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Early Childhood Teachers' Knowledge of Children with Disabilities and Teaching Children with Disabilities.

Pam Kilgallon B.Ed., Grad Cert. Ed. Admin.

A Thesis Submitted for Partial Fulfilment of the Requirements for the Award of-

Master of Education: Children with Special Needs

At the Faculty of Education, Edith Cowan University

Date of Submission: 22nd May 2001.

Abstract

Trends to integrate students with disabilities into general education schools, rely on early childhood teachers utilizing their knowledge and skills to provide successful induction into the education system, and fully including students with disabilities in the teaching program.

This study describes early childhood teachers' knowledge of children with disabilities, and the teaching of these children, through teachers recounting their sources of knowledge and experiences in teaching children with disabilities. This study was conducted in the northern metropolitan teaching districts of Perth, Western Australia. Using both quantitative and qualitative methodology, 22 early childhood teachers completed a survey involving openended questions, followed by 5 teachers participating in taped in-depth interviews, disclosing their thoughts and lived experiences of teaching children with disabilities in general education settings. Data were analysed to identify shared teacher knowledge significant to the effective teaching and inclusion of children with disabilities.

Findings indicated that early childhood teachers' knowledge of children with disabilities developed through the experience of teaching a child with disabilities and was relative to the particular children they had taught. Interview participants indicated that caring dispositions and knowledge of the individual, not the disability, was essential knowledge for teaching a child with disabilities. Being proactive and seeking support, as well as planning ahead, organizing time, adapting the learning environment and modifying existing teaching practices and expectations were considered to be critical elements of teaching a child with disabilities. Early childhood teachers also found that teaching a child with disabilities was a shared experience, where they were required to collaborate with various agencies and parents to ensure successful inclusion took place. The process of inclusion caused early childhood teachers to question their self-efficacy and the adequacy of their practical teaching knowledge. As one interview participant stated, "it's all a huge learning curve."

DECLARATION

I certify that this thesis does not, to the best of my knowledge and belief:

(i) incorporate without acknowledgement any material previously submitted for a degree or diploma in any institution of higher education;

- (ii) contain any material previously published or written by another person except where due reference is made in the text; or
- (iii) contain any defamatory material.

Signature.....

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CHAPTER ONE: INTRODUCTION

In recent years the education system has undergone significant restructuring and evolution in an effort to cope with demands and changes within society. Whilst attempting to effectively utilize limited resources, it strives to provide a quality service for all students (Fullan, 1991). Educational change presents new challenges for teachers, leading them to question their knowledge and ability to implement these changes.

One such change in the delivery of education is the inclusion of students with disabilities into general education classes. In the past decade inclusion has become a more widespread occurrence in Australian schools. Inclusion is considered to be the practice of integrating students with disabilities into general education classrooms and adapting teaching strategies and practices to meet their needs in order to involve them in the learning process (Sims, 1997).

As generalist teachers have had limited exposure to children with disabilities in their teacher training courses, and often only in optional courses, variances exist in their understanding and application of inclusion practices (van Kraayenoord, Elkins, Palmer, Rickards & Colbert 2000). These discrepancies impact on their ability to successfully include students with disabilities into mainstream education in Australia.

Improvements in inclusive practice rely on researchers examining factors which affect inclusion, including teachers' attitudes, knowledge and expertise in understanding students with disabilities, and how teachers attempt to meet students' needs. Research insights may lead to changes in teacher training regimes and in identifying and ratifying quality teaching practices, thereby improving the standard of education for all students, including those with disabilities (Grossman, 1990; Cochran-Smith & Lytle, 1993).

Background to the Study

Early childhood teachers are faced with the responsibility of inducting children into the education system. A child's early education sets the pattern for learning behaviours, attitudes and performance throughout their school years.

The Australian Early Childhood Association (AECA) code of ethics for early childhood care and education emphasizes the responsibility of early childhood teachers to acknowledge the uniqueness of each child, catering for their interests and needs (Department for Education and Children's Services (DECS), 1998). Early childhood teachers endeavour to provide learning opportunities for all students, including those with disabilities, in an attempt to develop students' potential. In order to do this they must utilize their own knowledge to cater for new and different challenges.

Teachers have developed their teaching knowledge through a combination of training, professional development, collaboration, life experiences, and teaching experiences. Clandinin & Connelly (1995, p.7) refer to teacher knowledge as " that body of convictions and meanings, conscious or unconscious, that have arisen from experience (intimate, social & traditional) and that are expressed in a person's practices." Teacher knowledge is deemed to be worth knowing, varied and changing, and relies on research to disclose its many forms (Cochran-Smith & Lytle, 1993). It is this teacher knowledge that impinges on teachers' ability to understand and adapt to changes in the education system.

A recent trend is the inclusion of children with disabilities, also referred to as children with special needs, into mainstream classes (Ashman & Elkins, 1994). Following overseas trends, Western Australian children with disabilities are being accommodated in the most appropriate setting (W.A. School Education Act 1999). This is determined by the students' special needs and the ability of schools and associated services to meet these needs.

In Western Australia students with disabilities are offered a range of options. These vary from segregated education support schools run by special education teachers, to full-inclusion in mainstream classes, where students are taught by generalist teachers (Australian Early Intervention Association (WA Chapter), 1999). Increasingly, inclusion of children with disabilities occurs in the first years of education. It may even be that some children are diagnosed as having disabilities, or special needs, only after they have commenced early education (Lerner, 1997).

Significance of the Study

The significance of this study is that examining the knowledge base of generalist teachers who have the responsibility of catering for children with disabilities may lead to improved practices and provision for children with disabilities in early childhood settings.

Research into the practice of including students with disabilities into general education settings has mainly been conducted overseas, in the middle and upper years of education (Vaughn, Reiss, Rothlein & Hughes, 1999). The focus has been on studying practices adopted by particular education systems, in order to improve the delivery of education for students with disabilities within that system (Fuchs & Fuchs, 1998; Cornoldi, Terreni, Scruggs & Mastropieri, 1998). As variations exist between social expectations, resources, structures and strategies operating within different education systems, findings of some research may prove irrelevant to other systems. This study attempts to identify teachers' knowledge of children with disabilities pertinent to the local education system.

Only recently has research on teaching students with disabilities been conducted in the area of early childhood education (Vaughn, Reiss, Rothlein & Hughes, 1999; Buell, Hallam, Mc Cormick & Scheer, 1999; Odom, 2000). These studies highlight the changing role of education for students with disabilities and stress the need for further research into teacher knowledge and inclusive practice in the early childhood years.

Teacher knowledge is part of teachers' self-efficacy, a combination of knowledge and belief in the ability to implement that knowledge, impacting on their sense of empowerment and teaching of children with disabilities (Beull, Hallam, Gamel-McCormick & Scheer, 1999). It is this self- efficacy that contributes towards changing a person's behaviour (Sims, 1999). With the trend of including children with disabilities into mainstream education, research into teachers' knowledge of this field may validate teachers' existing knowledge and improve their belief in inclusive practice and their quality of educational delivery (Sims, 1999).

Research into inclusion has focussed on the attitudes of generalist teachers to inclusion, and strategies for inclusion (Scruggs & Mastropieri, 1996). Research into teachers' knowledge has focussed on teachers' personal lived experiences (Connelly & Clandinin, 1995), not teachers' experiences of teaching students with disabilities. There appears to be lack of research into what teachers' knowledge of children with disabilities is comprised of and how it affects their teaching. This study of teacher knowledge and teaching children with disabilities, in a small way, attempts to address these issues.

Purpose of the Study

The purpose of this study is to describe what early childhood teachers know about children with disabilities, and about teaching and catering for children with disabilities. Early childhood teachers have been targeted in this study as they are the first, and potentially most influential educators, encountered by children with disabilities, in the general education system. A thorough search of the literature reveals a scarcity of research into the knowledge base of early childhood general education teachers in teaching children with disabilities in mainstream classes. This study is an attempt to rectify this discrepancy.

Research Questions

This study seeks to answer the following questions:

- 1) What do early childhood teachers know about children with disabilities?
- 2) What do early childhood teachers know about teaching children with disabilities?

Subsidiary questions related to these themes include:

- What knowledge is valued or deemed worthwhile by early childhood teachers?
- 2) What sources do early childhood teachers draw on to develop their knowledge?
- 3) What types of knowledge are common to teachers' understandings about children with disabilities?
- 4) What types of knowledge are common to teachers teaching children with disabilities?

Operational Definitions

The following definitions clarify terms frequently used in this study: *Early childhood teachers* – refers to teachers in the general education system teaching children aged from 3 to 8 years old, in Kindergarten to Year Three.

General education teachers or *generalist teachers* – refers to teachers trained for, and practising in, mainstream or general classrooms and schools.

Children with disabilities – refers to the definition of disability outlined in the Disabilities Services Act 1993 (WA), where a child may have a condition attributed to an intellectual, psychiatric, cognitive, neurological, sensory or physical impairment affecting the normal structure or functioning of the child's body, brain or behaviour (Williams, 1996).

Inclusion – refers to placing children with disabilities in mainstream classes and adapting the environment, planning and teaching to meet their needs, fulfilling their rights to be involved as part of the community (Sims, 1997, p. 10). This term is distinct from the terms *mainstreaming*, placing students in general education settings and assuming their needs will be met, and *integration*, offering a learning programme where some adaptations made to accommodate the child (Sims, 1997), rather than changes in teaching practices and the learning environment that strive to lead to full participation (Fuchs & Fuchs, 1998).

Inclusive Practices – those strategies, resources and teaching practices that educators adopt to include children with disabilities into general education settings.

Teacher Knowledge – refers to Connelly & Clandinin's (1995, p.7) definition of *personal practical knowledge*, "that body of convictions and meanings, conscious or unconscious, that have arisen from experience (intimate, social and traditional) and that are expressed in a person's practices." *Teachers' knowledge* is comprised of concepts, understandings, beliefs and reasonings, as well as facts, which cannot always be separated from practice (Morton, 1997; Smyth, 1987). **P**, followed by a numeral – refers to a quotation made by a participant of the study in the survey (P). The survey responses were numbered and therefore the particular quotations may be located by the numeral. For example, "I felt I was able to contribute in a positive way" (P8), refers to comments made by a participant on the eighth survey form.

PD - refers to professional development and in-service training.

The following chapters elaborate on the rationale and structure of this study into teachers' knowledge of students with disabilities, and the teaching of students with disabilities. Topics covered include a review of relevant literature, the study's conceptual framework and the selection and structure of the study's methodology. The study's findings are presented, and discussed, then concluding statements and recommendations arising from this study are made. References and appendices related to the research component of this study are also included.

CHAPTER TWO: LITERATURE REVIEW

This chapter is concerned with the review of literature relevant to the study, and comprises of three sections. The first section attempts to provide an insight into research studies investigating the educational practice of inclusion, and how their various findings have helped determine the dimensions of this study. The second section is a review of research into teacher knowledge, how it is structured, sourced and researched. The third and final section examines studies of early childhood teachers' knowledge in relation to children with disabilities.

Inclusion.

In the second half of the twentieth century many countries have acknowledged the rights of individuals, and social reform to address this issue has been undertaken. In an attempt to eradicate forms of discrimination against disabled persons, governments have developed policies, such as America's Individuals with Disabilities Education Act (1975) and Italy's Law 517 (1977). Based on principles of normalisation and least restrictive environment (Snell, 1993), these policies gave rise to the practice of inclusion: placing children with disabilities into general education classrooms and adapting the teaching program to meet their needs (Cornoldi, Terreni, Scruggs & Mastropieri, 1998).

In Western Australia, the 1984 Equal Opportunities Act and the 1993 Disabilities Services Act (Williams, 1996) promoted a similar development of inclusive practices, based on the appropriateness of educational settings to meet the individual student's needs (School Education Act, 1999).

Whilst fostering the practice of inclusion, differing education systems' philosophies impact on the interpretation and implementation of inclusion, leading to diversity in inclusive practices (Ashman & Elkins, 1994; Werts, Wolery, Snyder & Caldwell, 1996; Fuchs & Fuchs, 1998). For instance, in the United States "appropriate placement" refers to students with disabilities being placed within the public general education system, but in Australia this term also includes the special education facilities as a viable option (Ashman & Elkins, 1994). Consequently, research carried out in one education system may not always be applicable to another (Forlin, 1995). This emphasizes the

importance of conducting research relevant to the local circumstances, where the research findings are to be applied.

The educational practice of inclusion has resulted in a wealth of overseas research, including Scruggs and Mastropieri (1996), Schumm and Vaughn (1998), Snyder (1999) and Odom (2000). In a synthesis of 28 survey reports, mainly conducted in America on 10,560 teachers between 1958 and 1995, Scruggs and Mastropieri (1996) found that most research into inclusion comprised of survey studies into teachers' willingness to teach disabled students, as well as teachers' perceptions of benefits to students, the adequacies of classroom environments, time constraints, teacher training and expertise, and sufficiency of resources for inclusion.

In their synthesis Scruggs and Mastropieri (1996) reported that the majority of teachers agreed with the concept of mainstreaming, or inclusion, regardless of the year of the study, the grade level of teaching or geographical location. However, their synthesis showed that teachers' willingness to practice inclusion declined with the intensity of inclusion and the severity of the students' disabilities.

Scruggs and Mastropieri (1996) found special education teachers were more likely to see benefits of inclusion for students with disabilities, than general educators. Studies showed that general education teachers perceived that for inclusion to take place changes were needed in classroom environments, preparation time and allocation of material resources and support personnel. Scruggs and Mastropieri's (1996) synthesis also found only a quarter to a third of teachers surveyed perceived they had sufficient expertise to teach students with disabilities. The majority of teachers indicated some form of inservice training or paraprofessional support was required.

Overall, Scruggs and Mastropieri (1996) recommended that consideration should be taken into account of students' severity of disability, when determining the nature of the inclusive setting and the needs of the teacher. They indicated that teachers required more planning time, training, personnel and material resources, and reduced class sizes, if they were to become more willing to adopt the practice of inclusion in their classrooms.

Schumm and Vaughn (1998) investigated the instruction of students with learning disabilities, in a series of studies conducted over 9 years based on classroom observations and teacher interviews in Dade County Public Schools, Florida. Their investigations found that whilst teachers perceived adaptations to teaching practices as desirable they typically provided whole-class instruction, with minimal adaptations for students with learning disabilities. Schumm and Vaughn (1998, p.3) noted that general education teachers were "starved for practical, viable instructional practices", had little time for co-planning and collaboration with special educators and received few resources from their school district or curricular materials to make adaptations to their teaching practices.

