could be described as having taken an ethnographic approach as the study provided transcripts from recordings of interviews that took place with ten participants. Ethnographic research, according to Burns (1997), allows the researcher to study a group of people for the purpose of describing their socio-cultural activities and behaviour, giving the researcher the ability to grasp subjective aspects of what and how teachers implement inclusive education into the mainstream classroom. This ethnographic approach was implemented in the form of questionnaires and interviews administered to the participants. These instruments were useful in suggesting possible relationships, causes, effects and processes in school settings as a product of how teachers interpreted their experiences in their classroom and schools (Burns, 1997).

#### **METHODOLOGICAL STANCE**

Underpinning the epistemology of this research was the use of both qualitative and quantitative methods. Qualitative and quantitative approaches were alike in the fundamental

values on which they were founded (Thomas, 2003). Use of questionnaires allowed freedom from judgement and the interviews gave a deeper understanding of teachers' attitudes and pedagogy towards inclusion. Through this approach it was possible to get a more holistic view of what teachers thought and did in regards to inclusion.

Education provides advancement and inclusive education provides this advancement through equity and justice for all students regardless of their ability or, disability in this case, disability. Inclusive education is situated within the realms of social justice and better education for all. Inclusion is grounded in human rights. In this research there was no objective truth waiting to be discovered, rather the meaning was constructed. Constructivism allows the truth and the meaning to exist by engaging with our world, in this case the regular classroom via the classroom teacher (Wiersma, 2000). As there is no meaning without thoughts or ideas, this research asked the teacher to divulge his or her attitudes and choice of inclusive pedagogy.

There were two underlying theories that were fundamental in finding the meaning and truth behind the implementation of inclusion. The first theory was that teachers' attitudes did affect how they implemented inclusion. The second theory was that the level of inclusion was measurable by the type of pedagogy. These theories guided the design and selection of the questionnaires and interview items.

The present study came from a constructivist stance as it aimed to demonstrate that teachers' attitudes had an effect on how inclusion was implemented. There were a number of ways to measure attitudes. Specialist researching in the field of inclusive education consider the use of questionnaire surveys and interviews as valuable in terms of gauging teachers' attitudes towards inclusion methods (Antonak & Livneh, 1988).

This empirical study used the research tools of questionnaire surveys and interviews, to derive the attitudes of primary teachers towards inclusion. The analytical data collected from these questionnaires and interviews was used to analyse the teachers' attitudes towards SNS included in mainstream classrooms.

### Links with phenomenology, ethnography and interpretive research.

Phenomenology. Phenomenology is the description of understanding in words instead of numbers or measures. It lies originally in descriptive analysis, and is essentially an inductive process. The information gathered is not objective but attitudinal or subjective. Phenomenology stresses careful description of phenomena from the perspective of those experiencing the phenomena (Wiersma, 2000). It was therefore deemed that the best method to be utilised was the combination of questionnaires and interviews. Sproull (1988; as cited by Callery, 2006, p.131) suggested "Questionnaires and interviews schedules should be used ... when people's attitudes, values, beliefs or self-reports are desired". The combination of the two instruments allowed the researcher to test whether the reported attitudes (questionnaire) bear any relationship to observed behaviour (interview), which allowed a form of triangulation into the research design.

Ethnography. A second theoretical position linked to this research was ethnography. Interviews were the basis for the ethnographic stance of this study as they were a primary source of collection of the teachers' experience of inclusion in their classroom. In educational research, an ethnographic approach is the process of placing educational phenomena within specific contexts (Wiersma, 2000). In summary, ethnography has links with the present study as it dealt with educational phenomena within a specific context. It involved understanding meanings held by the participants about their inclusive practices.

Interpretative research. This study embodied the interpretative theoretical basis, as it sat in the broader interpretivist paradigm more easily than the positivist paradigm. It would seem correct to say that researchers must choose either normative or interpretive paradigms. However, in reality many researchers in education do not select one research paradigm to investigate all their questions (Clough & Nutbrown, 2002). Such was the case with the present study. By working within both paradigms the present study often moved between these broad approaches selecting the most appropriate for each part of the study. Initially questionnaires were used followed by the structured and semi-structured interviews. However, analysis in qualitative data is a process of approximations toward an accurate interpretation and description of the phenomenon. Much of the present study was descriptive and had little technical language, as the emphasis was on describing the phenomena in its context and, on that basis, interpreting the data (Wiersma, 2000).

### **PHASE 1 - SURVEY**

## **Selection of Samples.**

Applications were made to both the Australian Catholic University, Melbourne campus (see Appendix A for permission from ACU Ethics) and to DET (see Appendix B for permission from DET) seeking permission to conduct the present study. Following some adjustments made by both of these ethics committees each of the Metropolitan Regions were officially informed of the intention to distribute the questionnaire surveys in their regions. Contact was made with each Metropolitan Regional office informing them of the intention to conduct research in their respective areas. From these regional lists, 35 state primary schools were then approached to participate in the survey.

The selection of the samples for this survey was made on the basis of location and willingness to participate. Sampling involves the choosing of members in a population (Thomas, 2003). In the present study, the Melbourne metropolitan State Primary Schools in Victoria were the population, and the schools chosen were a sample from a selection of available metropolitan State Primary Schools. Although all the population members of a selected cluster (metropolitan State Primary Schools) were included in the sample, the exact size was not known until after the sample was selected.

The selected cluster chosen comprised two types of schools:

- Regular state primary schools, referred to as regular schools. There were
   158 participants from this cluster.
- Special regular schools, which were chosen using a purposeful selection (Wiersma, 2000) as these schools were schools with an unusually high enrolment of SNS. There were 67 participants from the special regular schools.

Regular schools were selected from a list of professional contacts known to the researcher who worked in schools in the Victorian metropolitan area. Special regular schools were purposely selected as they were known for their high enrolment of SNS, as a local school. Both regular schools and special regular schools were registered in the Victorian metropolitan area and were approached in the following manner.

An appointment was made with each principal or assistant principal to discuss the opportunity to conduct research with the staff. At this meeting each principal was given a letter of request (see Appendix C for Letter to Principals) and a statement in plain English (see Appendix E for Statement in Plain English to Principals and Participants). The principal

was then asked to sign a consent form (see Appendix F for Consent form). At this meeting it was arranged to give each staff member the Questionnaire on Inclusion (see Appendices I, J, and K for the three part Questionnaire on Inclusion) along with a letter of request (see Appendix D for Letter to Participants) and a statement in plain English on the present study (see Appendix E). Each participant was also given an envelope in which to place their responses. Participation in the study was voluntary. After completing the survey the forms were placed in an envelope. The sealed envelope was then placed in a box provided. The box was sealed so that once the participant had put the questionnaire in the box it could not be opened by anyone except the researcher. Each school had three weeks to complete the questionnaires before collection of the box.

Of the 35 schools approached 28 schools elected to participate. Reasons principals gave for not presenting the questionnaire to their staff were due to two common factors. One was that the school had been approached almost every week to participate in research of some kind. The second was that principals and teachers felt they didn't have enough time to complete the survey. The distribution of the survey was during Term Two which could have created some difficulties because of the heavier workload placed on teachers for report writing. Compounding this was the fact that in 2007 the report formats were new and teachers were learning to implement these new formats and procedures.

A total of 289 teachers who were given the Questionnaire on Inclusion. The participants specifically included teachers who were currently teaching in regular classrooms in local regular state primary schools. As mentioned earlier, subject specialist teachers were included in the survey as long as they were teaching students as a regular class group.

Specialists included were: art, music, sport, technology, library, language or other subject

specialist teachers. Part time teacher aides, administration staff and ancillary support teachers were not included.

Of the 289 participants contacted 230 responded. This consisted of 28 males and 202 females. The responses for all 230 participants from the 21 schools were input into SPSS (version 6.1.4). The responses to the items 3, 4, 6, 13 and 15 from the attitude survey, the Scale of Teacher Attitudes Towards Inclusive Classrooms (STATIC) (Cochran, 1997), were reversed so that a high Likert score reflected a positive attitude towards inclusion. The data base was then reviewed for errors or inconsistencies. There were five participants who failed to provide answers to more than nine questions and these were also excluded from the data base. If respondents had failed to answer up to eight questions the responses were treated as a middle score of 3 on the Likert scale. Altogether there was a data base of 225 participants of which 3 elected not to provide their age. In total there were 158 participants in regular schools and 67 participants in special regular schools.

Schools that participated were offered two rewards as a thank-you for their cooperation. The first of these was a complimentary membership to SPELD (Specific Learning Disabilities) of Victoria. The second offer was a PD presentation to their staff on Learning Disabilities from the President of SPELD. Permission was also granted by both Dr Bender and Dr Cochran to use a modified version of the BCSQ and STATIC instruments in the present study (see Appendices G and H for permission from Dr Bender and Dr Cochran).

## Instrumentation.

The use of a Likert scale to measure the attitudes of teachers towards students with disabilities was desirable as it allowed the participants to give their views in complete confidence, therefore removing the fear of being judged by their peers and employer. Likert

scales also allow for the range of feelings that need to be expressed when measuring attitudes. This is especially true when ascertaining attitudes towards students with disabilities, as this can be an emotive area for some people (Antonak & Livneh, 1988).

Table 3.1 outlines the three parts to the questionnaire survey. It shows the breakdown of each of these questionnaires.

Table 3.1 – Breakdown of Questionnaire Survey

PART 1 Personal Background Questionnaire (PBQ)	PART 2 Bender Classroom Structure Questionnaire (BCSQ)	PART 3 Scale of Teachers' Attitudes Towards Inclusive Classrooms (STATIC)
Variables	3 Domains	4 Factors
Age	Individual	Professional
Gender	Metacognitive	Philosophical
Education	Total BCSQ score	Logistical
Experience		Advantages and disadvantages
Open-ended comments		

In Phase 1 of this research, data was collected via a questionnaire survey. Three questionnaires were the Personal Background Questionnaire (PBQ), the pedagogy Bender Classroom Structure Questionnaire (BCSQ) and the Cochran attitude Scale of Teacher Attitudes Towards Inclusive Classrooms (STATIC) (Cochran, 1997).

Personal Background Questionnaire. The PBQ covered 10 areas of the professional and personal background of the teacher. It included gender, age, education (including a range of types of education), experience (both personal and professional) and two open-ended comment questions. The PBQ included eight variables that were tested for relationships

between the teachers' attitudes and pedagogy. There were also two open-ended questions that asked the participants to comment on how they felt towards inclusion and if they modified their teaching to allow more inclusive pedagogy to be practised.

Gender was included because the literature indicated that there appeared to be gender based differences in attitudes towards inclusion. Curtis (1991) found that females were more inclined to accept inclusion.

Based on the literature review, experience and age were also expected to be factors that influenced teachers' attitudes. Forlin (1998a) contended that graduate teachers were more positive towards inclusion. This may have been due to their youth or their education. The variable of age was divided into intervals of five years as some teachers were concerned about being identified.

The number of years teaching SNS was also indentified as a relevant variable. Since 1992, there has been an increase in the number of SNS included in mainstream classrooms. Since the introduction of the Discrimination Disability Act (DDA) in 1992, that local regular schools have implemented inclusive education, and by 2007 Victorian state schools had over 17,000 students with disabilities enrolled in regular schools (DEECD, 2008a).

Participants were asked if they had undertaken education focused on teaching SNS and if so what type of education. The nine choices identified in the questionnaire ranged from: no education in special needs, Professional Development (PD), education in special needs of 2 hrs, ½ day, 1 day, 1 week, or tertiary level education in special needs of a single unit of study, other tertiary study, a Degree in special education or a Masters of special education (see Appendix I for Personal Background Questionnaire, Item 3). The nine choices were given a notional linear ranking between 0, for no SNS education, up to 8, for a Masters

degree in Special Education. This Special Needs Teacher Education Level was abbreviated to the acronym SNTEL. These responses were also grouped into three broader categories. No education in special needs, PD education, covering the nominal SNTEL scores 1 to 5 and tertiary education in special needs, which covered the nominal SNTEL scores of 6 to 8. These rankings and categories facilitated the analysis of teacher education and its relationship with the results of the BCSQ and STATIC.

Bender Classroom Structure Questionnaire. The BCSQ questionnaire consisted of an amended version of the BCSQ (Bender,1992) which was used to assess the teachers' utilisation of instructional strategies that facilitate inclusion (see Appendix J for Bender Classroom Structure Questionnaire BCSQ). The BCSQ probed the type of pedagogy being used by teachers in mainstream classrooms. The BCSQ had 40 items and used a Likert Scale as a self-report questionnaire that included research-proven strategies for facilitating instruction in mainstream settings (Bender, 1992, 2002). Participants were asked to rate the frequency of use on a Likert Scale from 5 almost every day to 1 once a month or less. There were three scores generated from the BCSQ, and each was computed by adding the responses of specific questions. Score 1 was the Total BCSQ which, as the name suggests, was the total of all questions. Score 2 was the Individualised Instruction subscale and Score 3 was the Metacognitive Instruction subscale. Permission was obtained from Dr Bender to use the BCSQ (see Appendix G for permission from Dr Bender). Amendments made to the BCSQ were for consistency and use of local terminology. The amendments were not intended to change the meaning of the question. The amendments consisted of:

Item 2 – the word "worksheets" was included in the question.

Items 12 and 19 – the term "slow learners" was replaced with "special needs."

Item 23 – the term "pupils with disabilities" was replaced with "special needs."

Item 30 - the term "low ability" was replaced with "special needs."

Item 34 – the term "blackboard" was replaced with "whiteboard."

Item 38 - the word "advanced" was replaced with "graphic, such as mind maps."

Scale of Teacher Attitudes Towards Inclusive Classrooms. The STATIC questionnaire was an amended version of the Scale of Teacher Attitudes Towards Inclusive Classrooms (STATIC) designed by Dr Cochran (1997). The STATIC consisted of 20 questions related to teachers' attitudes towards inclusion (see Appendix H for Permission from Dr Cochran). Items 3, 4, 6, 13 and 15 were reverse coded items. Once these items were reverse coded, the sum score of the twenty items for each subject was considered an index of the teacher's attitude toward inclusion. Higher scores were indicative of more positive attitudes. Lower scores were indicative of more negative attitudes (Cochran, 1998). Cochran (1998) found that the near normal distribution of items and teacher abilities indicated the items defined the theoretical construct of "attitude toward inclusion" relatively well. There were four factors used to structure the analysis of individual questions. Indices for each of the four factors identified for the STATIC may be calculated in the same manner previously mentioned. The factors were called Advantages and Disadvantages of Inclusive Education, Professional Issues Regarding Inclusive Education, Philosophical Issues Regarding Inclusion and Logistical Concerns of Inclusive Education. Cronbach alpha reliability coefficients (Wiersma, 2000) were calculated for each factor. "The Cronbach alpha is a formula developed by Cronbach in 1951, based on two or more parts of a test, and requires only one administration of the test." (Wiersma, 2000, p. 298). Reliability for Factor one was at 0.87,

Factor two at 0.83, Factor three at 0.57 and Factor four at 0.62 (Cochran, 1998). Items associated with each subscale were as follows:

Factor 1: Advantages and Disadvantages - Items: 6, 10, 12, 13, 14, 15, 20

Factor 2: Professional Issues - Items: 1, 2, 3, 4, 8

Factor 3: Philosophical Issues – Items 5, 11, 9, 16

Factor 4: Logistical Concerns – Items: 7, 17, 18, 19

Permission was obtained from Dr Cochran to amend and use the STATIC for the purpose of the present study. Amendments made to the STATIC were in line with requests from DET (see Appendix B for Ethics approval from DET, 2007) to choose less negative wording. The amendments consisted of:

Item 3 – The words "easily frustrated" were replaced with "challenged."

Item 4 – The word "anxious" was replaced with "uncomfortable."

Item 8 – The word "no" was added.

Item 16 – The word "inservice" was deleted.

Some excellent questionnaires were not chosen because of the terminology (Avramidis & Norwich, 2002). In some cases, questionnaires reviewed were not applicable as the wording specifically aimed at a wider audience than teachers (Bailey, 2004). Other questionnaires, although applicable, were considered to be out of date with current terms and methods (Alghazo, 2003). The simplicity and succinct nature of the survey in the present study compared to other questionnaires in the same field, meant that teachers required less

time to complete the questionnaire. This was an important consideration when choosing a questionnaire, as principals noted that teachers were heavily involved with delivering the current curriculum and found it difficult to allocate time on other tasks, such as filling out questionnaires. Finally, in the present study it was considered important that the wording of the questionnaire was neither too negative nor too positive, as the wording might unintentionally encourage biased answers. However, some questionnaires purposely included in their design both positive and negative questions (Hastings & Oakford, 2003; Sharma & Desai, 2002).

#### Variables.

The type of variables applicable to this study were uncontrolled, compounded variables, that is, "correlated biases" which had hidden influences of unknown size on the results (Wiersma, 2000). As shown in Table 3.1 the variables considered in PBQ were age, gender, education (type and length) and experience (professional and personal).

In the BCSQ, the above variables were compared with the pedagogy that was recognised as best practice for inclusion. As indicated in Table 3.1 the three teaching domains in the BCSQ were individualised instruction, metacognitive understanding and a combination of teaching strategies that represented a wide range of inclusive pedagogies. The teachers ranked their use of these teaching strategies and a score was calculated. A high score indicated regular use of a wide range of inclusive teaching strategies and a low score indicated poor use of inclusive teaching strategies.

In the STATIC the variables were also compared with teachers' attitudes towards inclusion. As shown in Table 3.1, the four factors in the STATIC were professional issues, philosophical issues, logistical concerns and advantages and disadvantages.

A cross-sectional analysis was applied (Wiersma, 2000), using the Statistical Package for the Social Sciences (SPSS) version 6.1.4 (1996) between each of the three questionnaires and the individually inherent sets of variables of each questionnaire. It was necessary to use an analysis-of-variance technique as defined by Oppenhiem (1992) to disentangle the complex sets of relationships that these variables yielded. Together therefore, these results formed a network of interrelated determinants, which led to a multivariate analysis. To use a multivariate analysis design, the scale scores of the two main questionnaire surveys were entered on the SPSS program (version 6.1.4, 1996). These multivariate techniques rested on statistical assumptions from the data gathered from the quantitative scaled scores of the two questionnaires concerning teachers' attitudes and pedagogy (Poole, C. personal communication, 2007).

The independent variables of age, gender, experience and education form the basis of finding the answer to what teachers' attitudes were towards inclusion and what type of inclusive pedagogy they were using and how often (Oppenhiem, 1992). To determine the level of education in special needs obtained by each participant, a ranking was allocated to each level of education. This ranking score was referred to as the Special Needs Teacher Education Level (SNTEL). As mentioned earlier, the three levels of education were: No education in special needs, PD and tertiary education. Within the second and third levels of PD and tertiary education, there were four sub-levels which indicated the amount of time each participant spent attending the course or unit of study (see Appendix I Personal Background Questionnaire PBQ). The results of the three questionnaires were analysed using Excel and the Statistical Package for the Social Sciences (SPSS) version 6.1.4 (1996).

The PBQ consisted of eight variables. The variables were averaged and used as independent variables to characterise respondents with specific attitudes and/or pedagogies. The responses of each of the variables were analysed and compared with each item or group from both the BCSQ and the STATIC. The results were tested for inter-dependencies between the variables and the BCSQ and STATIC scores. The three domains of the BCSQ were collated and compared with the variables on the PBQ. Similarly the four factors on the STATIC were compared with the variables on the PBQ. The scores from the BCSQ and STATIC were then compared by investigating the relationships between the high and low scorers on both the BCSQ and STATIC and with each of the variables on the PBQ.

## Validity and Reliability.

Validity estimates the degree of consistency of information across empirical studies (Thomas, 2003). This research was constructed to be both internally and externally valid. Internal validity is the extent to which results accurately reflect the intended measure and can be evaluated accurately. External validity is the extent to which results can be generalised to populations (Wiersma, 2000).

In the present study the results obtained from the participants were internal as they should apply directly to their own experiences within their schools and classroom. The results were expected to be also externally valid, within the limitations identified, as they were collected in a systematic manner and should also be applicable to a wider group of Victoria's metropolitan area of state primary schools.

According to Bender (1992) in the BCSQ the Item difficulties for the three groups, BCSQ Total, individualised instruction and metacognitive instruction, ranged from -1.56 to 1.15. The near normal distribution of items and personal abilities indicated the items defined

the theoretical construct of "attitude toward inclusion" (Bender, 1992; Bender et al., 1995). Bender has demonstrated the validity of the instrument for measuring classroom pedagogy.

Similarly Cochran (1997) has demonstrated previously that the STATIC is a valid instrument for measuring teachers' attitude towards inclusion. Items 3, 4, 6, 13 and 15 needed to be reverse coded when entered for analysis.

## Collecting Data.

The survey was delivered by hand to each school and was self-administered individually by each participant. Some schools asked the staff to complete the questionnaire at the end of a staff meeting. However, in most schools the staff completed the questionnaires in their own time and returned them to the box in the sealed envelope provided.

Unfortunately this second method of leaving the staff to complete the survey in their own time reduced the number of participants. A box for the completed surveys was provided for the participants to put their sealed envelopes in. This box was sealed in such a way that once the envelopes were placed in the box they could not be retrieved until collected by the researcher.

The surveys had been purposely designed with an open-ended comment section for teachers to express their own thoughts. This gave teachers the ability to put in their own words their feelings and describe their own pedagogy towards inclusion. Due to the nature of attitudes and disabilities being a sensitive area for some people it may have been seen as more professional to keep a distance from the participants so that they could reply without fear of being judged. However, interviews were also conducted in Phase 2 to enable a closer, more accurate view of what teachers actually felt and how they were teaching in their classrooms.

#### Limitations and Delimitations.

The selection of schools was the first and major delimitation to be imposed on the study, as the research was looking only at primary level. It did not include: pre-primary, secondary, tertiary or special schools. The primary level was chosen as it was a familiar area and more readily accessible for gaining information because of the researcher's previous experience, interest and knowledge. To cover all levels of teaching would have been very difficult to manage both in terms of the size of the data and the gathering of the data (Wiersma, 2000).

Independent, Catholic and other denominational schools were also excluded. This was because of previous contacts and experiences in the researcher's state school system. The state schools also offered a larger group of cohorts from which to study. In Victoria there were 1,222 state primary schools, 380 catholic primary schools and 54 independent primary schools. There were some primary-secondary schools, but only 194 in all (DEECD, 2008a).

The selection of schools was both convenient and purposeful. Regular schools, were local, regular, mainstream schools, having an average intake of students with disabilities. Special regular schools were purposefully selected due to their special entry of students with disabilities. However, as mentioned earlier, both were local, regular, mainstream schools. The questionnaires were given only to schools within the metropolitan area of Melbourne because of the difficulty in gathering raw data from afar. It can be costly, time consuming and not as relevant for the needs of looking at state primary teachers' responses (Wiersma, 2000). It is also too much data to be gathered from the three questionnaires and matched up to be manageable (Thomas, 2003). More importantly, according to Loreman et al. (2005a) there is no one common definition of disability across Australia. In other words, each State's

definition and interpretation of disability may be vastly different. This was a major reason for keeping the study within Victoria.

Restricting the selection of teachers to regular classroom teachers also contained the quantity of data being gathered and analysed. It allowed responses only from teachers who were at the forefront of the implementation of educational policies such as inclusion (Westwood & Graham, 2000, 2002). Although there were personnel, such as part-time teacher aides or specialists, who worked closely with the SNS and had excellent knowledge of inclusive education these individuals did not have the required experience of handling a whole class. Therefore, it would not have been appropriate to include the teacher aides in the present study. The fact that some teachers chose not to complete a questionnaire may also have meant that only those teachers who filled out the surveys might have been biased either positively or negatively. The participants who completed the questionnaires may have had definite views on the subject, whether they were positive or negative. The "no reply" factor was also a component of biased answers (Thomas, 2003). Bias could also be affected by the principal in the school or the educational system not wanting to highlight inclusion in a negative light. Consequently, the surveys were prevented from being offered to as wide a base as possible.

A third and most important limitation to the present study was the selection of an acceptable and valid questionnaire survey on attitudes. This task proved to be exceptionally complicated as a consequence of the need to gain approvals from a number of bodies and individuals. Approval was sort from: Australian Catholic Human Ethics Committee, the Department of Education Research Department, individual school principals and individual teachers.

At the centre of this was the controversy that inclusion was mandatory in all education facilities in Australia, and there existed reports that inclusion had not been fully embraced in Australian schools. The Senate (OCH, 2002) reported, as did other States (Meyer, 2001; Rea et al., 2002) and world organisations such as UNESCO (Wills & Jackson, 2001) that inclusion had not been successfully implemented in Australia. Consequently, DEECD and some principals were sensitive to any negative bias and preferred a more positive bias if possible. Principals may have been overly anxious in avoiding a negative atmosphere due to the level of investigation that the questionnaires presented to staff. The questionnaires required staff to contemplate on a deeper level, issues such as, extra workload, support, funding and if education in special needs was necessary. Despite the questionnaire having been approved by DET (see Appendix B) some principals still wanted changes to specific words and others did not want the questionnaire at all because they thought it might create a level of reflection from their staff that might lead to controversial debate within their school.

This imposed another form of limitation on the schools available and the willingness of principals to allow their staff to complete the questionnaire. Similarly, with the teachers, some preferred to ignore the questionnaire as they weren't receptive to the concept of inclusion. However, this didn't prevent teachers from completing the survey because as shown in the results of the questionnaires, teachers ably expressed their attitude towards inclusion.

Both the BCSQ and the STATIC or more updated versions should be used for evaluating the following;

a) identification of needs for additional education in special needs

- b) screening prospective teachers in school systems practising inclusive education
- c) identification of areas for teacher education programs that need evaluation or revision
- d) measuring regular and SNS attitudes towards inclusion

Future studies might also include using the BCSQ and the STATIC with student performance measures to investigate the relationship of regular education teachers' attitudes towards inclusion and the performance of SNS.

Some of the above limitations led to blunt results from the BCSQ and STATIC. Also, there were seventy questions altogether and this may have been too many for already busy teachers. This was an important issue. There was a great deal of effort required to get teachers to complete the questionnaire. Of the 59 responses not returned most were from schools where the principal was not available to discuss the completion of the questionnaire. The return rate was relatively high by most standards but it was clear from the interviews that teachers were always pressed for time. Perhaps completion of these surveys and interviews, approved by DEECD, could be considered as part of the PD hours that all teachers are required to complete. The teachers would perhaps then take the time to give considered answers. This would also have increased the return of questionnaires because as the return of the questionnaires was voluntary, some teachers who are not interested in the issue of inclusion may simply have chosen not to complete the questionnaire.

The inherent weakness of self-report surveys should also be recognised as another limitation. The presence of subjective response in the participant's answers may or may not

reflect the teachers' true attitudes or correct implementation of inclusive practices. It is possible and in some cases likely that participants answered in a positive manner to demonstrate to themselves and the researcher that they were implementing both school and DEECD policies. It is impossible to judge the extent to which this occurred. The use of follow up interviews was a very valuable tool to better understand the responses. However, there were still some participants that did not respond as expected from the overall results of the study. It would be interesting and perhaps illuminative to conduct more face-to-face interviews.

There were changes that could have been made to the questionnaires themselves. Alternative questionnaires might include more target specific types of disabilities. Also improved questioning regarding the level of special needs educational programs undertaken by participants could be included. Included with the new questions could be a new scale of levels for education that could be weighted rather than the linear scale used in the present study. The need for this weighting would depict the difference in knowledge between no special needs education and half a day of PD which is far less than the difference between a tertiary unit of study as part of a general education diploma or a full diploma in special education. This would give a clearer picture of the type and depth of education in special needs undertaken by the participants.

### PHASE 2 – INTERVIEWS

Interviews were a natural progression from the questionnaire survey. This was due to a range of issues. Firstly, there was a need to explore the reasons for some of the scores on both the BCSQ and the STATIC that were either extremely high (over four out of five) or extremely low (below two out of five). There were some questions that produced low scoring

responses. This could have been due to a lack of understanding of the terminology or to carelessness in the responses by teachers. These complications could be explored in an interview situation. Consequently, most of the interview items were based on selected responses that specifically pertained to the main contentions of the present study, issues such as those that involved attitudes, pedagogy and related variables. Interviews allowed a closer examination of the type of inclusive education undertaken within the classroom. Interviews also enabled closer examination of the variables such as the number of years of teaching experience, level of education in special needs and the various types of disabilities encountered during teaching. The use of interviews gave the opportunity to explore the high usage of the word *challenge* in the open-ended section of the PBQ. The word *challenge* was used more frequently than any other word in the open-ended section. Engaging at a personal level with participants, would enable a deeper probing into the understanding of teachers' attitudes and the pedagogies they used in the classroom. Interviews gave the participants an opportunity to expand on the type of inclusive pedagogy they used most (Merriam, 1998).

However, there were three questions that were more open-ended in their nature, as they specifically dealt with each individual's own personal experiences. Whilst all interviewees were asked the same set of structured questions, each response was based on the interviewee having the freedom to relate their own stories and personal experiences (Burns, 1997). The interviews were designed to elicit an open-ended response. In some cases, it was necessary to expand on the initial set question. Further probes were needed to give adequate direction and encourage rich data that revealed the participants' perspectives (Bogdan and Biklen, 1998).

# Participants.

Ten teachers were purposely selected to be interviewed from two local schools. As mentioned earlier, one school was a regular school and the second school was a special regular school. Eight teachers came from the regular school, with two males and six female teachers. Two females came from the special regular school. All interviewees had previously completed the questionnaires and each interviewee, during the past 12 months, had had at least one or more students diagnosed as SNS. The type and severity of disabilities varied and included a range of physical, cognitive, emotional and behavioural disabilities. The degree of support depended on the type and severity of the disability.

# **Interview Questions.**

The interview questions (see Appendix L for Interview Questions) were a combined technique of unstructured and open-ended (or in-depth) interviews (Burns, 1997). There were 24 structured question items and two open-ended items. The structured items were taken from the BCSQ and STATIC questionnaires whilst the two open-ended questions came from the open-ended comments section on the PBQ (see Appendix I for Personal Background Questionnaire). The items were grouped under two major headings, attitude and pedagogy. A third heading was formed from the open-ended comments regarding the word *challenge* (see Appendix L for Phase 2 Interview Questions).

In some cases, branching items occurred which meant that some questions were skipped as the answer inadvertently came out during the participant's answers to earlier questions. Some of these branching items were pre-planned and some occurred spontaneously, as the participant related a personal anecdote or experience (Wiersma, 2000).

## **Conducting the Interview.**

Each interview was conducted separately and by the same interviewer, usually at the end of a school day in the teacher's own classroom. There were five exceptions to this: two interviews were held during the lunch break, two were conducted in a small meeting room or office, and the third was a telephone interview, as it was difficult to find a time and place that suited both the interviewer and interviewee.

All interviewees were asked separately if they would be able to do an interview and given a letter of request. A time was then arranged to meet. Each interviewee was asked if they had any concerns with the interview being recorded. All participants agreed to the interview being recorded.

### Interviews.

Interviews were considered the best way of not only getting the exact words of the participants but what it was that they meant (Denzin & Lincoln, 2008). Through an interview the researcher had the potential to gain an insight into the informant's own interpretation of their experiences, as they related to them at the time (Denzin & Lincoln, 2005).

In some cases the participants indicated that they felt a little nervous to begin with. They had preconceived ideas of the questions and were concerned about how they would be able to answer. This was particularly evident at the start, as the first question was perhaps one of the hardest due to the terminology used. It was this personal interaction between researcher and participant and how they made sense of personal experience which led to detailed transcripts in which to study the interactional processes in the interview as well as linguistic and thematic patterns (Denzin & Lincoln, 2008).

A concern regarding interview techniques was the atmosphere which may have prevented the participant from answering in a relaxed, open or truthful manner. The interviewer must be adept at not showing any judgement to either the participant's body language or what is said by the participant. Face-to-face interviews may present a difficulty if some form of bias is inadvertently shown by the interviewer (Burns, 1997). In the present study the more experienced the interviewer became, the better the interview. Latter interviews were more relaxed and there was a better flow or exchange of information.

Interviews generally allowed more flexibility and a higher response rate, as participants were personally approached and less likely to decline (Wiersma, 2000). In the present study, none of the participants approached declined to take part in the interviews.