In their article Schumm and Vaughn (1998) emphasized the importance of professional development to extend teachers' knowledge, expertise and perceptions of effective practice in order to improve instruction of students with learning disabilities in general education settings.

Snyder (1999) conducted a qualitative study of general education inservice teachers in South Carolina, regarding the status of special education in schools, teachers' attitudes towards special education and the training teachers had received for inclusion of students with special needs. Snyder (1999) found that special education at schools comprised of a combination of withdrawal, aide support, some mainstreaming and inclusion, but no school within the sample offered total inclusion for all students with disabilities. Collaboration between special education teachers and general education teachers varied, with some general educators experiencing minimal contact whilst others valuing ongoing support from special education teachers. The majority of teachers in the study felt unsupported by their administrators in practising inclusion, particularly in regards to being offered in-service professional development in this field. Most teachers expressed concerns that they lacked training in special education and saw a need for graduate courses in this field.

In conclusion Snyder (1999) recommended that teacher educators needed to make changes to teacher-training courses. Administrators were urged to encourage collaboration between special education teachers and general educators and to provide appropriate in-service training for general education teachers.

More recently, Odom (2000) reviewed literature on preschool inclusion in America to determine what is known about inclusion and how this knowledge impacts on future inclusive programs and services. The review indicated that children with disabilities receive positive outcomes from inclusion, dependant on the quality of the setting and the nature of the learning program.

Odom (2000) found students with disabilities were placed in inclusive settings according to their degree of disability. Specialised instruction was seen to be a crucial component of inclusive programs, as was the interpretation of inclusive policies by key administrators. In his literature review Odom (2000) found teachers were generally positive about including children with disabilities in their preschool classes, but were concerned about their lack of knowledge of children with disabilities.

Discrepancies were identified by Odom (2000) in educators' understanding of definitions of inclusion and the quality of inclusion settings and programs. Components that varied included the degree of individualization, intensity and specialization of instruction, the identification of outcomes and goals in planning, the level of social integration and the costing and funding of inclusive programs. Odom (2000) concluded that whilst a knowledge base exists for the development of productive learning environments for students with disabilities, successful inclusion relies on teachers being informed and committed to achieving this goal.

Australian literature on inclusion and teachers' beliefs has tended to concur with overseas findings (Forlin, 1995; Westwood, 1997, Sims, 1999). In an article on inclusion in Australian schools, Westwood (1997) called for caution in implementing inclusion as it placed additional demands on classroom teachers, already faced with added responsibilities and stresses. Westwood (1997) saw the tyranny of time and inadequate teacher training contributing to ineffective inclusion. Westwood (1997) advocated the need to implement inclusion gradually with appropriate funding and human resources for support, along with mandatory courses in teacher education and on-going training programs for regular class teachers to develop skills in teaching children with special needs.

Forlin (1995), in a study of 273 Western Australian educators, investigated how inclusion impacted on teachers' stress levels, involvement of teachers in inclusion decisions and teacher acceptance of inclusion. Forlin (1995) found that general education teachers viewed inclusion as stressful and inappropriate for some students. The study found that generalist educators experienced higher stress levels than special educators in teaching children with disabilities and felt they had little control over placement decisions. In the study teachers' acceptance of students with disabilities declined with teaching experience and severity of disability, with teachers being more accepting of physical disabilities than intellectual disabilities. Forlin (1995) also noted teachers were concerned about their personal competence in dealing with inclusive practices, suggesting teachers would disengage from commitment to the inclusive process if they felt they were failing.

In conclusion, Forlin (1995) stressed that a person's beliefs about a specific situation, such as inclusion, were a potential precursor to successful practice and needed to be taken into consideration when developing policies regarding inclusion.

In a keynote address to the 15th State Conference of Early Intervention Australia Inc, NSW chapter, Sims (1999) supported this finding, claiming that mainstreaming, the placement of children with disabilities in the regular education system, was insufficient and that teachers need to be empowered to meet the needs of the individual child. Sims (1999) saw the need to develop and validate teachers' existing knowledge to improve their self-efficacy in teaching children with disabilities. Ashman & Elkins (1994), in their book on educating children with special needs, also noted that ignorance, or lack of knowledge about disabilities, contributed to teachers' negative attitudes toward inclusion. It was deemed important to educate trainee teachers so they were prepared to face the realities of including children with disabilities into general education classrooms. These studies indicate that general education teachers continue to perceive shortcomings in their knowledge and expertise, in regards to teaching children with disabilities. Findings suggest this perceived lack of knowledge impacts on general education teachers' self-efficacy and the quality of inclusive practice, and merits further investigation.

Teachers' Knowledge

It is an accepted belief that knowledge leads to the development of better understanding and practice (Clandinin & Connelly,1995; Cochran-Smith & Lytle, 1993). In the past 20 years, in recognition of the importance of teacher knowledge in educational practice, research has investigated the composition, organization, acquisition and development of teacher knowledge (Connelly, Clandinin & Ming Fang, 1997). Researchers such as Shulman (1990), Elbaz (1983), Grossman (1990), and Connelly and Clandinin (1988; 1995) have established teacher knowledge as a reputable field of research, using qualitative research methods to investigate forms of teacher knowledge and how they impinge on teaching practice.

In his work Shulman (1990) adopted the stance that if teaching is viewed as an art, then teachers require knowledge of rules and principles, knowledge of particular cases and knowledge of when and how to apply rules to new cases. Shulman (1990, p.79) describes this stance as "the traditional wisdom of the practitioner". This approach has particular relevance for teachers of children with disabilities as it implies teachers need to have a knowledge base about disabilities and the teaching of children with disabilities, in order to apply theory to practice.

In Elbaz's (1983) research, involving a case study of a teacher of English adapting to the teaching environment, the term "practical knowledge" was developed. Elbaz viewed teachers' knowledge as combining experiential and theoretical knowledge, thereby influencing teachers' values and beliefs, affecting how a teacher responds to a situation. Teachers were seen as "the final authority on learning" (Elbaz, 1983, p.17), justifying research into teachers' knowledge as being of paramount importance. Connelly and Clandinin (1995, p.7) expanded on Elbaz's concept of practical knowledge, focussing their attention on investigating teachers' personal practical knowledge: "that body of convictions and meanings, conscious or unconscious, that have arisen from experience (intimate, social and traditional) and that are expressed in a person's practices". Their work involved narrative recounts by teachers, expressing their knowledge in terms of stories, in an attempt to portray humanistic qualities of professional life.

In a case study of a teacher in China, Connelly, Clandinin and Ming Fang (1997, p.674) surmised that teachers' knowledge is "an essential component in improving educational practice", cautioning policy makers to be aware that teachers' knowledge, and the environment in which they work, will affect the translation of theories and ideologies being put into practice. Such findings imply that, in promoting policies of inclusion, educational authorities need to consider teachers' knowledge and its effect on the implementation of inclusive practice.

More recently Connelly and Clandinin (2000, p.323) investigated the impact of image, rule, practical principles, personal philosophy, metaphor, narrative unity and rhythm on teacher knowledge. These forms were seen to determine and describe how teacher knowledge is formed and changed, depicting the everyday quality of teaching life. Other research into teachers' knowledge, based on Connelly and Clandinin's methods of narrative research, include those by Craig (1999) and Black and Halliwell (1999).

Craig (1999) used storytelling as a way to access beginning teachers' knowledge, finding that past human experiences pervade school and teaching life. Black and Halliwell (1999) adopted a range of narrative strategies, such as talking, drawing and writing to understand ways personal images impact on teaching decisions. Reference was made to the value of self-reflection in developing a critical awareness of knowledge needs. These studies continue to affirm that research into teachers' knowledge is a valid pursuit and may lead to better teaching practices.

Early Childhood Teachers' Knowledge of Children with Disabilities

Until recently few studies have investigated early childhood teachers' knowledge of teaching children with disabilities. Studies have tended to focus on teachers' understandings of specific disabilities, such as diabetes (Rosenthal-Malek & Greenspan, 1999), or Attention Deficit and Hyperactivity Disorder behaviours (ADHD) (Mioduser, Margalit & Efrati, 1998), rather than knowledge relevant to the broader category of children with disabilities.

Recent studies conducted in the United States that have looked at early childhood educators' knowledge base of inclusion include those by Vaughn, Reiss, Rothlein and Tejero Hughes (1999) and Dinnebeil, McInerney, Fox and Juchartz-Pendry (1998).

Vaughn, Reiss, Rothlein and Tejero Hughes (1999) used a questionnaire survey where 31 early childhood teachers rated 28 predetermined teaching practices as desirable or feasible for inclusion. They were also asked to offer opinions as to their knowledge base. The study found that the early childhood teachers viewed most of the practices to be desirable, especially in developing social and behavioural programs, and the use of portfolios. Time constraints and lack of support were seen to reduce the perceived feasibility of most practices. In particular, low feasibility ratings were given to observing children in pre- kindergarten settings, in developing Individualised Teaching Programs (ITPs) and in working with parents. Recommendations were made for more in-depth research to be conducted into early childhood teachers' perception of feasible inclusive practices. Use of interviews and classroom observations were mentioned as viable methods for future research in this area.

Dinnebeil, Mc Inerney, Fox and Juchartz-Pendry (1998) conducted a questionnaire survey of 400 childcare personnel in community-based centres, catering for children from birth to 8 years of age, including those with disabilities, regarding their attitudes towards inclusion. Their findings indicated the quality of inclusive experiences for all children is dependant on the amount and quality of training of the personnel. Most respondents indicated lack of knowledge as a major barrier to inclusion. Confidence and experience were also linked to the success of including children with disabilities in communitybased programs. The researchers recommended further research and training to be directed at developing early childhood personnel's inclusive childcare practices.

Literature that supports these findings includes articles by Werts, Wolery, Snyder and Caldwell (1996) and Buell, Hamel, Gamel-McCormick and Scheer (1999). Werts, et al. (1996) conducted state and national surveys with public elementary teachers, seeking information on support given and problems related to including children with substantial disabilities in general education classes. They found that teachers' need for support increased with severity of disability, but time factors were an issue for teaching children with milder disabilities. Lack of training and insufficient knowledge of special education methods were found to be significant problems for teachers teaching children with substantial disabilities. Teachers also reported they needed information specific to the child they were teaching, consultation with support professionals and in-class support.

Similarly Buell, Hamel, Gamel-Mc Gormick and Scheer (1999) surveyed 289 general and special education teachers, as to teacher confidence in teaching children with disabilities in inclusive settings, their in-service training needs and teachers' perceptions of what support is required for successful inclusion to take place. The survey found teachers perceived their knowledge of inclusion to be inadequate. Teachers indicated, from a list of given topics, they needed professional development in program modification, assessment, curriculum adaptation, Individualised Education Programs (IEPs), behaviour management and assistive technology.

In Australia, Milton and Rohl (1998) surveyed 230 West Australian early childhood teachers to investigate the nature and extent of teachers' concerns for students in their classes. Feedback was also sought on intervention programs currently being used as well as desired programs and early childhood teachers' professional development needs in this area. Milton and Rohl (1998) found that, on average, those teachers who responded to the survey held concerns for 14% of students in their classes. Their concerns included language and English-as-a-second-language (ESL) problems (65.9%), social problems (46.6%), cognitive problems (44.9%), emotional problems (24.8%) and physical (5.9%) problems.

Milton and Rohl (1998) noted that most teachers relied on their own judgement and abilities to identify and remediate children's problems. Teachers also indicated there was a lack of professional diagnosis and specialised therapy for children with problems. Survey responses indicated intervention programs tended to be what was currently popular and were designed and run by teachers (79.8%). Many programs were carried out on a whole-class basis, rather than meeting children's specific needs. Nearly half of the children with problems did not receive specialised or individualised instruction. Almost 75% of the early childhood teachers surveyed indicated they needed professional development (PD) to improve their ability to identify and remediate children's problems. Early childhood teachers who responded to the survey also sought PD in developing appropriate programs for early intervention.

Milton and Rohl (1998, p.18) concluded that early childhood teachers need more support in terms of knowledge, from professional and paraprofessional sources. They also recommended that teachers become informed on the effectiveness of intervention programs in order to put in place programs suited to meeting their students' needs.

More recently, van Kraayenoord, Elkins, Palmer, Rickards and Colbert (2000) conducted a study for the Department of Education, Training and Youth Affairs (DETYA), consisting of surveys of educational decision makers and teacher educators, case studies of students with disabilities, and a literature review. This study sought to determine how Australian students with disabilities were taught numeracy and literacy. It also sought to determine the status of these students' abilities, and how all teachers were prepared for teaching students with disabilities. The study's findings were reflective of overseas research (Scruggs & Mastropieri, 1996; Odom, 2000), recognizing a variety of interpretations of the terms "disabilities" and "inclusion" and levels of teacher training for teaching students with disabilities.

The DETYA-sponsored study found that where teachers had high expectations for students to develop independence, students performed well. Access to specialist staff, use of computers and assistive devices and the active support of parents were also seen to contribute to successful inclusive practice. It was noted that teacher aides provided a significant amount of direct

instruction, but like classroom teachers, received little training in this field. A need for on-going professional development was called for in the use of technology for students with disabilities, as was a greater availability of numeracy courses.

The project recommended that nationally agreed definitions of disabilities be adopted. It also recommended changes be made to pre-service training and professional development practices to improve all teachers' current knowledge of students with disabilities and the teaching of numeracy and literacy to these children. The authors also saw a need for Australian research into numeracy and literacy of all students with disabilities and effective teaching practices for meeting these needs.

Summary

The studies reviewed above indicate that teacher knowledge is a worthy topic to investigate. Teachers' knowledge is considered an important factor influencing teachers' attitudes and ability to teach, impacting on the quality of education for all students. Teachers' knowledge is also seen to impact on teachers' self-efficacy, influencing the education of students with disabilities in general education classrooms. Most studies recommend further research into inclusion and inclusion practices, including early childhood education and local education systems.

Further research in inclusion may lead to identifying and describing traits, such as teachers' knowledge, that will lead to educational reforms and better inclusive practice. Such is the intent of this research into teachers' knowledge of students with disabilities and the teaching of students with disabilities.

CHAPTER THREE: CONCEPTUAL FRAMEWORK

Research is based on paradigms, a paradigm being seen as "a basic set of beliefs that guide action" (Denzin & Lincoln, 1994, p.99). Paradigms are human constructions which determine how researchers know or look at the world, question the nature of reality and gain knowledge. The paradigm adopted by the researcher influences the selection of methodology and the analysis and interpretation of the study's findings. Ultimately, the aim of the research is to present authentic and trustworthy findings that are the truth, according to the researchers' beliefs, or paradigm.