A form of rapport was established in the interviews that could not be made in surveys. This rapport encouraged more discussion and probing of certain issues that may have unexpectedly cropped up during the interview. The interviewer was able to control the discussion and the order of questions as they progressed through the interview (Thomas, 2003). In instances throughout the present study, informants were comfortable enough to talk openly and gave experience-based narratives. They gave an account of an event, or several events, that they had been involved in or had actively observed. In establishing a balanced rapport, the interviewer had to be casual, friendly and perfect a style of being an interested listener without participating or evaluating the responses (Fontana & Frey, 2005). Other factors that come into successful interviews were those considered to be gender related, status of the interviewer, race and the degree of error (Fontana & Frey, 2005). For the most part, all of these relationships were of little consequence in the effect they had on the interviewer and the interviewees in the present study.

# **Telephone Interview.**

The telephone interview was prearranged because of difficulties in finding a suitable time and convenient place for both the participant and interviewer. Although telephone interviews do not provide the direct feeling and emotion that can be gauged by face-to-face interviews, this telephone interview enabled access to the individual that would otherwise have been extremely difficult to arrange. Telephone interviews allow the participant to feel more relaxed and less threatened than a face-to-face interview may be (Burns, 1997). In this case, the participant was quite at ease in her own home which may have been the reason for some of the lengthy details on some incidents. Some examples cited by this participant were quite thorough, which was not possible on the questionnaire survey. This telephone interview allowed the participant to feel free to relate personal experiences and provide more emotive detail. This may not have been so forthcoming had it been a face-to-face interview. These anecdotal stories are the essence of an in-depth interview.

## Limitations and Delimitations of Interviews and Telephone Interviews.

Wiersma (2000) concluded that visual cues were lost in telephone interviews and provided less flexibility which reduced the impact of gaining an in-depth understanding of how participants felt towards inclusion. The telephone interview in the present study was less costly than a face-to-face interviews because one did not have to travel to meet the participant. Wiersma (2000) found that whilst telephone interviews may have resulted in a slightly higher refusal or an "I don't know" response or shorter answers to open-ended questions on the phone, there was no evidence that cooperation was greatly reduced by telephone interviews. In the present study the participant gave lengthy replies, eliciting a number of experience narratives. Burns (1997) noted that an interviewer effect was also

eliminated in a telephone interview and factors such as age, sex, educational level, race, experience, opinions and expectations of the interviewer and so reducing the level of bias that may be present in a face-to-face interview. Apart from voice intonation it isn't possible to show any non-verbal form of bias over the phone. This could have reduced the possibility of the participant feeling inadequate or overly anxious about the interview, as there was little direct feedback about what they were saying (Burns, 1997). In the case of the present study, the style of the interviews was friendly and relaxed, as two teachers might be when chatting over their common professional field of teaching.

The major limitation encountered with the open-ended interviews was that the reported experiences were open to the vagaries of interpretation. This produced a problem with validity. However, it was still an account of how the participant perceived the events (Wiersma, 2000). This may be more obvious over the telephone as the informant does not have to deal with any immediate reaction that may be displayed by the interviewer. This could quite possibly have been the case in the present study, as the informant gave long renditions of both personal and observed anecdotal experiences.

#### **Ethical Stance of interviews.**

The recording of the interviews had to be considered as strictly confidential material.

This was stated at the beginning of each interview, to assure the participants that their responses would in no way be heard or seen by other individuals, except in the context of the research paper. For confidentiality their correct names were not used in the thesis.

Each participant was given a small gift as a token of appreciation for the time they had given to allow me to conduct the interview. This may be seen as encouraging favourable

answers, however the participants were not aware of the gift until they had completed the interview.

## **Analysing the Interviews.**

Recordings. The tape recording is deemed the best method for accuracy because it remains as raw data which can be readily referred to. It also means that the interviewer does not have to take notes during the session, allowing a more natural conversation to take place (Wiersma, 2000). This was an extremely valuable method in the present study, as some of the interviews went for 40 minutes or more. Each participant was asked before starting the interview if they agreed to the recording of the interview. It was explained that these recordings would be strictly confidential and only used for the present study. The recordings lasted between 13 to 40 minutes. Each recording was then written up as a transcript with codes indicating common themes.

Transcripts. The transcripts provided raw data that can be reviewed at any time after the interview has taken place. A transcript file was created for each informant. Each question was recorded exactly as asked by the interviewer. The participant's response was recorded immediately following the question. This format of "question followed by answer," was adhered to for each of the transcripts. Throughout the interviews it was obvious that the interviewer's technique allowed the response to be uninterrupted unless the participant indicated that they wanted more explanation or needed encouragement to complete an answer.

The transcripts were then coded to support the task of establishing common core themes (Bogdan and Biklen, 1998). A coding system was constructed to classify the material into themes, issues, topics, concepts or propositions. The coding assisted in focusing on

essential features that were consistently raised in the interviews. Coding was developed by making a list of categories and sub-categories. These codes were then placed in a margin on the left hand side of the transcripts. After each code had been allocated to the text in the transcript file, the data was then collated into headings and subheadings and recorded in the results. These results were then discussed and considered in the conclusion.

### **SUMMARY**

As described in the earlier chapters the present study addresses the primary research questions that concerned teachers' attitudes towards inclusion and the pedagogy they practised. Chapters 1 and 2 cover the research questions, rationale for the present study, the Literature Review regarding attitudes in relation to inclusion and the theoretical framework. All of these issues fed into the current chapter on the methodology and method used to undertake the present study.

The present study was divided into two Phases. Phase 1 comprised a survey, including the selection of suitable instruments for measuring teachers' attitudes and pedagogy towards inclusion and the method of collection. Phase 2 contained ten interviews which was a natural progression from the survey in Phase 1. Phase 2 allowed a deeper exploration of how teachers felt towards inclusion and exactly what type of inclusive practices were practised in the participants classrooms. This gave a fuller understanding of teachers' attitudes and pedagogy towards inclusion in mainstream classrooms. In the following chapters the results of the present study, Phase 1 and Phase 2 are presented. The information was collected using the methodology and methods described in this chapter. Chapter 4 provides the results of the survey and Chapter 5 details the results yielded from the interviews.

#### **CHAPTER 4**

#### **RESULTS - PHASE 1 SURVEY**

"There is little difference in people, but that little difference makes a big difference. The little difference is attitude. The big difference is whether it is positive or negative."

(W. Clement Stone, 1997)

This chapter provides the results of Phase 1 of the present study. Phase 1 consisted of the following three part questionnaire survey:

- 1. Personal Background Questionnaire (PBQ)
- 2. Bender Classroom Structure Questionnaire (BCSQ)
- 3. Scale of Teacher Attitudes Towards Inclusive Classrooms (STATIC)

Phase 1 yielded 225 valid responses from classroom teachers with a total of 21 participating schools, sorted into two school types. Fifteen schools which were classified as regular schools had 158 participants. Six special regular schools, which were regular schools that had attracted a higher number of SNS, had 67 participants.

The open-ended comments and the core themes are also discussed in this chapter.

There were two open-ended comments, which dealt with a different aspect of the present study. Question 9 (Q9) explored the participants' attitudes towards inclusion and question 10 (Q10) looked at the participants' inclusive pedagogy. These comments identified a number of

common themes which emerged. The themes from Q9 were attitude, support, education, challenges and type of disability. The comments from Q10 showed the innovation of teachers who used a wide range of individualised inclusive practices. Other themes from Q10 included the education of teachers in special needs, the adequacy of classroom support, the availability and funding of qualified teacher aides and the influence of the type and severity of the SNS.

# ANALYSIS OF RESULTS OF THE PERSONAL BACKGROUND QUESTIONNAIRE (PBQ).

A study by McKenzie (2003) provided the basis for the selection of the eight variables and two open-ended comments included in the PBQ. The eight variables were:

- 1. Gender.
- 2. Age.
- 3. Education in special needs.
- 4. Teaching experience.
- 5. Experience teaching SNS.
- 6. Number of SNS in current class.
- 7. Type of disability.
- 8. Personal experience of a SNS within the family.

These variables were presented in the order in which they appeared in the questionnaire.

Gender. As expected the vast majority (88%) of teachers were female compared with 12% males. The low percentage of males in the present study may have been because fewer

males were employed as classroom teachers. For example, more males were principals or involved in administration and specialist non-classroom teaching positions.

Age. The average age of the participants was approximately 40 years old. The average age of females was 41 years, the average age of males being 37 years old. The participants fell into two distinct age groups. That is one centred around 28 and the other centred around 48. The data was analysed using these two age groups. The average age of the younger group was 29 with the average age of the older group being 51.

Education. Participants were asked if they had undertaken education in special needs, and if so what type of education they had received. The nine choices were given a notional linear score of 0, for no SNS education, and up to 8 for a Masters Degree in Special Education. This Special Needs Teacher Education Level was abbreviated to the acronym SNTEL. The responses on type of special needs education were also grouped into three broad categories. The three categories were: No education in special needs, PD education which covered the four PD course options and Tertiary education in special needs which covered the four tertiary level educational options. These scores and categories facilitated the analysis of teacher education and its relationship with the results of the BCSQ and STATIC.

The survey results indicated that the average level of special needs education was very low. Almost 40% of participants had no education that specifically focused on special needs. The average SNTEL score for all respondents was 2.6, which was nominally equivalent to less than one day of PD in special needs. The SNTEL score for females was 2.6 compared with 2.0 for males. Only 50% of males had undertaken teacher education programs in special education compared with 62% of females. Of those that had undertaken teacher education in special needs, only 23% of males had undertaken some sort of PD compared

with 28% of females. Similarly 34% of females had some level of tertiary education focused on special needs whereas the percentage of males in this group was less at 27%. Teachers from the regular schools had a SNTEL score of 2.5 compared with 2.8 for teachers from the special regular schools. Special regular schools also had a higher proportion of staff with a Degree or Masters in Special Education.

Teachers in the older age group had a SNTEL score of 2.8 compared with 2.3 for the younger age group. The older teachers had undertaken more PD. However, a higher percentage of the younger group (27 %) had completed at least one unit of tertiary study in special education compared with only 16% in the older group.

Table 4.1 – Special Needs Teacher Education Level (SNTEL) Score versus School Type and Age

Education Category	ALL	School Type		Age	e
		Reg. Sch	Sp. Reg Sch	Younger	Older
No special needs education	40%	41%	37%	42%	37%
Professional Development.	27%	26%	28%	24%	30%
Tertiary	33%	33%	35%	34%	33%
SNTEL SCORE	2.6	2.5	2.8	2.3	2.8

Teaching experience. The average years of teaching experience was 8 years which was considered to be an *experienced* teacher. More than half the teachers had more than 10 years teaching experience (see Table 4.2).

Table 4.2 - Experience – Number of Years Teaching

Yrs. teaching	Reg. Sch. Sp. Reg. Sch.		All	Percent
_	N	N	N	%
0-2 years	21	6	27	12
3-5 years	31	13	44	20
6 – 10 years	30	5	35	15
10 + years	76	43	119	53
Total	158	67	225	100

Experience teaching SNS. The vast majority of the teachers surveyed, reported that they had experience in teaching SNS. Only 11% indicated that they had no previous experience teaching SNS. Interestingly, the teachers who stated that they had no previous experience in teaching SNS were from regular schools, with some respondents having more than ten years teaching experience. This was an unexpected result as in almost every classroom one would expect to encounter at least one student with some type of behavioural or learning difficulty.

Most SNS indentified in the present study did not meet the criteria established by DEECD for extra funding but all SNS should be recognised by an experienced teacher. The recent report "In the Balance" researched for the Australian Primary Principals Association (Angus et al., 2007) estimated that on average, 3.8 students per class, or 16.2%, were identified by teachers as SNS. Teachers reported that these students had special learning needs and required more specialised instruction (O'Keeffe, 2008). These numbers were comparable with the average number of 2.1 SNS per class identified by the teachers in the present study.

It was speculated that, in the present study, those teachers who reported no SNS in their current class did not recognise all SNS and had not been assigned students with an obvious disability. As previously mentioned, it tended to be common practice in Victorian State Primary Schools to assign obvious SNS to specific teachers. This was due to the fact that some teachers were better suited to teaching SNS as they displayed characteristics such as: patience, resilience, a caring attitude and were positive towards SNS (Bender et al., 1995; Keighran, 2001; Watson & Bond, 2007). Conversely some teachers were simply considered not suited to teaching SNS.

The average years of experience teaching SNS was more than 4 years. Not surprisingly both younger participants and those from the regular schools had less experience teaching SNS. In the special regular schools 53% of teachers had taught SNS students for more than six years in comparison with only 38% in the regular schools. A few participants indicated that they had taught SNS for more than 30 years. The survey results also indicated that teachers who have been teaching SNS for a longer period had undertaken more study in special needs education. The SNTEL score for teachers with less than 6 years SNS teaching experience was 2.3 compared with 3.2 for more experienced SNS teachers.

*Number of SNS in classroom.* Participants were asked to identify the number of SNS in their current classroom. The number ranged from nil to more than five students (see Table 4.3). There were 17% of respondents that indicated they had no SNS in their class. It was interesting to note that only 5% of the participants in special regular schools reported no SNS in their classroom compared with 22% in the regular schools. Fifty-three respondents (23%) reported that they had one SNS in their classroom, with 39% who reported 2 or 3 SNS and 9% who reported 4 to 5. In the special regular schools, 73% reported 2 or more SNS in their

classes compared with 52% in the regular schools. The relatively high number of SNS reported in some classrooms in the special regular schools will be discussed in Chapter 6.

Participants who reported no SNS in their classroom also had a very low SNTEL score of 1.6 in special needs education compared with a SNTEL score of 2.7 for teachers who reported SNS in their current classroom. The 18 teachers who reported more than 5 SNS in their class had a SNTEL score of 3.9 compared with the average of only 2.6. This was not an unexpected relationship because schools tended to allocate SNS to teachers who had a higher level of special needs education and who also coped better with SNS. Even within the group of teachers who reported SNS in their classes, there was an increase in the SNTEL score with increased numbers of SNS.

Table 4.3 - Number of SNS in class versus school type and SNTEL score

No of SNS in Class	Overall	Reg. Sch.	Sp. Reg. Sch.	SNTEL
Nil	17%	22%	5%	1.6
1to 5	75%	69%	89%	2.7
>5	8%	9%	6%	3.9
Average	2.1	2.0	2.5	2.6

Type of disability. According to the present study results the most common type of disability identified was a learning disability at 49%. There were relatively small numbers of students reported with physical disabilities or purely behavioural disabilities. Some participants did not identify having any students with disabilities. This number was consistent with the number of teachers reporting no SNS in their classes. There were 26% of teachers who felt that the SNS in their classroom displayed multiple categories of disabilities.

The respondents indicated that SNS with physical disabilities were well supported and were of little concern. However, SNS with behavioural disabilities presented more of an issue for some teachers. These students were often not eligible for extra support because they did not meet the DEECD criteria for extra funding (DEECD, 2009). A similar situation existed with teacher-diagnosed SNS who also, by definition, did not meet the criteria for additional support.

Personal experience of a SNS within family. This was found to have very little relevance on the influence of teachers attitudes towards inclusion and consequently their inclusive pedagogy. These teachers did however, believe that it was a 'challenge' for the mainstream classroom teacher to manage SNS given the range of diverse abilities already present in a regular class.

### ANALYSIS OF BCSQ QUESTIONNAIRE RESULTS

The responses to each of the BCSQ questions were tested for reliability and the overall value of Cronbach's Alpha (Cronbach, 1951) reliability coefficient for the BCSQ was 0.85. The raw scores on the BCSQ ranged from a possible low score of 40 up to a maximum of 200.

The range recorded in the present study was 91 to 194, with an average of 146 or an average Likert score of 3.66 (see Appendix O for BCSQ Questionnaire Results). A high BCSQ score indicated that respondents used a wide selection of pedagogies suited to SNS in their classrooms. The scores in the present study were considered to be relatively high indicating that the teachers surveyed used a wide range of pedagogies. This finding was also consistent with the open-ended comments analysed later in this chapter.

The average scores for each item on the BCSQ were sorted to identify the most frequently used pedagogies (see Appendix O for BCSQ Questionnaire Results). Of the 40 different teaching practices identified in the BCSQ the most frequently used was the practice of praise for successful work. The second most widely practiced pedagogy was to constantly monitor *on task* behaviours. Also, the Item concerning *assertive discipline plans* had a relatively high score of 3.9.

For the less popular teaching practices there was a noticeably wider spread of use. For the least practised technique of completing daily measures of academic progress, 18% of participants indicated that they used this teaching method regularly, with a further 28% who indicated that they sometimes used this technique. Also 25% of teachers required the student to raise their hand before leaving the seat. Conversely 60% of teachers did not require this procedure to be followed.

A further analysis of one of the least used pedagogies involved the use of a token economy. It is important to note, however, that this terminology may not have been understood by participants. The term token economy is when "tokens" are used to provide immediate recognition for a small reward that can be given at a future time (Weigall, 2009). Similarly the question on "inner language" may not have been readily understood. This was followed up as a question in the interviews, which clearly demonstrated that teachers did not at first understand the idea of inner language. Also the practice of allowing specialised grading was not a common practice in Victorian schools and therefore did not receive a high score on the BCSQ.

The participants regularly used many of the individualised teaching practices in the classroom. Some questions such as keeping the lesson moving and monitoring on-task

behaviour were considered to be common sense teaching practices widely used in any Australian school. Another high scoring item that was also frequently used in Victorian classrooms was the practice of cooperative learning groups.

Bender et al. (1995) divided the pedagogies into three different teaching domains. These domains were the Total BCSQ score, Individualised Instruction and Metacognitive Instruction. These three teaching domains had an average score of 3.66, 3.96 and 3.57 respectively. This indicated that metacognitive practices were not used as often as individualised practices.

## ANALYSIS OF BCSQ RESULTS VERSUS PBQ VARIABLES

The BCSQ scores for the variables of school type, age, education and the number of SNS in a class are presented in Table 4.4. Generally there was not a wide spread of BCSQ scores with different variables. The special regular school teachers achieved higher BCSQ scores. Teachers who had undertaken education focused on special needs scored higher than those who had no special needs education. Teachers educated in special needs scored 148.2 on the BCSQ, whereas those teachers without education in special needs scored 142.8 on the BCSQ.

Table 4.4 - BCSQ results versus PBQ variables

Variable		Number	BCSQ Score
School Type	Regular School	158	145.0
	Special Regular School	67	148.4
Age	Younger	109	144.3
	Older	113	147.7
Education in Special Needs	No Education in SN	89	142.8
	Some Education in SN	136	148.2
Number of SNS in class	No SNS in class	37	141.9
	Some SNS in class	180	147.1

<sup>\* 3</sup> participants declined to give their age

Number of SNS in current class. Teachers who recorded no SNS in their current classes recorded a lower BCSQ score compared with teachers who had indicated at least one SNS in their current class (141.9 cf 147.1 respectively). It should be noted that although there were only 21 teachers with 4 to 5 SNS in their classroom, this group achieved the highest BCSQ score of 154 of any grouping.

Table 4.5 - Years Teaching Experience and Years Teaching SNS vs BCSQ and SNTEL Score

Years Teaching Experience	BCSQ Score	SNTEL	Years Teaching SNS	BCSQ Score	SNTEL
1-2 yrs	142.3	2.5	1-2 yrs	143.6	2.0
3- 5 yrs	145.1	2.0	3-5 yrs	146.3	2.7
6-10 yrs	138.5	1.8	6-10 yrs	143.5	3.1
10+ yrs	149.5	3.0	10+ yrs	151.1	3.2

Years of teaching experience and years of teaching SNS. The results (summarised in Table 4.5) indicated that teachers with more than 10 years experience in either teaching or

teaching SNS achieved higher BCSQ scores than those teachers with less than 5 years experience and had higher qualifications (that is they had a higher SNTEL score). However, there was an unexpected drop in the BCSQ score for teachers with 6 to 10 years of experience. This group scored 138.5 compared with the average score of 146.0. This finding was consistent with a separate study by Loreman et al. (2005b) who suggested that one possible reason for this drop was that this group would have undertaken their pre-service education in the years between 1996 to 2000 when special education units of study were only electives.

The relationship between the BCSQ total scores and the variables of teaching experience and teacher age were explored further using the statistical analysis program SPSS (Version 6.1.4) to test for a relationship. The analysis showed that there was a good relationship between the BCSQ total score and the years of teaching experience with a score of 0.31. The BCSQ total score also showed a lesser relationship with the age of the teachers and gave a score of 0.24.

Table 4.6 - Relationships between BCSQ Score, Age and Years Teaching Experience.

	BCSQ	Teach Experience
	Total	
Tch. Exp.	0.31 ***	1
Age	0.24 **	0.78 ***
** 0.01> ρ>	0.001	*** p < 0.001

BCSQ Individualised teaching practices. The present study results showed that Individualised teaching practices, as measured by the BCSQ, were used frequently and more so in special regular schools and with teachers with tertiary qualifications in special education. The average Likert scores for the individualised teaching practices were 3.69, in

No education, 3.95, for PD and 4.16, in Tertiary education. This indicated that additional education in special needs resulted in a reported increase in the use of individualised teaching practices as measured by the BCSQ.

"one's knowledge concerning one's own cognitive processes and products of anything related to them" (Hempenstall, 2009a). These teaching techniques were used less than individualised pedagogies. Results show that teachers with no special needs education used metacognitive instruction less than teachers with a higher level of education in special needs. Mean Likert values for the metacognitive instruction were 3.48, for No education 3.75 for PD, and 3.83 for Tertiary Education.

## ANALYSIS OF STATIC QUESTIONNAIRE RESULTS

The responses to each of the STATIC questions were tested for reliability. The overall value of Cronbach's alpha reliability coefficient for the STATIC questionnaire was relatively high at 0.81. However the reliability analysis on individual questions indicated that two questions had very low reliability values for the corrected item totals. The first question was "I feel challenged when teaching students with special needs" and the second question was "Special training in teaching special needs students should be required for all regular education teachers." As detailed in Chapter 3 the wording for both of these questions was modified from the original STATIC. In the original word "easily frustrated" was changed to "challenged" being a less negative word as requested by DEECD and in item 16 the original word "inservice" was deleted. These two modifications were made without any revalidation of the reliabilities. The alpha scale reliability analysis for these two items using the corrected item total with values of 0.05 and 0.02. Such low values indicated that the responses to these

items were inconsistent with the results of the other questions and were addressing different issues. When these two items were excluded from the reliability analysis, the alpha reliability value increased from 0.81 to 0.84.

As a consequence of this, the results of the STATIC were then analysed using two different scores. The first value was the STATIC score as measured and the second score excluded the results of the two individual items with low reliability values, Items 3 and 16, and excluded all scores from respondents that did not complete the STATIC in full. This modified STATIC score was designated "PROINCL."

The results of the STATIC were sorted by total score (see Appendix P for STATIC questionnaire results). The overall score was then divided into the four factors identified by Cochran (1998) as being relevant to teachers' attitudes. These four factors were:

- 1. Advantages and Disadvantages of inclusive education.
- 2. Professional issues regarding inclusive education.
- 3. Philosophical issues regarding inclusive education.
- 4. Logistical concerns of inclusive education.

The average overall STATIC Likert score was 3.73 which indicated a positive attitude of teachers towards inclusion. The scores for the four factors showed that the highest score was for philosophical issues at 4.18 on a Likert scale of 0 to 5. This was followed by logistical concerns at 3.87, advantages and disadvantages at 3.70 and professional issues, the lowest score, at 3.3. In other words, teachers were not philosophically opposed to the practice of inclusion and they were generally supportive of the practice. Any negativity appeared to be related to professional issues. The results indicated that many people were unsure of critical issues relating to inclusion. An unacceptably high number of participants felt "challenged,"

uncomfortable and inadequately trained." These items on the STATIC all had low scores and were further analysed.

Factor 1- Cochran advantages and disadvantages of inclusion. Cochran's Factor 1 covered 7 of the 20 items in the STATIC. The factor was further divided into advantages and disadvantages of inclusion. In responding to the advantages of inclusion the teachers were asked four questions. The first of these asked if SNS successfully learnt social skills modelled by regular students. The response scored 4.07, which was relatively high with 83% of the participants agreeing with this statement. As expected, teachers who answered more positively were older, better educated in special needs, more experienced in teaching and had more years teaching SNS. The 27 teachers that were unsure of this statement were characterised as being more likely to be in the special regular schools, younger, no special needs education and with fewer years teaching experience.

At the heart of the inclusion debate was the question, "Do SNS make higher academic progress in an inclusive environment?" This item generated diverse responses. It was the fourth lowest STATIC score with a Likert score of 3.39. More than half of the teachers surveyed were not sure if inclusion delivered a higher academic outcome for SNS. Definitely there are many studies that have indicated that SNS do achieve better academic progress (Hall, 2002; Putman et al., 1996; Rea et al., 2002). However, the teachers in the present study seemed unaware of this and appeared to struggle in delivering the pedagogies necessary to achieve this outcome. This is a major finding in the present study. The group of teachers who were unsure included almost 75% of the males, 60% of the younger teachers and 61% of those with no special needs education.

Only one third of the participants agreed that inclusion delivered higher academic progress for SNS. This group were older and had completed more education in special needs. They also had more years teaching and more experience teaching SNS.

The question with the fifth lowest score of 3.52 asked if the self-esteem of SNS was increased by inclusion. Almost 50% agreed with the statement and only 9% disagreed but 41% were unsure. Those that disagreed were on average younger, had had less years of teaching experience and had no family member with special needs. Those that were unsure were female, older and had more years teaching experience. Participants that felt that the self-esteem of SNS improved were males, had more years teaching SNS and unexpectedly had no SNS in their class. This was unexpected result because in all the previous questions the teachers with no SNS in their current class gave responses that indicated a lack of understanding of the issues related to SNS.

The final item in the advantages of inclusion scored 3.88. The item asked "whether SNS should be included in regular education classrooms." This item was closely linked to Item 6 in the STATIC and the results were consistent.

Generally speaking, most teachers thought that SNS students should be in regular classrooms, with less than 4% disagreeing. However, 26% were unsure about the inclusion of SNS in a regular classroom. Participants who agreed had a higher percentage of family experience in special needs, had a higher SNTEL score and were employed in the special regular schools.

The disadvantages of inclusion were addressed in responses to Items 6, 13 and 15. In this category, teachers were asked if SNS should be placed in special classes (Item 6), if it is

difficult for SNS to make academic strides (Item 13) and if the academic progress of regular students is hindered (Item 15).

The most controversial question underpinning full inclusion versus partial inclusion was Item 6, "should children with special needs be placed in special education classes?" The Likert score was 3.78, sitting in the middle of the scoring range. The overall results of this question indicated that only 7% of those surveyed were in favour of such programs and 63 % were not in favour of SNS children being placed in special education classes. An analysis of the results showed that although 63% disagreed with SNS being placed in special education classes, but nearly a third of participants were unsure about the benefits of such an arrangement, which showed a high level of uncertainty.

Those that were not in favour of special education classes had a higher percentage of older teachers (64% vs 51%) and a higher percentage of teachers educated in special needs (68% vs 60%). This difference increased to 72% vs 31% for teachers with a higher SNTEL score, and further increased to 73% for those who had more than ten years experience teaching SNS.

A number of teachers were unsure of the benefits of placing SNS in special education classes. This was also evident in the interviews where some teachers were concerned with the possible stigma sometimes associated with being labelled SNS. Teachers uneducated in special needs and those with no reported SNS in their current class had the highest percentage of uncertainty at 39% and 38% respectively.

Teachers with a high SNTEL score and teachers with more than ten years SNS teaching, were less unsure and more opposed to the placement of SNS in special education classes.

Teachers with a family member with special needs were less unsure and more inclined to favour special education classes.

Only 16 teachers were in favour of special education classes. These teachers believed that early intervention could produce substantial academic achievement, particularly in the early years of primary education. Those that agreed with withdrawal programs shared characteristics such as: being younger, had no special needs education, had fewer years of teaching experience and had a family member with special needs. There was only one participant who did not fit this profile. This teacher had a high level of special education and strongly favoured withdrawal programs. However, what is understood as special education classes needed to be qualified in order to correctly analyse the responses to this question.

In the first instance, the terms *special education classes* and *withdrawal programs* were assumed to be inter-changeable. However, perhaps the terminology led some teachers to assume that the question suggested that all SNS be separated and put into one special class all the time, not just as a temporary measure for a specific activity. This issue will be discussed further in Chapter 6.

The results of this Item were consistent with the findings in the literature that teachers were not in favour of special education classes. Again, the area of concern is the high percentage of teachers who were unsure.

Similarly, more than half of the teachers "believed that it was not difficult for an SNS to make academic strides in a mainstream setting" (Item 13). The results also indicated that a percentage of teachers were unsure (29%). The score for this question was comparatively low at 3.52 and produced a wide range of results. These results contrasted in some ways with the responses of Item 12 where fewer teachers believed that SNS have a higher academic

achievement with inclusion. In Item 13 there was a much lower percentage of participants unsure about the outcome than in Item12 (29% vs 54%).

Participants who were positive about the students making academic strides in main stream classrooms tended to be from the special regular schools, were older, had more years teaching experience, had more years teaching SNS and had a higher SNTEL score.

Interestingly, the regular school teachers were more unsure, as were teachers who were less educated in special needs and teachers with no reported SNS in their current classroom.

When asked if they thought SNS hindered the academic progress of regular students, there was a wide range of views with 14% agreeing, 20% unsure and 66% disagreeing. The Likert score was 3.77 and sat in the middle of the range.

Participants who disagreed had a higher percentage of teachers from the special regular schools, more females, older, better educated, more experience with SNS, more experience teaching and a higher percentage of teachers with SNS in their current class.

The 20% who were unsure had a higher percentage of no education in special needs (32% vs.13%), had more males (31% vs. 19%), had more teachers with a family experience (28% vs.19%) had more from special regular schools (23% vs.13%), had more young people (26% vs.15%) and had a higher percentage of no reported SNS (24% vs.19%).

Those in the literature who did not support inclusion often argued that the teachers' time was taken up addressing the special needs of the SNS and therefore less time was allocated to regular students. Clearly the majority of participants in the present study did not accept this position. Participants believed that regular students' academic progress was still achieved. In some cases there may have been a teacher aide in the classroom so the regular

student was not disadvantaged and some regular students may have also been assisted by the extra support in the classroom.

Factor 2 - Professional issues regarding inclusive education. The Cochran Factor 2 on professional issues was formed by grouping five items from the 20 questions. When participants were asked if they were confident in their ability to teach children with special needs, the response scored a 3.79. Generally the participants were confident as 74% agreed, 17% were unsure and 9% disagreed.

The least confident were those with no SNS education in special needs at 60 %. This group was unsure of their teaching ability in special needs. Those who had a higher SNTEL score were naturally more confident in their ability to teach SNS. Participants with no reported SNS in their class were also less confident. However, within this group, 24% were unsure about their ability to teach SNS. Males were more confident than females (81% vs 73%) in their teaching SNS. Older teachers were more confident than younger teachers, 83% vs 64%. The most confident group were participants with more than ten years experience teaching SNS. The other group who felt confident were those who had over ten years teaching experience.

When asked "if they had been adequately trained to meet the needs of children with disabilities?" The score was the second lowest at 2.82. There was a wide range of answers to this question with 32% agreeing, 24% unsure and 44% disagreeing. Generally, the group as a whole did not feel adequately educated or were at least unsure about the level of education they needed. This uncertainty could have stemmed from a lack of knowledge about how to teach SNS. An analysis of the sub groups indicated that in every category there was a high level of uncertainty. Even teachers who had tertiary education in special needs were unsure if

they had been adequately educated in special needs. Naturally those who had the highest level of education in special needs gave the strongest positive response. Conversely, those who did not have any special needs education, and therefore had a low SNTEL score, had the lowest percentage who agreed (14%) and the highest percentage who disagreed (60%).

Although males were confident of their ability to teach SNS, they felt inadequately educated compared to females (23% vs 33%). Teachers who had no SNS in their class felt inadequately educated in special needs. However, teachers with more than ten years teaching SNS experience were more positive about their level of education. All of these results were consistent with the expectation that experience and education were important issues when it came to inclusion.

When the participants were asked if they felt challenged teaching SNS, the responses produced the lowest Likert score of 2.4. The majority of participants (67%) felt challenged, which was initially considered a negative response as far as SNS were concerned. As highlighted earlier, the statistical reliability analysis on this question indicated that further clarification was needed. It is interesting to note that the word *challenged* was mentioned more than any other word in the open-ended comments. However, the word *challenged* can be considered both a positive response as well as a negative response. Although feeling challenged elicited a reasonably strong agreement, there were still 21% who did not feel challenged teaching SNS. Surprisingly, participants with no education in special education were less challenged by inclusion. Also, teachers from the special regular schools reported to being more challenged than the participants from the regular schools. This may be the case as the special regular schools had a higher number of SNS and in many cases the students had more severe disabilities. Some participants who had students with difficult behavioural

problems were also very positive towards SNS but commented that they found it "very challenging." Not surprisingly younger and less experienced teachers felt more challenged by inclusion.