The theoretical framework of this study is based on constructivist beliefs, where participants are seen to construct their own understandings of students with disabilities and the teaching of students with disabilities, based on their own lived experiences and knowledge sources. In this study the constructivist paradigm is best explored through the use of qualitative methodology.

This chapter examines the understandings and beliefs that drive this study, thus influencing its structure and conceptual framework. The first section examines qualitative research methodology and the paradigm of constructivism, substantiating why this approach is suited to this study. Associated beliefs and alternative models of teachers' knowledge and how these are organized are then discussed. Finally, the conceptual framework is illustrated in Figure 1. and its characteristics described, illustrating how variables may influence the study's findings.

The Constructivist Paradigm

According to Denzin and Lincoln (1994), the aim and purpose of human inquiry is to investigate the uniqueness of human experiences, discovering how humans make sense of their everyday world. Researchers have utilised two main forms of study: quantitative and qualitative research. Qualitative research seeks to gain an understanding of a particular phenomenon within certain contexts (Grbich, 1999). It acknowledges the complexity and changing nature of human behaviour, seeking a rich description of experiences and beliefs, rather than a fixed or simplified presentation of events. A qualitative approach is suited to studying teachers' perceptions of their knowledge of children with disabilities and the teaching of such children, as it provides the opportunity to describe, rather than measure, characteristics of teachers' knowledge. This knowledge is not fixed or static (Cochran-Smith & Lytle, 1993), making it difficult to simplify or study using quantitative methods. As a multitude of factors uniquely determine how teachers acquire, use and adapt their knowledge to meet the individual needs of students with disabilities, qualitative methods appear to be more suited to this area of study. It is the task of the researcher to accurately describe participants' experiences and make meaning of their words. Use of qualitative research methods enables this study to take these factors into consideration.

Constructivism, also termed "naturalistic inquiry" (Guba & Lincoln, 1994, p.105), is one approach within the qualitative research paradigm. The world is seen to be inherently complex, where what is known is constructed from individual's beliefs and the social milieu in which they live. People make sense of information by building internal connections between ideas and facts they are learning, at the same time building external connections between new and existing information (Borich & Tombari, 1997). These constructions of reality may be multiple and conflicting but all are seen to be meaningful (Guba & Lincoln, 1994). People use constructions to organize knowledge as a basis for their perception of reality.

Constructivists see that "the truth is a result of perspective" (Schwandt, 1994), where reality is pluralistic and plastic. The aim of the constructivist researcher is to understand and reconstruct meanings participants hold about a particular phenomenon or concept. In this process, interaction between the researcher and the participants is considered to be a clarifying and building process, where more sophisticated constructions, or grounded theories, may be developed. Constructivists are committed to developing credible, transferable, dependable and confirmable research through the use of purposeful sampling, triangulation, grounded theory, inductive data analysis and contextual interpretations (Denzin & Lincoln, 1994).

This study is driven by a constructivist paradigm as it seeks to make sense of the multiple realities of early childhood teachers in teaching children with disabilities and their knowledge of this field. When exposed to different life experiences, each individual teacher develops a unique knowledge base. In disclosing these experiences teachers may reveal they share common understandings (Cochran-Smith & Lytle, 1993). In keeping with constructivist beliefs, the nature of teachers' knowledge may be individualistic, but may be shared by participants who have undergone similar experiences (Guba & Lincoln, 1994).

It is also understood that teachers' knowledge does not remain static. Clandinin and Connelly (1995, p.71) propose that teachers have been taught that their knowledge is incomplete when they commence teaching and learn from experience applied and acquired from previous practice (Smyth, 1987; Grossman, 1990). This is in keeping with the constructivist belief that the mind is active: concepts, models and schemes are developed to make sense of experience, leading to varied and changing constructions of reality (Schwandt, 1994).

"To understand the world of meaning, one must interpret it" (Schwandt, 1994, p.118). The role of the constructivist researcher is to interpret and describe participants' understandings, as is the purpose of this study. The research process is seen as a dialectical transactional process, where the researcher utilizes the participants' constructions of their experiences to subjectively develop more informed and sophisticated constructions about teachers' knowledge. Following constructivist practice, this study utilizes methodological triangulation, to verify reconstructions of their knowledge with participants as being authentic and trustworthy interpretations of their realities (Denzin & Lincoln, 1994).

This study also adopts the constructivist belief that the researcher is intrinsically linked to the study of teachers' knowledge of children with disabilities. The researcher, being the "voice" in the research process (Guba & Lincoln, 1994, p.115), is called on to empathise with participants. The researcher is also ethically responsible for valuing and accurately depicting participants' constructions of their values, beliefs and knowledge about children with disabilities and the teaching of children with disabilities. In adopting a constructivist paradigm this study aims to develop trustworthy and authentic representations of early childhood teachers' knowledge of children with disabilities and the teaching of children with disabilities. This study will attempt to faithfully depict the nature of teachers' realities, how they gain this knowledge and utilise this knowledge in their inclusive teaching practices.

Beliefs and Models of Teachers Knowledge

Other beliefs held by the researcher are acknowledged as they contribute to the rationale for conducting the study. These beliefs may influence researcher interpretation and reconstruction of participants' constructions of their knowledge of children with disabilities and the teaching of children with disabilities. Also given is an outline of different frameworks of teachers' knowledge, illustrating how researchers have interpreted the structure of teachers' knowledge. These frameworks provide a means to describe and identify components of teachers' knowledge of children with disabilities and the teaching of children with disabilities.

One belief is that a teacher's primary role is to teach. To do this teachers "are expected to learn the skills of effective teaching and also learn how to apply them to practice" (Cochran-Smith & Lytle, 1993, p.88). Teachers' knowledge is considered to be an important component of teaching, meriting research and investigation (Cochran-Smith & Lytle, 1993). This study presupposes that all teachers possess knowledge that is valid to their teaching practices and that this knowledge may prove valuable to others.

This study assumes that all students have a right to quality education and teachers have a duty to develop students' abilities (Sims, 1999). To cater for children with disabilities teachers have a responsibility to learn about their students' special needs, particularly if these needs hinder their ability to learn (Snyder, 1999). This study adopts the stance that early childhood teachers should, and do, possess knowledge about children with disabilities and teaching children with disabilities.

This study also assumes that teachers' belief in their knowledge and ability to teach, known as self-efficacy (Beull, et al., 1999), is significant in how teachers apply knowledge to practice. According to Morton (1997) beliefs may qualify as knowledge if the belief does not depend on reasoning that is flawed at any stage. Research advocates that self-efficacy, a combination of knowledge and belief in knowledge, is a contributing factor in the development of effective inclusive practices (Sims,1999; Vaughn, et al., 1999; Beull, et al., 1999). In this study the concept of self-efficacy is considered to be part of teachers' understandings, skills and practices.

Researchers have adopted a variety of models to understand teachers' knowledge. For example, Elbaz (1983) described practical knowledge as knowledge of self, of the milieu of teaching, of subject matter, of curriculum development and of instruction. Shulman (1990) described three forms of content knowledge: subject matter knowledge, pedagogical knowledge and curricular knowledge as relevant to teachers' instruction of students.

Grossman (1990), in a case study of 6 English teachers, developed a framework based on Elbaz' (1993) and Shulman's (1990) work, outlining four general areas of teacher knowledge:

- 1) General pedagogical knowledge beliefs and skills related to teaching;
- Subject matter knowledge content and structures related to specific learning areas;
- Pedagogical content knowledge an understanding of methods and skills related to specific learning areas;
- 4) Knowledge of context when and where to use particular method or skills.

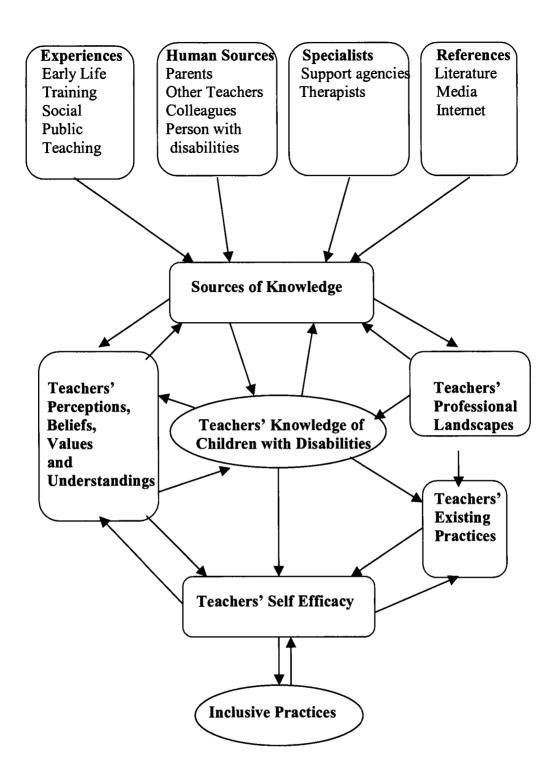
Such frameworks present a broad coverage of the field of teacher knowledge, providing a means to collate, compare and describe data, in keeping with a constructivist approach (Denzin & Lincoln, 1994).

Figure 1. is a diagrammatical representation of the conceptual framework that shapes this study. The development of teachers' knowledge that leads to successful inclusive practice is seen as a complex interactive process, not fixed, static, or linear. As noted in Figure 1. a wide range of sources are seen to influence teachers' knowledge and ultimately teachers' teaching practices. These include life experiences such as early encounters of children and people with disabilities, as well as social and public encounters of people with disabilities. Also considered is any tertiary training teachers may have received in regards to teaching students with disabilities. Experiences in regards to teaching students with disabilities also act as a source of knowledge where teachers form understandings and beliefs from perceptions and facts they have experienced in teaching such students.

Human sources of knowledge include the parents of children with disabilities, the student with disabilities, other teachers, colleagues and visiting teachers who may offer advice and act as sounding boards or be open to observation and scrutiny. Specialists, in the form of therapists from support agencies, or advisory staff, may offer advice or information about disabilities and teaching students with disabilities. Reference materials, such as books, magazine articles, media programs and the Internet may also be sources of information and knowledge.

These sources of knowledge interact with teachers' perceptions, values, beliefs and understandings, causing teachers to reflect on and re-evaluate their existing knowledge of children with disabilities. The "professional landscape" (Clandinin & Connelly, 1995, p.5) in which the teacher works also influences the sources of knowledge a teacher accesses and how this information is utilized. Their professional landscape may include the school environment, the classroom environment or even the educational climate they are currently operating under (Clandinin & Connelly, 1995). Whilst not specifically stated, the professional landscape in which teachers operate may affect their workload and stress levels, impacting on what knowledge teachers choose to use and apply in their teaching of students with disabilities.

These factors impinge on teachers' self-efficacy, leading teachers to question their knowledge and ability to effectively teach students with disabilities. Teachers may also consider existing teaching practices, applying what they already know to the inclusion of students with disabilities. This may mean making no changes to their teaching practices, making adaptations to existing practices, or even adopting new knowledge and teaching practices.



<u>Figure 1.</u> Conceptual Framework illustrating forces interacting on teachers' knowledge of children with disabilities and inclusive practices.

According to the constructivist paradigm the intake and organization of new information into understandable concepts, along with contrasting this data to existing knowledge, leads to the development of new constructions. Developing constructions of knowledge is viewed to be ongoing and varies according to the individuals involved: their knowledge base and the experiences they encounter (Borich & Tombari, 1997). In this study this complex process of construction of teacher knowledge is considered to ultimately influence inclusive practices used by teachers in their general education classrooms for teaching students with disabilities. The involvement in the process of inclusive practice may also lead to changes in the construction of teacher knowledge.

CHAPTER FOUR: METHODOLOGY

This chapter describes the methodology adopted for this study. The first section examines the theoretical basis for the chosen methodology and research design, including a review of relevant literature. The second section outlines the practical aspects of the study's methodology and shows how this study is structured. This section covers the pilot study, the participants, data collection, procedure and analysis of findings. It also includes an outline of the limitations of the study and ethical considerations.

Methodological Background

Research into education is undertaken with the intent of understanding the current status of particular features within that system. This often leads to changes and the potential to develop more effective, efficient educational organization and practices (Fullan, 1990). In order for research to be deemed trustworthy and authentic (Denzin and Lincoln, 1994) the researcher selects methodological instruments appropriate to the task being undertaken. The researcher must also develop a clear and systematic audit trail (Grbich, 1999) in order for the research results to be authenticated and valued by those involved in educational practice.

This study has utilised both quantitative and qualitative methods as a means of explaining and predicting phenomena (Gay, 1992). Quantitative methodology has been employed in educational research, with the intent to develop "a broad set of generalizable findings" (Patton, 1990,p.14). Such findings have proved useful but not always applicable to the diverse range of educational settings. In this study quantitative measures were used to record findings in tables as percentages of the sample population, as a means of identifying the degree to which this study's participants hold shared beliefs. It is acknowledged however that these numerical representations may not be generalized and transferable to apply to all early childhood education teachers or inclusive settings (Drisko, 1997).

In addition, qualitative methods have been utilized to investigate the complex nature of early childhood teachers' understandings of their knowledge

and behaviour when faced with teaching children with disabilities in inclusive settings. In the past two decades qualitative methodology has gained credibility as a means of accurately portraying features of an education system (Patton, 1990; Bogdan & Biklen, 1992; Cochran-Smith & Lytle, 1993; Heinecke & Stohl Drier, 1998). Qualitative research methodology, a group of strategies that investigate the complexities of a topic, attempts to understand the nature of human behaviour in social contexts (Bogdan & Biklen, 1992, p.2). Using qualitative methodology, the researcher derives meaning through investigating and interpreting participants' perspectives (Burns, 1996; Bogdan & Biklen, 1992), as is one intent of this study. Such methodology is descriptive, investigating processes rather than outcomes, which is also an objective of this study.

In utilizing both quantitative and qualitative methodological practices, this study strives to develop trustworthy and authentic findings, an objective of constructivist research (Denzin & Lincoln, 1994). This study's findings may also prove acceptable and useful to educators (Patton, 1990), potentially contributing to the development of better classroom policies and practices (Heinecke & Stohl Drier, 1998).

Research Design and Background

This study utilized features from both quantitative and qualitative methodology in an attempt to portray, in depth, features of early childhood teachers' knowledge of children with disabilities, and the teaching of children with disabilities. Data was gathered, using surveys and interviews, in an effort to obtain credible, confirmable in-depth accounts, relative to the participants' work situations and experiences (Drisko, 1997).

Survey methods were selected for use in this study as they enable collation of data to describe specific characteristics of a large group of persons (Jaeger, 1988, p.302). Surveys are considered multi-purposeful, varying in their conformity to quantitative and qualitative guidelines, according to the researchers' philosophical stance (Burns, 1997). Surveys are regarded as useful in obtaining information on participants' past experiences and attitudes to a particular topic (Burns, 1997). Use of descriptive surveys, in the form of open-ended questions, enables researchers to explore and define the nature of existing attributes of a population (Burns, 1997). For example, educational researchers such as Werts, Wolery, Snyder and Caldwell (1996) incorporated open-ended questions into their state and national surveys of teachers' knowledge of inclusion, as did Buell, Hallam, Gamel-McCormick and Scheer (1999). It is the intent of this study to use open-ended questions to allow participants to relate their own ideas regarding their knowledge of children with disabilities and the teaching of such children in order to more fully explore the nature of this educational field.

The success of surveys in representing a population's views, and in measuring the topic being studied, relies on the careful design of questions (Jaeger, 1988: Burns, 1997). Gay (1992) and Burns (1997) recommend pretesting, in the form of a pilot study, along with careful coding and processing of data, to develop reliable survey questions and valid responses to questions. This practice has been adopted in this study.

Also, the generalizability of survey findings is dependent on the random selection of participants for the study's sample and their completion of the survey forms (Burns, 1997). These attributes were also considered in this study in an effort to develop research yielding thick and critical descriptions (Heinrecke & Drier, 1998).

Interviews are another means of researching participants' stories: past experiences and attitudes (Burns, 1997). The purpose of interviews is to "understand the experience of other people and the meaning they make of that experience" (Seidman, 1991, p.3). Like surveys, the success of interviews in accurately portraying features of the chosen topic is reliant on the quality of the questions asked. The trialling of interview questions, the setting in which the interview is conducted, the time allowed, and time lapse between interviews, all affect the data's validity (Seidman, 1991).

Interviews are suited to smaller samples and are appropriate for asking questions of a personal nature. This aspect is taken into consideration in this study. Through developing rapport between the interviewer and respondent information may be obtained which participants would not provide in other research forms (Gay, 1992). Interviews are valuable research tools, ideally suited to qualitative research and to the purposes of this study.

This study's research design comprised of a survey of open-ended questions distributed to consenting early childhood teachers to disclose their knowledge of children with disabilities and teaching children with disabilities. From these participants, five willing candidates were selected to be involved in two interviews, expanding on their thoughts and experiences in greater depth. Interviews were recorded and transcribed, with names deleted for confidentiality. A summary of the transcripts was given to the participants for their verification. In using more than one method of data collection, termed "triangulation" (Burns, 1998, p.324), the study strove to develop credibility, contextual understanding, confirmability and a level of completeness (Drisko, 1997).

The Pilot Study

In an attempt to develop rigorous and credible research (Gay, 1992) a pilot study was conducted to clarify the survey questions to be answered and refine the format of the survey. The participants were two Pre-primary teachers known to the researcher, both having had several years experience in teaching children with disabilities in general education classes, and currently teaching children in their classes with diagnosed disabilities. They were invited to complete the survey, making changes to questions and suggestions for a suitable timeframe for survey completion. Recorded data was not used as part of the study's findings.

Similarly the first interview with the first willing participant, a preprimary teacher, was treated as a testing ground in which to clarify the interview questions to be asked and to determine the direction further interviews should take. These steps were taken in an attempt to improve the study's validity and credibility (Drisko, 1997)

Whilst the surveys from the pilot study were not considered as part of the main study's findings, they were valuable in refining the quality and presentation of the survey. The participants also commented it was a worthwhile experience for themselves, in keeping with research that sees reflection as a powerful learning and reinforcement tool (Black & Halliwell, 1999). Their perceptions of children with disabilities, and the teaching of such children were viewed as a means of validating what other early childhood teachers had written, confirming the reliability of the study's findings.

The Main Study <u>Participants</u>

The study's participants consisted of 22 early childhood teachers, teaching year levels ranging from Pre-primary to Year Two, from within three northern Perth metropolitan school districts who completed the survey. Five of these teachers from different schools, teaching different year levels, volunteered to participate in two follow-up interviews, conducted on a one-toone basis.

The participants of the study were asked to complete a demographic section at the beginning of the survey, briefly outlining their gender, age, level of training and teaching experience (shown in Table 1., Appendix One).

The majority of teachers who responded to the survey were middleaged females having taught an average of 17.78 years. Whilst 15 of the participants held a degree in education, or higher, only 6 participants indicated they had any accredited training in the area of special education. One participant held a Graduate Diploma in Special Education, one had majored in Special Education, another had a Learning Assistance Teachers Certificate (LATC) and the other 2 participants had studied one or two special education units in their teacher training.

In relation to participants' background in teaching children with disabilities 14 of the participants were currently teaching a child, or children, with disabilities in their classroom. Of the 8 teachers who did not have a child with disabilities in their current class only one teacher had no experience in teaching students with disabilities.

Data Collection

In order to enhance the credibility of research (Grbich, 1999) this study utilised two methods of data collection. The first method was a survey, the forms randomly labelled P1 to P22, containing 14 open-ended questions (see Appendix 1). Questions were designed to offer opportunities for participants to relate their constructions of their knowledge in different contextual situations, in order to develop confirmability (Drisko, 1997).

The survey questions (see Appendix 2) were based on the teachers' understandings of the terms regarding students with disabilities and inclusion, as well as their sources of information and training background. Participants were also asked to relate experiences in teaching children with disabilities, knowledge, changes and information necessary to teaching children with disabilities, their attitudes towards inclusion, and reactions and strategies to teaching a hypothetical child with disabilities.

The second method of data collection was two interviews, which were tape-recorded for transcription. In the first interview participants were given an outline of proposed questions, an interview schedule (see Appendix 3), and asked to expand on what they had written in the survey. The second interview involved participants verifying and signing a summary of their first interview. They were also asked to relate their understanding of the disability of a child they had taught and how it affected the child and their teaching of the child. Finally, participants were asked to make any comments they felt were related to the study.

Field-notes were taken by the interviewer, including the place, time and duration of the interview and the participants' general demeanour in responding to questions, as a means to verify interpretation of data and improve the study's credibility (Cochran-Smith & Lytle, 1993).

Procedure

The research study commenced with written permission (Appendix 4) being sought from the significant gatekeepers, school principals, at 16 government primary schools within the three northern metropolitan school districts. Letters were also sent to the district directors of the relevant districts, informing them of the intent to conduct research in their districts (Appendix 5).

The researcher approached 6 schools at a time at the beginning of third term in the Year 2000 school calendar. In order to cover a range of socioeconomic groups, and a diversity of teachers, one school from within a suburb was contacted. The principals were individually contacted, through a phone call, then a meeting was arranged, where they were given a letter outlining the nature of the intended research. A contact number was included for any queries.

After gaining the principals' written permission, letters of introduction, consent forms (Appendix 6 & 7) and accompanying survey forms were distributed to the early childhood teachers at the 12 participating schools. It was arranged for written consent and survey forms to be collected from the office after a period of 10 calendar days. Prior to collection a phone call was made the previous day checking for response. Twenty- two teachers responded from the 12 willing schools and 9 indicated they were willing to be interviewed.

Selection for the follow-up interviews was tentatively based on gaining a representative of each teaching year level and from different schools. Prospective candidates were personally contacted by phone a fortnight after the survey forms were collected and mutually convenient times and places for interviews arranged during the third term.

Interviews were conducted at a location of the participant's choice. Consent was gained from participants to record their interviews. At the first interview the interview schedule (see Appendix 3) was given to the participants and they were encouraged to elaborate on their perceptions and experiences. Approximately 40 minutes were allowed for the first interview.

In the second interview, conducted 2 to 3 weeks later, the participants were given a summary of the first interview's transcripts, outlining the main features of the discussion, and asked to verify and sign the statement, making any changes, or inclusions, they thought appropriate. The second interview was briefer, up to 20 minutes duration.

Analysis of Findings

In keeping with qualitative research practices, surveys and transcripts were individually analysed to identify key words or phrases that may indicate the essence of teachers' experiences (Burns, 1997; Grbich, 1999). Comments were then compared as a means to determining if saturation had been reached, or if any knowledge could be generalized (Drisko, 1997). Whilst data from the surveys was compiled into table format, and converted to percentages, the intent of the study was to describe the nature of the phenomena, not to measure attributes. The findings, in particular data from the interviews were presented descriptively in written form, using thematic headings.

The study adopted data analysis practices outlined by Bogdan and Biklen (1992, p.165-179). Four forms of data analysis occurred: the first being the collation of survey data; secondly summarising of transcripts and identification of significant statements; thirdly a comparison of the interview findings, and finally, a comparison of all the data, under thematic headings.

Analysis of data commenced as soon as all the survey forms were returned, prior to interviews. Transcribing the interviews was an ongoing process, commencing as soon as the first round of interviews were conducted.

In analysing the survey data the questions of the survey became the themes or concepts being investigated. Responses to each question were transcribed from each survey to form a bank of data under each question, or heading. Each question's responses were then compared to identify any common knowledge forms and experiences, as well as to locate unique and significant information. Key concepts were identified. These were tallied, converted to percentages of the survey sample, and a table of responses to each question was constructed.

As soon as each initial interview was concluded the tapes were individually transcribed, then summarized using the headings from the interview schedule (Appendix 3). Participants were asked to verify transcript summaries as being accurate interpretations of what they had said. Significant and unique statements were highlighted in the interview transcripts. Interview findings were presented individually, in descriptive written form, to portray the interpretation of personal experiences and knowledge.

Common words, phrases, or themes, arising from the interviews were identified. A table was also constructed to highlight the themes arising from the survey and interviews. The themes are discussed in full in the following chapter. These forms of data analysis were an attempt to identify, and describe the shared meaning early childhood teachers hold of children with disabilities and teaching children with disabilities.

Limitations

This study's limitations were dependent on the key players involved in the study: the principals, the early childhood teachers and the researcher. Also involved is the effective design of the survey and interview schedule, as well as the circumstances in which the study was conducted. Consideration of such factors was seen to lead to the development of valid research (Burns, 1997).

It is acknowledged that this study is limited by the cooperation of participants. The first stage involved gaining principal consent, which varied according to what other demands were being placed upon them, and their staff at the particular time of the study. Of the 16 school principals approached, only 12 agreed to participate in the study.

Selection of participants was based on willingness to be surveyed and interviewed. Because of this, the study could not be assured of a non-biased sample. Of the 107 survey forms distributed, only 22 were returned. Due to the limited number of participants involved the findings of the study could not be generalized, as they may not be representative of the broader early childhood teacher population (Drisko, 1997).

The study also relied on participants' integrity, being open and honest about their experiences and knowledge of children with disabilities. The credibility of the study may have been affected by participants' accuracy in depiction of experiences, and the willingness of participants to admit to deficiencies in their knowledge bases (Grbich, 1999). By using both open-question surveys and interviews to collate data the study attempted to develop a depth of understanding of teacher knowledge in this field. These measures may have been inadequate in covering all forms of teacher knowledge. Conducting a trial study, reviewing transcripts and providing opportunities for participants to express their own ideas were attempts to diminish possible disparities.

As this study attempted to identify personal practical knowledge (Clandinin & Connelly, 1995), the sensitivity of the researcher to accurately depict participants' experiences, and the ability to develop an empathy with participants may have impacted on the quality of the research. In transcribing interviews it was easy to develop an affinity with what was expressed, but at the same time, there was a need to be aware that these were the participants' voiced thoughts, not the researchers'. The researcher's own inclusive teaching experiences and having a child with disabilities may have impacted on constructions made from participants' comments. A balance of objectivity and affinity was sought through constant reference to all the forms of data, reflection, and reviewing what was written.

The concern of any research is to provide valid, accurate information, pertaining to the study. This study acknowledges that the research design and participants may have flaws affecting the study's credibility and generalizability (Drisko, 1997), but attempts have been made to take these factors into consideration. In studying people's lived experiences, which is the nature of qualitative research, "flaws" are part of the study, since it relies on human perception and interpretation, both individual and variant (Grbich, 1999).

Ethical Considerations

The ethical considerations of this study were concerned with protecting the rights of the participants. Participants were given a letter of introduction (see Appendix 6), which included a written outline of the research purpose as well as a guarantee of confidentiality and anonymity in data collection and analysis. The written consent form (see Appendix 7) noted the right of participants to withdraw from the study at any given time, and a complaints procedure they could choose to follow. Pseudonyms were used

throughout this study and participants were given the option to view the final written study, upon request.

The intent of this study was to preserve participant anonymity and not to impinge on early childhood teachers' professional life.

Summary

In describing the rationale behind the selection of methodological procedures and the format undertaken, this study strove to develop trustworthy and authentic research, in keeping with the paradigms of constructivism (Lincoln & Guba, 1994). It is acknowledged that whilst the researcher strives to be thorough and pedantic, leaving a clear audit trail, the methodology of any study is open to criticism, based on the readers' beliefs and interpretation.

CHAPTER FIVE: FINDINGS

In this chapter the findings of the study are presented in two parts. In the first section the survey findings are shown, outlining the participants' responses to each question. Examples of participants' comments are included, along with identification of the survey form they appeared in (labelled P1 to P22). Tables are also shown to illustrate the range and commonality of responses given by the participants. The second section includes an individual outline of each participant involved in the interviews. Their understandings of children with disabilities and the teaching of children with disabilities in early childhood settings are portrayed, along with examples of their comments.

The Surveys

In conducting the survey the selection of participants was limited by willingness to participate in the study. Twenty-one out of twenty-two participants indicated they had taught or were currently teaching students with disabilities. As a result of a high proportion of respondents having experience in teaching children with disabilities their comments were not confined to oneword responses. Participants tended to offer several answers to each question, providing a rich and varied range of responses. A copy of the survey can be found in Appendix Two.

After collating responses according to each question, key words were highlighted and grouped together to identify common themes. These key words and themes for each question were then tallied and compiled in table formats (as follows), including the total and percentage of the sample.