Item 4 asked if teachers felt uncomfortable teaching SNS. The majority of participants responded that they were comfortable. The Likert score for was this Item was 3.77, and there were 17% who felt uncomfortable. These participants were characterised as male, young, with less than ten years teaching experience and with no SNS in their class. Conversely, the participants who were comfortable with SNS in their class were those with a tertiary education in special needs, those with both more experience teaching SNS and more years teaching, and those with a family member with special needs.

When participants were asked if they were comfortable teaching a child who had cognitive deficits the Likert score was 3.7. Two thirds of participants had no problems teaching a child with cognitive deficits, but there was a substantial variation between the different groups. Not surprisingly, the teachers at the special regular school felt that they were able to teach students with cognitive deficits; females had fewer issues with teaching this group as did older, more experienced teachers. Participants with special needs education felt more capable of teaching such students. Similarly, there was a large difference between participants with less than 10 years teaching experience and those with more. Almost 1 in 5 participants were unsure about teaching SNS with a cognitive disability.

There was a difference between participants with and without reported SNS in their current classroom. Approximately three quarters of participants with reported SNS in their current class had no issues with students who had cognitive deficits compared with only 40% of participants without reported SNS in their current class. Almost a third of the participants

without SNS were unsure if they could teach SNS with cognitive difficulties, with a further 25% who indicated that they would have issues teaching this group. Overall there were 13% of participants who felt that they would have issues teaching these SNS.

The results indicated that teachers who had no issues teaching SNS with cognitive disabilities were: female, taught at the special regular schools, were well educated in special needs, tended to be older, more experienced in teaching SNS, and had SNS in their class. On the other hand, the group who were unsure about teaching SNS with cognitive disabilities tended to be in the regular schools, male, younger and had a lower SNTEL score. These participants had less teaching experience, had no reported SNS in their current class and no family experience of SNS.

Factor 3 - Philosophical issues regarding inclusive education. Cochran's Factor 3 was formed by grouping four items. In the first of these items participants were asked that despite children differing intellectually, physically and psychologically, did they [teachers] believe that all children can learn in most environments? This scored 4.11 on the Likert scale with 83% of the participants agreeing. Participants who disagreed shared the characteristics of being in a regular school, were younger, had no education in special needs, had less years of teaching experience, and had no reported SNS in their current class. Not surprisingly, the most positive responses came from participants who had family experience in special needs, were experienced, had some education in special needs and had more SNS teaching experience.

The second highest STATIC score of 4.34, indicated that teachers felt academic achievement was possible for SNS. When participants were asked if they could handle students with mild behavioural problems, the Likert score was surprisingly high at 4.14, The

third highest score. Initially it was expected that teachers would have a negative attitude towards mild to moderate behavioural problems because of the disruption that these students might have on the class. A key issue here was the severity of the disability. It was likely that the most difficult behavioural cases elected to go to special schools or to the special regular schools.

The results indicated that more than 90% agreed, although, there was a group who were unsure if they could handle such behavioural problems. This group consisted of participants with less education in special needs, less teaching experience, those with no SNS in class and surprisingly those with a family member with special needs. The suggestion was that perhaps these teachers actually knew how hard it was to manage such students.

When participants were asked if they believed that all regular teachers should undergo special education in special needs to teach SNS it was expected that those teachers who support inclusion would naturally encourage teachers to have special education. This was the case as most teachers agreed with the need to be adequately educated in special needs. The Likert score for this question was one of the higher scores at 4.11, with 80% of participants agreeing, 13 % unsure and 7% who disagreed.

Factor 4 – Logistical concerns of inclusive education. Cochran's Factor 4 was generated by grouping four items. When participants were asked if they felt comfortable teaching students who were moderately physically disabled, most responded that they were comfortable teaching these students. The Likert score for this question was 4.07. Not surprisingly, the group most in agreement were those with a SNS in their family and those with a tertiary level in special needs. Teachers with no reported SNS children in their current

class and those with no education in special needs were more unsure about being comfortable teaching this group.

When participants were asked if adaptive materials and equipment were easily acquired for meeting the needs of SNS there was a high spread of responses. Almost one third of participants agreed, one third of participants disagreed and one third of participants were unsure. The older teachers with more years teaching experience and more SNS experience tended to disagree. The suggestion is that these more experienced teachers may have had more knowledge on what type of support is required and believed that more could be provided.

There were also a number of issues regarding the interpretation of this question. SNS were a relatively diverse group. A physical disability was clear cut and easily addressed. It was far more problematic identifying or diagnosing a learning disability/difficulty. Students may display poor academic performance but the teacher may not recognise the specific cognitive deficit, let alone acquire adaptive materials, effective pedagogies, diagnosis and the necessary equipment. Clearly, teachers saw the educational or behavioural outcomes, but they did not have the diagnostic support or knowledge to address the issues. The suggestion therefore was that teachers would benefit from the assistance of a teacher aide who worked closely with a student who displayed a learning disability/difficulty.

The issue of teacher aides was not specifically addressed in the questionnaire, however, results indicated that when additional funding was available the funds were principally spent on teacher aides. As mentioned in the interviews this came back to the belief that one-to-one teaching was an effective solution for academic progress. It is important to note, that if the teacher aides did not understand the issues or did not have the necessary

education in special needs that would enable them to use the correct strategies for the specific student's issues, then their assistance was compromised. The issue of support, in the present study, was more about diagnosis, development of pedagogies and the availability of teacher aides than it was about the provision of materials and resources. The issue of support via a teacher aide is complex. The concern that teacher aides were not adequately educated as teachers further complicates the issue.

Respondents indicated that principals were generally supportive, as shown in the favourable responses to the question regarding support, but they were always making compromises within the total budget allocations. This generated other problems with regards to class sizes or lack of teacher aides. The question did not specifically address the key support issues such as the availability of teacher aides and other resources.

## ANALYSIS OF STATIC RESULTS VERSUS VARIABLES FROM PBQ

The STATIC scores ranged from 40 to 99. The average score was 74.7 with the scores for the different variables as shown in Table 4.7. The special regular school respondents scored higher than the regular schools, with the older teachers scoring higher than the younger ones. The variable with the largest impact on the STATIC score was the level of education in special needs. The difference between no education and PD education was 4 points, with the difference between PD and tertiary a further 2.1 points.

The next most important variable was years of experience teaching SNS where teachers with more than 10 years experience teaching SNS scored on average 3.9 points, more than those with less than 10 years (see Table 4.7).

Teachers in the present study who had less education in special needs recorded a lower STATIC score and those with more education in special needs achieved a better attitude score.

Table 4.7 - STATIC scores versus PBQ variables

Variable		Number	STATIC Score
School Type	Regular School	158	73.9
	Special Regular School	67	76.4
Age	Younger	109	73.7
	Older	113	75.7
Education in Special Needs	No Education in SN	89	71.7
	PD Education	66	75.7
	Tertiary Education	70	77.8
Yrs teaching experience	Less than 10	107	73.2
	More than 10	118	76.1
Yrs teaching SNS	Less than 10	140	73.5
	More than 10	70	77.4
Number of SNS in class	No SNS in class	37	73.2
	Some SNS in class	180	75.0

## **ANALYSIS OF BCSQ VERSUS STATIC**

The fundamental contention of the present study was that if teachers had a positive attitude towards SNS they would select pedagogies that were better suited to SNS. The BCSQ scores and STATIC scores indicated that teachers did in fact use a wide range of teaching practices in the classroom that favoured inclusion and had a positive attitude towards inclusion. When the STATIC scores were modified by eliminating the two items that had low reliability coefficients and eliminating all respondents that did not complete the

questionnaire in full, the results showed that the attitude score, as measured by PROINCL, did correlate with the BCSQ pedagogy score. As shown in Table 4.8 there was a strong relationship between PROINCL and the BCSQ total. This relationship was not present with the unmodified STATIC score. It was suggested that the poor reliability on Items 3 and 16 masked the underlying relationship. The relationship between the attitude score as measured by the PROINCL and the BCSQ score was 0.43 with an error probability  $\rho$  < 0.001. This indicated that teachers who had a positive attitude towards inclusion were more likely to have selected pedagogies that suited inclusion and conversely teachers with a more negative attitude were more likely to use teaching practices that were less suited to SNS.

As outlined in Table 4.8 a further analysis of the PROINCL score showed further relationships with three other variables, tertiary education in special needs, years of teaching experience and the number of SNS in the class.

Table 4.8 – Relation between PROINCL, BCSQ and other variables.

	Tertiary education in SN	Years Tch. Exp.	SNS in classes	BCSQ Total
PROINCL.	0.29	0.19	0.20	0.43
	$\rho < 0.001$	$\rho = 0.006$	$\rho = 0.003$	$\rho < 0.001$

# ANALYSIS OF HIGH SCORERS AND LOW SCORERS IN BCSQ AND STATIC VERSUS VARIABLES

The trends and relationships identified in the statistical analysis were complicated and interdependent. Often it was not just one variable but a multitude of variables that provided a possible explanation of teachers' attitudes and pedagogies. In order to focus on the differences between the participants, a different approach was taken. Rather than consider the

responses of individuals, the responses for both the BCSQ and the STATIC were divided into high scorers and low scorers. The high and low scores were set for the two questionnaires to identify a group in the top and lower quartiles of scores. Setting the high score for the BCSQ at 155 or higher gives a group of 59 participants. Similarly, setting the high score in the STATIC at 80 or greater, also gives 59 participants. A similar exercise for the low scorers identifies a group of 57 participants when the low score for BCSQ is set at 136 or lower and a group of 55 for STATIC when the low score is set at 68 or lower. This grouping was further refined to give a more select group by selecting those participants who scored high or low in both surveys. This resulted in a low scorer group of 19 respondents and a high scorer group of 23 which was approximately the top and bottom 10% of the sample. A comparison with the overall sample of these six groups against the nine independent variables gave the following outcomes. Details of these comparisons is included in Appendix N for Analysis of High Scorers and Low scorers in both the BCSQ and the STATIC vs Variables from the PBQ.

School type and age. The participants from the regular schools were over represented in the low scorers for both the BCSQ and the STATIC. They were similarly under represented in the high scorers for both questionnaires. The age variable indicated that the younger group of teachers were over represented in the low scores and under represented in the high scores. This effect was more pronounced in the STATIC attitude survey.

Teacher education. This variable produced the most variation. Participants who had no education in special needs were substantially over represented in the low scorers of both BCSQ and STATIC and under represented in the high scorers. In the total sample 40% of the participants had not undertaken special needs education. This percentage increased to 46%

for the low scorers in the BCSQ, and to 58% for the low scorers in the STATIC. There was a further increase to 63% for the low scorer group in both the BCSQ and the STATIC. Similarly, the percentages of participants with no education in special needs dropped from 40% to 24% for the BCSQ, 25% for the STATIC and to 17% for the combined BCSQ and STATIC for the three high scorer groups.

Experience. Experience was viewed from four aspects. They were: years of teaching experience, years of teaching SNS, number of SNS in class and family experience with SNS. The teachers with less than 10 years experience were over represented in the low scores and under represented in the high scores. This impact was slightly more pronounced in the pedagogy survey and was, in general, the second largest influence on scores.

Participants with less years experience teaching SNS were over represented in the lower scorers in both the BCSQ and the STATIC. Conversely, teachers with more SNS experience were more often in the high score group. This trend was more evident in the BCSQ than it was in the STATIC. Similarly, the participants who had more SNS in their class also tended to be the high scorers. The overall trend was consistent with the hypothesis that teachers with no SNS in the class were less attuned to the needs of SNS. However, surprisingly on the attitude questionnaire the distribution was even across the high and low scorers which indicated that the number of SNS in the class was not an important determinant of attitude. Finally, family experience with SNS was not an important factor in the STATIC but did have an influence on the BCSQ.

The summary of this high-low analysis suggested the following order of importance for the variables selected:

1. Special needs education teacher level (SNTEL).

- 2. Experience.
- 3. School Type.
- 4. Years of teaching SNS possibly related to Item 2 (experienced teachers).
- 5. Age as a consequence of Item 2 (experienced teachers).
- 6. Number of SNS in class.
- 7. Family experience and gender.

#### **OPEN-ENDED COMMENTS.**

The PBQ provided an opportunity for participants to comment on two Items. The first open-ended statement was Q9, "Comment on how you feel about teaching a student with a special need in a mainstream classroom." The second statement was Q10, "Do you modify your teaching when you have students with special needs?" Q9 and Q10 on the PBQ were specifically included as a method of asking participants to comment on inclusion before they had completed the BCSQ and STATIC. It was considered important to elicit the respondents' comments before they completed the BCSQ and STATIC as the terminology used in the questionnaires may have influenced their choice of words or biased their responses.

Sufficient space was provided to encourage an answer of more than one word.

Unfortunately, despite this provision, participants did not always give a comprehensive response. Of the 225 participants, 3.5% chose not to complete either of the open-ended questions, 7% chose not to answer Q9 whereas most participants provided a comment for Q10. In both Q9 and Q10 the participants' responses were ranked from 1 to 5. A ranking of 5 indicated a positive comment and a ranking of 1 a negative comment.

## Open-ended comment Q9.

Q9 dealt with attitude towards teaching inclusion. The participants' comments were ranked as shown in Table 4.9. For Q9 there were 14% of participants who scored 5, 13 % of participants who scored 4, 32 % who scored 3, 23% scored 2 and 11% of participants scored 1. A further 16 teachers declined to respond to Q9. The average score for Q9 was approximately 3 out of 5. From these figures it was considered that the participants were generally positive towards inclusion (see Table 4.9).

Table 4.9 - Scores for Q9

Scores	Reg.Sch.	Sp. Reg. Sch.	All	All
			(N)	%
1. Negative towards inclusion	11%	9%	24	11
2. Open to inclusion but not fully	25%	19%	52	23
3. Pro-inclusion but had a proviso that qualified their positiveness	29%	40%	72	32
4. Definitely pro-inclusion but not fully committed	11%	18%	30	13
5. Fully committed to inclusion	15%	11%	31	14
Declined to answer question 9	9%	3%	16	7
Total	100%	100%	225	100

Common themes in Q9 open-ended comment. Q9 had five common themes extracted from the comments (see Appendix Q for Themes from Q9 on Attitude). They were:

- 1. Support.
- 2. Challenges.
- 3. Education.
- 4. Type and number of SNS.

#### 5. Attitude.

Although positive comments were the most numerous (85) there were 32 negative comments recorded. Common themes identified were very similar to those that emerged from the in-depth interviews. The themes *support* and *time* were also identified in the STATIC results.

Support. The need for support in the form of a teacher aide was obvious in the open-ended comments, STATIC and interviews. Support was considered to be of paramount importance to the teachers and was commented on by 31% of participants. Support generally fell into three areas: 1) The current level of support was absolutely necessary. The participants emphasised that they would not be able to manage without the support of an aide. This was mentioned 11% of the time. 2) Teachers believed in inclusion, as long as there was support from a teachers' aide. This was mentioned in13% of the comments. Teachers felt that without an aide inclusion could not work. 3) The teachers felt that they lacked sufficient support in the classroom for the current numbers of SNS in their class. This was mentioned by 7% of the participants.

Although teachers felt that inclusion was working, the suggestion was that inclusion could be more fully implemented if more teacher aides were available. Often the comment used the word *support* but without further elaboration. Support was an extremely important issue if inclusion was to be implemented successfully. The regular schools participants commented on support 23% of the time. The special regular schools mentioned support only 8% of the time. Four percent of the comments identified support as "must have an aide if inclusion is to be fully implemented" and the remaining comments indicated that support was of benefit to the current SNS in their classroom. It was clear that teachers highly valued

support in their classroom. However, the issue of support was shown to be more complex. Two issues mentioned earlier were the quality of support and the way in which aides went about the task of support in the classroom. The words "depends on support" were also written on the questionnaire papers. Some teachers chose not to complete the Likert scale because they felt that the answer could only be given if support was in place. The theme of support will be considered in Chapter 5 and again in the discussion in Chapter 6.

Time. A major challenge was the issue of time. Participants identified concerns about time when managing SNS, with 15% of the participants raising this issue. There were three main issues related to time. 1) The "Extra time to teach one-to-one" was commented by 8% of participants. 2) The extra time taken to plan and prepare for the SNS. Teachers commented that they had to plan specifically for SNS. It took a great deal of time to prepare activities or lessons and to locate special resources. This extra time to plan was commented on by 5% of the participants. 3) The time issue was the time taken away from the rest of the class, which was commented on by 3% of participants. A number of participants were concerned about not being able to interact with all class members, particularly if one child required more time than others.

The teachers at the regular schools had a total of 10% of the comments regarding issues about time, with the teachers at the special regular schools having a total of 20%. Time as an issue was also raised in the interviews.

Teacher Education. Education in special needs was also a major concern to teachers. This ranked as the third highest concern, with 9% of participants making a comment about the lack of education in special needs. Teachers felt that they did not have the necessary education in special needs to adequately teach SNS. Comments such as "I feel under

prepared," "education was a big help," "need specific education," "more education" and "not sure how to target specific needs" were made throughout the questionnaire and during the interviews. As mentioned earlier, teacher education had an effect on both the type of strategies teachers chose and their self-efficacy which ultimately affected their attitude towards inclusion and implementation of inclusion.

In the open-ended comments teacher education was referred to in a general sense, as something they needed, but did not specify the type of education they thought they required. They indicated that they wanted to know specifically how to address the specific needs of the SNS in their classroom. Some teachers described the need for special education as being crucial if inclusion was to be successfully implemented in their classroom. The regular school participants mentioned education 19 times. This was far more than in the special regular schools, who only mentioned education twice. Whilst education as such may not have been an issue for a high percentage of teachers, it was a major concern for the younger and less experienced teachers. It was the choice of words that these teachers used that made their comment a powerful statement, which included "worried about being able to be inclusive," "would like to learn more strategies," "daunting" and "overwhelming". Similarly, in the interviews words such as "draining" and "tiring" were used. Again, these comments and others are elaborated on in Chapter 6.

Type of disability. The type of disability was mentioned 6% of the time and was usually alongside the need for a teacher aide. The need for this type of support was relevant if the SNS was extremely disruptive or required specific one-to-one attention. This did not, however, appear to negatively impact on the teachers' attitudes towards inclusion. Most teachers felt that having a SNS in the classroom was appropriate. However, this depended on

the correct structures and support systems being implemented. The type of disability emerged not only in the data analysed from the PBQ but also in the interviews and on the open-ended comments made by participants in their responses to Q9 and Q10. Comments such as, "it depends on the disability" were written several times across the questionnaire. These were relevant comments and needed to be taken seriously.

The types of disability were categorised into students with physical, behavioural and cognitive disabilities, including those diagnosed by the teacher as being SNS. The type of disability was extremely relevant to teachers who were interviewed. For example, on a few occasions, the participants mentioned the type and severity of disability as a concern. It is the difference between success and failure for inclusion (as quoted by many respondents in Q9 and Q10). In essence the participants from the special regular schools were exposed to a higher number of SNS and more students with severe disabilities. They were the students whose parents placed their child in the special regular school as they believed the local primary school to be ill equipped to accommodate their child's specific needs. Some of these issues went well beyond the scope of the present study but were critical issues for the task of implementing inclusion in Victorian State Primary Schools.

Attitude. The comments that were the most common were those which expressed teachers' attitudes towards inclusion, with 117 comments from the participants. These comments have been categorised into positive comments (N = 85) and negative comments (N = 32). However, of these 117 comments there were 22 that were both positive and negative. Some comments were not stand-alone and were coupled with a proviso such as "great, if you have an aide" or together with an equally negative comment such as, "rewarding and frustrating." These teachers tended to qualify their comments in such a way

that while they felt teaching SNS may be a challenge it was also rewarding. Some of the comments that fell into this category were "a challenge, but rewarding", "privileged, frustrated, good days and bad days". It should also be noted that of the positive comments the special regular schools had four teachers who used extremely powerful words. These have been termed as "double positive" as the words used indicated an exceptionally high ranking by the teachers of their beliefs and values towards inclusion. For example, having inclusion "enriches the class and tolerance of everyone" or "I am enthusiastic, challenged, passionate." Such comments are a mixture of a double positive and yet there was recognition that inclusion is a challenge. This was also the case with double negative words that suggested extremely low views of inclusion. These included "I felt teaching SNS was very challenging," or "I feel like I have failed to achieve." These comments are indicative of how some teachers felt towards inclusion. To explore these words in more depth a scale of positive and negative words has been made with the words listed according to how often they were written and the level of intensity for the extremely positive and negative words (see Appendix R for Words, Phrases most frequently used in Q9). Whilst attitude was shown to be high in both the open-ended comments and the STATIC, this was also the case in the interviews.

# Powerful wording.

Some of the words and phrases chosen by the teachers were extremely powerful. In some cases, just one word could convey a very strong feeling or emotion towards inclusion. For example, words such as "passionate" or "daunting." Also, when reviewing 225 responses, the repeated analysis of the comments gave an appreciation of the overall attitude that was conveyed by the cumulative comments of all participants (see Appendix R for Words, phrases most frequently used in Q9). This was consistent with the findings in the STATIC.

# Open-ended comment Q10.

Q10 dealt with the type of pedagogy that the teachers chose to use. As mentioned earlier, this question was to solicit from the participants understanding of how they used inclusive strategies before they had read the BCSQ. To measure the teachers' comments towards inclusion and their inclusive strategies participant's response was ranked from 1 to 5.

In Q10 participants were asked: Do you modify your teaching when you have SNS?

The average score was 3.8. One third of the teachers scored a 5, a further 24% of teachers scored 4. Additionally 32% of teachers scored 3 in the ranking and 4% scored 2 (see Table 4.10). These scores indicated that the majority of teachers modified their teaching and learning programs for SNS. A wide range of practices reported by the participants included a variety of individualised programs. This will be discussed in Chapter 6.

Table 4.10 - Scores for Q10

Scores for Q10	Reg Sch	Sp. Reg Sch	All	All
			N	%
1 – Did not modify their teaching program	2%	3%	5	2%
2 – Used one minor inclusive strategy	5%	2%	9	4%
3 – Answered in one word, gave no examples of inclusive strategies used	42%	10%	73	32%
4 – Gave more than one inclusive strategy	14%	46%	54	24%
5 – Fully committed to using inclusive pedagogy, gave a range of strategies	31%	39%	75	33%
Declined to answer question 10	6%	0%	9	4%
Total	100%	100%	225	100%

Common themes in Q10. The most important set of answers that were obtained from Q10 were those that showed the wide range of inclusive pedagogy used by the participants. Some participants reported up to four different inclusive strategies. Other participants mentioned one or two inclusive strategies, while more than 40% of the participants put one word or gave a minor justification as to why they did or did not use inclusive practices in their classroom. These words did not describe what types of pedagogy they used (see Table 4.11 for Themes from Q10).

Table 4.11 - Themes from Q10

Item No	Themes from question 10	Reg. Sch	Sp. Reg. Sch	All	All
		%	%	%	N
1	Varied inclusive practices	18%	14%	17%	52
2	Individualised programs	47%	24%	41%	126
3	Issues of education, support, disability	10%	13%	10%	31
4	Single word "yes" given	16%	37%	21%	64
5	Range of other single words	10%	12%	10%	31
	Total comments	100%	100%	100%	304

Varied inclusive pedagogy. Table 4.12 records the type of varied inclusive pedagogy mentioned by participants. There are 13 different types of inclusive practices that were given by 49 individual teachers.

Table 4.12 - Varied inclusive pedagogy recorded by teachers

Pedagogy used	Reg. Sch.	Sp. Reg.Sch.	All
1. Peer tutoring	3	0	3
2 Small groups	2	0	2
3 Explicit teaching	2	1	3
4 More visual aides	4	1	5
5 Open-ended activities	2	1	3
6. Slowed pace of lesson	3	1	4
7. Time to complete tasks	1	0	1
8 Variety of strategies	2	0	2
9 1 to 1 with SNS	7	2	9
10 More hands-on tasks	1	0	1
11 Used selected games	1	0	1
12 Instructions:			
varied instruction	5	2	7
pace of instruction	2	1	3
repeated instruction	2	0	2
simplified instruction	2	1	3
13 Arranged furniture	2	0	2
Total	41	10	51

*Individualised programs*. Individualised programs are considered to be a major inclusive practice used for SNS. Such programs are also used for students who are gifted, students who have a learning difficulty/disability and all students who are diagnosed as being eligible for DEECD funding. As shown in Table 4.13 there were many different types of individualised programs. Many participants chose specific individualised methods for specific students. The individualised programs can be sorted into seven categories. They are:

planning, instructions, tasks, level of work, individualise for all students in the class, differentiation for the diverse range of students and universal tasks where best practice benefits all students. These programs were indicative of the variety of ways the participants individualised their teaching and learning program. 1) The first of the individualised programming was the individualised planning, which involved students who required a specific Individual Learning Plan (ILP). This was used by 13 teachers. ILPs were devised by the teacher in consultation with parents and provided very specific details of the learning plan for that student. These ILPs were considered to be standard practice by DEECD in Victorian state schools. 2) The second individualised program was individualised instruction which was used by 22 teachers. 3) The third individualised program involved the setting of individualised tasks for SNS; these were used by 38 teachers. 4) The fourth type of individualised program was the individualised level of work which was used by 19 teachers. This was where set tasks were grouped into levels and the whole class was placed into a level and given the appropriate level of work. 5) The fifth type of individualised program was one that involved all students in the class. There were 27 teachers who claimed to have used individualised work for each student in their classroom. 6) The sixth individualised program offered was a form of differentiation, designed to specifically cater for the diverse abilities in any classroom. 7) The seventh was the use of universal tasks which involved the use of tasks that benefited all students.

Individualised programs were considered to be a fundamental requirement when implementing inclusion. The responses on the PBQ, BCSQ and interviews clearly indicated that teachers were implementing individualised programs for the SNS and for other students as required. In some classes there was an individualised program for every student in the class. This is an important finding. This indicated that teachers had the ability and willingness

to commit to a comprehensive set of pedagogies. The type of inclusive practices, such as individualisation and other practices recorded will be discussed in Chapter 6.

Table 4.13 - Individualised Programs

Individualised Program	Reg. Sch.	Sp. Reg. Sch.	All	Percentage of teachers who individualised
	N	N	N	%
Individualised Learning Plans (ILP)	8	5	13	6
Individualised instruction	18	4	22	10
Individualised tasks	35	3	38	17
Individualised level of work	17	2	19	8
Individualised program for all students in the classroom	26	1	27	12
Differentiation for students who need it	2	0	2	1
Universal best practice that benefits all students in the class	3	0	3	1
Total	109	15	124	55

Issues that affect type of pedagogy implemented by teachers. The third theme that emerged from Q10 involved Issues that affect pedagogy and these were subdivided into three issues:

- 1. The level of education obtained by teachers in special needs.
- 2. The support from teacher aides.
- 3. The type of disability.

The first sub-theme that affected the type of pedagogy practiced concerned the need for specific special needs education for teachers. This was identified in the open-ended comments when a participant explicitly wrote that they lacked the necessary education in

special needs or when a participant commented that they did not know what to do about inclusion. Some participants were not sure of what inclusive practices they could or should use. This was indicated in five comments.

The second sub-theme that affected the pedagogy used, involved the support offered by teacher aides. Some teachers felt that they could only implement inclusion and individualise their teaching for SNS provided a teacher aide was available.

The third sub-theme included a number of teachers who felt that the type of inclusive pedagogy used depended completely on the needs of the students. That is, the type or severity of the students' disabilities. Teachers felt that the delivery of a successful inclusive program often depended on the type of disability displayed by the SNS. This was a concern for 18 teachers.

One word response. Finally there were responses which consisted of only one word to describe the inclusive pedagogy used. This was not enough information to discern what type of pedagogy was used. There were two categories of one word responses. A positive response or a negative response. The word "yes" and a range of other positive words such as "absolutely, definitely, nearly always, of course, have to" were used 86 times and indicated that teachers did in fact implement inclusive practices. Participants from the regular schools used the word "yes" 55 times where as participants from the special regular schools used the word "yes" 31 times.

The word "no" was only used three times. Each time "no" was mentioned it coincided with the following attitude comments; "rather daunting," "not sure how to target specific needs" and "challenging." These three comments indicated that these teachers lacked the

appropriate education in special needs to implement inclusion. The word "no" occurred once in the special regular schools and twice in the regular schools.

Although, the one word response did not give a specific type of inclusive pedagogy it suggested that teachers were using selected inclusive practices in their classroom and in some cases the words used were very powerful. Words such as, "absolutely," "definitely," "of course," "nearly always," indicated that the teachers had very positive attitudes and used a wide range of pedagogy.

### **SUMMARY**

This chapter has reported on the results of the survey and has highlighted the fundamental issues relevant to the implementation of inclusion in Victorian State Primary Schools. The results indicated that teachers had a positive attitude towards inclusion and used a wide range of inclusive pedagogies in their classrooms. However, teachers were often unsure about the benefits of inclusion and did not have the education in special needs to implement an effective program in their classroom. They felt challenged and inadequately educated to teach SNS. There appeared to be a relationship between teachers who had a positive attitude and those who implemented a wide range of inclusive practices. Whilst experience in teaching SNS was an important factor that affected teachers' attitudes, it should be noted that the present study highlighted the finding that some excellent teachers were not allocated SNS because they did not have the characteristics necessary to teach SNS. This uneven distribution of SNS both between school types and within schools placed a heavier burden on the teachers who were capable and qualified to teach SNS.

There is still open debate by experienced SNS teachers with a positive attitude toward SNS about the benefits of withdrawal programs. The suggestion was that some teachers

philosophically believed that it was a practical solution and necessary within the constraints of the current system for SNS to make academic progress.

Teachers who rendered a high attitude score also had a high score in individualised teaching practices. Individualised practices were widely used by almost all teachers in some form or other. It appeared that metacognitive teaching practices were used less despite the acknowledged benefit for cognitive learning difficulties.

The issues surrounding teacher aides were complex. On one hand teachers in general required the assistance of an aide. Indeed some teachers strongly believed that inclusion could not be successfully implemented without the presence of an aide. However, there were multiple issues that complicated the availability and effectiveness of the aide. One key issue was the knowledge and education level of the aide. A second key issue was funding for teacher aides and other classroom support.

The fact that many teachers were unsure about many issues involving teaching SNS in an inclusive setting indicated that teachers themselves may have had a poor self-efficacy towards their ability to teach SNS. This was particularly evident in teachers' concerns regarding the students who they considered to have severe learning disabilities but had not been diagnosed and therefore did not qualify for assistance. However, it was clear from the extremely low performance levels of the teacher-diagnosed SNS that specialised teaching was crucial for the development of these students. The teachers indicated that they wanted more education in special needs to enable them to identify and diagnose various learning disabilities and or difficulties. However, it appeared that teacher education in special needs alone was not the only answer. The suggestion was that experience with SNS was an important issue in determining the attitude of teachers and the pedagogies they indicated they

used. There were also some well regarded teachers with many years of teaching experience who were simply not suited to teaching SNS.

The analysis of the high and low scorers on the BCSQ and STATIC also indicated that education was an important variable. Teachers with a higher level of special needs education were over represented in the high scorers and conversely under represented in the low scorers. In a similar way the more experienced teachers and the older teachers scored better in both the BCSQ and the STATIC. However, the issues were relatively interdependent and the many open issues at the end of Phase 1 of the present study necessitated further investigation in the form of targeted interviews. The data from these interviews is given in Chapter 5.

## **CHAPTER 5**

# **RESULTS - INTERVIEWS**

"Attitude is a little thing that makes a big difference" (Winston Churchill, 1945)

This chapter presents the results from ten structured and semi-structured interviews conducted by the researcher with participants, attending two types of State Primary Schools in Victoria. The first type of school was the regular school which is described as being a regular State Primary School, with a regular enrolment of SNS. The second type of school was the special regular school which was also a regular State Primary School but had attracted a larger than usual enrolment of SNS.

The findings of the interviews stressed the reality as the participants perceived it to be from their personal experiences with SNS in their classrooms. Interviews are expected to generate useful information about an experience and its meanings (Denzin & Lincoln, 2005, 2008). The interview is an art of conversation, that is, of asking questions and listening (Fontana & Frey, 2005). In the present study the interviews indicated how the participants made sense of their experiences in relation to the educational changes brought about through global cultural pressure to implement inclusion (Chase, 2005).

The present study findings related by the ten participants were categorised into seven themes:

- 1. Attitude.
- 2. Pedagogy.
- 3. Teacher education.
- 4. Support.
- 5. Type of disability.
- 6. Challenge.
- 7. Comparisons between the regular school and the special regular school.

These seven themes have been investigated and presented in the following manner.

### **ATTITUDE**

The term inclusion is complex. It is not merely the mandatory enrolment of all SNS that we are examining. It is the underlying innuendos of cultural values and beliefs that are held to be important in today's global society that must be taken into account. One of the present values considered to be held in high esteem, globally, is the concept of inclusion in education and, in the case of the present study, how inclusion is implemented in the Victorian State Primary Schools (UNESCO, 1994; OCH, 2002; DEECD, 2009). The present study suggested that, teachers found inclusion to be difficult to maintain at times, such as when some SNS were extremely difficult, which led to such comments from one participant (Jane) who stated, "some of the children with ....... definitely shouldn't be in mainstream".

Behaviour such as violent attacks on teachers and other students prompted the statement "if our school couldn't cope with him, and teach him, then we shouldn't have him" (Debra).

Clearly, how inclusion was managed in classrooms impacted on the success for all involved.

In most cases the teachers interviewed were aware of these difficulties, and despite this were able to embrace inclusion and use inclusive pedagogy on a daily basis as part of their holistic teaching approach. For example, Jane felt that her teaching reflected her attitude which was "it's just embedded totally, if we are thinking about social issues ... it's embedded in our planning." Teachers Mel and Mat commented on the tolerance and acceptance displayed by their regular students. They believed that SNS were in most cases able to improve academically by being in an inclusive environment. For instance Jo, who was emphatic when asked if she thought SNS improved academically, stated "Of course, everybody does".

For the most part the social skills and acceptance of SNS were seen to have improved, with Jo explaining "I think between the other kids (regular students), the teacher, and the aide if there is one thing you can make huge inways in, its self-esteem and confidence. Other kids seem to be your best resource". The improvement, however, often depended on other variables that interacted with progress in this area, such as the severity or type of disability. A good example of this was Mel's recount of one SNS she had who had cerebral palsy, "I didn't really think she improved apart from getting the other children to appreciate her for what she could offer and ignoring her when she screamed out and that sort of thing. It was excellent for the other children to have to cope with that". Type and severity of the disability will be discussed later in this chapter.

Again, it was important to the teachers that the self-esteem of all these students played a crucial part in the overall development of the student as a person. Inclusion not only contributed to SNS self-esteem but also to that for the regular students. Lily was insistent, as were some other teachers, "I believe the self-esteem of all students to be really, really important and it doesn't matter whether they have a disability or not. It's the role of the

that SNS hindered the academic progress of regular students except in minor instances, such as, waiting for physically disabled students to move in and out of the classroom. In some cases disruptive behaviour interrupted regular students' work but did not hinder academic progress as such. Debra, Jane and Mel felt that the regular students became more "tolerant" and were not hindered. Debra commented that "it must be awkward for some children when they have a difficult child in their room to complete work or if the teacher's time is often taken so they can't get help". Debra also expressed the concern "that if a teacher is stressed then that is not going to be good for the children".

It was interesting to note that when asked if they believed that SNS should be taught in regular schools, participant's response was a resounding "yes". To a great extent the interviewees seemed to fully embrace the concept of inclusion and at no time did they demonstrate a blatant discomfort towards having a SNS in their room, regardless of the disability. For example, Lily and Dan both had a SNS with physical disabilities which could have been seen as not pleasant to deal with (toileting) or unpleasant visually (physical deformity) but neither of these teachers, nor their students, displayed any issues with the disabilities. On the contrary, one of these students was extremely popular with all staff and students and, despite his physical disability, he was a keen cricket player who was the first to organise a stream of peers into teams for daily matches.

The fact that SNS were seen by all students as being "just another student" was clearly important to some of the interviewees. The concept of person before language (Loreman et al., 2005a) essentially promotes inclusion which was extremely relevant to the teachers

The suggestion was that SNS were more likely to be accepted for themselves regardless of their disability. An excellent example of this was Jane's recount of an incident with a ten year old student. The student was playing with other students in the school yard when one of the other children fell over. The student ran inside to tell the teacher and said "one of the girls has hurt themselves" when asked which girl she said "the one with the black hair." She had been playing with a student who was physically disabled and a student from India. She didn't see the disability or the colour of the student. This incident is an example of tolerance and total acceptance and, to some extent, evidence that inclusion actively works. From the experiences of most of the interviewees the presence of SNS in their classroom was not the main issue. Having said this, the type and severity of the disability seemingly needed to be addressed. In the present study the participants indicated that SNS with physical disabilities were easily identified and well supported and were of little concern to teachers (Dan, Lilly and Dee). However, SNS with behavioural disabilities were more of an issue for some teachers (Mel and Debra). This was particularly noted in the comments by interviewees Debra, Jane and Mel because some of their students consistently disrupted the class. These students were often not eligible for funding because they did not meet the DEECD criteria. A similar situation existed with teacher-diagnosed SNS who also, by definition, did not meet the strict criteria for additional funding although the teachers felt that they required extra support. As identified in this chapter, in some cases these students required more one-to-one teaching (Lily, Mona, Mel, Jane and Debra). In this situation, it is inevitable that without support, time was taken from the rest of the class. These SNS were seen to sometimes make minimal progress academically because they needed more one-toone teacher time which was simply not available. However, having identified these students, teachers indicated not only their acceptance of inclusion but their willingness to learn all they could about inclusive pedagogy.

#### **PEDAGOGY**

The suggestion from the present study was that most of the teachers demonstrated that they used a variety of inclusive strategies many times throughout a day. For some it was totally embedded in their teaching as they had adopted many of the inclusive practices as universal best teaching practice. For example, Jane felt that "inclusion underpins every single thing that I do and by doing inclusion, it makes those kids [SNS] accepted. It makes the other kids [regular students] accept them [SNS], and it helps them become rounded human beings and both having the sort of integrity that we love them to have as adults. This is really extremely important to me." That is, it is not only considered best inclusive practice for SNS, but practice that benefits all students in their classroom. Again, Jane's philosophy that inclusion is "embedded totally... it's embedded in our planning, and probably further... because fundamentally I believe you can have the most unintelligent person on earth and yet they can get along with people and are successful". Many teachers in the interviews outlined how they used inclusive pedagogy. One example given was the strategy of metacognitive thinking. This question was about "inner language and self-monitoring" which was shown to be used relatively infrequently in the questionnaire survey. However, when the interviewees were asked this question and had time to reflect on the terminology, it became clear that they often used these methods. These inclusive practices were implemented for both individual SNS and for the class as a whole. As Lily explained, there were a number of ways in which she instructed the students to use "inner language." The range Lily used were: key words, body language, teaching rhymes to remind the children to stay focused or remember information. Mel, Jo and Mat were strong advocates for "self monitoring," as Mel responded "Absolutely, often I will say to the students, I want you to go back and check your work and make sure that you have actually done the best you think you can." Jo commented, "that we do a lot of work with the kids (on self monitoring) because self assessment and particularly

evident. For example, Jo, Mel and Mona would regularly expect the students to ask themselves: "Am I using my time effectively? Am I using the strategies that I have been taught? Have I asked the teacher? What strategies am I going to use to work this out?" This was also the case with issues on self-esteem where a number of teachers quoted that they believed that self-esteem was a crucial factor for all students (Lily, Mona, Jane and Mel). They felt that self-esteem must be of concern for every individual, on an on-going daily basis. This was particularly evident in Lily's comments when she stated, "the self-esteem of all children is important." This not only meant considering students' self-esteem when addressing the class and individuals but also when asking children to work in groups and partners. Again when assessing students, most teachers were conscious of each students' ability and sought to read all questions, or take more time and care with explanations allowing extra time to accommodate SNS and the teacher-diagnosed SNS.

Another method of self-monitoring was the use of Individual Contracts which were to a great extent used for SNS, particularly those with behavioural disabilities and in some cases for children who had difficulty in finishing a task. Most teachers adapted a special grading or reward system for SNS as one they would use for the whole class. For example, stickers and stamps were frequently used by Dee and specific praise was used where the aim was to make the student "feel good about themselves". Jane was in the habit of rewarding students for their best effort, regardless of whether they were a SNS or not. Jane related a story of how a particular student who struggled with the class work "had shown perseverance and achieved something he didn't think he could do. So I gave him 1000 house points... his little face just lit up, he was just really happy". This type of *token economy* (as it was referred to in the survey and interview questions) was often awarded to students.

Descriptions of how teachers used modified programs in their classrooms were reported by the participants. One teacher qualified this by saying that she modified the programs for SNS often (Mona). This was also the case for the question on "token economy," where most teachers understood this to mean a small reward to encourage correct behaviour or to note a success in their work. However, not all teachers understood the term token economy or simply didn't relate to the concept. Comments such as "I don't know what you mean by token economy" or "I don't like the sound of 'token' it sounds like you just mean 'a little bit' not a sincere gesture." This was obviously why this particular question scored low on the BCSQ questionnaire. From the comments and explanations given by the teachers on how they implemented inclusion, it is necessary to consider the type and amount of planning required for successful inclusion.

Most teachers expressed the need to produce a specialised plan. This included teachers of students with physical disabilities, who felt that they didn't have to address many specific tasks or implement inclusive pedagogies as such. For the most part, the teachers wrote Individual Learning Plans (ILPs) in consultation with parents. If the student was old enough they were also included in these discussions with the teacher and parent. ILPs are also provided for students who are considered to be gifted as they too require a specialised program. ILPs often involved the teacher-diagnosed SNS where children had been found to need extra assistance due to an unidentified learning disability. The teacher-diagnosed SNS were identified by their poor skill performance at a level considerably lower than their age group (at least two or more years below). ILPs were also provided for those students who had a behavioural disability. Enforcing the ILP required a great deal of time, usually one-to-one by the teacher. Teachers with students who had a recognised physical disability, whilst required to provide an ILP, did not have to implement entirely new teaching methods or inclusive strategies in the classroom, as their needs were usually addressed by the teacher

aide. Therefore, implementing the ILPs for the other students required the knowledge of inclusive pedagogy and took extra time to seek specific resources, equipment and the like, in order to address the specific needs of these students. In such cases some teachers requested that they attend specific PD sessions, in order to learn more about the needs of the SNS in their classroom.

Jane was one teacher who specifically did not plan differently for the SNS in her classroom. Jane explained that her teaching was symptomatic of her years of experience and the number of special education sessions that she had attended over the years. Jane felt that inclusive strategies were completely embedded in her everyday teaching and in her handling and planning for the whole class. It was interesting to note that Jane had recently been the first mainstream classroom teacher in the State to complete the Graduate Diploma of Special Education, Autism. In her course, Jane had learnt that in some cases some methods she had once employed when teaching children on the autism spectrum were setting both herself and the student up for failure. This brought to light that despite the number of years teaching and extensive experience teaching SNS, the quality and level of education can make a difference in the successful implementation of inclusion.

Withdrawal programs. The controversial issue of withdrawal of students from the regular classroom has raised interesting discussion by parents, schools and within schools. When the interviewees were asked what they thought about withdrawal programs the majority felt that it was necessary for a range of students whether they were SNS or gifted. As discussed in the Senate, report (OCH, 2002) in Australia two models of inclusive education exist. One model is where SNS are for the most part, in a regular classroom with partial withdrawal of individuals or groups, which are dependent on the SNS needs and individual programs. The second model involved complete inclusion with all students in the

same classroom all the time. As mentioned in Chapter 1, this second model was inspired by concerns for equality of opportunity and moral and ethical considerations determined by the Salamanca Statement in 1994 and strongly supported by those involved in rights movements (OCH, 2002). Recent evidence suggests that withdrawal and special classes have increased (DEECD, 2009).

Participants indicated that students required withdrawal from the classroom for a variety of reasons, such as behavioural problems, learning requirements or for physical needs. Debra commented that "children who might scream, be loud or disruptive needed to be removed quickly by the teacher aide". Having this type of support available immediately is crucial for the safe and effective learning of all students in the classroom. As Jo pointed out, "you can't beat withdrawal for one-to-one teaching" This applied to all students, whether they were a teacher-diagnosed SNS or beneficiaries of state funding.

As Mona commented for some children it is better to be withdrawn because "in the classroom they can get easily distracted, although they might be labelled, most other students want to go out also and ask why they can't go." Such programs were extremely valuable to the SNS as well as some regular students. Elle felt that, "the withdrawal program was great. It really improved the students academically." In some cases withdrawal was only necessary for the administration of physical needs such as medication, special exercise, assistance from an educational specialist or quality one-to-one assistance. Dan felt that without the teacher aide to regularly assist in withdrawal of the student it would make it extremely difficult for the rest of the class. Particularly, if the class had to leave the room every time the student required special assistance. This type of inclusion would draw too much attention to the SNS which Dan felt would prove to be a disadvantage to the student and his acceptance by the regular students. However, in some cases, withdrawal may have been a class management issue

arising from behavioural disabilities, such as the case with Debra who specifically positioned a student near the door for quick removal by the aide. This was done in case the student became disruptive, loud or physically violent. In the case of students with severe learning disabilities, most teachers felt that the student would benefit from the ability to complete work on a one-to-one basis, free of other distractions in the classroom. As Mel said "sometimes I want Danielle to go out and do special writing and just focus on her own special needs."

### TEACHER EDUCATION

For the purpose of the present study the words education in special needs have been consistently used to cover the various types of education in special needs that teachers have undergone. Teachers indicated that they intended to continue to pursue knowledge in special needs in order to keep abreast of new inclusive techniques, as well as to further advance their understanding of specific disabilities. Not all of the education in special needs discussed and undertaken by teachers was specifically designed to gain knowledge on how to teach. Indeed much of the acquisition of knowledge about the student and their disability was gathered from a wide range of sources some of which would not be considered to be education as such. For example, Lily and Jo both mentioned how valuable the informal conversations with either parents or ancillary staff, such as speech pathologists, helped in their management of SNS. Much of the education in special needs undertaken by teachers was informal and completed in a two-hour session or from meetings with parents and specialists. Although Dee praised the fact that as a requirement in her pre-teacher Diploma of Education she had to attend some weeks of a practice round where SNS were included. Jane had taken her education a step further and completed a Graduate Diploma of Teaching Students with Autism Spectrum disorder. Mona cited her past experience as a psychologist as being an excellent form of

education when dealing with SNS. Despite the diligence displayed by each of the interviewees to gain specific information about the SNS in their classroom, these three teachers had obtained a higher level and more specific type of education in special needs than the other interviewees.

Some of the young and inexperienced teachers expressed a dire need to learn more about the background of SNS and how to teach SNS in their class. For example, Elle felt that she was "floundering" and Dee found the idea of having a SNS to be "daunting". In many cases the teachers sought knowledge on the best inclusive practice for their students, including the teacher-diagnosed SNS, by attending a range of PD sessions, conferences, or meetings with parents, specialists and ancillary staff. For the most part, teachers from the special regular school had attended numerous PD sessions. Dee had attended a conference on students on the autism spectrum. Some of these teachers felt that they lacked the confidence to know what to do and had no education in special needs. For example, Mat and Elle who had no education in special needs, both commented that they "needed more education in special needs".

When the interviewees were asked how they felt when they heard they were to get a special needs student, some teachers commented that they felt "unsure, worried or daunted". Elle commented that she felt "unprepared" and was going to seek information from the student wellbeing coordinator and other specialist, to help her in her quest to learn more about the SNS in her class and their specific disability. Whilst the older and more experienced teachers did not have this overwhelming feeling of "not knowing what to do", they also related incidents where they did not have the necessary skills or education in special needs to cope with the severity of some SNS. For example, Mel commented "it is beyond me." Mel felt that neither the student, teacher nor regular students were, in fact, benefiting

from the experience, her comment was "Tom was absolutely extreme. I certainly did not have the techniques to deal with him". Many of the teachers such as Elle, Dee and Mat had attended, or were about to attend, specific PD seminars regarding the disabilities of students they had.

As mentioned earlier the teachers in the special regular school had attended numerous PD sessions arranged by the school for the whole staff. This was due to the fact that they had a high percentage of SNS throughout the school. Some teachers mentioned the fact that while they usually benefited from PD sessions some PDs were of an exceptionally high calibre whilst some were no value at all. Both Lily and Jo had attended sessions which they commented "were lacking in information...." and indicated by their comments "I feel that I received more information from the parents of my SNS students". Jo and Mona revealed that they had read up about the disability. As Lily stated "A couple of PDs that I have been to, not all of them, just a couple of them have given good hints...." Elle stated that "She had asked previous teachers and other staff who had had contact with the student for information and assistance".

Mona, an experienced teacher with a psychology background, felt that teachers in general were "learning on the job" and were not trained enough to handle the range and severity of SNS. She felt that teachers would need to regularly keep abreast of current pedagogy and background knowledge by attending PD sessions and reading current journals and information relating to specific disabilities. Her comment "I would have attended over the years lots of courses and reading and stuff".

This was also in line with the concept put forward by Jo, who felt that "all teachers should have regular PD sessions on the range of learning disabilities/difficulties that every teacher would find in a regular class of students with the usual range of diverse abilities".

However, Jane an experienced teacher from the special regular school, not only attended many PD sessions on SNS but had afforded the time and money to embark on a Graduate Diploma in Special Education in Autism. Jane felt that education in special needs was not the most crucial factor. Jane's philosophy regarding education in special needs was more in line with the innate talent or natural empathy that a teacher possessed. Her comment highlighted other important issues that some teachers were not suited to teaching SNS. Jane commented that "some excellent teachers are just not suited to teaching SNS." Comments such as these lead to the question of the "quality of teachers". It is not just a question of education in special needs or lack of education in special needs that leads to inclusion being fully embraced. Perhaps it is the innate ability and empathetic character that is more important to the successful implementation of inclusion.

# Teacher suitability.

The suitability of the teacher has been an underlying issue throughout the present study. The variables of experience, type of education, age and school types might have contributed in determining the suitability of a teacher and their effective use of inclusive strategies. These variables and how they interacted needed to be addressed in more detail. In the light of inclusion one of the most necessary requirements would be the teacher's personality. Females were considered to be more caring, perhaps the 'mothering' aspect may have been more natural to females (Watson and Bond, 2007). Having empathy towards the students and their disability was also a quality that teachers may have needed when teaching SNS (Watson and Bond, 2007).

Making a difference and being committed to SNS were specifically highlighted by

Jane as it was her contention that teachers had to not only "be committed to the SNS and

inclusion" but also have the desirable personality traits considered to be essential for working

with SNS. Jane felt that it was something "you either have ...or you don't", "even if you give them [teachers] the strategies to do it [inclusion], it doesn't necessarily work for them." Jane felt that it was not the education in special needs or experience that made you the most appropriate teacher to teach SNS, but some teachers just weren't suited to teaching SNS.

As mentioned earlier, Jane had recently completed her Graduate Diploma of Special Education in Autism, and she was the only full time mainstream classroom teacher in Victoria to do this course. When asked why she had completed this degree she said that by doing this intensive study in autism it would benefit the three students on the autistic spectrum in her class at the time. Jane said "it suited me to learn as much as possible about autistic children as I had lot of students on the autism spectrum over the years and I knew I was to have three autistic students in my class that year." She commented that she wanted to "make a difference" in the lives of these three children. The commitment demonstrated by Jane clearly indicated that she had empathy for the students and was willing to learn all she could to improve her teaching.

According to Watson and Bond (2007) other personality traits considered desirable such as being tolerant, reflective, warm, accepting and adjustable to the needs of SNS were essential in order to implement inclusive practices effectively. The present study indicated that most interviewees did, in fact, reflect such traits. Jane certainly showed these characteristics when choosing a word to describe teaching SNS, she said it was "Gorgeous... you know how Care Bears have hearts, well I really think that autistic kids are like that...to me, autistic kids are just like the Care Bears."

The present study demonstrated that the participants accepted inclusion and were willing to adjust to the needs of SNS by attending PDs, researching information and meeting

with parent and specialists. The teachers were willing to make physical changes to their classroom. Many teachers made changes to the curriculum planning or modifications to how they gave instructions. For example, when Lily explained how she taught "inner language" to her class. The preparedness of these participants to accommodate inclusion was evident in a range of ways. The interviewees were considerate of the needs of both SNS and teacher-diagnosed SNS and did their utmost to seek education in special needs.

There was no evidence that the interviewees were not committed, nor unwilling, to embrace the recognised hard work that having an SNS may entail. In fact, it was the very fear of "not knowing what to do" (Elle) that led to comments such as "daunting, draining, unsure and floundering".

Dan) made comments that having an SNS could be "interesting, different or a good challenge". Both Dee and Dan had also sought specialised PD and had rigorously sought information from a variety of sources available to them through the school system and personal networking including meetings with the parents. Dee commented that "The parents gave us a lot of information... They informed me of everything I needed to know". When commenting on the Graduate Diploma course that Jane had attended, she substantiated the value of seeking information both formally and informally. Jane keenly felt that the part of the graduate diploma she valued the most was "the informal discussion at the end of each session where the group came together and discussed particular concerns and problems they had encountered". One formal requirement of the course was to visit special schools to see first hand how SNS were supported in these environments. It was whilst on these assigned rounds that Jane noted the quality of teacher and teacher aide was rarely in question as all teachers and aides had undergone education in special needs and many had completed formal

educational courses, such as a Masters in Special Education or a Graduate

Diploma in Special Education. Each of these teachers also had many years of experience in the field. However, this type of education was not always the case in the mainstream classrooms. The quality of the teacher aides' education in special needs was also questioned by some of the interviewees. For example Debra stated that "The aides are lovely people but they are not highly qualified and they are definitely not teacher trained and yet they are trying to deal with some very difficult cases".

## **SUPPORT**

The present study indicated that support for SNS came in a variety of ways. The most valuable support recorded was the availability and use of a teacher aide. The provision of resources and equipment was also necessary for successful inclusion. This was followed by a range of support at varying levels from parents, principals, educational system, colleagues and other students. Whilst most teachers felt that they had easy access to resources and equipment only Debra felt that this could be improved. Debra related the story about "how one student had been catered for with a special room, desk and shield to protect students and teachers." "He would kick students, and bite students, and bite aides , he would be removed to a little room and kick and kick. It sounded like the wall was going to come down". Whilst this incident took place some years ago, with the increased knowledge and experience of teachers today, the management of difficult SNS were now catered for in a variety of ways. Again, Debra reported that a variety of programs were offered to SNS. These programs focused on a range of areas such as social skills, behaviour skills and academic skills.

The problem with access might have been the ease at which some resources were obtained. For example, some equipment took months to arrive, some resources had to be handmade by the teacher or teacher aide and some items had to be obtained by approaching

other staff members or accessing school funds which may have originally been designated for other school programs. Debra made the comment "we spend a lot of money on extra aides".

Overall teacher aides were considered by the participants to be an important part of inclusion, especially if inclusion was to be implemented successfully. Most teachers interviewed felt that they needed teacher aides not only for the students already funded but for the teacher-diagnosed SNS. In some cases, such as Mel and Lily, these teachers had students they considered to be in need of support more than the students currently receiving funding for support. Lily made the observation that "One student here, one gets a lot of assistance, and one I see a similar sort of degree of disability actually gets none — it's not funded."

The interviewees had serious concerns about the lack of teacher aide support for those students that had not been diagnosed by DEECD (teacher-diagnosed SNS) and required a lot of the teachers' time in either disciplinary behaviour or one-to-one teaching. Debra commented that "I think we need extra aiding. ..... if you go on a school camp or excursion, you can't just take an aide for half the time..... you are always juggling the aiding time and getting extra aides". Half of the interviewees gave examples of how the school arranged placement of teacher-diagnosed SNS in classes with funded SNS so that the teacher aide could be shared between these students.

Both school types allocated SNS with teacher aides into classes where teacher-diagnosed SNS were specifically placed because a teacher aide was available in those classrooms. Monas' comment that "they have put aides in a room where there are other students.... It means you can give some aide support to them [students without funding]". Consequently, this method of distribution of teacher aides meant that some classrooms

became top heavy in the number of students that required special assistance,

whether it be SNS or teacher-diagnosed SNS. The number of SNS was a notable issue in the special regular school more so than in the regular schools. Debra felt that this was the most "challenging" aspect of teaching SNS in her school "... a lot of people are very positive about inclusion. I am to a degree, but not whole heartedly, the main thing I am against is the disproportionate numbers of SNS."

The juggling of teacher aides into various classrooms so that teacher-diagnosed SNS could be assisted was questioned by some teachers. For example, Jane, felt that not enough funding was made available for schools in general to support these students, as more teacher aides were needed for both funded and teacher-diagnosed SNS. Her comment was "We have so many children who don't get funded and who should." Mona commented that "it was never enough, never enough".

The act of obtaining funding for a teacher aide was a difficult and often frustrating task for the teacher and school. Most participants felt that the criteria for funding in Victoria had become too restrictive and many students who should be funded or given extra support in the classroom were not. For example, Mona cited the situation where she campaigned hard to get funding for a child who she was forced to create completely separate programs for in every subject area. "I use a lot of resources and I adapt them, my aide helps me do this and I make up stuff myself". This child obviously required enormous amounts of time but there was no support available.

This however, was not the case for students with physical disabilities. Funding was readily available for students with physical disabilities and therefore they were more easily supported by the provision of a teacher aide, special furniture or equipment and other materials that assisted in their learning. Having said this, it became evident in the interviews

that the provision of a teacher aide was a highly complex issue. I refer to the comments made by Jo, Debra and Mel who mentioned situations where teachers' aides did not necessarily "fit" into the classroom environment and the teacher's style of teaching.

Mona, Mel, Dan and Debra had experiences with teacher aides that were not always conducive to successful inclusion. Debra commented that some teacher aides "are fairly intelligent and think of ideas, make suggestions and are good at adapting class activities.... but sometimes I often prepare work for the teacher aide to use but they do their own things." The relationship between co-workers often depended on the education in special needs both had and each person's philosophy towards inclusion.

There seemed to exist two diametrically opposed attitudes towards having a teacher aide. Being able to work smoothly, side by side, in the classroom with any one teacher aide was an issue for some teachers. However, some teachers highly valued the presence of a teacher aide in their classroom. For example, Lily stated, "having a teacher aide was something I look forward to." This was not always the case for some interviewees. Some participants feared that having a teacher aide working constantly in the classroom would be disruptive for a variety of reasons. However Jane made the comment "they [teachers] don't like the extra aides in their class, they are intimidated by that". Debra, Jo and Mel felt that some teacher aides had been very disruptive, very loud or noncompliant. That is, they did not "work in" with the classroom teacher. For example, some teacher aides did not know what to do and required a lot of assistance from the classroom teacher themselves before they could be of value to the SNS. Teacher aides may be selected according to their experience, education in special needs or just the desirable personality traits that were perceived to be necessary when catering for SNS. However, it became evident in the interviews that teachers found some teacher aides to be totally unskilled and lacked experience for the SNS they were

dealing with. For example, Jo and Debra both commented "that the teacher's aides were at times disruptive and in some cases did not know what to do". This meant that teachers had to spend time teaching the aide or helping them with the SNS. Debra said that "the aides take a lot of responsibility in adapting the program but sometimes they don't follow the program."

As a consequence the quality of the teaching, whether it be implementing inclusive pedagogy or normal pedagogy, was dependent on a number of variables and situations within the classroom. The provision of high calibre support in the classroom alone, greatly influenced the implementation of a successful inclusive program.

In general the teachers interviewed showed respect towards teacher aides in their classroom and worked as a partnership together to achieve the best inclusive program for all students. To a large extent teachers commented that without a teacher aide for the SNS in their classroom they would not have been able to cope. Participants felt that it was necessary to have teacher aides for inclusion to be successful. In fact, it became evident that the older and more experienced teachers, such as Jo, Jane, Lily, Mona and Debra, felt that there was not enough support for the students that had not been funded and they required extra assistance. The comment by Jane is indicative of the general feeling among the interviewees, "There are days when I don't necessarily think that we are supported as well as we might be but because of the funding, you know the way the diagnosis...the criteria... is now, we have so many students who don't get funding...."

Twenty percent of the interviewees believed that the extra time taken by the teacher to manage the teacher aide was quite time consuming. Debra commented that "I spend a lot of time preparing for my SNS, for the aide to use, but it doesn't always get used". Some teacher aides were not trained to deal with certain learning disabilities or behavioural disabilities.

"The aides are not even teacher trained". Whilst the teacher aides may have attended some PD, it was noted by 20% of the interviewees that the quality of teacher aides varied somewhat. In some cases this became an important issue because poor assistance could have been interpreted as a hindrance to successful inclusion. This may have been the case for Jo and Debra who reported "I feel uncomfortable with a teacher aide because the teacher aide may be judgemental". The idea of being judged made them uncomfortable especially if they were inexperienced teachers such as Elle. However, this was also mentioned by more than one highly experienced teacher. For example, 30% of the interviewees (Jo, Debra and Mel) felt that having another adult in the room was something they were not at ease with. Debra commented that "You feel uncomfortable having another adult in the room all the time, you feel that they are judging you or you can have aides that you might not feel comfortable with". Support and knowledge of how to handle specific disabilities often coincided with the type of disability. The type of disability regularly became a prominent adjunctive, when discussing the major themes that concerned teachers' attitudes, pedagogy and support.

### TYPE OF DISABILITY

The type of disability was a concern to teachers as was evident by the number of times this issue was mentioned during the interviews. The issue of "disabilities" tended to fall into three main types: physical, behavioural and cognitive. A substantial number of teachers found that SNS students with physical disabilities were given more than adequate support. For example, Dan, Lily and Dee were given over 12 hours a week with a teacher aide to assist the student who had a physical disability, whereas students with a behavioural or cognitive disability were not supported at all. This was evident in Lily's comment "One little fellow gets a lot of assistance (physical disability) and one who has a similar degree of disability

(cognitive disability) gets none". Similarly, with other interviewees, a good example was Jane's comment "I get a huge amount of support… because he is so difficult. However, there are times when I don't think we are supported as well as we might be, because we have so many children who don't get funding and who should". Dan commented that he got support "whenever I need it" as he had a student with a physical disability.

Equipment and resources were readily available to students where needed, particularly students with physical disabilities. Some SNS had special furniture made for them and were catered for in classroom arrangements for easy access and manoeuvrability. For example, Lily had a special footrest and chair for her SNS in the classroom and a special stool was provided for the art room. Other SNS had special equipment such as computers or hearing equipment for both the teacher and the student to access. This was the case for Mona, who had a laptop provided specifically for a child to assist his learning. "I was given a laptop... to assist him, even though it was hopeless". Again when Jo was teaching a student with a hearing impairment, both the student and teacher were provided with highly sophisticated transmitters. All physically disabled students had teacher aides who were able to address the special requirements.

Teachers agreed that students with physical disabilities made academic progress, had few if any social issues, and rarely affected the academic progress of regular students. Again, both Lily and Dee felt that the students' learning was enhanced due to the assistance received from teacher aides. In fact, to some extent, most teachers felt that the regular students all benefited from the presence of students with physical disabilities in their classrooms because of the extra support in the classroom. Due to the obvious nature of physical disabilities, which were easily identified and therefore easily addressed, there was little reason to dispute the inclusion of SNS with physical disabilities. Hence, the acceptance indicated in the present

study, to readily include SNS with physical disabilities. As Jane commented "I don't want to take anything away from the kids with physical disabilities, but sometimes they are over funded while other students who need don't get it".

This was not always the case for students with behavioural and cognitive disabilities. The academic progress, social acceptance and development of self-esteem for some SNS depended on the type of disability. For example, Jane said "for students with Aspergers their social awareness is limited... they can be quite nasty at times". This was also the case for Debra, who felt that students on the autistic spectrum may not improve socially, "I had a little boy last year and he definitely didn't make any progress with his social behaviour". These students were found to vary in their ability to work harmoniously within a regular classroom which warranted a closer look into how these students were managed.

Students with severe or extreme behavioural disabilities were easily diagnosed and, in most cases, funding could be obtained. However, funding was limited and teachers found that those students who needed constant surveillance only had part-time support. Consequently they remained disruptive in regards to the teachers' ability to teach, as well as to the other students in the class. This was the case for Mel, Debra and Jane who found it necessary to have the child withdrawn from the classroom at times for the benefit of both the teacher and the regular students. Due to the magnitude of disruption to the classroom learning environment, Jane arranged what she referred to as a "Carter Free Day". This was one day that the SNS was removed from the classroom to work in the library with the teacher aide. Jane commented that "The children could have one day free of physical intimidation, climbing under furniture, banging on desks....". In some cases schools had to fund extra teacher aide support for one-to-one assistance, especially if the class was on a camp or excursion, as the funding did not allow for a complete day to be covered. This funding was

then seen as being taken from other school programs that would benefit all students not just SNS.