When asked their understanding of the term "children with disabilities," in Question One (Table 2), half of the participants gave responses using terms "not normal" or "unable to cope" indicating such children were compared to the general education population, and perceived to be "different." Four participants referred to a child having impeded or variant development, implying they used their understandings of developmental psychology to make comparisons and develop their own constructions about children with disabilities. Whilst 15 of the participants mentioned physical disabilities and 13 mental disabilities, fewer made reference to other forms of disabilities, including social, emotional, sensory and learning disabilities. Contrasting opinions were given as to what constituted a disability. One participant stated, "children with disabilities had a cognitive disability, as opposed to a learning difficulty" (P21), another stated "not learn spontaneously from a natural play experience or environment" (P22), and another, "it may be an intellectual, physical, vision or hearing impairment, autism or a language disability" (P10). Only 2 of the participants actually referred to a child with a disability as having a diagnosed condition.

Eleven participants understood children with disabilities as being children who required assistance or some form of support in order to learn and participate in normal, mainstream classrooms. Comments included "they are not able to be independent" (P6), "they need extra help to achieve success within the school classroom setting" (P11) and "a diagnosed disorder inhibits their ability to participate in the mainstream class, without some form of support" (P19).

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Key Words or Themes	Total	% of Sample
Physical Disabilities	15	68.18
Intellectual Disabilities	13	59.09
Not normal (developmentally)	11	50.00
Requires support/ unable to cope	11	50.00
Difficulty learning	7	31.82
Emotional Disabilities	5	22.73
Social Disabilities	2	9.09
Language Disabilities	2	9.09

Table 2.

Definition of Children with Disabilities

<u>Note.</u> N = 22 participants.

Participants' responses indicated that, whilst they shared some understandings of the term "children with disabilities," participants didn't have a uniform knowledge of the term. This is in keeping with van Kraayenoord, et al.'s (2000) findings, where varied interpretations of "children with disabilities" may have ramifications on how educators and educational administrators view children in their charge, and what they constitute to be a disability.

Participants were also asked their understandings of the terms "inclusion" and "inclusive practice" in Question 2 (Table 3). Over half the participants used the terms "mainstreaming," "integrated" and "including" without elaborating on what these terms meant, or further describing what was involved in the process of inclusion. Three participants considered inclusion to be the same as mainstreaming, with one stating "inclusive practice refers to mainstreaming of all children with across the board IQs of 74 and above" (P10). Other comments included "allowing the child to be educated in a preprimary setting, regardless of disability"(P4), "involving of disabled children with mainstream classes and activities" (P16) and "including with others" (P6). These divergent views are in keeping with findings by Fuchs and Fuchs (1998) and van Kraayenoord, et al. (2000), who found a lack of consensus on what inclusion and associated terms mean.

Table 3.

Understanding of Inclusion & Inclusive Practice

Key Words or Themes	Total	% of Sample
Mainstreaming	12	54.55
Including	10	45.45
Meeting their needs	7	31.82
Be normal or regular	4	18.18
Integrating	3	13.64
Involved	2	9.09

Note. N = 22 participants.

Some participants' interpretations were, as follows: "included in the programme and providing them with a developmentally appropriate programme" (P4), "educated in a normal classroom setting with their peers but at a level suited to their needs, with the assistance they require" (P2), and "use knowledge of their strengths and needs when planning, implementing and evaluating learning experiences" (P18). One participant also referred to the child's right to be included and inclusive practices were "making this happen" (P11).

When asked to describe their first awareness of terms regarding children with disabilities (Table 4), 6 participants stated that their first encounters with the terms stemmed from having to teach a child with disabilities in their classroom. Another 6 participants referred to the terms being found in relevant Education Department of Western Australia (EDWA) documents, such as the Curriculum Frameworks and Social Justice documents and the First Steps National Literacy Project. Three participants commented that their knowledge of the terms came from attending professional development courses. The need to refer to EDWA documents and attend PD courses appeared to be related to the experience of having to teach a child with disabilities for the first time and needing to access information.

Table 4.

First Awareness of Terms and Usage

Key Words or Themes	Total	% of Sample
Teaching a child with disabilities	6	27.27
EDWA Policy Documents	6	27.27
Unsure / Informally	3	13.63
Professional Development	3	13.63
Teacher Training	2	9.09
Not before this survey	2	9.09

Note. N = 22 participants; EDWA = Education Department of West Australia.

Other responses included 2 participants considering teacher training to be their first source of information. One participant stated, "this survey was the first time" (P18), one wrote "never" (P17), and another participant left this section blank (P3).

When asked about sources of information for knowledge about children with disabilities in Question 4 (Table 5), participants gave a range of sources, indicating they relied on more than one source to construct their own knowledge. The exception to this was one participant whose comment was "probably none really" (P21).

A total of 14 participants found support agencies a valuable source of information, 10 referring to support agencies and a further 4 referring to therapists, such as speech therapists, who came from support agencies. Specific support agencies mentioned included the Disabilities Service of Western Australia, the School for Deaf and Visually Impaired, the Autistic Society and the Cerebral Palsy Association.

Total	% of Sample
14	63.64
10	45.45
7	31.82
7	31.82
6	27.27
6	27.27
3	13.64
2	9.09
	14 10 7 7 6 6 3

Sources of Knowledge

Table 5.

<u>Note.</u> N = 22 participants; Ed = education.

Participants also valued sources from within their profession. Special education teachers, including visiting teachers from the Centre for Inclusive Schooling and teachers from Educational Support Centres, were seen as valued by 10 participants. Seven participants commented that colleagues were sources of information.

Six participants also listed PD courses as sources, but most didn't specifically relate what the courses were about. One participant did refer to a 10-week course on Attention Deficit Disorders (ADD & ADHD) as "being of limited value" (P13). Parents were considered valid sources of information by 6 participants and 3 participants listed school psychologists.

Reference materials, including books, journals, journal articles and pamphlets were accessed by 7 participants for information. Two participants also sought written information about children with disabilities from school records. Another participant referred to "accessing EDWA's Social Justice Policy" for information (P20). Only one participant specifically mentioned using the Internet (P5).

Key Words or Themes	Total	% of Sample
PD and Inservice Training	11	50.00
None	8	36.36
Teacher Training	5	22.73
Working with Children	4	18.18

Table 6.

Training for Teaching Children with Disabilities

<u>Note.</u> N = 22 participants; PD = professional development.

Participants were asked to comment on their training for teaching children with disabilities in Question 5 (Table 6). Only 5 participants indicated they had any tertiary training related to teaching children with disabilities, one having a Graduate Diploma of Special Education (P12) and another majoring in special education in her Diploma of Teaching (P13). Two participants mentioned their training was very limited, being a Bachelor of Education unit (P1 & 11). Eight participants responded that they had received no training in teaching children with disabilities.

Four participants indicated that their training was gained through working with children with disabilities, including one participant who had had private employment in England "working with autistic children" (P16), and another who had worked for "a term at the Exceptional Children's Kindergarten at the University of Western Australia" (P11).

Professional development was considered the main form of training received by 11 participants. This included PD offered by EDWA and inservice courses run by support agencies, including courses at Hale House and Chidley Education Centre, and inservices by Mildred Creek Autistic Centre, Disability Services, the Cerebral Palsy Association and an Education Support Expo. No mention was made of the duration or follow-up to these courses.

These responses support the notion that knowledge of children with disabilities is usually derived on a "need to know" basis.

Participants' perception of their training in this field, asked for in Question Six (Table 7), ranged from 5 not responding to this question and 3 finding the training unhelpful, to 5 participants finding it helpful. A range of comments were made, including "PD was helpful overall in understanding different disabilities, though not always specific enough" (P15), "helped me to understand autism" (P19), "very helpful but usually too much to take on board in a few rushed hours after school, I only remember things necessary for survival" (P9), "not at all as I was unimpressed with the tutor and assignments" (P1) and "experience working with the children has given me more understanding than any formal training" (P16).

Areas in which training did contribute to participants' understanding of children with disabilities included providing a background or overall understanding of some disabilities, which was mentioned by 4 participants and understanding what problems parents and families are faced with and how they might feel, mentioned by 2 participants.

Table 7.

Perception of Training

Key Words or Themes	Total	% of Sample
Not very helpful	8	36.36
Helpful	5	22.73
Gave a background knowledge	4	18.18
Changes in teaching practices	4	18.18
Developed an empathy for parents	2	9.09

<u>Note.</u> N = 22 participants.

Four participants referred to changes in their teaching practices. This included learning to plan and evaluate, mentioned by 2 participants. Another participant felt her training had lead to the development of a more inclusive programme and one commented "training reaffirmed the belief that all children can learn: early intervention and constant monitoring is the key to successful inclusion" (P10).

In Questions 7 and 8 (Tables 8 & 9), participants were asked to relate their experiences in teaching children with disabilities, including rationales for what made these experiences positive or negative. Participants made mention of several factors, often of a non-academic nature, which contributed to the experience being positive or negative. One participant didn't complete this section of the survey and another only wrote about successful experiences.

The development of the child's self-esteem, confidence, happiness, sharing and participation in the class were gains observed by 9 participants when relating their positive experiences of inclusion. Comments included "children became more confident with peers" (P2), "to see a child with spina bifida being accepted as a friend" (P5), "the child was happy to come to school" (P18), and " the experience allowed children of all varied abilities to work, share and enjoy learning" (P16). One participant related a particular incident where an autistic boy spoke before a crowd of 300 people at a Christmas concert. An accompanying comment was "any small thing the

children can accomplish is such a high, especially seeing success all over their faces" (P22).

These attributes of self-esteem, sharing, enjoyment and participation were observed to be lacking in negative inclusive experiences encountered by 12 participants. Their comments included "the child was not self-motivatedshe expected everyone to run after her" (P13), "the child had a low self-esteem and feelings of failure and he was ostracised by class members" (P18), and "being unable to encourage the child to participate with pleasure in any area of school work" (P3).

Table 8.

Key Words or Themes	Total	% of Sample
Support, including -	12	54.55
Education Assistant (7)		
Staff (6)		
Parents (6)		
Agencies (2)		
Self esteem & Confidence	9	40.91
Academic success	8	36.36
Attitudes of other children	7	31.82
Attitude of teacher	5	22.73
Adapting work to their level	5	22.73

<u>Note.</u> N = 22 Participants.

Participants also commented on attitudes other than the child's being part of, or a result of, the successful practice of inclusion. This included 5 participants acknowledging they received personal gains, such as "knowing in some way that you helped make a difference" (P11), "I felt I was able to contribute in a positive way" (P8), and "personal satisfaction of the teacherdoing a worthwhile job" (P3). Seven participants observed that inclusive experiences were also beneficial for other children in the class, developing their "caring and nurturing natures" (P11) and "acceptance of others" (P3, 5 & 18) so that "all children participated willingly, produced something to show and shared with others" (P16).

Table 9.

Features	of	Unsuccessful	Experiences

Key Words or Themes	Total	% of Sample
Lack of support, including -	12	54.55
General (4)		
Education Assistants (4)		
Resources (4)		
Agencies (2)		
Poor self-esteem & failure of child	12	54.55
Lack of knowledge & understanding	11	50.00
Time constraints	7	31.82
Poor academic progress	7	31.82
Behaviour of the child	6	27.27
Attitudes of other children	5	22.73
Attitudes of teacher	5	22.73
Inappropriate Expectations	4	18.18

<u>Note.</u> N = 22 participants.

Attitudes also played a part in unsuccessful experiences, where 5 participants made comments that they felt frustrated from the experience, one stating that she felt like she wasn't "doing enough" (P11). Although not mentioned in successful experiences of inclusion, 11 participants indicated that in unsuccessful experiences they lacked information, knowledge and experience in understanding the child with disabilities and dealing with them. Comments included "a lack of information and assistance causing feelings of frustration, in me and child " (P18), "an inability to understand the child's frustration" (P19), and "I feel very frustrated when the help I get is to be shown his confidential records, being told his IQ and told not to worry, it won't help" (P1).

It seems that to have an expectation of the child's learning ability the teacher would have to have some knowledge about the child and their specific disability. Four participants specifically said a lack of understanding contributed to the setting of unrealistic expectations. As one participant stated, "My inexperience," and, "not being confident in expectations of the child's capabilities" (P6) led to the experience being unsuccessful.

The attitude of other children in the class was considered to be a factor of unsuccessful experiences by 5 participants, where "bullying by other children" (P8), "ostracised by class members" (P18), "laughed at" (P5), or "others in the group who display non-accepting behaviour toward the special needs child" (P11). One participant commented that parents of other children became concerned about the child's behaviour (P14).

In unsuccessful experiences failure to make progress or academic gains were reported by 7 participants as contributing to the negativity of the experience. Comments included "he was unable to do much of the schoolwork" (P20), "little progress was made in written activities and working independently" (P7), "the child with severe/moderate disability seeming to gain very little from her kindergarten experience" (P15), and "seeing the children fall behind" (P10). In recounting positive experiences 8 participants had referred to general gains being made by the child with disabilities, rather than specific academic skills. Comments like "enabling students to operate with a high level of success" (P7), "I helped this boy achieve far beyond the expectations of the visiting teacher" (P4), and "noticing small but significant developments" (P11), indicated that academic achievement was considered by participants to be part of the inclusive process.

Communication and support were also perceived by participants to contribute to successful and unsuccessful experiences in teaching children with disabilities in general education settings. In successful experiences 12

participants wrote about the support they received, including support from staff, education assistants, also known as teacher aides, parents and the principal. Only 2 participants made mention of a support agency, one being Disability Services. Comments included " being involved with their carers, families and special needs assistant" (P15), "a wonderful aide who not only assisted the child with disabilities but provided support for other children in the classroom. She was my saviour" (P13), "lots of support. Communication between parents and staff" (P22), and "a successful team approach with teachers and assistants" (P7).

In unsuccessful experiences 12 participants referred to lack of, or no, support, in varying forms, contributing to the negativity of the experience. Four participants made mention of support in general. This may have been their reference to lack of an education assistant, which was specifically mentioned by 4 other participants. Six participants commented on poor parental support, 4 mentioned a lack of resources, 2 referred to poor support from visiting teachers and one participant had received little support from the school administration.

Other factors seen to impact on participants' experiences of inclusion, including 5 participants noting they were able to make adaptations to their teaching practices in successful experiences. Comments included "being able to find ways to adapt class activities to help the child be included" (P6), "Experiences could be easily adapted for suitability of achievement. Often these involved large books, drama, art and writing about a shared experience" (P16), and "being able as the teacher to produce an appropriate program of work" (P3). In unsuccessful experiences, 2 participants found they were "trying everything you know but not finding a solution" (P17). A participant's sense of personal achievement may have been a contributing factor to their discriminating between experiences of inclusion as being successful or unsuccessful.