In the case of the special regular school where there was a higher number of SNS these funds were appropriated. When the school funds were not accessed the teachers and rest of the class were left to carry the burden. Debra highlighted that the lack of full funding meant "you are always juggling the aide time and getting extra aides... a lot of money was spent on extra aides. The new principal wanted to stop this... there is a lot of opposition for lots of reasons".

The participants also felt that the academic progress and self-esteem of both SNS and regular students strongly depended on the type and severity of the disability of the SNS. A simple yes or no answer would not suffice, as teachers did not commit to saying that all SNS would improve academically or socially. Lily said "that she had no way of knowing if a child would be better off in a special school compared to the progress she saw made in her classroom for various SNS." Mona was very adamant that it depended on the student. In her experience some children's self-esteem would suffer so badly by going to a special school that they would not be able to make strides academically or socially, "some kids would be devastated if they went to a special school." At the same time, Mona spoke of cases where students had gone to a special school and "... had grown beautifully, they have gone there and come back afterwards and said that they felt relief at being there." Some teachers felt strongly that students with behavioural problems were not consistent in their learning due to their behaviour. As Mel said for two of the most severe SNS she had "their academic progress was limited" while for other SNS "it has helped them by being in a normal mainstream situation." The ability of some students to stay focused or attend to instructions was limited and led to varied academic results. It is important to note that most teachers

believed that both academic and self-esteem improvements were likely to have been better in an inclusive environment than had the student been in a special school environment.

Likewise, with self-esteem issues, this often depended on the students' own perspective and perhaps their own personality and how they related to other students. Again, Mel felt that one student was psychologically traumatised and her [Mel] ability to manage his behaviour was "way out of my depth to help... he was beyond our help at this stage". Consequently he had not improved in any way at all by being in a mainstream classroom. Behaviour disabilities required extensive education as the younger and less experienced teachers such as Mat and Elle requested more in-depth education in special needs. Elle commented that she was "floundering" and had no idea what to do or how to address the SNS in her classroom. The severity of behaviour often impinged on the teachers' ability to teach without being disrupted. This was evident when, as mentioned earlier, Jane arranged a weekly "student free day" from a particular student so that both the class and teacher could go about their work without constant disruption. This action was taken in spite of the fact that Jane was known to be the most experienced, most highly educated and pro-inclusive teacher at the school. In the special regular school where the number of SNS was high, Debra talked about teachers who were known to take time off on a regular basis or need some extra peer support in order to cope with the "stress" experienced with teaching SNS.

Other major concerns noted by Foreman (2005) and Trimper (President of the Primary Principals Association Australia) when interviewed by O'Keeffe (2008) was the high number of students who were teacher diagnosed as requiring special needs. These teacher-diagnosed SNS were of particular concern to over half of the interviewees (Lily, Mona, Jo, Mel, Debra and Jane). Comments such as "we have so many students who don't get funding

and who should," or "Danielle probably is one that needs the most support, she doesn't get any...." and "One student here gets a lot of assistance and another one I would see with a similar sort of degree of disability actually gets none – they are not funded." As was stated in the literature review of Chapter 2, at least 15% of current classroom students required extra support, yet did not receive funding and therefore had no support. The interview data in the present study suggested that these, teacher-diagnosed SNS had not qualified for funding because the criteria for funding were extremely restrictive. In other words, the standard deviation was quite limited and therefore rejected the selection of students that were in desperate need for support.

The above-mentioned 15% of students, believed to have a learning disability who were teacher diagnosed SNS, were possibly of most concern. These students were the students often labelled as having the *hidden* disability which is often not obvious, but evidently low performances prove it exists, and manifests itself as the students begin to lag behind their peers quite noticeably as each year passes. Assessments of these students often demonstrated that they were performing at least two or more years below the expected reading or mathematical level for their age or year level (Louden et al., 2000; O'Keeffe, 2008; Westwood & Graham, 2000). The teacher-diagnosed SNS presented quite a challenge to the participants. The word *challenge* was also used more frequently in the open-ended comments than any other word. Therefore, the concept of what constitutes a challenge was included in the interviews.

#### **CHALLENGE**

The word *challenge* involved two separate questions asked at the end of each interview. It rose from the high frequency of the word used by participants both in a study by McKenzie, Waldie and Horwood (2006) and again in the open-ended question in the survey

conducted in Phase 1 of the present study. The word *challenge* can be used in both a positive or negative manner and needed more clarification as to how teachers might use this word in association with inclusion.

In the interviews there were two questions regarding challenge: How do you interpret the word challenge? Is it a positive or negative feeling? and what issues in teaching would you say are a challenge? (see Appendix L). It was expected that the participants would reply with the notion of "inclusion" in mind. Eight of the ten interviewees found that managing the issues involving inclusion were a negative challenge. The underlying issue was identified in the comments as: "it is coping with the diverse range of the whole class" that is a challenge. As Mona said "The challenge for me is finding the right level for each student". Classroom management and time was a challenge for some of the interviewees, particularly the young and inexperienced teachers. Managing classroom "time" was commented on by Jane, Mel and Elle who indicated that the challenge for them was "keeping on time" and "fitting everything in". This was particularly obvious when Dee commented that time was an issue for her because she simply "Can't cut herself up into 21 pieces." During Lily's interview she said "you can't have 24 kids with 24 individual programs in the classroom, so at some stage all kids are going to be compromised". Likewise with Elle, who found *time* to be the challenge in that she didn't have enough "time to get around to every child, especially when you have one child that needs a lot of time". An essential component of the time issue was the type of inclusive pedagogy required to address every child. The challenge seemed to be the diverse range of abilities and needs that existed within any one class. Whether there were SNS in a class or not, the issue that was a "challenge" was how to teach the wide range of abilities that already existed. This was commented on by Lily, who stated "Catering for the diverse range even for one student is a challenge". Lily's challenge was in reflecting on her own teaching and learning, whereby she was always working on "finding the right method".

The fundamental issue was, that within a regular class of students the wide range of diverse abilities was a difficult enough task for the teacher to manage, let alone when there may be both SNS and teacher-diagnosed SNS.

Throughout these interviews it was apparent that the regular school and the special regular school differed in many ways. Not just in the obvious profiles each school had in the high and low enrolment of SNS but in the type of teacher education, support and in various perspectives about how inclusion was implemented.

## COMPARISONS BETWEEN THE REGULAR SCHOOL AND THE SPECIAL REGULAR SCHOOL

Each school presented as a regular state primary school from the structure and number of regular staff per capita of students. However, a number of differences were noted between the two school types. The main differences between schools were:

- 1. More teacher aides and visiting ancillary staff in the special regular schools.
- 2. Allocation of extra monies from school funds in the special regular schools.
- 3. Teachers in the special regular schools did not feel adequately supported for the number and severity of SNS.
- 4. Teachers in the regular schools had little or no education in special needs and the younger, inexperienced teachers lacked confidence to teach SNS.
- 5. Teachers in the special regular school were more stressed as evidenced by time off given to staff to recuperate from SNS behaviour.

For example, Lily, Dan and Mat from the regular school, felt that they had ample support, whereas Jane and Debra from the special regular schools felt that they needed more

teacher aides because of the high ratio of SNS in each class and the severity of the disabilities of their SNS.

The major difference between the schools was the lack of special needs education received by teachers in the regular school, which was considerably less than in the special regular school. For example, Mat and Elle had no education in special needs at all. They commented that they were lacking in confidence and direction in how to deal with SNS.

Although the older teachers from the regular school were comfortable with their experience accrued over the years, some teachers such as Jo, Elle, Dan and Mona believed that education on a regular basis and in particular for learning disabilities should be undertaken to update all staff on current theories and strategies. Jo's comment was particularly relevant on this issue

"I would read as much as I possibly could. I don't think you can know enough about specific difficulties and it's probably particular for each student. And when you get that child you find out as much as you can. That being said, I think we all should know as much as we can about all different processing problems and kids who just don't fit the norm. I think we should be constantly updating our ability to help those students and when a specific need comes along do more PD then".

There were some similarities that existed between the two schools. For example, both schools recognised the fact that whilst teacher-diagnosed SNS may have needed support they did not qualify for funding (see earlier comments on page 173). Other similarities were: SNS with physical disabilities were in some cases over supported, and representatives from both schools felt that they had sufficient resources and support from the principal for this group (see earlier comments on page 170).

For example, Debra felt that the high number of SNS and the teacher-diagnosed SNS meant some classes did not have sufficient support. It was suggested that some students attracted to the special regular school had severe disabilities and were either unsafe or so disruptive that the learning and teaching were severely interrupted. Debra commented that "teachers were stressed by the situation this brought about.... Every teacher at our school goes through times where they feel very stressed...every so often someone will be in tears, I think it's the nature of the job really".

#### **SUMMARY**

The findings of the interviews stressed the socially constructed nature of reality as the interviewees perceived it to be from their personal experiences with SNS in their classrooms. The teachers interviewed in each case were, at all times, fully aware of the difficulties inherent in teaching SNS and, despite this, were able to embrace inclusion in a positive manner. Some teachers specifically embedded inclusive pedagogy into their daily teaching and learning programs. At no time did the teachers demonstrate a blatant discomfort towards having a SNS in their room regardless of the disability. Teachers indicated not only their acceptance of inclusion but their willingness to attend PD sessions and acquire knowledge about special needs in a variety of ways.

All teachers reported that they used a variety of inclusive strategies many times throughout the day. For some, it underpinned their teaching philosophy as they had adopted many of the inclusive practices as universal best teaching practice that benefited all children.

Teachers believed that extracting SNS students was necessary for a range of students whether they were SNS or not. Such programs, which strictly speaking, do not embrace inclusive strategies, were extremely valuable to the individual including regular students.

Whilst withdrawal programs may not come under the definition of inclusion as such, it is definitely a normal teaching practice used for a variety of students. Therefore, withdrawal programs qualified as treating the SNS as any regular student would be treated and is seen as equality and equity in action.

Teacher aides were considered to be a crucial part of inclusion, especially if inclusion was to be implemented successfully. All participants felt that teacher aides were vital for the funded SNS, but they had concerns about the lack of teacher aide support for the teacher-diagnosed SNS who required a lot of the teachers' time in either disciplinary behaviour or one-to-one teaching.

Physical disabilities were clearly defined and fully supported, however it was noted that some disabilities such as those nominated as teacher-diagnosed SNS were not as clearly identified nor did they fit into the strict criteria for funding.

From the interviews in the present study it became evident that the provision of a teacher aide was a highly complex issue. The quality of the teacher aides and their education in special needs highlighted a realm of personality traits that were desirable for working closely with SNS. These traits were also necessary for both the teachers and the teacher aides to possess.

The results of the interviews not only highlighted the need to discuss the quality and amount of education in special needs of teachers and teacher aides but also the question of the teacher-diagnosed SNS and lack of sufficient support offered to these students. These issues strongly influenced the attitudes and pedagogy pertaining to the successful implementation of inclusion.

#### CHAPTER 6

#### DISCUSSION

If we establish communities in which children feel included and valued, the choices children make will take teachers' concerns as well as their own into account.

(Joan Dalton, 2008)

This chapter discusses the findings of the present study structured around the six research questions and how they relate to the Literature Review. The discussion summarises specific themes that emerged from the analysis of the results, explaining them in terms of the Literature Review and a triangulation between the questionnaires, interviews and open-ended comments.

The underlying aim of the present study was to identify improvements to the implementation of inclusion in Victorian State Primary Schools. It was believed that if teachers' attitudes towards inclusion could be improved then they would be more likely to implement inclusion and select classroom practices suited to SNS. Teachers who had a less positive attitude were expected to have been less likely to select pedagogies suited to SNS. It was expected that the database generated from the three questionnaires would reveal any relationship between the BCSQ pedagogy score, the STATIC attitude score and the variables of age, gender, school type, education and experience. These results were further explored by a series of open-ended questions and targeted interviews with teachers who had completed the questionnaires. This analysis revealed a number of common themes.

#### **COMMON THEMES.**

In the analysis of attitudes and pedagogies a number of consistent themes emerged from both the survey and the interviews. These themes were in line with the research questions outlined in Chapter 1 and the Literature Review in Chapter 2. As the present study progressed the common themes that emerged were:

- 1. Level of education in special needs.
- 2. The challenge.
- 3. Support.
- 4. Experience teaching SNS.
- 5. Suitability to teach SNS.
- 6. Distribution of SNS.
- 7. Funding.

The literature review showed that education in special needs was an important variable that influenced the attitudes of teachers towards inclusion (Avramidis & Norwich, 2002). The Personal Background Questionnaire asked teachers to nominate their level of education focused on special needs and the results of the current study confirmed the consistent influence of education on teachers' attitudes.

The word *challenge* was often used by teachers in the open-ended comments and was used in the modified Item 3 of the STATIC to replace the less positive words "easily frustrated". The present study sought to explore why teachers felt challenged by inclusion. Consequently this important topic was analysed in the open-ended comments and in the interviews. There was both a positive and negative aspect to the use of the word *challenge*. The analysis indicated that inclusion added to teachers' workload and placed additional demands on teachers to deal with the challenge of teaching a wide range of diverse abilities in a regular classroom. This included students who were identified as SNS but also included those students that were teacher-diagnosed SNS. There were students who were gifted and sat at the other end of the learning spectrum. Teachers indicated that it was a challenge to cater for such a diverse range of abilities within a regular class. This was particularly noted in the open-ended comments and in a number of the interviews. For example Matt and Elle struggled with their lack of knowledge and the need to identify the type of disability, and two of the interviewees made similar statements about not being able to cut themselves up into pieces to attend to each student. This concern related especially to hidden disabilities such as dyslexia, auditory processing and attention deficit. These students had normal or above average intellect but were not easily able to complete age appropriate skills in reading and /or mathematics. Unfortunately they did not always fall within the Education Department's criteria for additional funding and support. It was apparent that in some instances teachers lacked the support necessary to make a precise diagnosis of the students' needs. Given the wide range of abilities in a regular class, teachers needed to know how to recognise, plan and teach such a range of diverse abilities, so that each student achieved their maximum potential. By identifying and addressing the root causes of the negative challenge in teaching SNS it was believed that the attitudes of teachers could be improved.

In the past, numerous studies have demonstrated that teachers lacked confidence to teach SNS and were unwilling to make the necessary changes to allow SNS to be educated in a regular classroom (Shoho, Katims & Wilks, 1997; Kuester, 2000; Van Reusen et al., 2001; Westwood, 2001 Avramidis & Norwich, 2002;). Ajzen and Fishbein (1980) suggested that the theory of planned behaviour (positive or negative) explained that attitude was the planned action, (conscious or unconscious) that followed a thought, perceived from an experience (direct or indirect). Based on this theory it was hypothesised that such negative attitudes affected the teacher's ability to select and implement a range of appropriate inclusive practices and was important for the successful implementation of inclusion (Bender et al. 1995).

The Literature Review, in Chapter 2, suggested that positive attitudes were essential when implementing an inclusive educational program. It was expected that positive attitudes would both lead to more teaching and lead teachers to select a wider range of suitable inclusive pedagogies. In the present study most teachers had a generally positive attitude with respect to inclusion, but a lack of support in the classroom and limited education in special needs were barriers to a better attitude.

The ultimate goal of the present study was to contribute to the extant body of knowledge about inclusion in Victorian State Primary Schools and to identify future actions that may lead to interventions in both policy and teacher education in the Victorian education system. Although teachers used a wide range of inclusive strategies and had a positive attitude towards inclusion, there were complex relationships created by a wide diversity of views and a general lack of knowledge. A close examination of the results indicated that a teacher's attitude appeared to influence the pedagogies they selected. The statistical analysis

also showed other important variables influenced teachers' attitudes and their pedagogies.

These variables were tertiary education in special needs, years of teaching experience and the number of SNS in class. These themes and issues were explored in the context of the research questions presented in Chapter 1.

Research Question 1: Do teachers with additional education in special education have a different attitude towards inclusion?

Based on the findings of a number of researchers (Avramidis & Norwich, 2002; Bender, 2001; Beh-Pajooh, 1992; Shimman, 1990) teachers who had been educated in special needs education expressed more favourable attitudes than those who had no such education. Education and knowledge about inclusive education should be provided to all teachers. Increasing teachers' knowledge of inclusive education and pedagogies suited to SNS may have been a means of minimising negative teacher attitudes and improving teaching outcomes (Bender, 2004). In the present study although it was indicated that participants held positive attitudes towards inclusion the number of "unsure" responses to the STATIC questionnaire was unexpected and warranted further discussion.

Harvey (1992) commented that Victorian teachers' acceptance of inclusion had improved within six years of inclusion being implemented. This finding was supported by the more recent work of Avramidis and Norwich (2002) and by Subban and Sharma's (2005) data on teachers in Victorian schools, which indicated that teachers in general had positive attitudes towards inclusion.

These previous studies were consistent with the indications of the present study, where it is suggested that the attitude of teachers towards inclusion is positive. The STATIC questionnaire reported an overall Likert attitude score of 3.7 out of a possible 5. The scores

indicated that philosophically teachers had a positive attitude towards inclusion although teachers did not seem to be aware of the advantages of inclusion and did not know how to implement inclusion because they felt challenged, inadequately trained and not adequately supported.

Improving teachers' attitudes by education. The results of the present study indicated that 40% of teachers had not undertaken any type of special needs education and that the average level of education in special needs was equivalent to less than four hours of special education. This was considered extremely low in terms of the time that teachers were required to allocate to training by both the Victorian Institute of Teaching (VIT) and by DEECD. At the time of the present study Victorian State Primary School teachers were required to complete a minimum of 100 hours over a three year period. Evidently participants had chosen to select PDs in other areas of teaching. Less than four hours of education in special needs was also considered insufficient exposure to gain the knowledge and expertise necessary to implement a successful inclusive program. Further validation of this finding was provided by the exceptionally low STATIC score of 2.83. in this Item participants were asked if they had been adequately trained to meet the needs of students with disabilities. This STATIC Item returned the second lowest score. This clearly indicated that teachers themselves did not believe that they had undertaken sufficient education in the field of special needs. Even teachers who had a tertiary qualification in special needs and had a higher SNTEL score were unsure if they had been adequately educated for the particular SNS in their classroom.

Data from the survey indicated that education, or an increased level of knowledge, would have improved the attitude of teachers towards inclusion. Of the twenty Items that

made up the STATIC there were thirteen Items where additional knowledge appeared to lead to an increase in the STATIC score. On all of these Items, participants with more SNS specific education achieved better scores than those with less specific education. It was suggested that more knowledge reduced the very high levels of uncertainty and increased teachers' understanding of the issues relevant to inclusion. These Items on the STATIC and their results are discussed within the context of the research question that addressed the impact of more education in special needs on the attitude of teachers.

The literature clearly suggested that SNS had higher academic achievements when included in regular classrooms (Hollahan & Costenbader, 2000; Putman et al., 1996; Rea et al., 2002). Also Hall's (2002) study suggested that SNS who spent more time in an inclusive environment gained higher academic achievement, in both mathematics and reading. This understanding was also supported by Cawley et al. (2002) who contended that SNS achieved more academically when included in regular classrooms.

The two STATIC items that addressed the issue of academic performance of SNS with inclusion only scored 3.4 and 3.5. More than half of the participants (54%) felt unsure that SNS would achieve higher academic results when included in a regular classroom. However, teachers with a higher level of special needs education were less unsure and had a better attitude score on this Item. Similarly, in the second Item concerning academic progress 29% of teachers indicated that they were unsure if SNS would make academic strides in mainstream classrooms. The suggestion was that additional education in special needs reduced their level of uncertainty and improved their attitude. Teachers with a higher level of special needs education had a better attitude score for this Item. The high percentage of teachers who were unsure suggested that teachers lacked the knowledge necessary to be more

positive towards inclusion. Without detailed specific knowledge, teachers relied on their own experience. This experience was limited because it was impossible for teachers to have actually compared and measured the academic achievement of a student in both an inclusive class and a special class. However, studies that compared outcomes for mainstream and special schools report higher academic achievements for children in an inclusive environment (Fletcher-Campbell, 2000; Hall, 2002). If teachers in the present study had been aware of these findings it was very likely that they would have been less unsure and would have agreed with the statements. This would have resulted in a higher attitude score. There were two other Items, 6 and 20, in the STATIC that dealt with a similar core issue of inclusion.

According to Cochran (1998) Item 6, which asked if SNS should be placed in special classes, represented the "nucleus" of his design of the STATIC attitude questionnaire.

Cochran claimed it was the "essence of the instrument as a whole" (p.99). On this Item more than 30% of the participants were unsure. These results were consistent with the results in Item 20 which asked if SNS should be included in regular classrooms. Again a high percentage of respondents (26%) were unsure despite the fact that a substantial body of literature indicates that inclusion was the preferred educational setting for SNS. Again teachers were unsure and uninformed. An analysis of the results of the present study indicated that teachers who had undertaken education in special needs scored higher on these STATIC items and were less unsure. Also teachers with a higher level of education in special needs scored higher than those who had only undertaken short PD courses. Despite these findings some teachers were in favour of special withdrawal classes; this issue is discussed in research question 2 on pedagogy later in this chapter.

The teachers' responses to Item 15, which asked if SNS hindered the academic progress of regular students, produced a range of views. Sixty-six percent of the interviewees believed that regular students were not hampered by SNS. These results are consistent with the literature. York et al. (1992) believed that the placement in inclusive classrooms of SNS did not interfere with the academic performance of students without disabilities. It was suggested that the rate of interruption to planned activities and students' achievement on test scores and report card grades were not at risk due to inclusion (York et al., 1992).

The issue of limited time to address the needs of the regular students needs, Item 15, scored 3.77 on the STATIC. The participants with education in special needs scored higher than the participants without education in special needs. Only 14% actually agreed that SNS might hinder regular students' progress but a further 20% were again unsure. This percentage of uncertainty reduced with participants who had special needs education. Only 13% of participants educated in special needs were uncertain compared with 32% of participants who had not had special needs education. On the basis of these results, the more education in special needs, the better the STATIC score and the better the teachers' attitude towards inclusion.

However, one of the interviewees, Jane, who gave many examples of the benefits of inclusion on behalf of regular students, also gave examples where SNS did indeed disrupt the work of regular students. Debra also related incidents where SNS were extremely disruptive in class. This disruption was so pronounced that Debra purposely seated one SNS near the door so the teacher aide could easily and quickly remove the student if they became too disruptive. However, Mel took great care to say that regular students in her room learnt to

ignore disruptions of that nature. Mel reiterated further that regular students were in fact "better off" for the experience.

Those opposed to inclusion, often used the argument that the teachers' time was taken up addressing the needs of SNS. In theory, inclusion requires sufficient changes in the classroom to meet the needs of all students. Clearly this is not an argument against inclusion per se but a question of appropriate changes in the classroom. In the present study 66% of teachers did not agree that regular students were disadvantaged by the presence of SNS in mainstream classrooms. The participants' perceptions were that the regular students needs were still met by the classroom teacher. In most cases the extent of disruption depended on the severity of the SNS and the availability or otherwise of a teacher aide. In some cases, where there was a teacher aide in the room, some regular students indirectly benefitted from opportunities to work with the teacher aide. This was mentioned in the interviews by Lily, Debra and Jane who noted that teachers often had teacher diagnosed SNS specifically placed in their classroom because they already had a teacher aide allocated to their classroom.

Teachers in the present study indicated that SNS benefited from having similar aged peers to model their everyday behaviour. In Item10, 82% of teachers agreed that role modelling by regular students did indeed help SNS. The Likert score for this STATIC questionnaire was 4.08. For example, interviewees Jane and Mel both had observed regular students showing SNS how to do certain tasks. They noted that co-operative grouping greatly helped both the SNS and the regular students, whose self-esteem rose due to their interaction with SNS. It had been observed by Mat that some of the more popular students in his class consistently "took care" or "included" SNS in the playground and in the classroom work.

Participants in the interviews and comments in the open-ended section also noted an increased tolerance and acceptance by the regular students. Mel and Jane related situations where regular students automatically assisted SNS and regarded SNS as a regular student in the school. For example, one of the students referred to a student with a disability "as the one with the dark hair." The fact that the regular student could have said "the one in the wheel chair" but hadn't really taken this factor into account suggested a mature level of social acceptance. The regular student saw the child, not the disability. However, despite the relatively high STATIC score of 4.08, teachers with education in special needs still outperformed teachers with no special needs education. Teachers educated in special needs were more positive and less unsure than teachers with less education in special needs on almost every Item in the STATIC. These observations were in keeping with both Vygotsky's (1978) and Bandura's (1997) theories that emphasized the central role of social learning, and were confirmed by research carried out by Melloy et al. (1998).

Improved self-efficacy via education will improve the attitudes of teachers. As stated by Branden (1973) there was no factor more decisive in one's psychological development and motivation than the opinion one passes on oneself. As Branden (1973) suggested, self-esteem was based on two interrelated aspects: a sense of personal efficacy and a sense of personal worth. It is the combination of self-confidence and self-respect that inclusion aspires to instil in both SNS and regular students. Based on Bandura's (1997) theory that those with high self-efficacy are more successful than those with low self-efficacy, it would seem logical to suggest that teachers with a high self-efficacy in their ability to implement inclusion would be more successful in implementing inclusion. In turn this would allow each student to develop belief in their own capabilities and therefore be more successful (Bandura, 1997). Humans are not born with the knowledge of what is needed and how to gauge it. It is

discovered through experiences in life. Such is the role of inclusion as a means of experiencing, gauging and establishing a high level of self-esteem.

In the present study, 50% of participants agreed that the self-esteem of SNS improved with inclusion. It seems that inclusion may be able to contribute to fulfilling the need for self-esteem in SNS. Of those who did not agree, a staggering 41% were unsure of whether the self-esteem of SNS was in fact improved through inclusion. Again there was a high percentage of uncertainty among the participants. The suggestion was that teachers might have found it difficult to note the actual change, one way or the other, in the self-esteem of the SNS and again were not aware of the literature. PD in special needs should reduce this high level of uncertainty and convince teachers of the benefits to the self-esteem of SNS due to inclusion.

According to Smylie and Kahne (1997) teachers' self-efficacy was considered to be an important factor that influenced their work. Factors such as a positive attitude, a flexible approach in the classroom and a willingness to assume responsibility for the learning of the child invariably produced successful inclusion (Bender et al., 1995). It was noted by the students in Callery's (2006) study that a supportive teacher increased the motivation of the students to learn. This occurred when the teacher exhibited authentic interest along with a belief in the student. Teachers' self-efficacy is crucial to the successful implementation of any policy, such as inclusion. It is therefore necessary for teachers to acquire the knowledge and skills to enable them to feel capable, confident and successful if they are to fulfil their role as teachers in classrooms with diverse ranges of abilities.

In the present study the "willingness, enthusiasm and positive attitude" of teachers was measured in the STATIC via the professional issues when the participants were asked:

- 1. If they felt confident in their ability to teach SNS. (Q 1)
- 2. If they felt adequately educated in special needs. (Q 2)
- 3. If they felt challenged when teaching SNS. (Q 3)
- 4. If they felt comfortable when they learnt that they would have a SNS. (Q4)
- 5. If they had no problem teaching SNS with cognitive deficits. (Q 8)

The responses to these statements indicated that teachers who were educated in special needs scored higher and were less unsure on these Items than those teachers with no education in special needs. Those who lacked confidence and were more "unsure" of their skills were those that had not completed any education in special needs. In the present study self-efficacy in implementing inclusion declined when teachers had less special needs education and fewer years teaching experience or no experience with SNS. This finding was reflected in the responses to the professional issues of the STATIC and in the interview data from both Mat and Elle. They were inexperienced and had no education in special needs and consequently seriously lacked confidence in teaching SNS. They held the view that they required specialised education to teach the SNS in their classroom. Elle used powerful language when she described herself as being "overwhelmed and feeling unprepared [lacked the skills] to teach SNS." Similarly, other participants answered the open-ended questions regarding their teaching and responded with comments such as "I feel inadequate and frustrated" when teaching SNS. The comment that often coincided with these low self-esteem issues was the willingness to complete some specific educational programs, which would enable them to be more confident in handling the SNS in their class. In some ways this finding was at odds with the very low level of education in special needs. Either the courses were not available, which goes beyond the scope of this study, or the respondents were providing positive answers to meet the expectations of the interviewer.

Those teachers who felt confident used equally powerful words such as feeling "privileged to be teaching SNS" or being "passionate about teaching SNS," and "enthusiastic." These words were often mentioned in the open-ended comments. This indicated strong positive attitudes towards inclusion despite the extra work.

In many cases teachers in both the interviews and the questionnaires indicated that they were fully aware of the difficulties inherent in teaching SNS. Despite being fully aware of the difficulties, the teachers indicated that they embraced inclusion in a positive manner. This was demonstrated in the results from the BCSQ where teachers clearly used, on a daily basis, a wide range of pedagogies particularly individualised tuition.

In the analysis of the results in the STATIC, the impact of education in special needs was clear. Teachers better educated in special needs were more confident, better informed and more certain about the advantages and disadvantages of inclusion. These overall results were confirmed by statistical analysis of the results of the STATIC. Teachers in the present study who had less education in special needs recorded a lower STATIC score and those with more education in special needs achieved a higher attitude score. This was consistent with Bender et al. (1995) who also showed that teachers who were favourably disposed towards inclusion reported more consistent utilisation of effective teaching strategies than did teachers with less positive attitudes.

The high low analysis presented in (see Appendix N for Analysis of high and low scorers in BCSQ and STATIC vs Variables) gave the same results. Those who had no specific education in special needs were over represented in the lower quartile of the STATIC score and were under represented in the upper quartile. The opposite trend was observed with respondents who had undertaken tertiary education in special needs. This group was under

represented in the lower quartile and over represented in the upper quartile. The trend for respondents who had undertaken only PD was less, but is still consistent with the principle that those with a higher level of special needs education achieved a better score on the STATIC. It appeared that with only a few hours of PD the improvement in knowledge was not sufficient and that a more intensive and extended exposure to the complex issue of education in special needs was required in order to show an improvement in attitude.

Van Kraayenoord (2008) explored the issue of one-off courses of short duration. She suggested that evaluations of effective PD had indicated that successful PD involved complex and sustained contact for participating teachers and that short-duration courses were not as effective. Indirectly the present study supported the suggestion that sustained contact is an important aspect of improving understanding of teaching SNS. The present study indicated that teachers with more SNS exposure and more intensive education used better pedagogies and had a more positive attitude towards inclusion.

Watson and Bond (2007) recommended that all pre-service and in-service teachers take mandatory special education courses. Studies have indicated that teacher acceptance or resistance to the inclusive programs was related to the knowledge base and education of teachers and this finding was confirmed by the current study. It was clear that the type and extent of education must be considered before conducting PD if it was to be effective in implementing a successful inclusive education program (Dupoux et al., 2005). In the present study the younger participants who had recently completed their pre-service studies were found to have more positive attitudes towards inclusion. This may have been attributed to a higher standard of education in special needs now included in pre-service education. This did not exist for participants who had completed their pre-service education prior to 1992. This

conclusion was supported by Leyser, Kapperman and Keller (1994) who conducted a cross-cultural study of teacher attitudes towards inclusion and found that teachers who had extensive education in special needs and preparation in teaching SNS had the most positive attitudes towards inclusion.

In summary, the answer to the first research question has been irrefutably established. Additional teacher education in special needs led to improved attitudes of teachers towards inclusion in Victorian state primary schools. This was consistent with the existing body of literature. It appears that generally the teachers in the present study did not have a high level of education focused on special needs and were unaware of the findings from the literature. These teachers were, for the most part, forced to rely on their own classroom experiences. Teachers generally displayed a positive attitude towards inclusion. Most teachers believed that SNS should be included in regular classrooms and generally speaking they endorsed the philosophy of inclusion. It was apparent that the teachers felt that the self-esteem of both SNS and regular students improved. This was in keeping with the positive outcomes displayed by regular students, such as increased tolerance, positive role modelling and inclusive social behaviour, as presented in Chapter 5 by the interviewees (Mel and Elle). This was particularly evident when the teachers expressed their view that, in general, regular students are not hindered in any way by the presence of SNS in the classroom. These positive attitudes ultimately led to a consistent use of inclusive pedagogy. In many of the STATIC items there was a high level of uncertainty that was attributable to either a lack of experience or a lack of knowledge.

# Research Question 2: Do Victorian State Primary School teachers use inclusive pedagogies?

In the broadest sense the word *pedagogy* means "to lead the child" into adulthood. It includes the science or theory of education and includes the instruction, learning and other operations of the total educational environment. In this sense the pedagogies used by teachers in classrooms indentify how students are prepared to become a fully contributing and valued member of our society. In this context *fully* means to the fullest extent possible. It is a very challenging task given the diversity of needs present in any one classroom. Inclusion is an all-encompassing program of creating an educational environment where there is inclusion in the program and not just inclusion of place (Phillips et al., 1999).

All educational institutions and authorities in Australia have developed and adopted programs that deliver, to varying extents, inclusive teaching practices. The indicators on the BCSQ were selected as typical types of instructional practices that encouraged differentiated instruction to facilitate effective inclusion. Primarily the BCSQ was developed to ascertain the type of inclusive pedagogy teachers used. These include: the pacing of instruction, pupil feedback and monitoring pupil's progress (Bender, 1992). Bender developed it to be used by teachers to determine their teaching preferences and the types of strategies they should implement when dealing with specific SNS in their classroom. It was also promoted as an aide to administrators in selecting appropriate teaching staff for specific SNS in the school.

Current inclusive programs. When analysing the data rendered from both the questionnaires and interviews the present study revealed that teachers did believe that they use a wide range of pedagogies suitable for SNS. The range of instructional techniques reported by the participants in the open-ended comments was diverse. Participants were often

innovative and intuitive when delivering specific programs for an individual. In some cases participants were not necessarily aware of the theory or the terminology used in the questionnaires because, as shown in research Question 1, they had low levels of education in special needs. However, they used their experience to develop a teaching technique that met the child's needs as they perceived them. The teachers in the present study consistently nominated a range of inclusive practices that they employed in their classrooms on a daily basis: such as, individualised programs, co-operative learning, explicit and varied instruction, meta-cognitive strategies, differentiation and other evidence based inclusive pedagogies.

The average BCSQ score was 146 or 3.65 on the Likert Scale of 1 to 5, which was a relatively high score and indicated that participants perceived themselves as regularly using a wide range of pedagogy in their classrooms. But some teaching techniques included in the BCSQ did not score particularly well because they were practices not considered to be school or DEECD policy, such as a physical tap on the shoulder or extended time in tests. Taking these low scoring questions out of the analysis meant the BCSQ result would have delivered a higher score if the BCSQ had been modified to suit current practice in Victorian state primary schools. This positive result of a wide range of classroom teaching techniques was similarly reflected in the open-ended comments and the interviews, where the teachers commented on the numerous types of inclusive teaching strategies they used.

Self-esteem, tolerance and social acceptance. The development of self-esteem, tolerance and acceptance are essential components of inclusion. If these three aspects of inclusion are successfully nurtured through the appropriate use of inclusive pedagogies then inclusion has achieved one of its major aims. The use of inclusive practices has the potential to allow teachers to successfully deliver a "sense of belonging" to all students (Maslow,

1943). As highlighted in the data and in the literature reviewed, the basic need to belong directly affects self-esteem (Boeree, 2004). Boeree (2004) believed that teachers should strive to accept the student as they are and satisfy the student's basic needs of belongingness, safety and self-esteem. This objective was demonstrated in the BCSQ scores where the BCSQ highest scoring technique was *praise* for successful work. The overall results of the BCSQ indicated that teachers used pedagogies that promoted self-esteem. This finding was also supported in the results of the interviews, where a number of the older teachers insisted that self-esteem was an integral part of their teaching for all students.

In the interviews, both Elle and Jane felt that the regular students in their classrooms definitely displayed increased empathy, tolerance and acceptance for the SNS present in their class. These participants reported incidences where students specifically sought to include SNS both in work situations and in the playground. Mel and Jane related situations where regular students automatically assisted SNS and regarded SNS as regular student's in the school. The older, more experienced and most highly educated in special needs interviewee specifically stated that inclusion was an integral part of her everyday teaching practice. In Jane's words "It underpins every single thing that I do....It's just embedded totally...."

Some studies have suggested that the act of inclusion alone sufficiently engaged both disabled students and non-disabled students in a positive manner and that learning and acceptance automatically improved (Katz & Mirenda, 2002). As indicated in the examples given by Mel and Jane it was clear that the act of inclusion alone had a positive effect on regular students especially in regards to social acceptance and student self-esteem. It has been suggested that inclusive education positively affects the self-esteem, social acceptance, academic performance, behaviour and attendance of students with learning disabilities (Baker

& Zigmond, 1990b; Putman et al., 1996; Hall, 2002; Harrison, 2003; Luster & Durrett, 2003). The placement of SNS in a regular classroom is not inclusion. Phillips et al. (1999) stated that "the key principle of inclusive education should be the education of the individual and this should *not* be synonymous with a place but a practice of providing individual instruction" (p. 2).

As noted by a number of researchers, inclusion can be a burden on the classroom teacher (Ashman & Elkins, 2005; Foreman, 2005; Loreman et al., 2005b). The range of abilities within a class can be difficult to master. There is no single correct way of including children with diverse abilities. It will depend on the teacher and the specific needs of the group of children being taught (Loreman et al., 2005b). There were several ways of approaching inclusion. These included adapting the curriculum, planning for instruction, partial participation and modifying classroom environments (Foreman, 2005). However, meeting a diversity of needs in the classroom was a challenge. This was expressed in the interviews, with the older, more experienced teachers such as Lily, Mel, Mona and Jo. For example, Mona commented "the challenge for me was finding the right level and offering a challenge for each student." The demands of teaching in a mixed ability classroom were challenging. Changing instruction to meet individual needs, working with other teachers and aides in the classroom and time needed to meet with other professionals all added to the complexity of teaching in a regular classroom (Foreman, 2005).

Despite the overall high BCSQ scores, approximately 5% of participants in the openended comments specifically stated that they did not modify their classroom practices to accommodate SNS. These respondents recorded lower BCSQ scores. This issue was more complicated than it appeared. Some teachers believed that true inclusion meant that they did

not need to change the class at all as the concept of inclusion was to include SNS in all normal class activities. This included a regular class program in every way possible. This was a good example of inclusion of place and not inclusion in the program and provided further evidence of the need for more education in special needs. These participants may not have had sufficient knowledge or experience about inclusion. An examination of the results of these participants showed a variety of reasons why they had not modified their teaching practice. In the cases of three of these teachers it was evident that more education in special needs was required. One stated that they "were not sure how to target specific needs".

Another participant stated "I personalise all learning for all children" which was actually an inclusive practice. The fifth person said "I cater for the majority but give extra time to SNS". When the attitude statement of this participant was compared with this pedagogy statement, it became clear that this participant did not believe in inclusion. This participant stated that she felt, "Inadequate, frustrated, angry, lacked support, unable". The remaining four participants had had no experience with SNS and therefore stated that they "had not needed to use any inclusive practices as yet". This range of responses was consistent with the literature.

Cawley et al. (2002) suggested that teachers should have the knowledge and skills of individual students and the curricula and be able to adapt and provide the correct instructional methods. On the other hand Yuen, Westwood and Wong (2005) found that in practice teachers made relatively few adaptations to accommodate the needs of students with specific learning disabilities and relied on students' peers to assist SNS. The teachers rarely (if ever) adapted the curriculum or modified instructional resources or designed special activities for students with a learning disability (Yuen et al., 2005). It was noted that the Yuen et al. (2005) study was conducted in Hong Kong and addressed only state government diagnosed SNS who were receiving special funding. Given the cultural differences between communist

China and Australia and the narrow focus on funded SNS it was not surprising that the study showed very little variation in the nominated pedagogy. This indicated the important role of educational authorities in setting and fixing teachers pedagogy. However, in the present study the overall results indicated that participants claimed that they consistently implemented a wide range of inclusive strategies within the guidelines provided by DEECD. This claim was validated in the triangulation between the open-ended comments, the BCSQ and the interviews.

In response to the open-ended comments, 98% of participants noted that they modified their teaching practices and gave examples of how this was achieved. This was also confirmed in the interviews. Many participants implemented individualised programs for students both with and without disabilities in their class. Participants offered differentiated activities and modified the curricula and work to suit individuals. This indicated that 98% of participants regularly implemented a wide range of inclusive practices. Details of these practices are set out in the following sections.

### Types of inclusive instruction utilised by participants.

Individualised Instruction. Individualised instruction was considered essential for SNS and beneficial to all students. In the BCSQ the individualised instruction score was 3.96 which was considered to be a relatively high score, and indicated that teachers used a variety of ways to individualise. Differentiated instruction was when the curricula, goals, methods, pace or concepts in activities were varied according to individualised needs (Bender, 2002). It has been suggested that this teaching practice was one of the most effective methods for including SNS (Vygotsky, 1978).

This position was also supported in the open-ended comments where the participants described numerous types of individualised inclusive practices. These were categorised into six main types of individualised strategies. They were: specific planning, a variety of instructional techniques, individualised activities, varied levels of activities, differentiation between individual students and groups of students. Some teachers emphasised the fact that they explicitly used Individual Learning Plans (ILPs) for each student in their class. The teaching methods indicated that teachers were not only aware of a variety of inclusive practices but were enthusiastic, motivated and willing to implement them regularly in their classrooms. The ILPs were also in keeping with DEECD policy.

Most teachers in the interviews mentioned individualisation, but, the younger or less experienced teachers found it difficult to "get around" to all students. Elle and Mat often quoted time as being a particular problem for them to manage, especially when some students required a lot of one-to-one assistance. They were not only concerned about the time given to the SNS but the time that might have been taken from regular students. If the SNS were funded by DEECD then the student was already given the necessary time by the teacher aide but this did not address the issue for unfunded teacher-diagnosed SNS. As these students did not qualify for funding and did not receive extra assistance in the class, it was difficult for some teachers to allocate the time necessary to give individualised instruction.

Time management was a strong factor that must be considered when investigating teachers' ability to implement new pedagogies such as inclusive education. Bender (2001) suggested that teachers' time was a crucial variable underpinning many fundamental changes in teaching. The issue of time delineated the teachers' competency in classroom management. Time usage dictated teachers' capacity to make better use of instructional time with all

students in the class. Teacher instructional time and the type of instruction, especially instruction allocated to basic skill acquisition, was essential and required educators to realise the importance of maximising their instructional time (Bender, 2001). Bender (1985) demonstrated that SNS did place additional demands on teacher time but unfortunately teachers were not equipped with the necessary time management skills to address the individual needs of SNS in a regular classroom. As mentioned, effective instruction was based on effective pacing of instruction, frequent pupil feedback, and monitoring of pupil's progress (Bender, 1992).

The open-ended comments, survey results and the interviews showed that participants wanted to know how to better deliver instructions and which type of teaching techniques they should select. The younger and less experienced interviewees expressed concerns about their ability to simplify or clarify their instructions, with one in particular mentioning instructional technique as a challenge.

Instructional techniques. The Klinger and Vaughn (1999b) study of 4,659 students' perception of instruction in inclusion classrooms gave valuable insight into the types of instructions that facilitated the best learning practices. In the present study, the BCSQ recognised that not everyone learns in the same way, therefore varying strategies should be used. In the open-ended comment on pedagogy, the most commonly used instructional techniques reported by teachers were:

- 1. Vary instructions.
- 2. Simplify instructions.
- 3. Repeat instructions.
- 4. Rephrase instructions.

### 5. Vary the pace of instruction.

This indicated that teachers were conscious of how they worded their instructions, not only for the class but also for individuals. This was particularly the case for Mat. The one aspect of his teaching that challenged him the most was how to give instructions.

Fundamentally this is one of the most basic abilities a teacher requires. The ability to communicate, simply, correctly, and naturally enhances learning. Avramidis et al. (2000a) supported this and suggested that successful implementation of inclusion required the need for instructional adaptations by teachers.

Withdrawal programs. Strictly speaking, students should not be separated into different ability groups that might include withdrawal for special services (Westwood & Graham, 2002). Several studies have indicated that the use of special education classes can negatively impact the students' self-efficacy (Lipsky & Gartner, 1997; Cawley, Hayden, Cade & Baker-Krozynski, 2002; Rea, McLaughlin & Walther-Thomas, 2002). However, Victorian State Primary Schools often included programs that involved the temporary withdrawal of individuals or small groups and was considered to be DEECD (2009) policy at the time of the present study. This was offered to all students. This practice was supported by studies that suggested that the academic performance of students was better with quality withdrawal programs (Centre et al., 1995; Hall, 2002; Ward et al., 1994). In the present study the respondents were divided on the issue of SNS being placed in special education classes. In the STATIC approximately 40% were either unsure or in favour of placing SNS in special programs. The balance of respondents (60%) were opposed to the use of special education classes. This result was inconsistent with the findings of the interviews. It could be that the terminology on this item on the STATIC was unclear as the wording did not use the term

withdrawal classes and perhaps some respondents understood this to mean permanently placed in special education classes rather than the short term withdrawal practised in Victorian state primary schools for programs such as Reading Recovery (Clay, 1979).

The interviewees felt that whilst occasionally students may have felt uncomfortable being withdrawn because it labelled them as needing special assistance, not all students felt this way. One respondent was aware that some of the SNS in her class felt labelled and stigmatised by leaving the classroom for specific tuition, however, she also commented that other students in the class wanted to be included in the withdrawal group as they saw this as a benefit. In keeping with the varying views expressed in the literature not all participants were opposed to withdrawal programs. Most participants hastened to add "students benefited more in being able to work in a private, quiet setting, free of disruptions and distractions" (Mona and Elle). Some interviewees also felt that the type of tuition offered in the withdrawal programs could only take place outside the main classroom (Lilly and Dan). It was generally felt by participants that, on balance, few students would be so uncomfortable about being extracted that they would lose all advantage of the individual or small group assistance. In the Literature Review partial inclusion was where the student always began in the regular classroom and was removed only when appropriate services could not be provided in the regular classroom (Ashman & Elkins, 1998, 2005, 2009; Mastropieri & Scruggs, 2000). As Ashman and Elkins (2005) stated, the withdrawal of a student with a disability from the regular classroom may be required to provide more intensive, individualised instruction. Withdrawal provided instruction in skills already mastered or not needed by the regular students (Ashman & Elkins, 2005). Some teachers interviewed were strongly in favour of using withdrawal classes, saying "nothing beats one-to-one tutoring". Students with disabilities may have felt more stigmatised if they were given extra help within the

classroom, than if they were withdrawn for assistance Sharrock, B. (personal communication, April, 2000). It could be argued that partial inclusion was an important equity issue. However, it was the quality of the instruction that was of paramount importance (Mastropieri & Scruggs, 2000). For some students, on return to the classroom they may have been confused and felt left out of the classroom activity. In these cases the teacher was required to be exceptionally alert and act immediately to include the child in the classroom activity (Piji & Hegarty, 1997). This was demonstrated by Dan who commented that he made sure that he began a new lesson only once the student who had left the room returned. These withdrawal programs were generally considered to be anti-inclusion but there was still open debate as to the merits of the early intervention programs. Their success depended on the quality of the program and how it was managed.

All the interviewees believed that with the correct early intervention, substantial academic progress was made in special education classes. In general, the teachers in the interviews believed that withdrawal programs benefited students at both ends of the learning continuum. The interviewees believed that the quiet surroundings used in these programs allowed the student to be fully engaged. The teachers believed that one-to-one tuition enabled the student to receive focused, individualised tuition.

Co-operative learning. Vygotsky (1978) promoted co-operative learning as an integral component of teaching. He believed that it was through peer tutoring, mentoring and group learning that a rich learning environment was created. This was precisely the co-operative learning environment that the teachers in the present study described in their responses to the open-ended comments, in their answers on the BCSQ and in the interviews. The teachers indicated that co-operative learning took place in a variety of ways including

peer tutoring, reciprocal learning and mentoring by older students. Putman et al. (1996) suggested that positive changes in peer ratings occurred more frequently in the co-operative-learning conditions than in the competitive-learning conditions.

Teachers in the present study indicated that SNS benefited from having similar aged peers to model their everyday behaviour. A high proportion of teachers agreed that role modelling by regular students did indeed help SNS. For example, interviewees Jane and Mel had both observed regular students showing SNS how to do certain tasks. They noted that cooperative grouping greatly helped both the SNS and the regular students, whose self-esteem rose due to their interaction with SNS. It had been observed by Mat that some of the more popular students in his class consistently "took care" or "included" SNS in the playground and in the classroom work.

Callery (2006) used reciprocal reading techniques with struggling readers as a method of passing the control of reading onto the reader. On the BCSQ, five items specifically measured the use of co-operative learning. In each item the Likert scores were very high.

Clearly, teachers felt that co-operative learning was an important inclusive pedagogy. This could be due to the fact that during the 1980s and1990s, co-operative learning was considered to be a crucial teaching pedagogy and was encouraged in Victorian State Primary Schools as a key PD session. The Western Australian First Steps Literacy Program (EDWA, 1994) was the basis of many of the fundamental strategies on partnership and small group interaction.

Indeed, the Victorian Early Years Program (Bradbury et al., Department of Education Victoria, 1997) currently running and first initiated in most Victorian State Primary Schools in 1997 was designed to run in small groups, where students worked co-operatively together.

Individualisation was the most frequently implemented inclusive pedagogy used by all participants in the present study. That is, teachers in the open-ended responses, BCSQ and interviews strongly supported individualisation. Within this frequently used arena fell the range of co-operative learning and varied instructional strategies. However, whilst there was a high score for the total BCSQ, the metacognitive instruction did not score as well.

Metacognitive Instruction. Metacognition is developing an understanding of how one learns. It teaches the student to "think about their thinking" and is a form of Socratic dialogue within oneself (Chan & Van Kraayenoord, 1998). The ultimate goal of metacognitive instruction is self-regulation, such as goal setting, self-instruction, self-monitoring, and self-reinforcement (Bender, 2002). Metacognitive instruction has gathered momentum over the past decade as a teaching strategy and has been increasingly implemented in regular classrooms for all students.

Metacognitive instruction was recommended in Baker and Zigmond's (1990a) study on whether regular educators were equipped [educated in special needs] to accommodate students with learning disabilities. They suggested that teachers should spend more time teaching learning strategies than giving straight directions for instructions. The suggestion was that PD should be made available to facilitate these changes in teaching practice.

In the present study the teachers with a higher level of education in special needs had a higher metacognitive BCSQ score and more frequently implemented metacognitive instruction. In general the overall use of metacognitive instruction did not gain a high score. These results were explored in the interviews. The interviewees indicated that whilst not familiar with the terminology they did in fact use teaching techniques that were considered to be metacognitive as an integral part of their daily teaching habit. It is likely that these

techniques had been gained through practical classroom experience. A good example of this method is the compulsory Maths Interview where all of the maths questions are structured from a metacognitive perspective. It seems that current practising teachers may use metacognitive instruction often but the participants were not familiar with the terminology and examples used in the BCSQ. It could have been so embedded in their natural pedagogy that the participants did not realise how often they used metacognitive methods. However, it was noted that the more highly educated participants obtained a higher BCSQ metacognitive score and claimed to implement metacognitive instruction more than any other group. A good example of this was the BCSQ Item on "inner language".

The BCSQ Item on "inner language" scored one of the lowest scores of 2.94. Participants were apparently not familiar with the term *inner language* but according to the interviewees many used the technique. Five of the ten interviewees responded immediately that they used this type of strategy and other participants on reflection gave examples of how they used metacognitive instruction.

Younger participants used metacognition instruction less than older participants.

These older, more experienced participants used metacognitive strategies especially to create an inner language dialogue that helped the students achieve their goals in either sport, daily academic work or general behaviour. For example, Mona used the slogan "You can do it". These teachers used this strategy as an integral part of their everyday teaching for the class as a whole. One of the most highly educated teacher (Jane) went on to say that "metacognitive instruction underpinned her philosophy on inclusion" when managing a mainstream class.

Other forms of metacognitive instruction such as self-monitoring and behavioural contracts, which aimed to promote self regulation, goal setting and self instruction were used

by some of the participants but they were unfamiliar with the terminology. The question on self-monitoring had a very low BCSQ score and the interviewees had to think for a while or check what self-monitoring meant before they answered. It appeared that the males and younger participants did not use self-monitoring as a strategy. The experienced, older teachers used self-monitoring more frequently. This was particularly the case with the two participants with a high level of special needs education who used it for monitoring both students' work and their behaviour. Most participants interviewed used behavioural contracts with students on a regular basis whilst some participants only implemented behavioural contracts when they were required. Metacognitive strategies may have existed in participants' repertoires but were not readily recognised as such. Therefore, teachers may need more education in utilising metacognitive strategies to become more aware of how to consciously model and explicitly teach these strategies (Blakey & Spence, 1990).

In summary, it was clear that research question 2 was confidently answered in the affirmative. Within the constraints of the existing systems most participants strove to select pedagogies suited to SNS. There were some limitations in the selection of appropriate pedagogies specific to SNS related to the level of funding and the availability of teacher aides. Another limitation was the lack of education in special needs. In many cases there was a need for a better understanding of how individual students learnt. In some cases answers were simply not available at the time. Although, participants felt challenged by inclusion and were generally unsure about their ability to teach SNS, they used many suitable inclusive practices. However, there was room for improvement, which would be gained from more education and more classroom support.

# Research Question 3: What are the attitudes of teachers towards classroom support for students with special needs?

Staub and Peck (1994) argued that to advance an understanding of the issues associated with inclusive practices, it was essential to recognise what influenced practice. Some of the key influences included the school policy, the policy of the educational departments, expectations from the community, the level of funding, the level of support and the education of teachers. Support was a consistent theme that emerged from the present study. A key issue for support was the availability of teacher aides in the classroom. Support was also sought in terms of access to appropriate classroom teaching techniques for specific disabilities and access to diagnostic assessments. Based on the results of the present study support such as provision of resources or equipment, and support from colleagues and the principals were, in the view of the participants, sufficiently available and were not seen as an impediment to successful inclusion.

Hurley (1994) contended that the second highest factor that correlated with teacher attitude towards inclusion was support from teacher aides. The degree of linear relationship between the two variables of teacher aide support and positive teacher attitudes in Hurley's (1994) study supported the claim that aides were vital to the development of positive teacher attitudes. In line with Hurley's study, the most frequent statement that appeared in the openended comments was the need for support in the form of a teacher aide. In the present study support was also of paramount importance to the teachers and was commented on by 31% of participants.

In the present study teachers felt that they lacked sufficient support in the classroom for the number of SNS in their class and in some cases for the type of SNS. This was

particularly relevant to the special regular school interviewees. Support was often commented on as "not enough support in the classroom for the SNS," by both interviewees in the special regular school and by the older more experienced participants in the regular school. It was clear that participants highly valued support in their classroom. However, the issue of support was extremely complex.

A study in the Australian Northern Territory by Keighran (2001) suggested that teachers did not feel adequately supported. The belief was that those teachers and teacher aides that had a suitable disposition or did not complain were heavily loaded with SNS. Keighran (2001) pointed out that these teachers were not necessarily adequately educated in special needs nor very experienced but just that they simply fitted the "characteristics" suited to teaching SNS.

The frequent request for more classroom support was followed by concerns regarding the quality of education in special needs that teacher aides had undertaken and how teacher aides went about the task of support within the classroom. The words "depends on support" were also written on the questionnaires by a number of participants. Therefore, the theme of support was discussed more thoroughly in the interviews.

Westwood (2001) contended that if teachers were not adequately supported within the classroom, there would be a danger of stress and burn-out. The interviewees discussed the issue of support on two levels. On one hand, teacher's talked about the quality of the teacher aide. On the other hand, teachers were concerned about the lack of teacher aides. At all times the teachers made it clear that teacher aides were necessary if inclusion was to be successful. Some teachers acknowledged the value and need for a teacher aide but sometimes found the interaction between the teacher aide, the SNS and the class as a whole to be intrusive. They

felt judged and not fully supported by the teacher aide. In fact, some teachers felt extremely uncomfortable in the presence of a teacher aide. They also had to allocate valuable time instructing the teacher aides. In general most teachers were more concerned with the lack of a teacher aide although this often depended on the type of disability.

The type of disability was mentioned usually alongside the need for a teacher aide. The need for support was relevant if the SNS was extremely disruptive or required specific one-to-one attention. Westwood (2001) suggested that high levels of stress would result in teachers who did not receive sufficient support. This was particularly the case where children with high support needs, combined with aggressive and challenging behaviour, were in regular classrooms (Westwood, 2001). This did not necessarily devalue the teachers' attitudes towards inclusion as most teachers embraced inclusion provided the right structures and support systems were in place. However, this was difficult to judge at times due to the problem of identification and diagnosis regarding the teacher-diagnosed SNS. The type of disability came up not only in the data analysed from the PBQ but also in the interviews and in the open-ended comments. Comments such as "it depends on the disability" were made a number of times in the responses. These were relevant comments and needed to be taken seriously. The type of disability was also important to the teachers who were interviewed. For example, Debra and Mel mentioned the type and severity of disability as a concern. As quoted by many participants, "it [disability and severity of disability] is the difference between success and failure for inclusion." The types of disability were categorised into students with physical, behavioural and cognitive disabilities. Whilst the special regular school teachers were exposed to students with more severe disabilities, these students were usually well supervised by teacher aides. Similarly students with physical disabilities were easily identified and well supported. However students with behavioural and cognitive

disabilities were more difficult to diagnose and appeared to be less funded. When it came to physically modifying the classroom with ramps for students in wheel chairs or hearing aids for hearing-impaired students, it was relatively easy to identify and therefore acquire the obvious necessary equipment. It was much more problematic identifying or diagnosing a learning disability. This lead to numerous comments regarding the teacher-diagnosed SNS.

# Support of teacher-diagnosed SNS.

In Australia it has been reported that between 12% to 20% of the student population should have been classified as SNS (Ashman & Elkins, 1998, 2005, 2009; Angus et al., 2007). The results of Westwood and Graham's (2000) research also suggested that the commonly accepted figure of 20% of the school population may be too low. Other Australian researchers suggested that teachers regarded 10% to 16% of their students were in need of support for learning difficulties which went beyond their capabilities as classroom teachers (Louden et al., 2000, Angus et al., 2007).

In the present study the notional percentage of SNS in the classes was 11%. Students may have displayed very low scores in their academic performance but the teacher may not have recognised the specific cognitive difficulty let alone known what pedagogy, adaptive materials or equipment were required. There were many learning disorders where teachers had little knowledge and therefore found it difficult to address the needs of the specific student. This was the case for some of the participants in the interviews. These participants would have benefited from the assistance of a trained teacher aide who could have worked closely with the SNS.

Research has shown that students with severe disabilities may be less disruptive if there is adequate support in the classroom (Avramidis & Norwhich, 2002). Students with

emotional and behavioural disabilities were more likely to cause more concerns to teachers as they were disruptive and often did not qualify for assistance in the classroom (Avramidis et al., 2000a). In the present study, students with cognitive deficits were of great concern to teachers. In general the participants felt that they had neither the skills nor education in special needs to correctly identify the learning disability nor the extra time necessary to adequately cater for these students. Hence, there was a specific need for more assistance in the classroom.

The issue was more about diagnosis and development of student specific pedagogies than it was about changes to the buildings to install ramps. If there were more teacher aides, then within a fixed budget there was generally less money available for other areas such as diagnosis, computers, software and programs for the gifted or regular students. Also, most teacher aides were not trained as teachers. In the end it came down to funding. In a study by Bowd (2009) school principals were concerned about the growing number of SNS who did not fit into the Programs for Students with Disabilities available in Victorian schools.

Principals reported that "none of these children are eligible for funding; neither do we receive any extra assistance for them" (Bowd, 2009). These findings were also supported by the Australian Primary Principals Association (APPA), which reported that 21.7% of students had either medically diagnosed disabilities or teacher-diagnosed SNS (O'Keeffe, 2008). Half of the teachers surveyed by the APPA had five or more such students in their classes (O'Keeffe, 2008). However, many principals reported that the school bore the cost of supporting these students because "the level of special funding for students with disabilities was grossly insufficient" (O'Keeffe, 2008, p.3).

Having considered the comments of teachers in the present study and the reports on the teacher-diagnosed SNS from other sectors of the educational community, such as the Australian Education Union (AEU) and the APPA, it was clear that more needed to be done for students with unfunded special needs. These students were present in every classroom and did not appear to have been given the necessary extra support required to bring their literacy and/or numeracy skills up to an acceptable standard for their age or year level.

These teacher-diagnosed SNS were recently catered for in New South Wales legislation. In 2008, the New South Wales Legislature submitted the Education Amendment Bill (Educational Support for Children with Significant Learning Difficulties, 2008). This Amendment to the NSW Education Act 1990 aimed to ensure that students with significant learning difficulties were included in the NSW Special Education Initiative for SNS. What was exceptional about the introduction of this bill was in the definition of significant learning difficulties and how this was to be identified. Students were to be identified by a qualified teacher or other qualified education professional as not performing in the basic educational areas of reading, writing, spelling or maths according to their peer age and stage of learning (Twaddell, 2009). These were precisely the students of most concern to teachers in the present study. These students were functioning well below the expected level for their age and year level. The teacher-diagnosed SNS were evidenced in both the open-ended comments and the interviews.

Some of these issues may be the root cause of the low score and wide spread of responses obtained in the statistical analysis in the STATIC. This Item about support asked if materials and adequate equipment were easily acquired and it recorded one of the lowest scores at 3.09. The responses were very evenly distributed across the Likert scale. One third

agreed that support was easily acquired, one third were unsure and one third disagreed that adaptive materials and equipment were easily acquired. Unfortunately this Item did not specifically address the key support issues which were the availability of teacher aides in the classroom and the availability of quality diagnostic services.

#### Number and type of SNS in classroom.

In the present study the number of SNS in a classroom ranged from nil to more than five students. Eleven percent of the participants indicated that they had no SNS students in their class. As discussed earlier each classroom would expect to have at least one student that the teacher could have identified as SNS. Either these teachers were not allocated SNS or did not recognise the SNS in their class. Alternatively the respondents were only considering SNS to be those officially funded by DEECD. It did raise the possibility of some teachers failing to recognise students with mild or difficult to diagnose disabilities. Just over half of the participants had one SNS in their classroom, however, the majority of participants, reported two or three SNS in their classroom. Some teachers had four to five SNS in their class while others had more. Based on these findings the approximate average number of SNS in each class was 2.1 but there was a range of responses. The reasons for the large difference in the numbers of SNS in a class could have been due to two factors. The first factor was the teachers' ability to recognise all SNS in their class, and the second factor was the method in which students were assigned to specific teachers. Typically SNS students were assigned to those teachers who best handled the extra workload and knew how to teach SNS. The teacher then had the best resources available and as a consequence other students with difficulties were often assigned to that teacher. Obviously this distribution needed to be balanced so that not all SNS ended up in one class. Such an outcome would have been inconsistent with the whole concept of inclusion.

The vast majority of the teachers surveyed in the present study had experience in teaching a SNS. Only 11% reported no SNS in their class. Interestingly, all of these teachers were from the regular school and three had more than ten years teaching experience. These results were most probably influenced by the way in which SNS students were assigned to specific teachers. Some teachers may not have been considered by the school administration to have been suited to teaching SNS. Perhaps they lacked the personal characteristics deemed necessary to teach SNS, such as patience, caring attitude, resilience and a positive attitude towards SNS. In Keighran's study (2001) it was also suggested that SNS tended to be placed with teachers who displayed more empathy and were less inclined to complain. However, this did not necessarily mean that these teachers had obtained a higher degree of education in special needs or were better teachers per se. This was in keeping with Jane's comment in the interviews about teachers needing to be committed to inclusion before they can successfully implement inclusion. Watson and Bond (2007) also supported the theory that teachers were required to display a higher degree of empathy towards students with a disability, if they were to successfully create an inclusive environment. Both Bender (1992) and Cochran (1997) suggested that their questionnaires could be used to identify teachers' suitability to teaching SNS.

All of these issues were relatively complex. It was a balancing act between the varying needs of some, the quality and disposition of the teacher and the level of support available. Clearly one-to-one teaching for all is not achievable and in many ways not desirable from a social interaction perspective. It appears that at the time of the present study there was a need for more trained teacher aides in mainstream classrooms to fully support an inclusive education program. There existed a constant juggling between knowledge, resources, time and motivation but in terms of the Research Question number 3 the results of

this research indicated that teachers' attitudes would improve with increased levels of support.

Research Question 4: What do teachers perceive to be a "challenge" when implementing inclusion?

Ingram (1997) contended that the demands of the additional challenges that regular classroom teachers were required to address on a daily basis were extraordinary. Challenges came in many forms, such as making changes in instructional methods and classroom routines, finding additional planning time and accommodating additional support staff or teachers for team teaching in their classes. These demands occurred in a global culture where teachers' actions were made more transparent and accountable, not only to the school but also to the whole school community.