Lack of time was another factor mentioned by 7 participants that contributed to unsuccessful experiences. As one participant stated "I was unable to give him time and attention, he was one of 32 children in my class" (P20). Behavioural problems were also mentioned by 6 participants, including, "he could be quite violent" (P22), "being noisy and disruptive" (P5), and "serious behavioural problems that are not addressed. Behaviours taking a long time to change" (P12).

In view of the participants' comments, it could be surmised that not one single factor contributed to the success, or failure, of the inclusion experience. Rather it was the culmination of several factors that determined whether the experience of teaching a child with disabilities was successful, or not.

In the next section of the survey, Questions 9 (Table 10), 10 (Table 11) and 11 (Table12), participants were asked what they needed to know about a child with disabilities, what changes they needed to consider and what information about a child was important.

Eighteen of the 22 participants made comments that knowledge of children with disabilities was important. This is an interesting comment considering half of the participants had indicated that their lack of knowledge had been a contributing factor to unsuccessful experiences of inclusion. What is even more interesting, however, is that knowledge of the child and the child's disabilities were not mentioned by participants as being a contributing factor to successful inclusive experiences.

A distinction can be made between participants needing to know the child's particular condition and understanding the nature of the disability. The first theme in Table 10, expressed by 17 participants, was the nature of the child's condition: the child's abilities, daily functioning and level of independence, the child's particular needs and limitations, and the child's learning potential. This knowledge could impact on the participants' approach to teaching the child with disabilities, resulting in changes and adaptations being made to meet the child's disability in more general terms: what the disability was, how it originated, how the disability affected people and their ability to function, and the prognosis of the disability. Such information may lead to changes in participants' attitudes and expectations, but not necessarily to changes in inclusive practice and meeting the child's special needs.

Closely related to this, was knowledge of the child's learningpotential, mentioned by 10 participants. Comments included, "what the child is capable of" (P16), " information about the child' ability to learn" (P6), and "what the child is expected to achieve" (P4). One participant wanted to specifically know the child's concentration span (P21), whilst another was interested in the parents' understandings of the child and expectations" (P12).

Table 10.

What Teachers Think They Need to Know about Children with Disabilities

Key Words or Themes	Total	% of Sample
Nature of the Child's condition	17	77.27
Nature of the disability	15	68.18
Child's learning potential	10	45.45
Strategies for teaching	9	40.91
Sources of support	8	36.36
How to do I.E.P.s	2	9.09

Note. N = 22 Participants; IEP = Individualised Education Programme.

Sources of support were also mentioned by 8 participants, including "I need to know how to access teacher support for each child from appropriate source" (P9), "support I will be offered" (P4), and "where to access professional help" (P11). Nine participants referred to the need to know strategies for teaching children with disabilities, but only 2 specifically referred to developing Individual Education Programmes (IEPs). One participant expressed the need of "how to say no to unrealistic expectations and not to feel guilty" (P9). Two participants also included what they thought was valuable advice, "knowing that small gains are really huge gains" (P10) and "any victory is a big victory" (P22).

When asked about changes teachers would need to make to ensure successful inclusion, in Question 10 (Table 11), half of the participants referred to making changes to the physical environment, such as seating, toilet access and additional space. Eight participants stated that changes would depend on the nature and severity of the child's disability, but gave no specific examples. As one participant wrote, "you would need to have some idea of the type of problem and the individual level of disability" (P6). In contrast one respondent said that, in her experience, "no changes would be needed" (P12), and another commented that "very few changes would be made, apart from physical access and staff knowledge about the particular disability of a child" (P11).

Table 11.

Key Words or Themes	Total	% of Sample
Physical Environment / Space	11	50
Depends on the disability	8	36.36
Education Assistant & Support Time	5	22.73
Special Equipment or Resources	5	22.73
Reduce class sizes	2	9.09
Use therapists	2	9.09
Seek training	2	9.09

Changes Teachers Think They	y Need to Make for Successful Inclusion.
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Note. N= 22 participants.

When asked in Question 11 (Table 12), to relate what particular information about the child with a disability they would need to access, 21 out of 22 participants indicated they would seek some information about the child. This included either information about child's particular abilities and needs, mentioned by 10 participants, or the child's disability, mentioned by 12 participants. Comments included " all I can be told about the disability, especially what to expect" (P1), "a video (I don't have time to read a lot) which explained about the disability, why, how, future etc." (P14), "the child's future needs as well as any past records relevant to his condition or ability to learn" (P5), and "information specific to each child's disability" (P18). One participant requested "a proper diagnosis of the condition" (P12), and another stated "anything!" (P19). It could be surmised participants perceived information of this nature to be crucial to successful inclusion. Some participants specifically listed the types of reports they would need to access, including 7 participants indicating they would like access to medical and psychological records, and 7 indicating they would like access to therapist reports. Five participants nominated access to academic history, or progress reports as being necessary information to have. No participants mentioned a coordinated approach being taken to accessing these records, or contacting a case coordinator who may manage these records. It is seems that participants felt that accessing particular information records may contribute to their planning in meeting the needs of child with disabilities.

Successful teaching practices were seen as another important form of information needed for successful teaching of children with disabilities. Six participants sought information about what programmes and teaching strategies had worked for other teachers. As one participant commented, "how other teachers manage in similar situations" (P9), and another, "programmes that have been tried before" (P22). Five participants specifically mentioned behavioural management strategies, including "practical help with behavioural management" (P9), "practical suggestions for classroom management, not the rubbish development support staff offer" (P14).

Other particular information that participants thought would be valuable included information about the availability of support agencies, mentioned by 5 participants, and the child's family background, also mentioned by 5 participants. A further 5 participants responded that any information that could be provided could prove beneficial for successful inclusion to take place. One participant didn't seek any information about the child, but rather sought information about how much extra time and attention the child would require (P20).

Participants were asked, in Question 12 (Table 13), to indicate their attitudes towards including a child with disabilities in their classroom. Eight participants made unconditionally positive statements, including "happy to include any child" (P8), "we have to do it. I believe in mainstreaming as much as possible" (P19) and "I have no problem with this and would encourage it to provide experiences for the child and allow children without disabilities to appreciate the specialness of children" (P18).

Table 12.

Key Words or Themes	Total	% of Sample		
Nature of Disability	12	54.55		
Child's Ability & Needs	10	45.45		
Medical & Psychological Reports	7	31.82		
Therapist Reports	7	31.82		
Successful Teaching Practices	6	27.27		
Behaviour Management Strategies	5	22.73		
Academic History	5	22.73		
Availability of Support Agencies	5	22.73		
Parental & Home Background	5	22.73		
Anything at all!	5	22.73		

Particular Information Needed about a Child with Disabilities.

<u>Note.</u> N = 22 participants.

Ten participants were willing to include a child with disabilities but identified limits, such as workload, stress levels, severity of disability and support. Their comments included "providing I had adequate support and that the other children in my class were not in any way disadvantaged" (P20), "it does not worry me as long as the child is not disruptive" (P5), "good, as long as there are not too many children with problems, as the workload is just too much" (P12), and " not a problem at all when I am not stressed and feel I can cope" (P9).

Apprehension was expressed by 2 participants when asked about including a child with disabilities in their classrooms. One participant was specifically concerned about "the knowledge I have to be able to cope with the child, how the child relates to others and about how much extra time will be needed" (P6). Two participants were negative, one stating, "not good, with information, help and facilities being as they are" (P1), and the other "it can be a rather stressful time for the classroom teacher... It concerns me that I am not meeting adequately the needs of all children" (P13). Table 13.

Teacher	Attitudes	towards	Inclusion

Key Words or Themes	Total	% of Sample	
Positive with limits or conditions	10	36.36	
Unconditionally positive	8	36.36	
Apprehensive	2	9.09	
Negative	2	9.09	

<u>Note.</u> N = 22 participants.

Participants were asked, in Question 13 (Table 14), to identify what they thought were the 5 key components to successful inclusion, which resulted in a wide range of responses.

Although the order of preference might have differed amongst participants, support was seen to be a major factor of successful inclusion. Support, in the form of teacher assistance, was mentioned by 15 of the participants. Other forms of support considered important to the inclusion process included agencies, nominated by 14 participants, and other teaching staff, mentioned by 7 participants. Parental support, cooperation and communication were considered to be key components by 9 participants. The administration staff, including the principal, was mentioned by 5 participants and other children in the classroom was listed by 4 participants. This implies that the participants saw the successful inclusion of a child with disabilities into general education settings as a collaborative process, where a group of people are required to work together to achieve the goal of inclusion.

Knowledge of a child's disability was considered to be necessary for successful inclusion by 7 participants. Associated with this, 3 participants saw the need to have realistic expectations of the child. Five participants considered training and professional development was needed to gain this knowledge.

Whilst only 4 participants gave strategies for programming and teaching methods as contributing factors to successful inclusion, 10 participants

considered resources, such as physical resources and equipment to meet the child's needs as being important.

Table 14.

Key Components to Successful Inclusion

Key Words or Themes	Total	% of Sample
Support – Teacher Assistance	15	68.18
Support from Agencies	14	63.64
Resources	10	45.45
Support from Parents	9	40.91
Support from Other Teachers	7	31.82
Positive Attitudes	7	31.82
Knowledge of child's disability	7	31.82
Support from Administration	5	22.73
Professional Development	5	22.73
The child's abilities	5	22.73
Support from children in class	4	18.18
Programmes & methods	4	18.18
Realistic expectations	3	13.64
Time	3	13.64
Physical environment changes	3	13.64

<u>Note.</u> N = 22 participants.

Interestingly very few participants mentioned the child with disabilities as being a key component to successful inclusion. Only 5 participants set criteria in regards to the child's abilities, commenting that the child should be able to communicate, follow routines, not be disruptive and not require too much time. One participant did state that the child should have success working at his own level (P5). Other key components to inclusion included 7 participants specifically referring to having a positive attitude in regards to the teacher and other school staff and 3 participants referring to having adequate provision of time. Three participants also mentioned changes to the physical environment, referring to space, ease of access and safety considerations. The need for smaller class-sizes, continual re-assessment and funding were singular responses.

Participants were presented with a hypothetical case in Question 14 (Table 15), where they were asked to respond to having a child with disabilities placed in their class. In the first part of the question participants were asked to comment on their reactions to the scenario. In the second part the participants were asked what action they would take.

Half the participants indicated that their reaction to teaching a child with multiple disabilities would be to ask questions, particularly in regards to the child's needs and what support was available. For example, 2 participants asked what global delay meant, 3 questioned what they knew about the disability, 2 mentioned the child's needs and 5 queried how much aide-time they would be entitled to.

Concerns were expressed by 9 participants about the child, the workload, and not knowing what to expect, using words like "initially one of panic, how can I help this child as well as others in class and will I get support?" (P13), "concern about the additional time it will rake me to prepare lessons and the extra time the child may require of me" (P10), and "horror, if I was in the situation that I am already this year" (P1). One participant stated "Oh no! ...I feel I work really hard and don't need anything extra" (P20). These comments are in keeping with Scruggs & Mastropieri's (1996) findings that general education teachers' reactions to teaching a child with disabilities depend on the nature and severity of the disability.

In contrast, 2 participants did say they had no reaction, but "just to get on with the job" (P14 & 22). Another 2 participants said they were "happy and looked forward to meeting the child and parents" (P8 & 15).



In the second part of Question 14 (Table 16) participants were asked what course of action they would take. There appeared to be a common strategy on the part of the participants to seek information about the child: 11 participants sought information about the disability and 14 sought information of the disability's effect on the child, the child's abilities and learning potential. Sixteen of the participants indicated they would talk to the parents regarding the child's abilities and their expectations.

Half of the participants commented that they would talk to support agencies or specialists. Only two respondents said that they would talk to the Principal. Other teachers, the case coordinator and the school psychologist were also considered to be sources of information by 4 participants. One participant specifically said she would rely on someone other than parents for valid information, but didn't elaborate as to the reason for this (P9).

Support was another issue raised by participants, with 10 seeking an education assistant and 5 wanting to find what support agencies were available.

In making changes to their teaching practices, 11 participants indicated they would modify their teaching programme to cater for the child's level of development or develop IEPs. Of these, 2 participants indicated they would modify activities so that the child would feel part of the class.

Table 16.

Total	% of Sample
16	72.73
14	63.64
11	50
11	50
11	50
10	45.45
7	31.82
5	22.73
4	18.18
4	18.18
4	18.18
3	13.64
2	9.09
2	9.09
	$ \begin{array}{c} 14 \\ 11 \\ 11 \\ 11 \\ 10 \\ 7 \\ 5 \\ 4 \\ 4 \\ 4 \\ 3 \\ 2 \end{array} $

Proposed	I Action	to Meet	t A Hyr	oothetical	Child's	Needs.

<u>Note.</u> N = 22 participants.

Whilst 4 participants said they would modify the class environment to cater for the child, such as installing ramps and modifying the toilets, a further 3 participants referred in general to making the necessary changes. Participants also presented a range of actions they would take. Finding out what resources were available was mentioned by 3 participants. Two participants would seek professional development. Three participants requested they actually meet the child and another 3 said they would observe and make their own assessment of the child's needs. Four participants said they would inform their class of the child's inclusion in an attempt to include them, and another 2 said they would endeavour to make the child welcome.

Individual participants made comments about "seeing the Case Coordinator" (P14), "speak to the Principal" (P20), "spend hours of my own time finding out and go on the Net for specific information" (P9), and "familiarize myself with the foundation Outcome Statements of the Curriculum Framework" (P10), and "cry for help" (P1). All these responses indicated participants' unique approaches to the practice of inclusion.

Summary of Survey Results

The findings of the survey provide a wealth of information, indicating that early childhood teachers do possess a range of knowledge about children with disabilities and the teaching of such children in general education settings. Whilst they accessed a range of sources, received different training, and had undergone unique experiences in teaching children with disabilities in general education settings, shared understandings arose in participants' knowledge of children with disabilities and the teaching of children with disabilities. These findings will be further discussed in the next chapter, in light of the findings from the interviews conducted with 5 willing participants.

The Interviews

The intent of the interview was to select participants from different schools, teaching different year levels, for further discussion of concepts and ideas. Of the 5 participants involved in interviews, 2 were pre-primary teachers teaching five-year olds, one was a Year One teacher with experience in teaching Year Three, and 2 were Year Two teachers, one having taught Year One the previous year. All were from different schools and had had experience in teaching children with disabilities in general education settings.

The first interview with each participant took approximately 40 minutes and was transcribed and summarized prior to the second interview. The second interview was shorter in duration, taking 10 to 15 minutes, where participants clarified their responses and indicated their knowledge of a particular disability and its effect on a child they had taught.