The word *challenge* was used frequently in the open-ended comments. Although it was sometimes used in a positive way it was more often used to convey a negative response. Even the positive use of the word *challenge* indicated that teaching SNS was considered to be an extra demand on the teacher in a variety of ways. Teachers used the word *challenged* in a positive sense when they said that they were ready and willing to "take it on" (quote from Dee). However, this also implied that inclusion exacted more from the teacher. Teachers were directly asked if they felt challenged teaching SNS in the STATIC and the Likert score was the lowest score recorded and 67% responded that they felt challenged when teaching SNS. Of this group 85% had SNS in their class and 50% had more than 10 years teaching experience. The suggestion was that the teachers who were experienced and had close contact with SNS found inclusion to be fairly challenging whilst those who did not have any SNS at the time felt less challenged by the task. As discussed earlier, the statistical reliability analysis

on this Item was very low and indicated that the responses were not providing reliable information and further clarification was needed. It should be noted that the wording in Item 3 of the STATIC had been modified from the original questionnaire. The original wording used the term "uneasy" and was changed to "challenged" in order to satisfy a request from principals and DEECD to make the questions less negative. Unfortunately the use of the word *challenged* created some unintended inconsistencies in the respondents' answers. As described in Chapter 4, this inconsistency resulted in the researcher generating a modified overall STATIC score called PROINCL which excluded the responses to Items 3 and 16 in the questionnaire. It should be noted that, as detailed in Chapters 3 and 4, the wording on Item 16 was also changed from the original STATIC questionnaire

As described by the participants, the word *challenge* can be both a positive response and a negative response. In the interviews discussed in Chapter 5 it was clear that some teachers relished the challenge whereas others felt overwhelmed by the complexities of the challenge. Dan and Dee felt that having a SNS would be something to "take on" or "step up to." An analysis of the responses from sub-groups surprisingly indicated that the participants with no SNS in their class felt less challenged about teaching SNS than teachers who had SNS in their current class. The explanation for this observation was that teachers with no SNS in their class may not have been able to realistically assess the challenges associated with teaching SNS.

Teachers from the special regular schools felt slightly more challenged than participants from the regular schools. Initially this was a little surprising, however, the special regular schools had a higher number of SNS and in many cases students with more severe disabilities. Westwood (2001) suggested that having more than five SNS in a regular class

would inhibit the benefits of inclusion as such. This suggested that an increased number of SNS in a class increased the challenge for teachers. Gigorcelli, L. (personal communication, June, 2007) believed that three was the ideal number of SNS in a regular class. She suggested that any more than this would seriously negate the whole idea of an inclusion. Although special regular schools had very positive attitudes towards SNS, they found behavioural problems very taxing. Not surprisingly, in the present study the younger and less experienced teachers felt more challenged by inclusion.

In terms of Research Question number 4 it was clear from the responses to the questionnaires and the literature that SNS placed an extra burden on the classroom teacher and that this burden was dependent on the number of SNS in the class, on the severity of the disability and on the level of support. Some teachers felt challenged by these burdens whereas others relished the challenge to make a difference. As reported by the interviewees, time management and a lack of knowledge were the major issues that challenged the classroom teacher. Knowledge was gained either from experience or from extra education in special needs. It was also expected that increased knowledge of time management techniques would reduce the time burden and improve the attitude of the teacher by making the challenge more manageable. These burdens challenged some teachers more than others and were mitigated if support was readily available. The teachers most challenged were those with less experience and less education in special needs. The negative challenge was accentuated by the uneven distribution of SNS between classes. It was desirable that the number of SNS in any one class be limited to no more than three SNS per class.

Research Question 5: Are there differences in inclusion between schools with a high enrolment of SNS and schools with a regular enrolment of SNS?

In Comber's (2002) study it was suggested that the most crucial factor for successful teacher was *respect for and genuine interest* in the student. This, in essence, was the hidden agenda within the policies of the special regular schools. These schools were aiming to encourage SNS to their school because they saw themselves as offering an environment that was all-inclusive. That is, in every classroom and in every corner of the yard.

Watson and Bond (2007) emphasised the importance of establishing trust, and developing respect and empathy for SNS, as well as providing an appropriate learning environment. According to Watson and Bond (2007) these qualities were crucial if the student was to achieve their potential and become engaged in school.

Two types of local mainstream schools were identified and investigated in the present study. These were regular schools and special regular schools. The regular schools enrolled students from the local neighbourhood and had a regular intake of SNS within the school. The special regular schools were also the local primary schools, however they had a higher percentage of SNS enrolment. The special regular schools tended to have SNS travelling from other neighbourhoods. In some cases these special regular schools had promoted their capacity to provide an inclusive educational setting and consequently attracted more SNS per class. This together with specific allocations made by the school administration to assign SNS to specific teachers led to some classes having many more severe disabilities than those at the regular primary schools.

There were measurable differences between the culture and attitudes of the two schools in the present study. The special regular schools had better attitudes towards

STATIC questionnaires. Teachers at the special regular schools were better educated in special needs and marginally more confident but also more challenged. Based on the openended comments and interviews, teachers at the special regular schools dealt with more severe disabilities than those at the regular primary schools. Despite the higher number and severity of disabilities the special regular schools produced more positive attitudes, which could be attributed to their atmosphere of supportive staff and the overall engaging inclusive culture present at the schools. More teachers at the special regular schools believed that SNS were able to make academic strides in mainstream classrooms and that SNS should be in mainstream classrooms. In general they were more committed to inclusion than regular schools.

The number of SNS was not an issue for teachers in the regular schools and was not raised in the interviews nor did respondents from the regular schools mention it in the open-ended comments. However, the two interviewees from the special regular schools raised the issue of numbers of SNS per class, surprisingly in different ways. Jane appeared unperturbed by the number of SNS in her class. Indeed Jane was often allocated more than a fair share of SNS in any one year. Jane had been moved around the school over the years specifically to enable her to have certain students in her class. As mentioned earlier, this practice took place in the regular schools also but the numbers were usually smaller compared to the numbers in Jane's class. Jane sometimes had five or more SNS in her classroom. Contrary to this position, Debra commented that she was "against the disproportionate numbers of children at her school [special regular school] compared to the numbers that would be in your normal community". The number of no more than three to five was in keeping with the comments made by Gigorcelli, L. (personal communication, June, 2007) and Westwood (2001).

Issues such as the number of SNS in any one classroom led to discussions on teachers "feeling very stressed...Every so often someone will be in tears..." (Debra, special regular school). Although Jane did not describe herself as being "stressed" she did relate the need for her and the class at the time to have what Jane referred to as a "Carter Free Day." This involved the student being removed from the classroom for a whole day, once a week to give both the teacher and the other students a "break." The behaviour of some SNS in Jane's class another time did cause stress. The only stress reported by the regular school teachers was by young and inexperienced teachers who felt that they were not adequately educated in special needs. In some cases, teachers from the regular schools felt that the presence of a teacher aide made them feel uncomfortable or that the aide was inappropriately trained and could not provide the adequate support to the student or teacher. Stresses, such as these examples in the special regular school, were commented on by researchers Westwood (2001) and Forlin et al. (1996) as being a highly contentious issue for some.

Provision of support was another area of difference between the two types of schools. Generally both schools reported low STATIC scores relating to the availability of support materials and support from the principal. Although the special regular schools felt they had slightly better support from the principal, there was still some discrepancy between staff as the interviewees responses varied somewhat. Debra felt that there was definitely not enough support available, whilst Jane commented "I get a huge amount of support for one of my students." Jane also qualified her statement on the support allocated as "... I don't necessarily think that we are supported as well as we might be, because of the funding and the ... diagnosis needed for the criteria. We have so many children who don't get funding and who should." This is directly related to the teacher-diagnosed SNS. Teachers in the regular schools also did not find the support adequate for the teacher-diagnosed SNS. This was

evident in both the open-ended comments and the interviews. A number of teachers in the interviews felt who they had students that were worse than the funded SNS. They also felt that these teacher-diagnosed SNS required support. As mentioned earlier some principals allocated school funds to support these teacher-diagnosed SNS to enable them to acquire basic skills in literacy and numeracy (O'Keeffe, 2008; Bowd, 2009). The regular schools in general did not have to deal with severe SNS.

The severity of the disability was more of a problem for the special regular schools as they acquired students whose parents had specifically sought their school for their child. This was one reason that the special regular schools had more teacher aides. The teachers at the special regular schools were more experienced in teaching SNS and had undertaken more education in special needs.

It was noted that teachers from both the regular school and the special regular school felt that SNS with physical disability were easier to handle because they required less attention and they were adequately supported by a teacher aide and other resources. As mentioned before, ramps are axiomatic but identification, teaching and support for the teacher-diagnosed SNS was not appropriately catered for in Victorian State Primary Schools.

The level of education in special needs varied measurably between the two schools. The special regular teachers generally scored better in the questionnaire regarding their level of education. Both Jane and Debra (special regular school) felt that they were more than adequately educated in special needs. However, Jane had just completed a two-year degree in Special Education, Autism. On the other hand, the regular school teachers often felt that they were not adequately educated in special needs. This was particularly the case for the young and inexperienced teachers. The younger and inexperienced participants made comments

such as "tiring, daunting, feel like I have failed". Despite these comments teachers in both the regular schools and the special regular schools demonstrated that they were philosophically positive towards inclusion. This was evident in the wide range of inclusive pedagogy listed in the open-ended comments and the high scores achieved on the BCSQ and STATIC surveys and in the positive statements made in the interviews.

When the attitude and pedagogy of the regular schools and the special regular schools were compared it was found that the special regular schools were far more positive, better educated in special needs and had more years teaching experience with SNS. Interestingly, the regular schools were more "unsure" about inclusion in general. This was perhaps due to their lack of experience and lack of education in special needs.

Research Question 6: To investigate the relationship between pedagogy and attitude.

The fundamental contention of the present study was that if teachers had a positive attitude towards SNS they would select pedagogies that were better suited to SNS. This question was consistent with the findings of Bender (2004) who found that negative attitudes towards inclusion were directly linked to less frequent use of effective inclusive pedagogies. The expectation was that by improving the attitude of teachers it would then be possible to improve their pedagogies and thereby by implication improve the teaching outcomes for SNS.

However, as demonstrated in the preceding sections there were many complex issues that influenced teachers' pedagogy and attitudes. Clearly, one of the most significant issues in establishing teachers' pedagogy was the DEECD policy. The curriculum of a state primary school was relatively prescriptive. Specific programs, such as Early Years and the Reading

Recovery program were mandatory. Teachers understandably did not have individual freedom to operate independently. Techniques such as team teaching and cooperative learning needed the cooperation and participation of the whole school and could not be selected by individuals even if they believed that they were the best pedagogy for a specific student. DEECD also had funding limitations so that teachers could not act independently. Issues such as diagnostic services and teacher aides were almost beyond the reach of the classroom teacher particularly for the teacher-diagnosed SNS. There was a structured curriculum, set by DEECD, which provided continuity and consistency. This suggests that the classroom teacher is restricted in their ability to adjust their pedagogy according to their attitude.

There were other impediments to individual teachers independently selecting their preferred pedagogy. These were the logistics and time constraints placed on the teacher by the diversity of abilities present in every class. SNS students made up only a portion of the class and other students, such as regular students, socially disadvantaged students, students with English as a second language and gifted students also required the attention and time of the classroom teacher. Teachers were generally time-constrained and conscientiously worked to implement the teaching programs already in place. The diversity in the class also presented problems of identification of the nature of the disability. Teachers recognised the lower than expected teaching outcome but were not able to identify the cause. Many cognitive and behavioural difficulties were not fully understood by specialists let alone by classroom teachers and in many cases the classroom teacher found it difficult to ascertain what strategy to use. This issue of teachers' knowledge also indicated that the participants did not have enough knowledge to select pedagogies suitable for some specific needs of SNS.

As pointed out by Watson and Bond (2007) diversity in the classroom also included the diversity amongst teachers. They suggested that some teachers were simply not suited to teach SNS, others seemed disinterested, others did not want to take on the challenge and still others were overwhelmed by the challenge and complexity of teaching SNS.

However, despite these limited degrees of freedom the results of the interviews and the open-ended comments indicated that teachers with a positive attitude were very innovative and worked hard to develop and select pedagogies suitable for all children in their class. The analysis of the BCSQ and STATIC results indicated that teachers used a wide range of teaching practices that favoured inclusion and that philosophically teachers had a positive attitude towards inclusion. This was also confirmed in the analysis of the open-ended comments and interviews. Throughout the survey there were a number of consistent themes that emerged from these results. They were:

- 1. Support
- 2. Education in special needs
- 3. Experience with SNS
- 4. Number of SNS in the class
- 5. Severity of disability
- 6. Time constraints
- 7. Diversity of abilities

As shown in Chapter 4 when all the data was analysed and the STATIC scores modified to generate the PROINCL, the data revealed a relationship between the pedagogy score (BCSQ) and the modified attitude score (STATIC) as measured by PROINCL. The relationship between the modified attitude score PROINCL and the BCSQ score was 0.43

with an error probability  $\rho$  < 0.001. These results indicated that teachers who had a positive attitude towards inclusion were more likely to have selected pedagogies that suited inclusion, and conversely teachers with a more negative attitude were more likely to use teaching practices that were less suited to SNS. A further analysis of the PROINCL score showed a relationship with three other variables, tertiary education in SNS, years of teaching experience and the number of SNS in the class. These findings from the questionnaires were consistent with the findings from both the open-ended comments and the interviews but may not have been linked.

Intuitively it was expected that the attitude was established first and the selection of the pedagogy followed. This was consistent with Ajzen and Fishbein's (1980) theory of planned behaviour that described attitude as the planned action, either conscious or unconscious, that follows a thought perceived from an experience either directly or indirectly. This would suggest that the teacher entered the classroom with a particular attitude. They were all adults and have formed their views prior to completing the questionnaire. It was possible that the attitude was not the only determinant in the equation. As shown by Staub and Peck (1994), and indirectly supported by the findings of this study, pedagogies were influenced by DEECD (in this case) policy, school policy, expectations of the community, level of support, levels of funding and the level of education of the teachers. Perhaps the relationship between the attitude and the pedagogy was to some extent via one of these other variable. Definitely in the current study relationships were observed between school policy, DEECD policy, community expectations, level of funding, level of support and the level of education of the teachers. However the relationship was relatively strong and all the respondents worked within the same constraints of DEECD policy, school policy, community expectations, funding limitations and level of support. The only variable in these equations,

which varied, was the level of education in special needs. Here there was a very strong difference between the respondents. Perhaps the relationship between the attitude score and the pedagogy score was indirect and the key variable was the level of education in special needs. In some ways the interdependency between attitudes and pedagogy could have been indirect but the important conclusion remains unchanged. If inclusion is to be better implemented, teachers need more education in special needs if the other factors of DEECD policy, school policy, community expectations, level of support and level of funding remain constant.

Chapter 7 will set out the conclusions and recommendations suggested, enabling the results of the present study to be implemented in the best possible way, in primary schools within Victoria. The present study generated a rich and valuable database and a number of convincing findings. These findings should be of use to aid the direction and planning for policy makers, educators and administrators involved in implementing and reviewing inclusion.

## **CHAPTER 7**

# **CONCLUSION AND RECOMMENDATIONS**

"Time.... to carry forward that precious gift, that noble idea passed on from generation to generation: the God-given promise that all are equal, all are free, and all deserve a chance to pursue their full measure of happiness."

(Barack Obama, Inaugural Speech, 2009)

The conclusions and recommendations suggested in this chapter are aimed at assisting the implementation of inclusion in Victorian State Primary Schools. The present study investigated the attitudes of Victorian State Primary School teachers towards inclusion and identified the pedagogies they used. It concluded that overall teachers philosophically had a positive attitude towards inclusion. However, there were clear indications that the attitude of teachers could be improved with increased levels of special needs education and additional classroom support. The present study suggested that full inclusion was not the most suitable practice in Victoria, and that the current practice of modified partial inclusion was well suited to the needs of SNS within the education system. Generally, the present study confirmed the reports that inclusion was not fully implemented in Victorian State Primary Schools and indentified specific areas where improvements could be made to improve the implementation of inclusion

Inclusion requires appropriate changes to be made within schools to ensure that students are involved in all class activities and receive the education that they need. Based on the comments from participants surveyed in the present study, some students did not receive the education that they required because teachers, despite their positive attitudes, did not have

the knowledge necessary to teach all students in their class and in some cases did not have the support necessary.

The positive attitude of teachers towards inclusion correlated with an increased use of pedagogies suited to SNS. The results indicated that teachers with a high positive attitude towards inclusion used both individualised and metacognitive teaching practices more often than teachers with a low negative attitude.

The most frequently used inclusive pedagogy was individualised instruction. Many teachers provided an extensive description of individualised programs that they utilised in their classrooms on a daily basis. However, in the main, metacognitive instruction was more often used by teachers who had a higher level of education in special needs as compared to those teachers with little or no education in special needs.

This confirms the contention that teachers who had a positive attitude towards inclusion used pedagogies that were better suited to inclusion. The issues associated with inclusion and the teachers' pedagogy were complex. Although teachers may have had a positive attitude towards inclusion and used a wide range of pedagogies, there was still room for improvement. Many teachers felt challenged and unsure about crucial issues relating to inclusion.

Whilst participants were comfortable and confident in their ability to teach SNS and philosophically embraced the practice, many were unsure about specific aspects of inclusion. When asked whether students with a disability should be placed in special classes, one third were unsure. A similar proportion were unsure if SNS should be in mainstream classes, with more than half unsure if SNS achieved a higher academic outcome with inclusion. The participants were also unsure about both the academic progress of the SNS and unsure if the

self-esteem of SNS improved with inclusion. These questions go to the very heart of the inclusion debate.

A portion of participants felt that most students would benefit from selective short-term special education classes such as the Reading Recovery Program practised in Victorian State Primary Schools. There is still an open debate by participants experienced in teaching SNS who have a positive attitude towards inclusion, about the benefits of withdrawal programs. Some participants thought that it was a practical solution and was necessary within the constraints of the system. They highlighted that there needs to be a balance between the possible damage to the self-efficacy of students that were withdrawn versus the increased knowledge they would gain from the small group or individual tuition.

This high level of uncertainty on many key issues on inclusion, combined with the observation that 40% of respondents had no education focused on special needs, led to the conclusion that the most likely reason for teachers' uncertainty about inclusion was their lack of knowledge about teaching SNS in an inclusive environment.

Based on the results of the present study, education in special needs would be beneficial and therefore all teachers should undertake education in special needs. Teachers believed that they were not adequately educated in special needs. Many teachers had had only a few hours of special needs education and on average teachers had had less than four hours of education in teaching SNS.

The literature is full of examples of studies that expound the benefits of inclusion, but the participants were simply unaware of these findings and were unsure of the benefits. They were unable to test the theories in their classrooms. It was suggested that the lack of understanding may have prevented teachers from having a more positive attitude and consequently were not able to fully embrace inclusion.

The present study noted that inclusion added to the workload of the classroom teacher. More than two thirds of the participants felt challenged by inclusion, with a further 12% unsure. In addition, participants believed that they lacked the necessary support, specific education and, most importantly, the ability to address the complex issues surrounding the needs of the teacher-diagnosed SNS. These concerns were considered crucial elements in the implementation of a successful inclusive environment. The lack of teacher education in special needs was a particular problem for the teacher-diagnosed SNS. These students were difficult to diagnose within the classroom and were not afforded funding due to the selection criteria.

The participants were concerned about the level of support in the classroom and this concern may have influenced their attitudes towards inclusion. Generally the level of support for SNS with physical disabilities was considered to be sufficient although, support levels for students with cognitive disabilities seemed to be deficient. These students were not recognised by DEECD as being in need of additional support.

The lack of sufficient, qualified teacher aides was a serious issue especially for the teacher-diagnosed SNS. This was highlighted by the disproportionate number of SNS in some classrooms and between school types. Whilst the special regular schools had more teacher aides and the teachers had attended more educational programs in special needs than the regular schools, it did not lessen the burden of the uneven distribution. The overload of SNS in some classrooms created stress and in some cases negative attitudes in teachers. This overload was also applicable to regular schools, where some classes had no SNS and other

teachers had more than five SNS in their class. This uneven distribution of SNS was the result of two practices evident in State Primary Schools.

In the first instance the factor that led to an uneven distribution of SNS between schools was the observation that some schools attracted more SNS. In some cases this was a specific school initiative aimed at developing an area of specialization and attracting more "clients". These schools, designated in this study as special regular schools, may need additional support in order to address the increased burden due to the higher number of SNS per class. There appeared, in some sections of the school community, to be a demand for such schools. Parents of children with milder disabilities sought a halfway house somewhere between the special school and the regular school. This practice was considered to be anti-inclusion and contributed to the general assessment that inclusion had not been fully implemented in Victorian State Primary Schools. In order to address this demand from parents it would be preferable for all State Primary Schools to be able to make the appropriate accommodations to meet the identified student needs. This demand clearly existed because some parents sought the best possible education for their child and perceived that some schools were better able or more willing to make the necessary changes.

The second factor that led to an uneven distribution of SNS between classes within schools was the allocation of SNS to those teachers who were considered to be the most able to teach SNS. Interestingly, it was established that some teachers were considered not suitable to teach SNS and therefore were not allocated SNS. Although these teachers were considered to be capable teachers, they did not have all the skills or characteristics required to teach SNS. These participants were not only the younger, less experienced participants but also included experienced participants. They either lacked the innate personal traits, such as

empathy, patience and understanding, necessary to teach SNS or they lacked the desired experience and knowledge. The results indicated that it is the combination of personal traits, teaching experience, SNS teaching experience and education in special needs that generated teachers with both the best pedagogies and the best attitudes. Based on the present study's results, the profile of a teacher more likely to have a positive attitude towards SNS and successfully implement a wide range of pedagogy was female, working at a special regular school, older, with more SNS teaching experience, with strong classroom support and, most importantly, with a high level of special needs education. It is expected that if more teachers have a higher level of education in special needs there would be more teachers able to teach SNS. This would then lead to an even distribution of SNS between classes and thus reduce the current bias and associated burden on some teachers.

There are many factors that affect a teacher's classroom pedagogy. They are not only dependent on teachers' attitudes to SNS but are also influenced by community expectations, school policies and DEECD policy. The policies introduced by DEECD such as ILPs, assertive discipline or classroom management procedures have clearly impacted on teachers' classroom pedagogy. Teachers' pedagogy was also strongly influenced by curriculum initiatives such as, the Early Years and Reading Recovery. These policies and initiatives were generally well adopted by teachers as evidenced by the authoritarian, cooperative and individualised teaching practices found in both the statistical and qualitative analysis of the data.

There were clear structural reasons why inclusion in its purest form was not practised in Victoria. The state educational authority in Victorian state schools, DEECD, consciously practised a partial inclusive educational program. The existence of special schools for hearing

and visually impaired students and other special schools meant that some students were not in the mainstream classrooms, thus a fully inclusive educational setting was not possible. Also, the practice of specialist withdrawal programs was not fully inclusive in its purest definition. The decision to structure our education in this manner was made very consciously and gave students and parents the choice. This meant, in general, that the most severe cases of SNS were not in the mainstream educational system.

In conclusion, from the evidence provided by the present study, it is possible to suggest a range of recommendations that will help to address the important issues that underpin successful implementation of inclusion. The two key issues were the inadequate teacher education in special needs and sufficient, quality, support in classrooms, particularly as it pertains to the teacher-diagnosed SNS. It is crucial that these issues be addressed so that teachers' attitudes towards inclusion improve and teachers select more appropriate pedagogies that are suited to the diverse range of students present in the classroom. This should lead to better educational outcomes for SNS.

# RECOMMENDATIONS

Inclusion requires appropriate changes to be made within schools to ensure that students are involved in all class activities and receive the education that they need. It is not possible to achieve this by passing a law or adopting a policy. Such fundamental changes are expected to be progressive and require continuous review and improvement. The present study indicated that Victorian State Primary School teachers' attitudes towards inclusion were positive but could be improved. The teachers' lack of knowledge about inclusion and its management hampered implementation. Too many teachers were unsure and uncomfortable with their implementation of inclusion. They felt challenged and inadequately educated in

teaching programs that specifically catered for SNS. There appear to be a number of recommendations that fall into the following themes of: teacher education and classroom support.

#### **Teacher Education.**

It is recommended that DEECD prepare a number of special needs education courses that could be delivered as part of the PD program. These courses should be specifically designed to provide teachers with information about teaching SNS in State Primary Schools. The teaching strategies should be underpinned by the results of evidence-based practices from recent research into the practice of inclusion. These courses should provide material that sets out a range of different best practice pedagogies developed to address the specific needs of the most common behavioural and learning disorders. Programs such as the Response to Intervention (RTI) currently operating in the US (Bender and Shores, 2007; Hempenstall, 2009b) could be implemented in PD programs offered to schools throughout Victoria. Offering quality educational programs and guidance will have a multiplier effect on the improvement of literacy and numeracy levels as well as an expected improvement in social and behavioural issues.

The present study found that SNS constituted between 10% and 15% of the student population in State Primary Schools. According to some, the number of SNS could be as high as 30% of the student population (Louden et al., 2000; Westwood and Graham, 2000). Clearly there is a need for compulsory PD programs for teachers that focus on special needs. This type of specific education could also be provided to teacher aides. It would be ideal if the teachers and their teacher aides could undertake these courses together. Consideration

should also be given to including courses on team teaching approaches and techniques for better management of classroom time.

Inclusion does place additional demands on a teacher's time management skills (Bender, 2002). The data from the present study revealed that teachers felt that there was not enough time to attend to the specific needs of each student. Effective time management and improved team teaching skills for teacher aides or other support personnel may well help to address this concern.

The present study identified that some teachers who did not have SNS in their current class may not be well suited to teaching SNS. It is therefore suggested that DEECD, or other educational groups employing teachers could develop and regularly use the BCSQ questionnaire as a means of monitoring the pedagogies used by teachers. DEECD plays a pivotal role in determining the pedagogies used and such a questionnaire, updated and adjusted to meet the needs of Victorian teachers would be a valuable tool. It is difficult to implement change if it is not measured. Questionnaires such as the BCSQ and STATIC could provide quantitative data about improvements and outcomes from PD courses on inclusion.

One of Bender et al. (1995) recommended uses of the BCSQ is to determine what strategies a teacher may or may not be using and then match the type of strategy they need to use, to the type of SNS they have in their class. Bender et al. (1995) felt that being aware of these inclusive strategies would be particularly valuable to a teacher who was struggling with a SNS. The BCSQ might have highlighted specific strategies that the teacher needed to implement in order to achieve success for a specific student. Bender did not advocate that the BCSQ be used to determine placement of teachers; it was more as an assistance to teachers who had concerns about the progress of the SNS in their care (Bender et al. 1995).

The present study suggests that an increased use of metacognitive instruction techniques, as highlighted in the Literature Review, are required by teachers to improve the teaching practices of Victorian State Primary School teachers. This could best be accomplished by properly structured PD programs such as the Teacher Training Certificate (TTC) offered by SPELD, Victoria (2008).

Whilst the level of basic teacher education in general was outside the scope of the present study, it was clear that teachers do not have sufficient skills and confidence in the specific area of special needs. Consequently, the introduction of a wide range of intensive PD programs should be provided. These PDs should focus on specific teaching and learning practices designed to improve the implementation of inclusion in mainstream classrooms. It is perhaps prudent to direct specific special education programs towards male teachers since this group were found to be more deficient than females. Included in this educational program should be time management issues. Teachers were obviously limited in both what they can do, in the time available and the need to deliver individualised programs. The challenge of managing such a range of diverse abilities in one class requires attention and must be addressed with quality courses and programs.

In addition to teacher education, it is important that the support provided by teacher aides is comprehensive. Therefore, it is necessary for teacher aides to be adequately educated in special needs thus enabling inclusive programs to operate at an optimum level. This can be achieved by ensuring that all teacher aides are suitably skilled in special education, via comprehensive well-structured PDs. One method that would assist with these educational programs is that both the teacher aides and teachers from the same year level undertake the relevant educational programs together. These PDs could be facilitated within the school and

be presented by experts in the field. It is suggested that all teacher aides undertake extensive PD courses targeted at the specific SNS they are assisting.

As each school determines which teachers and support staff require specific educational programs in special needs, it would be extremely useful for these schools to consider utilising a similar questionnaire survey such as the BCSQ used in the present study. The BCSQ or similar could be administered to teacher and teacher aides to identify their understanding and knowledge of suitable strategies to assist SNS. The BCSQ is a valuable tool in determining what pedagogy teachers are implementing in their classrooms. In line with this, it is suggested that closer interaction with DEECD be sought in order to develop an adapted version of the BCSQ for use in Victorian schools. This adaptation would require the use of local terminology and would specifically address Victorian teaching practices.

# **Classroom support.**

One of the recurring themes of this survey was the issue of classroom support.

DEECD provided funding for approximately 3% of the student population (DEECD, 2008).

Similar figures were also reported in the Literature Review (Westwood & Graham, 2000;

Dempsey, 2005) and supported by the results of the present study. However, the number of students requiring additional targeted classroom support appears to be approximately 15% or more (Louden et al. 2000; Westwood & Graham, 2000; Dempsey, 2005; Angus et al., 2007). There is clearly a need for an increase in the level of specific funding for SNS. Therefore, it is recommended that DEECD reassess the selection criteria for the allocation of funding to SNS with the objective of making it suitable for children with learning disabilities/difficulties to receive the extra support necessary.

In many cases, teachers identified the fact that they were teaching students who were under achieving. However, the teachers could not identify the specific problem. Teachers could obtain more support if there was easier access to comprehensive diagnostic services. If teachers had specific teaching techniques from PD sessions and access to staff who offer full diagnostic services, perhaps they would be better able to deliver a more inclusive educational program. In line with DEECD's role in determining which students are eligible for teacher aide support, it is recommended that DEECD consider increasing the quality and availability of professional diagnostic services to help teachers specifically identify the teacher-diagnosed SNS.

Generally speaking there are several learning and behavioural difficulties observed in students that are not fully understood. This is evident in the results of the National Assessment Plan for Literacy and Numeracy (NAPLAN) published over the past few years and some students' below age and year level performances. It would be advantageous if DEECD could develop a departmental standard suite of pedagogies that could be used firstly to assist teachers in identifying learning and behavioural disabilities and secondly to outline strategies to address the particular disability. Such material could then be included as the course material for the PD program referred to earlier.

More generally, DEECD could support fundamental research into identifying how students learn so that techniques can be developed. These strategies could help in the educational process of SNS and provide teachers with the support necessary.

The data in the present study highlighted that teachers believed that the level of support offered to students with physical disabilities in many cases was disproportionate to the support required for students with learning disabilities. Typically this additional support

would be provided by teacher aides. It is therefore suggested that DEECD consider reviewing the selection criteria for support with the objective of increasing the support for students with learning disabilities.

#### **FURTHER STUDY**

One of the current teaching practices in Victorian State Primary Schools is the use of a Reading Recovery Program for students in Year 1 (Clay, 1979). This program has wide support from parents and well-informed teaching professionals. It is argued that the academic progress offered by these programs outweighs any negativity generated by a withdrawal from the classroom (Centre et al., 1995; Rowe, 1995). However, this and other types of withdrawal programs are inconsistent with the principles of inclusion. Research carried out overseas suggested that students' academic progress was better with inclusion (Hall, 2002). It is therefore suggested that DEECD fund or support a study of the educational outcomes of withdrawal programs in comparison with a fully resourced program of inclusion.

In a similar way, the current practice of concentrating SNS in one class or in one school is also inconsistent with the principles that underpin inclusion. This disproportionate distribution of SNS adds to the workload of those teachers and schools and magnifies the limits of the existing system. There was a clear preference in some school communities for targeted areas of specialisation. However, there was also reluctance by some principals and teachers to take on SNS since they felt ill equipped to handle such students. These reservations were conveyed to the parents who then targeted another neighbourhood school that offered to support the educational needs of their child. DEECD should further investigate and assess the advantages and disadvantages of these practices and either discourage the uneven distributions or allocate funding in a targeted and specific manner.

The present study addressed the attitudes and pedagogies for Victorian State Primary School teachers and provided a valuable set of data. However, it is expected that the issues will be different in other types of schools. Such schools include secondary schools, country schools and Catholic and other independent schools. Consideration should be given to further similar studies being undertaken in other types of schools, using the same structure of surveys and followup interviews.