In order to preserve the participants' anonymity each teacher interviewed was assigned a pseudonym, and is referred to, as such, in the individual interview profiles and comparison of responses.

Interview Profile of "Chris"

"Knowing through the practice of teaching a child with disabilities."

Chris was a pre-primary teacher and acting deputy principal at a small Level 4 northern suburban Perth school. The participant was in her late 20s, possessing a Bachelor of Education, and having taught for 9 years. Chris had previous experience teaching children with disabilities in the country and currently had in her class a child in the process of being assessed for autism.

Chris referred to a child with disabilities as having inhibited development when compared to a normal child, such as autism and physical or severe intellectual disabilities. Her view of inclusion was to adapt the teaching program to suit the needs of the child. Chris perceived her knowledge of children with disabilities had developed only by having a child with special needs in her class. However, she did acknowledge that early life experiences with a family member made her value people with disabilities, quoting "treat them as human, not as a disability." This experience also made her appreciate the value of routines for people with disabilities, and "not putting anybody down."

Her training only briefly touched on special education issues. Chris saw her knowledge as chiefly gained from her own research and inquiry, through background reading and talking with colleagues. She acknowledged that she had received some professional development from the Autistic Association, when she sought their advice regarding a child she was teaching. In Chris's words:

> I went through my notes and thought, gosh, there's more here that looks like autism than I had originally thought of, so I made a phonecall to one of the autistic centres and got information on how to get her referred and diagnosed.

Her first experience in teaching a child with disabilities left her feeling that she had achieved very little, not being able to change the child's behaviour or help her in the way she wanted to. Chris attributed this lack of success, on her part, to limited understanding and no background knowledge of the child. What knowledge of teaching she gained was derived through trial and error,

and from colleagues being used as "sounding boards to bounce ideas off." Lack of success was also attributed to the child having undiagnosed difficulties and living in a remote part of the country, with little access to services or support. Chris commented, " I had limited understanding myself and I had limited access to any resources, be it readings or books or support from anywhere."

Chris's current experience in teaching a child with disabilities was proving to be more successful. Her strategy was to compare the child to others she had taught and those currently in her classroom, and to refer to her reference notes. She was also able to assist in the referral of the child for a diagnosis on the Autistic Spectrum. Chris found that specific knowledge of the disability being experienced by the child helped her to understand why the child behaved in a certain way, and generated possible solutions to the child's frustration. Her comments included, "It's given me a better understanding of why she's behaving like she is, and what causes her frustration and possibly the options of how to get around it. Whereas before I didn't know what sort of strategies I should be using because I didn't really know what I was dealing with."

As a result of her experiences in teaching children with disabilities Chris felt she had developed a repertoire of ideas for teaching these children. This included prioritising what is important in daily class routines, modifying her expectations in individuals' work and behaviour standards and making adaptations to the environment when necessary. Another part of Chris's understanding was to value sharing and collaboration with other teachers, providing her with a means of moral support.

In regards to her expectations for academic achievement Chris agreed with the philosophy behind EDWA's Curriculum Framework and Outcome Statements, stating, "It helped teachers to realise that they need to teach what's appropriate to the children in the class, not necessarily what's appropriate to the year level."

As a teacher, Chris learnt to question what is "the normal range." Chris developed the strategy of first observing the child, and comparing him, or her, to other children, as a guideline of where to start. Getting someone willing to work with you, a special needs education assistant, was viewed as a priority, "to support the child whilst encouraging the child to be mainstreamed as much as possible." Working with an education assistant and the child was seen as a way of "learning together."

Chris found it was important to get specific knowledge about the child's specific problem and how it could affect the child and the child's learning potential. Contact with support agencies was a means of doing this. Chris also made use of the EDWA curriculuum materials, along with experimenting with teaching strategies on a trial and error basis, trying to limit the number of situations in which a child might experience failure.

Chris determined that her knowledge of children with disabilities came from her prior experiences in teaching children with disabilities. She was concerned that difficulties arose when teaching children with undiagnosed disabilities in that it took a long time to try and identify what their difficulties were and how to go about teaching them. She felt a teacher can indicate whether a child fits within the normal range or not, but "lacked the necessary skills to diagnose specifics." Chris thought it was better left to specialists to diagnose and devise strategies to help the teacher include the child in the class.

When asked about a specific disability Chris defined autism as a condition whereby a child was not able to understand the social world in the way we do, due to unspecified causes, possibly genetic. This disability made the child Chris taught frustrated, not able to wait, take turns or understand how different people affect a situation. Although the child could communicate, and was "capable academically", her condition resulted in social problems, which Chris attempted to pre-empt and avoid. Chris felt that knowledge of the child's disability and how it affected the child made her more aware and responsive to the child's needs.

Chris also commented on support she had received from various sources, finding that she most valued support from other staff, stating, "I think they can put themselves in your shoes and they know that they might get the kid next." Chris considered support from agencies, such as the Centre for Inclusive schooling, to be useful. Chris considered the quality of administrative support to vary and found school psychologists to be "very stressed" and "time consuming." Chris also said she had heard the district view was to "just move the child on and not to get too bogged down in diagnosis." Her response to this was, "If I was the child or the child's parent I wouldn't be too happy knowing that the teacher was changing my programme without me knowing why. I would rather be told there was a reason for it."

Chris had developed an understanding of children with disabilities from her life experiences and applied this knowledge to develop a set of strategies that enabled her to teach a child with disabilities in a general education setting. Chris was willing to seek information and support when faced with difficulties in including the child with disabilities in her classroom, in order to improve her knowledge and teaching practices, and meet the needs of the child.

Interview Profile of "Edna"

"Developing a team approach and valuing the child."

Edna was a Year 2 teacher in her mid-40's, with 27 years teaching experience and currently teaching in a large north metropolitan school. In gaining a Diploma of Teaching Edna had elected to receive optional training in "atypical" education, due to always having had an interest in children who have difficulty reaching their potential.

A child with disabilities were considered by Edna as being any child with anything that may prevent them from accessing the curriculum independently: in her teaching experience this being deafness, autism, physical disabilities or cerebral palsy. Her understanding of inclusion was to adapt the teaching program to enable the child to "join in", at their own level, in the daily routine of the classroom.

Edna found most of her knowledge of children with disabilities came from reading, instigated when her own children commenced their education at a school with an Education Support Centre attached and when she had to teach children with disabilities. When discussing the impact of early experiences on

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her knowledge Edna recounted her exposure to children with disabilities, through a cousin's illness and work at a children's hostel, stating, "I guess it all works in." At the time of the interviews Edna had not attended any professional development in relation to teaching children with special needs.

In relating experiences of teaching children with disabilities Edna only commented on recent positive experiences in teaching a deaf child and a child with autism for 2 years. The experiences had led her to clarify and develop her educational philosophy and teaching role. Edna viewed teaching a child with disabilities as a team effort. This included valuing and sharing information with two support assistants in weekly "staff" meetings to develop a plan, a timetable and adaptations to class activities to meet the children's needs. A comment was, " It's great having people to talk to and talk things over about different aspects."

Knowledge of the child's learning styles was also perceived to be important, and how the child's disability affected this. Edna's need to extend her knowledge involved finding out the child's needs, knowing where to start looking and who to go to. Included in this seeking of knowledge was gaining parental support and contacting support agencies, as well as valuing input from teacher aides.

Edna felt she had learnt to value the child with disabilities, as she did all children, expecting the best and striving for the best. At the same time Edna considered it was important to develop their independence and responsibility for their own behaviour. When discussing behaviour problems exhibited by a deaf child in the playground she commented, "Value the child, because often they (other teachers) see a naughty child as having less value than someone else." She also recounted that once they (the teacher and aide) had taught him some of the rules for soccer, the deaf child was able to understand and play more appropriately in the playground.

Combined with respect for the individual, Edna saw it was the role of a teacher to be patient and flexible, making allowances and needing to "give" for any child to develop. Often this meant letting the child set the pace and listening to what they were saying. Edna then made adjustments to the learning

goals, from academic needs to meeting social needs, or altering the mode of activity from abstract to concrete. She also found that teaching the child depended on the nature of the disability but her objective was to "just try and fit them all in," adapting activities to meet their needs.

Comments were also made by Edna on how she had learnt what worked best "for her" when faced with teaching a child with disabilities. She observed how the child behaved in the classroom then made adjustments to seating arrangements, and the timetable, as well as activities and work expectations. As soon as she could Edna sought information from the administration about the child's school history. She had learnt to contact the parents, then books and support agencies, to gain information about the child and expectations for learning. This information was then used to develop strategies to meet the child's needs.

Edna felt she had gained confidence in knowing how to find out the child's needs, through the experience of having to do it. Experience had also provided Edna with the knowledge of how to arrange case-conferences, interpreters and timetables, giving her the confidence to apply this knowledge to new situations. Edna said she was happy to include children with disabilities in her class, commenting, "It's like talking to someone in a coma, you don't know how much they take in: you just give them whatever amount you can, as much as you can... we have to assume it's worthwhile."

Edna's understanding of a particular disability, autism, was that it applied to children unable to make a connection with other people, verbally, socially or expressively and hadn't been attributed to having a main cause. The child Edna taught had delayed speech, was blunt and tactless, heard "noises", avoided eye contact and displayed self-centred behaviour typical of a 2 yearold. Knowledge of the effect of the disability on the child enabled Edna to develop rules and routines, minimize noise and distractions, and provide more time for the child to complete modified tasks.

Inclusion was considered by Edna to be a collaborative task and she enjoyed the "team approach" of working with other staff and the parents to accommodate the child in a general education setting. She valued the input

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from others and the knowledge she had gained from her experiences in teaching children with disabilities. Edna expressed the belief that she couldn't "stand back and see children who need help and not do it." She found that knowledge of the child and the child's disability enabled her to make adaptations to "include the child in everything" in the classroom.

Interview Profile of "Hilda"

"Teaching a child with disabilities is a huge learning curve."

Hilda was a Year 2 teacher in her 40s with 15 years teaching experience. Hilda had a Diploma of Education with no training in special education, but had received some professional development from the Cerebral Palsy Association, when she was first faced with teaching a child with severe cerebral palsy in her classroom. She found this to be very helpful.

A child with disabilities was considered by Hilda to be "a child who can't learn on their own and needing assistance for whatever reason that disability is." Her understanding of disabilities related to her experiences in teaching children with cerebral palsy and autism. Hilda saw inclusion as trying to adapt normal practices to fit these children, rather than isolating them from normal schools.

Hilda perceived her knowledge was relatively recent, coming from an advisory teacher from the Centre for Inclusive Schooling, and from the experience of teaching children with disabilities. Prior to teaching such children Hilda had not had any involvement with people with disabilities, or as she put it "no hands on experience," or training in special education, which was treated as something separate when she undertook tertiary education.

The experience of teaching children with disabilities was considered by Hilda to be both positive and a "huge learning curve." In her dealings with a child with cerebral palsy, and 2 children with autism, she learnt to value support and rely on advice from parents and support agencies, such as the Cerebral Palsy Association and Centre for Inclusive Schooling. Hilda had learnt to be proactive in obtaining information, finding out what the child can do, the level they are at and their level of independence. She saw her role, as a teacher, was to try and adapt normal practice, modifying the volume of work and the activities in order to get the child to be independent. This involved changing, not lowering, expectations and becoming more sensitive to the needs of the individual child.

Hilda found that she had learnt to apply knowledge from one child on her approach to another child, stating, "I found I haven't felt at all stressed about having these children because I sort of feel as though I've been there already and done a bit." Hilda also commented, "I feel like I can use the same principles I used with the cerebral palsy child to work with these 2 autistic boys."

Being consistent in using teaching strategies, such as in behaviour management, was one approach that worked for Hilda. She had learnt not to get "steamed up" and use the School's Cantor Policy to apply to all children in the class. The experience of teaching children with disabilities had also made Hilda more aware of time factors. She found that children with disabilities often took longer to complete tasks. Whilst believing in the philosophy that, "They need to have as much of a fair go as any other child does," Hilda strove to share her time out fairly to benefit all children in the class. She saw her role was to plan and provide direction for learning activities, relying on the support aide to give the child with disabilities the individual attention he, or she, required. This involved the aide checking the teachers' daily work-pad and gathering appropriate resources, then organizing the child to complete tasks.

In teaching children with disabilities, Hilda sought knowledge of a child to get a "starting point," otherwise she found "you were floundering around to work out the best way to go." This involved communicating with others, such as past teachers, aides, parents and agencies. It was important to plan and develop an Individualised Education Programme (IEP) and use it. Support, in the form of support assistants and agencies, was also seen as crucial, as was learning to rely on their experience. Hilda acknowledged the experience of teaching children with disabilities made her more aware of "normal" children's problems, and found she continued to learn on the job.

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When asked about a specific disability, Hilda perceived cerebral palsy as being a malfunction of the brain to direct the muscles, usually caused at birth through lack of oxygen. In the child Hilda taught, this disability resulted in the child having no leg movement and only slight movement in the hands. The child was in a wheelchair all the time, with weak upper body strength and poor tactile awareness, resulting in the child being unable to do anything on her own. As a result of her awareness of the child's condition Hilda was able to help the child get a typewriter, limit the amount of work required from the child, and be careful not to overtire the child. Hilda felt her understanding of the disability enabled her to develop an empathy with the child's parents and sensitivity to the child's needs.

Hilda found the experience of inclusion to be a "huge learning curve," where her experiences and sources of knowledge lead her to continually expand on her knowledge of children with disabilities. Hilda found she had developed an awareness of the child's needs, through parental and support agency contacts, which lead to her modifying her teaching practices and planning to meet the child's needs. She saw her knowledge of children with disabilities, and the teaching of children with disabilities, as an ongoing process of "learning on the job."

Interview Profile of "Cath"

"Knowing the child makes all the difference."

Cath, a pre-primary teacher at a small Level 5 primary school, was in her mid 30s with 14 years teaching experience. Cath had a Diploma of Teaching in Early Childhood Education, including a unit of study in special education, and had received professional development from the Cerebral Palsy Association, the Autistic Association and the Learning Difficulties Branch of EDWA.

A child with disabilities was considered by Cath to be a child not functioning within the norm, providing examples of physical disabilities, global developmental delay, and language difficulties. She also considered English-asa second language (ESL) to be a disability for a child at a normal school. Her definition was based on personal observations, as children with special needs entering preschool did not always have a diagnosed disability, but were often found to have problems that were later diagnosed, or "labelled."

Cath understood inclusion to mean placing a child in the normal school and developing programs to include the child in the school, rather than placing them in special schools or centres.