The researcher found it difficult to collect statistical information about the numbers of SNS in Australian schools and the degree to which these figures changed over time. In part, this appeared to be due to an absence of generally accepted definitions. For example the current terminology for SNS is "students with diverse abilities." In other words there was no consistent set of terminology used for inclusion. Definitions changed from state to state and from time to time which undermined the collection of data (Loreman et al., 2005b). It is suggested that there be a government initiative to establish a panel of professionals to research and develop a series of definitions that can be used across the country. These definitions could include a classification and/or grading of difficulties and disabilities. A student who is classified as having a specific learning disability, can have a disability that can range from mild to profound. Further study on the classification should allow a system of measurement and have the ability to measure trends. Without a standard set of definitions it is difficult to identify the impact of change and to make adjustments to the practice of inclusion. This discussion could be initiated by investigating the terminology used in the recent NSW Education Amendment Bill (2008) regarding the education support for children with significant learning difficulties. These discussions may lead to the Victorian government introducing a similar bill into Victoria as it has been widely acclaimed by professionals working in the area (Twaddell, 2009).

Funding for the special regular schools is another area that requires further study. These schools have a higher percent of SNS and more severe SNS enrolled. Whilst the special regular schools appear to meet a need within the community, it is possible that this need is the result of other failures in the inclusive program. If adopted, the policy requires more funding to acquire better-resourced teacher aides. It is recommended that DEECD assess the funding levels of the special regular schools and review the policy and its implications as it is currently implemented in the special regular schools. Further studies could explore the implementation within the special regular schools more thoroughly to determine the most appropriate methods of management.

As mentioned earlier, similar studies should also be undertaken in secondary schools, rural schools, Catholic and independent schools. The present study found the combination of comprehensive questionnaires and intensive followup interviews extremely effective in coming to terms with the complex issues involved when implementing inclusion. The interviews helped make sense of the masses of data from the questionnaires and increased the confidence level in the findings. It would also be beneficial for educationalists and researchers to undertake comparative studies in Victoria to identify the teaching outcome for withdrawal programs verses full inclusion. This would provide a better understanding and appreciation of inclusion and how it is best implemented. In keeping with the demand for quality education in special needs and the need for assistance in identifying learning disabilities, more research is required to better understand how children learn. In many cases in the present study there did not appear to be a solution available to teach certain children. Interviewees particularly noted that without this knowledge the challenge of catering for the diverse abilities within any one classroom is a system of hit and miss based on existing teaching techniques. Consequently future studies should have a redrafted question to address

the specific education that teachers have actually undertaken and what teachers perceive as being necessary education in special needs.

These recommendations and suggested future studies should contribute to addressing the fundamental issues that underpin the findings in the present study. Critically, the Victorian Government would need to develop relevant policies, provide specific guidelines such as the exemplary bill passed by the New South Wales Legislation (Legislature NSW, 2008) which provides for all students regardless of their disability.

If these recommendations and future studies were to be implemented in part or in whole then there should be a gradual improvement in teaching outcomes which would go some way in addressing the concerns raised in the National Reading Inquiry (Australian Government: Department of Education, 2005) and the results of the National Assessment Plans in Literacy and Numeracy (NAPLAN, 2008) regarding Australian students' academic performance.

The challenge now is for the educators and politicians to allocate the resources necessary to develop the skills, programs, infrastructure and teachers with the ability and motivation to teach every individual according to his or her needs. This responsibility and obligation is heightened for students with disabilities, especially the teacher-diagnosed SNS.

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## **APPENDICES**

## APPENDIX A ACU ETHICS APPROVAL

Australian Catholic University
Brisbane Sydney Canberra Ballarat Melbourne



## **Human Research Ethics Committee**

## Committee Approval Form

Principal Investigator/Supervisor: Dr Ken Smith Melbourne Campus

Co-Investigators: Melbourne Campus

Student Researcher: Cheryl McKenzie Melbourne Campus

## Ethics approval has been granted for the following project:

Teachers attitudes towards inclusion.

for the period: 27<sup>th</sup> Feb 2007 to 30<sup>th</sup> Sep 2007.

Human Research Ethics Committee (HREC) Register Number: V200607 17

The following <u>standard</u> conditions as stipulated in the *National Statement on Ethical Conduct in Research Involving Humans* (1999) 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 minimum risk. There will also be random audits of a sample of projects considered to be of minimum 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.

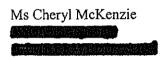
Signed:		. Date:
-	(Research Services Officer, Melbourne Campus)	

## APPENDIX B DET ETHICS APPROVAL



## Department of Education & Training

Office of Learning and Teaching



Dear Ms McKenzie

Thank you for your application of 27 September 2006 in which you request permission to conduct a research study in government schools titled: *Primary Teachers' attitudes inclusion of students with disabilities*.

I am pleased to advise that on the basis of the information you have provided your research proposal is approved in principle subject to the conditions detailed below.

- Should your institution's ethics committee require changes or you decide to make changes, these changes must be submitted to the Department of Education and Training for its consideration before you proceed.
- 2. You obtain approval for the research to be conducted in each school directly from the principal. Details of your research, copies of this letter of approval and the letter of approval from the relevant ethics committee are to be provided to the principal. The final decision as to whether or not your research can proceed in a school rests with the principal.
- 3. No student is to participate in this research study unless they are willing to do so and parental permission is received. Sufficient information must be provided to enable parents to make an informed decision and their consent must be obtained in writing.
- 4. As a matter of courtesy, you should advise the relevant Regional Director of the schools you intend to approach. An outline of your research and a copy of this letter should be provided to the Regional Director.



## Appendix B DET Ethics Approval (cont)

- 5. Any extensions or variations to the research proposal, additional research involving use of the data collected, or publication of the data beyond that normally associated with academic studies will require a further research approval submission.
- 6. At the conclusion of your study, a copy or summary of the research findings should be forwarded to the Research and Development Branch, Department of Education and Training, Level 2, 33 St Andrews Place, GPO Box 4367, Melbourne, 3001.

I wish you well with your research study. Should you have further enquiries on this matter, please contact Chris Warne, Project Officer, Research on (03) 9637 2272.

Yours sincerely

John McCarthy

Joh Mich

Assistant General Manager Research and Innovation Division

3 / 4 / 2006

enc

APPENDIX C LETTER TO PRINCIPALS

February, 2008

Dear

Re: Project Title: "Teachers' Beliefs Towards Inclusion"

Principal Supervisor: A/P Ken Smith Co-Supervisor: Dr. Kate Callery

Researcher: Mrs. Cheryl McKenzie Educational Doctorate

I am currently undertaking an Educational Doctorate study at the Australian Catholic University (ACU) in the study of primary school teachers' beliefs about the inclusion of SNS into mainstream classrooms in regular local schools. It is hoped that from the survey and follow up interviews, it can be ascertained how teachers feel towards inclusive education and what inclusive teaching strategies they may be using in their classrooms.

As a token of appreciation to you and your staff for taking the time to fill out these questionnaires, I wish to offer your school a one-year membership to the Specific Learning Disabilities Organisation Victoria (SPELD, Vic.). This membership entitles you to SPELD Bulletins, Newsletters, an annual Journal and concession rates to staff who attend SPELD PDs seminars/workshops and Conferences throughout the year.

A copy of the letter to the participants is attached.

We would appreciate your support in conducting this research and we will be in contact with you to arrange a mutually acceptable time to conduct the interviews.

Please don't hesitate to ask if you have any questions.

I can be contacted on:

Thank you for your assistance.

Yours faithfully,

A/P Ken. Smith.

Mrs Cheryl McKenzie

6M/Kinzie.

Principal Supervisor

Student Researcher

## APPENDIX D LETTER TO PARTICIPANTS

February, 2008

Dear Participant,

Re: Project Title: "Inclusion: Teachers' Attitudes and Pedagogy"

Principal Supervisor: A/P Ken Smith Co-Supervisor: Dr. Kate Callery

Researcher: Mrs. Cheryl McKenzie Educational Doctorate

I am a primary school teacher who is very interested in special education and I would like, with your help, to identify teachers values and beliefs towards the inclusion of SNS in mainstream classrooms.

The overall aim is to identify professional issues, philosophical issues, logistical concerns and teaching methods which may influence the implementation of inclusion.

I am following up with Phase Two of the research conducted last year with your staff,

I am I seeking your permission to ask four or five members of your staff to allow me to

interview them on their beliefs and values on inclusive education.

This is a short interview of approximately 15 minutes. The interview comprises of 20 questions and I will ask each interviewee if I could use a recorder to ensure correct answers. The results will be kept both confidential and anonymous.

You are free to refuse to participate in the interview without having to justify that

decision. Completion of the interview indicates consent. Once submitted the data cannot be

withdrawn as there will be no way of identifying your interview. Summary results from these

interviews may be used by DEECD. No individual responses or individual school responses

will be revealed in any publication at any time.

This study has been approved by the Human Research Ethics Committee at the

Australian Catholic University and from the Department of Research and Innovation Division

in D.E.T. (Department of Education and Training, Victoria). The data collected will be used

only for research purposes and confidentiality will be ensured.

Any questions regarding this project should be directed to the Principal Supervisor,

A/P Ken Smith or to the Co-supervisor, Mrs Kate Callery and the Student Researcher,

Mrs Cheryl McKenzie at: Alternatively both Dr. Phillip Clarkson and Dr Lyn Carter

would be available to discuss areas of concern. Whilst both of these lecturers are not directly

involved with this research they are qualified and experienced in the field of research and

education. Ms Rosemary Williams is the campus counsellor who is also available to discuss

issues of concern. All of the above can be contacted at:

Australian Catholic University

School of Education

St Patricks Campus

115 Victoria Pde.

Fitzroy 3065

Phone No: 03 9953 3257

Email: Ken.Smith@acu.edu.au

If you have any query that the Principal Supervisor, Co- Supervisor or Student
Researcher have not been able to satisfy, you may write to the Victorian Chair of the Human
Research Ethics Committee (HREC) of the Research Services Unit at:

Victorian Chair, HREC

C/O Research Services

Australian Catholic University

Melbourne Campus

Locked Bag 4115

Fitzroy Vic. 3065

Tel: 03 9953 3158

Fax: 03 9953 3315

Any complaint or concern will be treated in confidence and fully investigated. The participant will be informed of the outcome.

I sincerely thank you for your assistance in completing phase Two - Interviews for the purpose of research.

Yours faithfully,

A/P Ken Smith.

Mrs Cheryl McKenzie

Principal Supervisor.

X/Han (18)

Student Researcher

boll Kenzie.

# APPENDIX E STATEMENT IN PLAIN ENGLISH TO PRINCIPALS AND PARTICIPANTS

Dear Principal/ Teacher,

This study intends to explore the attitudes and concerns of State Primary School teachers towards the inclusion of students with disabilities in mainstream classrooms.

Inclusion is considered by DET as one of the best educational practices for diverse abilities in classrooms.

Currently the DET acknowledges that with over 540,000 students in 1600 government schools there is substantial diversity in the student population. In the Blueprint for Government Schools (2003) the Government is committed to delivering an inclusive education system that ensures all students have access to quality education to meet their diverse needs. There are 16,000 students in government schools who need additional assistance. The Program for Students with Disabilities has begun to detail the process to reform three major areas: 1. better targeting of students 2. strengthening funding 3. building school and teacher capacity. This study will help to identify the relationship between teacher education in SN and the teaching practices of the classroom teacher.

There has been very little research in this area of inclusion. This study asks teachers what they think about inclusion and what they are doing to cater for the diverse range of student abilities in their classroom. As teachers are at the 'coal-face' of implementing educational policy it is essential that we ascertain the teachers' opinions on these issues.

To do this I have selected three questionnaires that together give a good insight into what teachers think and the current teaching practices in classrooms. Each questionnaire

covers a separate area. The first questionnaire involves answering five questions on the teachers' background. The questions cover, age, gender, teaching experience and teacher education in SN.

The second questionnaire asks classroom teachers to answer questions designed to rank their attitude towards inclusion. This questionnaire has been validated, independently by the author Dr Cochran as a suitable instrument to measure teachers' attitudes towards inclusion. It covers the four teaching factors: advantages and disadvantages, professional issues, philosophical issues and logistical issues.

The third questionnaire deals with current classroom teaching strategies. It covers three major teaching domains. They are: teaching instruction, self-talk thinking strategies and a combination of inclusive teaching practices such as differentiation and cooperative learning.

The information will be anonymous and the information will be kept confidential. The results of the survey will be analysed to identify assumed relationships between the amount of teacher education in SN and the teaching practice of the classroom teacher. Within certain selection criteria to schools have been randomly chosen and only full time teachers are being asked to fill out the questionnaire.

We need your help to ensure that we know as much as possible about the views and beliefs of classroom teachers so that the policies towards inclusion can be effectively structured. Thank you for allowing me to give teachers the opportunity to be heard and for the valuable experience of teachers to be acknowledged.

Yours sincerely

Cheryl McKenzie

## APPENDIX F CONSENT FORM

Australian Catholic University
Brisbane Sydney Canberra Ballarat Melbourne

# **ACU** National

Australian Catholic University Limited ABN 15 050 192 660 Melbourne Campus (St Patrick's) 115 Victoria Parade Fitzroy VIC 3065 Locked Bag 4115 Fitzroy MDC VIC 3065 Telephone 613 9953 3000 Facsimile 613 9953 3005 www.acu.edu.au

## CONSENT FORM Copy for Researcher/ Copy for Principal

Title of Research: TEACHERS' VALUES AND BELIEFS TOWARDS INCLUSION NAMES OF PRINCIPAL INVESTIGATORS or SUPERVISORS: Dr KEN SMITH (Principal Supervisor) Dr. KATE CALLERY (Co-supervisor) NAME OF STUDENT RESEARCHER: Ms CHERYL McKENZIE [ ...... (the Principal) have read (or, where appropriate, have had explained to me) and understood the information provided. Any questions I have asked have been answered to my satisfaction. I agree to participate in the questionnaires, realising that I can withdraw my consent at any time without comment or penalty. 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 or staff members in any way. NAME OF PRINCIPAL: ..... (block letters) SIGNATURE ......DATE ...................... SIGNATURE OF PRINCIPAL INVESTIGATOR or SUPERVISOR: DATE 2/1 3 1 07 SIGNATURE OF STUDENT RESEARCHER:...... DATE: .2/../...3..../....0.7....

CRICOS registered provider: 00004G, 00112C, 00873F, 00885B

#### APPENDIX G PERMISSION FROM DR BENDER

Cheryl:

Thanks for your interest in using the BCSQ. I have not updated that recently, but I would be happy for you to use that form, and/or adapt it in any way you see fit for research purposes. you will need to cite my work as well as an article in Intervention IN School and Clinic (published by Pro-Ed., in Austin, TX). You'll need to obtain that article (I think from 1992). Also, I would appreciate a copy of your research paper when it is finished (electronic copy will be fine!).

I am doing several workshops for teachers in OHIO for the next several days, and may have difficulty responding to e-mail, but the permission above should give you what you need for now. I'll be available for a phone conversation early next week should you need that (800-991-1114).

By way of explanation, Dr. Renet Bender is my wife of several decades and she rents me out for workshops nationwide in her company the Teacher's Workshop. The phone number is for her company, which is where I work when I'm not doing workshops.

Have a great day, and good luck with your research.

William Bender

#### APPENDIX H PERMISSION FROM DR COCHRAN



#### MISSOURI SOUTHERN STATE UNIVERSITY

March 13, 2006

Mrs. Cheryl McKenzie



Australia
3124

Dear Mrs. McKenzie,

Thank you for your inquiry about the Scale of Teachers; Attitudes Toward Inclusive Classrooms (STATIC). I have enclosed with this letter a copy of the most recent copyrighted version of the STATIC to date and a scoring key for your use. Additionally, you will find a summary of the development of the STATIC. It will provide for you an abbreviated explanation of the psychometric properties of the STATIC.

You may reproduce the STATIC for use in your research project(s) on inclusion. The only requirements that I have for the use of the instrument is that you: (1) ascribe authorship to me on the instrument, and acknowledge me as the author of the instrument, using one of the citations below, in any publication that may arise from your use of it; and (2) request permission for each major use of the instrument beyond its use in your present research project (just a simple way of helping me know how and where it is being used). You may make changes to the demographical data you choose to collect or the instructions for collecting the demographic data to meet the needs of your particular study. However, the 20 items specific to inclusion must remain intact as originally published.

Good luck with your research! Please call or write if I can assist you further.

Sincerely,

H. Keith Cochran, Ph.D. Department of Psychology 3950 East Newman Road Joplin, Missouri 64801 Cochran-k@mssu.edu

#### APPENDIX I PERSONAL BACKGROUND QUESTIONNAIRE PBQ

#### QUESTIONNAIRE ON INCLUSION

#### Instructions

Please respond to the following items by placing a tick that applies to you or by filling in the blank as indicated. Thank you for participating in this survey.

М	ale				Fe	male							
Ag	ge:	21-25 yrs		26-30	) yrs		31-35	yrs		36-40 y	rs		
		41-45 yrs		46-50	) yrs		51-55	yrs		56-60+	yrs		
		dertaken tr bled or hav					ucation of s	students	who h	ave bee	n iden	tified as	
Υe	25				No	•							
If :	yes: Wh	at type of al Develop	training ment	<b>j</b> :		<u>Forma</u>	l Qualificat	ions.					
2	hours					1 unit	of study at	tertiary	level				
1/2	day					A degi	ree in Speci	ial Educa	tion				
1	day					Maste	rofSpecial	Educati	on				
1	week					9ther							
Н	ow many	years hav	e you b	een te	achi	ng?							
0	to 2 yrs		3 to	5 yrs		6	to 10 yrs		More	than 10	yrs		
0	f those y	ears, how	may yea	ars ha	ve yo	u taug	ht special i	needs sti	udents	?	vea	r(s)	
		number of needs stu		ts that	are	in your	classroom	this yea	r, who	have be	een ide	entified	
0		1		2-3			4-5		Мо	re than	5 stud	lents	
		response t ren in your		t desci	ribes	the sp	ecial need(	s) stude	nt mos	t closely	y asso	ciated	
Le	earning (	Difficulty			Beha	viour [	ifficulty	Н	ealth o	r Physic	al Diffi	iculty	
					All of	f the ab	ove						
Is	anyone	in your far	mily clas	ssified	as h	aving s	pecial need	ds?					
Υe	25				No								
	omment o		ı feel ab	out te	eachi	ng a st	udent with	a specia	Ineed	in a mai	instre	am	
_													
_													
_													
D	o you me	odify your t	teaching	g wher	ı you	have s	students wi	th specia	al need	ls?			
D O	o you m	odify your t	teaching	g wher	ı you	have s	tudents wi	th specia	al need	ls?			
D -	o you m	odify your t	teaching	g wher	ı you	have s	tudents wi	th specia	al need	ls?			

### APPENDIX J BENDER CLASSROOM STRUCTURE QUESTIONNAIRE BCSQ

RESEARCH (	QUESTIONNAIRE I
Adapted	by W Bender, 1985

1	2	3	4	5
Very Rarely			Almost	Always
(ஓருஜ் a month or less)			(almost eve	ery day)

No.		1	2	3	4	5
1	I keep the lesson moving along smoothly.					
2	The class review worksheets or assignments I return.					
3	Several students may be walking around in my class at any one time retrieving materials.					
4	Students receive verbal praise from each other.					
5	I encourage students to share various techniques that may help them memorise facts.					
6	The class emphasises correction of worksheets.					
7	Students must raise their hand before standing.					
8	I ask "How did you learn that?" or some other question to focus on learning strategies.					
9	I insist that doors be shut and students remain in their seats to minimise distractions.					
10	New material is introduced fairly rapidly.					
11	I suggest particular methods of remembering.					
12	Peer tutoring is used to assist students with special needs.					
13	I emphasise the importance of working quietly.					
14	I determine early in the year if a student needs the same concepts covered in several different ways.					
15	I use physical touch, such as a pat on the back, as reinforcement.					
16	I praise students for successful work when ever possible.					
17	Students are encouraged to help each other informally on learning tasks.					
18	I try to determine how students learn best.					
19	I use reading materials that highlight the topic sentence and main ideas for students with special needs.					
20	I individualise in my class when necessary.					

# APPENDIX J BENDER CLASSROOM STRUCTURE QUESTIONNAIRE BCSQ (CONT)

No.		1	2	3	4	5
21	Students are taught to use their own inner language to give themselves silent instructions.					
22	I use class privileges as rewards for work.					
23	I use a specialised grading system that rewards special need pupils.					
24	I use several test administration options such as oral tests or extended-time tests.					
25	Directions for educational tasks are kept simple and are demonstrated to achieve clarity.					
26	Differential curriculum materials are selected based on the learning characteristics of particular students in my class.					
27	I routinely vary the instructional level for different-ability children doing the same tasks.					
28	Instructional materials are varied for different kids in my class.					
29	I constantly monitor the on-task behaviour of my students.					
30	I individualise my class for special needs students.					
31	Visual displays and diagrams are used in class to aid comprehension.					
32	Students use self-monitoring to record daily academic and behavioural progress.					
33	A token economy is used for reinforcement.					
34	I use the whiteboard frequently to explain concepts.					
35	I have an assertive discipline plan in effect.					
36	Cooperative learning groups are frequently used.					
37	I use individual behavioural contracts with students to improve behaviour.					
38	I use graphic organisers such as mind maps to assist students in comprehension of difficult concepts.					
39	Students complete direct daily measures of academic progress in class.					
40	A set of class rules is on display in my class.					

Please Turn over

## APPENDIX K SCALE OF TEACHERS ATTITUDES TOWARDS INCLUSIVE CLASSROOM STATIC

## RESEARCH QUESTIONNAIRE II Adapted by K Cochrane, 1999

After reading each item, decide how you would react. Rate your reaction using the scale below as your guide to describe the extent you believe best describes your feelings. Answer any items that do not specifically define the type of disability or special needs of a student with the response that best describes your general perception of a student with a disability or special need.

SD STRONGLY DISAGREE D DISAGREE NS NOT SURE A AGREE SA STRONGLY AGREE SD No. D NS SA I am confident in my ability to teach children with special needs. I have been adequately trained to meet the needs of 2 children with disabilities. I feel challenged when teaching students with special 3 needs. I feel uncomfortable when I learn that a student with 4 special needs will be in my classroom. Although children differ intellectually, physically and 5 psychologically, I believe that all children can learn in most environments. I believe that children with special needs should be placed 6 in special education classes. I am comfortable teaching a child that is moderately 7 physically disabled. I have no problems teaching a student with cognitive 8 deficits. I can adequately handle students with mild to moderate q behavioural problems. Students with special needs learn social skills that are 10 modelled by regular education students. I believe that academic progress is possible in children with 11 special needs. Students with special needs have higher academic 12 achievements when included in the regular education classroom. It is difficult for children with special needs to make strides in academic achievement in the regular education classroom. Self-esteem of children with special needs is increased 14 when included in the regular education classroom. Students with special needs in the regular education 15 classroom hinder the academic progress of the regular education student. Special training in teaching special needs students should 16 be required for all regular education teachers. I don't mind making special physical arrangements in my 17 room to meet the needs of students. Adaptive materials and equipment are easily acquired for 18 meeting the needs of students with special needs. My principal is supportive in making needed accommodations for teaching children with special needs. Students with special needs should be included in regular 20 education classrooms.

#### APPENDIX L PHASE 2 INTERVIEW QUESTIONS

#### **QUESTIONS RELATED TO: BCSQ - PEDAGOGY**

- 1. Would you teach students to use inner language to give themselves silent instruction?
- 2. Would you expect students to self monitor their academic or behavioural progress?
- 3. Do you use an oral test or extend time for a student with special needs?
- 4. Do you use individual contracts with a student to improve behaviour?
- 5. Do you use a special grading system that rewards SNS?
- 6. What do you understand by token economy as a teaching technique?

#### **QUESTIONS RELATED TO: STATIC – ATTITUDE**

- 1. Do you feel you have had adequate education in special needs?
- 2. What do you do that is different for the SNS in your classroom?
- 3. Do you plan differently for the SNS in your classroom?
- 4. Which word or words would you use to describe teaching SNS?
- 5. How did you feel when you learnt you were to have a SNS in your class?
- 6. What do you think about extracting SNS from the classroom for tuition?

#### **INTERVIEW QUESTIONS: PHASE 2**

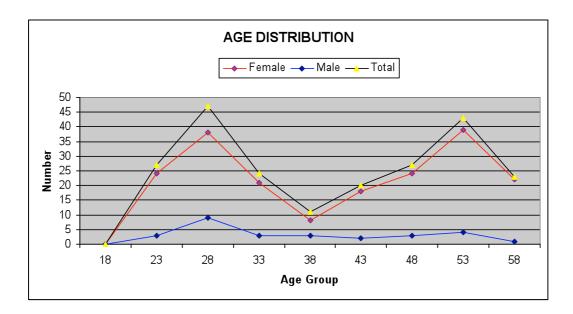
- 7. What is the most difficult aspect of teaching a child with cognitive problems?
- 8. Is it easier for you to teach a SNS with a behavioural or physical disability?
- 9. Do you believe that SNS can make "suitable" academic progress?
- 10. Do you agree that the self-esteem of SNS improves in a regular class?
- 11. Does inclusion hinder the academic progress of regular students?
- 12. In your school is it easy to obtain adaptive materials and equipment for SNS?
- 13. Are principals aware of the practical consequences of inclusion?
- 14. Do YOU believe that SNS should be taught in regular classrooms?
- 15. Do you agree in inclusion?
- 16. What is the best education in special needs you have had in SNS?
- 17. Do you get support for your SNS? If so what type of support?

#### QUESTIONS RELATED TO: OPEN-ENDED COMMENTS ON PBQ: CHALLENGE

The most commonly used word in the 'comments' section was *challenge*.

- 1. How do you interpret the word challenge? Is it a positive or negative feeling?
- 2. What issues in teaching would you say are a challenge?

#### APPENDIX M AGE DISTRIBUTION



APPENDIX N ANALYSIS OF HIGH AND LOW SCORERS IN BCSQ AND STATIC VERSUS VARIABLES

Variable	Group	ALL	Low BCSQ	High BCSQ	Low STATIC	High STATIC	Low BCSQ, STATIC	High BCSQ, STATIC
		%	%	%	%	%	%	%
School	A	70	72	64	73	54	79	43
	В	30	28	36	27	46	21	57
Gender	Male	12	11	10	13	10	16	9
_	Female	88	89	90	87	90	84	91
Age	younger	49	55	47	56	41	67	22
	older	51	45	53	44	59	33	9
Training	No	40	46	24	58	25	63	17
	PD	27	21	32	27	29	16	35
	Tertiary	33	33	44	15	46	21	48
Yrs Tch	0 – 10 yrs	48	60	41	58	36	65	39
Exp	10+ yrs	52	40	59	42	64	35	61
Yrs SNS	0 yrs	11	17	9	17	7	26	5
Tch Exp	1 –10yrs	62	75	64	59	53	58	59
_	10+ yrs	23	8	27	24	40	16	36
No of SNS in class	Nil	17	25	9	17	16	26	9
	Yes	83	75	91	83	84	74	91
Average SNS in								
class		2.2	2.0	2.5	2.0	2.7	1.9	2.8
Family exp	Yes	17	19	22	11	16	9	26
	No	83	81	78	89	84	91	74

## APPENDIX O BCSQ QUESTIONNAIRE RESULTS

Question No.	Score	Comment
16	4.84	praise for successful work
29	4.60	constantly monitor on task behaviour
18	4.52	try to determine how students learn best
17	4.41	students encouraged to help each other informally on learning tasks
27	4.33	vary the instructional level for SNS
31	4.32	visual displays
25	4.32	directions kept simple
20	4.30	individualise when necessary
34	4.28	use white board
40	4.28	set of class rules
28	4.23	vary the instructional material for different kids SNS
36	4.23	cooperative learning groups
26	4.20	Differential curriculum
30	4.09	Individualised instruction
8	4.08	how did you learn that or some other question to focus on learning strategies
1	4.04	keep lesson moving
5	4.03	encourage students to share various techniques to help memorise facts
14	3.98	does student need same material covered in several different ways
4	3.95	verbal praise from each other

Question No.	Score	Comment
35	3.91	assertive discipline plan in effect
38	3.74	graphic organisers
19	3.65	use reading materials that highlight topic sentence for SNS
12	3.65	peer tutoring is used to assist SNS
11	3.64	I suggest particular methods of remembering
13	3.64	must work quietly
24	3.47	use oral test or extended time tests
22	3.44	use class privileges as rewards
2	3.26	class reviews returned work sheets
15	3.12	pat on back as an enforcer
37	3.08	individual behaviour contracts to improve behaviour
21	2.94	students taught inner language silent instruction
32	2.86	self monitoring record academic and behaviour
23	2.77	use specialised grading to reward SNS
3	2.76	kids moving around classroom
6	2.74	my class emphasises correction of work sheets
9	2.65	insist that doors are shut and in seats to minimise distraction
10	2.62	introduce new material fairly rapidly
33	2.59	token economy
7	2.37	raise hand before leaving seat
39	2.36	students complete direct daily measures of academic progress
Average	3.66	

## APPENDIX P STATIC QUESTIONNAIRE RESULTS

	ciassincanon	question No.	SORTED BY SCORE	SCORE		disagree	not sure	agree
						%	%	%
d	17		Can re arrange my room to accommodate SNS	4.36		1	5	94
c	11		SNS children can make academic progress	4.34		2	7	91
c	9		I can adequately handle student with mild to mod behaviour problems	4.14		1	9	90
c	5		All children can learn in most environments	4.12		8	9	83
c	16		All regular teachers should have special education in SN for SNS	4.10		7	13	80
a	10		SNS learn social skills from regular students	4.08		5	13	82
d	7		Comfortable with moderately physically disabled	4.07		5	11	84
d	19		Principal is supportive of making accommodations for SNS	3.96		3	23	74
a	20		SNS should be included in regular classrooms	3.89		3	26	71
b	1		Confident to teach SNS	3.79		9	16	75
a	6		SNS should be in special ed. classes	3.78	R	63	30	7
b	4		Uncomfortable when learn that I will have SNS student	3.77	R	69	14	17
a	15		Integration hinders the academic progress of	3.77	R	66	20	14

classification		question No.	SORTED BY SCORE	SCORE		disagree	not sure	agree
			regular students		_	%	%	%
b	8		I have no problems teaching student with cognitive deficits	3.70		13	19	68
a	13		Difficult for SNS to make academic strides in regular classrooms	3.53	R	56	29	15
a	14		Self-esteem of SNS children is increased with integration	3.52		9	41	50
a	12		SNS students have higher academic achievement when integrated	3.39		7	53	40
d	18		Adaptive materials and equipment easily acquired	3.09		31	31	38
b	2		I have been adequately educated in SN	2.82		44	24	32
b	3		Challenged when teaching	2.40	R	21	12	67
			Overall Average	3.73				

R indicates that the scores have been reversed

% are raw score values

## APPENDIX Q THEMES FROM Q9 ON ATTITUDE

Common Themes	Examples of comments	Sch. A	Sch. B	All	Percentage
Support		53	17	70	31%
Good		18	7	25	
Inclusion only if teacher aide	I could not manage without a teacher aide in the classroom	21	9	30	
Need more	Some students have no support and they need it more than those funded	11	4	15	
Time				35	15.5%
Given to teach	Can't cut myself up into 21 pieces and help every student at once	11	6	17	
1 to1					
Planning		7	4	11	
Taken from reg. students	Can't have an ILP for every student	4	3	7	
Education	I have had no education in SN for my SNS	19	2	21	9%
Type of Disability	The success of inclusion depends on the type of disability	12	2	14	6%
Overall attitude		Double positive	Double positive 4	117	52%
	It's a passion of mine, excited, I love the challenge, enthusiastic, privileged	41			
Positive	P		44	85	38%
Negative	Manual all and a control of	10	22	32	14%
	Very challenging, feel like I have failed, daunting, tiring	Double negative	Double negative 3		

## APPENDIX R WORDS, PHRASES MOST FREQUENTLY USED IN Q9

Words	Frequency	Percent	Positive	Negative	Double positive	Double negative
Challenge	32	14%		Yes	Fulfilled	Disruptive x 3
Difficult	26	12%		Yes	Privileged	Frustrated x 6
Time	16	7%		Yes	Enriches all students	Stressful x 2
Rewarding	14	6%	Yes		Great opportunity	Daunting x 2
No problems	12	5%	Yes		Enthusiastic x 2	Overwhelmed
Fine	8	4%	Yes		Passionate x 2	Anxious
Нарру	7	5%	Yes		Love it	Demanding x 2
Very happy	4		Yes			
Frustrated	5	2%		Yes	Delight	Pressured x 2
All students have the right to learn	2	.8%	Yes		Great	Lack of education x 3
Beneficial to all students	7	3%	Yes		Confidence x 4	Lack confidence x 2