Her knowledge of children with disabilities was based on the experience of having to find out about children with disabilities because she had to teach them, rather than through training or early life experiences. Sources of knowledge included her friends, Cath's cousin, a social trainer for adults with disabilities, and support agencies such as the Cerebral Palsy Association.

In Cath's first year of teaching, at a country posting, she taught a child with global developmental delay. The experience made her "aware," and Cath learnt to use the school psychologist, to contact hospitals and speech therapists. On reflection Cath realised that she didn't know a lot, and neither did the people around her. Cath commented, "Knowing something is better than knowing nothing", and, "The more you know the more you see, then the more you know the more you grow, and the more you learn from it."

Knowledge about children with disabilities that Cath considered was essential included finding out what the disability meant and how it affected the child's day-to-day functioning. Cath relied on gathering her own information and considered it helpful to find out about learning strategies that had worked in the past. She said it was important to meet the parents and child first, in order to understand where the child was coming from and what expectations the parents held for the child, and the school. Cath perceived a teacher had to be proactive, contacting agencies and parents to gain their support as well as elicit information.

Support was seen as a fundamental component of teaching children with disabilities. Cath had learnt how to access support in the form of parents, teacher aides and support agencies, stressing it was important to get therapists

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to come to the class to give advice so that the advice became applicable to the environment the child was in.

Whilst using and valuing this advice, Cath also felt it was necessary to make personal judgements and use what she felt was appropriate and practical. In recounting an incident in teaching a child with severe cerebral palsy, where the occupational therapist had given the child switch boxes, she said, "Sometimes I thought the things they were making this child do were just silly, and I just felt he didn't have the physical capabilities of doing that. So we just didn't do that anymore."

Being prepared to modify and make changes to teaching practices and the classroom environment was another part of Cath's practical knowledge. This often included a process of trial and error. Cath learnt that being organized, developing a personal file of information to be used to plan and develop routines, made teaching children with disabilities easier. At the same time it was necessary to be tolerant, flexible and have a sense of humour, realising that "there are some things you can't do."

Cath strongly believed in the process of inclusion and thought it beneficial to other children too. She related an incident where she had taught a child with disabilities for 2 years and felt the child and parents had been happy and the child was making progress. At the end of pre-school the child was sent to a special school and became an outsider. The parents had expressed to her that they had "lost the feeling of spirit of the school." Cath was most concerned with what happened to children with disabilities after they had completed preprimary schooling and felt it was important that inclusion be an on-going process, throughout the child's education. She commented, "We're good enough to have these children for 2 years and then all of a sudden nobody else in the school needs to have these children, because they can send them somewhere else."

Related to this was Cath's belief that the aim of inclusion was to get the child to be part of the community. In prioritising the child's needs for inclusion Cath strived to ensure the child was happy, part of the group and treated as a member of the community. At a class level this involved including the child in all activities and informing the students and other parents of what was happening. She saw a child with disabilities as being a child, "under all those problems they're just a kid", and should be treated accordingly.

When asked about a specific disability Cath identified cerebral palsy as affecting the child's muscles and movement, and being attributed to unknown causes. Cath acknowledged there were several different types of cerebral palsy, such as quadriplegia and spasms. The child Cath taught was totally immobile, in a wheelchair with a harness, and had no control over head, hands, mouth or bodily functions. As the child was unable to do anything without support Cath saw her role as providing an environment where the child could explore and roll on the floor, facilitating access to equipment and adjusting the class timetable so the child's needs for toileting and feeding, as well as involvement in class activities, particularly tactile experiences, were met.

Cath found her experiences of inclusion had enriched her knowledge of children with disabilities, where she had become more "aware" and sensitive to meeting the child's needs. Cath had developed a "plan of action" when teaching children with disabilities in general education settings, which included seeking advice and support from parents and support agencies as well as planning ahead, being flexible and allowing more time to do things. Cath felt it was important to appreciate the child with disabilities "for what they are."

Interview Profile of "Ann"

"Plan ahead, organise time and make adaptations."

The final interview participant was Ann, a Year One teacher in her 40's with 23 years teaching experience, currently teaching at a large north metropolitan primary school. Ann was appointed an Advanced Skills Teacher by EDWA, having a Bachelor of Education, majoring in special education. She had received some professional development from the Sir David Brand Centre but found it to have limited value, as it provided little information on how the teacher should work with the child in the classroom.

The participant perceived a child with disabilities as being someone who needs additional support to enable them to function in a normal classroom setting. She provided examples, which included physical disabilities, cerebral palsy, blindness, hearing impairment and mental and emotional disabilities. Her understanding of inclusion was to include the child in a normal classroom setting and provide programs to meet their needs.

Whilst Ann had received training in special education she had found no need to use this in her early years of teaching. As a result of this lack of use Ann felt her training did not contribute to her knowledge of children with disabilities. Rather, it was in talking to other teachers, using colleagues as sounding boards, and consulting the curriculum framework, that she gathered information in regards to teaching these children. On reflection, Ann found her early life experience with a thalidomide child, having no legs or arms, may have contributed to her accepting and understanding that people with disabilities are "quite normal" and able to do a lot of things independently.

When encouraged, Ann spoke about an unsuccessful experience in teaching a Year 3 child with cerebral palsy. She attributed her feelings of stress and frustration to being given no information on the child and the child's condition as well as a lack of support from the parents and support agency, as well as insufficient education assistant hours. What support and information she did receive she found to be delayed: "too little, too late."

Another teaching experience involving a Year 3 child with autism, led Ann to developing a more structured and repetitive approach to cope with teaching a child with disabilities, learning to avoid practices, such as group work or excursions, that would lead to behavioural problems. She also learnt to organize her time more effectively and share it out amongst class members, rather than focussing on the one child.

Ann considered it was important for children to develop independent work skills. She considered this was particularly applicable to children with disabilities as they relied heavily on the support of others, which wasn't always available. Ann related a teaching experience with a child with cerebral palsy, "She expected them (the other children) to do everything for her... Towards the middle of the year I said, "No, she's quite capable of doing some of these things for herself," so she'd do them." Ann also thought it important to provide a caring supportive environment for all children, and felt that even children with disabilities were capable of improving, and could "grow." She saw it was the teacher's role to make a difference in the child's life, regardless of abilities or disabilities. Ann considered that some strategies she had learnt to use through teaching children with disabilities were beneficial to other children, including setting goals and standards, meeting the parents, planning and organizing for time and observing the child to assess their "problems" and needs.

As a result of these experiences Ann had learnt to recognize the need for help and support, initiating contact with support agencies, rather than waiting for them. Ann found it was important to contact parents to share knowledge and gain support, and to contact the administration in regards to education assistant support.

Ann commented, "You build your knowledge quicker when you've got a little bit of information behind you." Accessing background information on the child's problems as soon as possible enabled Ann to plan ahead and make environmental changes, if necessary, prior to the child starting school. It enabled her to plan a time schedule and adapt teaching strategies, such as blackboard writing, to suit the child's needs. Informing the class members and sharing information also enabled Ann to gain their support, contributing to successful inclusion.

Ann was willing to have children with disabilities in her class provided she was given background information on the child and support. She saw the knowledge she had gained from past experiences as assisting her to plan and manage the rest of the children in the class. She also saw inclusion as contributing to other children in the class becoming "better people," more tolerant and understanding and making them realise "not everyone is as fortunate as they are."

When questioned about the nature of a particular disability, Ann saw cerebral palsy as affecting a child by making them unable to move as freely and easily as normal children. She was unsure about the cause of the disability but thought it may be due to birth processes or brain damage. The child Ann taught wasn't able to run and walk properly or copy from the blackboard and needed support to move and toilet herself. As well as having poor gross motor skills the child's vision was affected, she had difficulty holding a pencil, was behind in academic work and had slowed speech.

This knowledge enabled Ann to modify the amount of work she put on the blackboard, providing a written copy of work for the child to type from. Whilst the child was expected to do the same activities as the class, Ann reduced her work expectations and strived to develop independent work habits in the child, in keeping with her philosophy of education.

Ann acknowledged inclusion was beneficial for those involved in the inclusive process, particularly when it was adequately resourced and supported. She found her knowledge of children with disabilities had developed through teaching such children, using colleagues as sounding boards and proactively seeking information from support agencies and parents. Ann admitted she found the inclusive process stressful and time consuming but recognized that she had learnt from the experiences, stating, "We can all improve... I think I probably learnt a lot by having these children."

Summary of Interviews

The conducted interviews provided a more in-depth look at participants' experiences in teaching children with disabilities in general education settings and aspects of their knowledge of children with disabilities.

Although the interviewees expressed varied interpretations of the terms "children with disabilities" and "inclusion", which were related to their own unique encounters with people with disabilities, they concurred that they sought knowledge about children with disabilities when faced with having to teach such children. The interviewees learnt to be proactive and contact parents and support agencies themselves to seek knowledge and support, in regards to how the child's condition affected the child's learning potential, abilities and needs. Only 2 interview participants indicated that they relied on written sources, such as books and journals, for information about children with disabilities.

Interview participants used their acquired knowledge to plan for teaching the child with disabilities but acknowledged there was a need to be flexible, particularly in regards to work expectations and time considerations. Most used "trial and error" to determine what teaching strategy best suited the child they were teaching, tending to adapt and modify current teaching practices, rather than adopt new teaching strategies.

The interview participants valued the support of special needs education assistants, also known as teacher aides or teacher assistants, and relied on them to ensure the child participated in planned activities, or completed tasks. Reliance on the education assistant varied with the specific needs of the child and the experience of the teacher in teaching children with disabilities in general education.

Whilst interview participants valued information and support from support agencies to varying degrees they all considered parental support and communication to be a vital component of successful inclusive practice. Similarly, colleagues were considered by all participants to be "good sounding boards", but each participant had experienced varying degrees of support from their administrative team.

Most interviewees spoke about their philosophical approach to teaching a child with disabilities as being no different to teaching any child, and referred to needing to demonstrate traits of tolerance, patience, flexibility and nurturing in their teaching styles.

All acknowledged that teaching a child with disabilities was a learning process and that they had learnt from the experience. Four out of five of the interview participants said they would willingly tackle inclusive experiences in the future, using their acquired knowledge to develop a "plan of attack" and confidently seek further information. The other participant had concerns that support and resource requirements would need to be met, as these impacted on the success of the inclusive experience. These findings, and those of the surveys will be further discussed in the next chapter. They are briefly outlined in Table 17 (see Appendix 8), under common themes arising from the study's findings.

CHAPTER SIX: DISCUSSION

The aim of this study was to investigate early childhood teachers' knowledge of children with disabilities and the teaching of children with disabilities. Surveys and interviews were used in an attempt to describe indepth the participants' knowledge. The study also attempted to identify where participants' knowledge came from, what knowledge early childhood teachers valued and what knowledge was common in teachers' understandings of children with disabilities and the teaching of children with disabilities.

This study's findings indicated that teachers only sought knowledge about children with disabilities, when faced with having to teach a child with disabilities. Prior to the experience of having to teach a child with disability, teachers considered information about disabilities and the teaching of children with disabilities to be irrelevant and unnecessary to their daily teaching practices. Teachers perceived inclusion to be an additional educational change thrust upon them that added to their existing heavy workload, and were not inclined to pursue information unless they saw it had immediate benefits to their teaching. Busy lifestyles, stress, time constraints and the demands of children they were currently teaching also limited teachers' propensity to access information in this field these findings support those of Westwood (1997).

Teachers' knowledge of children with disabilities was derived on a "need to know" basis. Teachers only accessed information in order for them to survive the challenge of having to cater for a child with disabilities in their class. Teachers needed this knowledge to understand what they were faced with and what role they were expected to play in including the child in their classroom. Knowledge of children with disabilities enabled teachers to organize, support and plan for meeting the children's needs in inclusive settings. The study's participants indicated that this knowledge was essential for successful inclusion to occur.

This chapter discusses the study's findings under the following themes, and takes into consideration the participants' shared understandings and supporting research literature- sources of knowledge; forms of common knowledge; attitudes, values, expectations and, support and collaboration. Changes to teaching practices are also described, as well as the impact of the inclusion experience on those involved in the inclusion process.

Sources of Knowledge

This study's findings indicated that early childhood teachers considered it necessary to seek knowledge and information in order to successfully include the child with disabilities. The value of sources of knowledge varied according to what was most accessible and practical to teachers' particular inclusive situation.

Early childhood teachers valued their colleagues as a valid source of knowledge that was practical and easy to access. Teachers perceived they could share information and "bounce ideas off each other." Participants of the study may also have considered their peers to have undergone similar experiences and have an empathy with their current situation. Fellow teachers could be considered to be on the same professional level as themselves, whereas "the wisdom of outside experts" (Smyth, 1999, p.103), removed from the daily practicalities of teaching, was not considered to be as relevant to their particular inclusive situations.

Although parents of a child with disabilities are regarded as a critical part of the inclusive process (Cook, Tessier & Klein, 1996), they appear to be under-acknowledged by teachers as an official source of knowledge. When asked to state specific sources of knowledge few participants nominated parents as a valid source of knowledge, yet in later sections of the survey (see Appendix 1) most participants indicated that talking to parents to elicit information about their child and to seek their support was important. However, one survey participant had stated she would "find out about medical problems from someone other than the parents for an objective medical report & assessment" (P9), indicating that she did not acknowledge parents as an official, or perhaps unbiased, source of knowledge. In contrast to this, all interview participants indicated they consulted with the parents of a child with disabilities on a regular basis about the child's day-to-day performance and any related health issues. The type of knowledge sought from parents was predominantly information regarding daily routines and practical knowledge related to meeting the child's immediate needs. Teachers may perceive this kind of information, though relevant to their daily teaching practices, to be changeable and unpredictable, unlike official and factual knowledge. Official knowledge, such as the child's medical diagnosis and pedagogical content knowledge (Grossman, 1990), was sought elsewhere. In undervaluing parents and their knowledge base, some teachers may precipitate withdrawal of parental support, support that participants of this study indicated they relied on. In not valuing parental knowledge teachers also increase the likelihood of making avoidable misjudgements in the inclusive process.

Specialist support agencies, such as the Cerebral Palsy Association, were considered important sources of information by over half the participants. Special education teachers from the Centre for Inclusive Schooling and Educational Support Centres, employed by EDWA, were also seen to offer valid advice and professional development for teachers of a child with disabilities in general education settings. These sources were valued By just under half of the participants interviewed. Hilda found the teacher from the Centre for Inclusive Schooling was "fabulous, she sort of put it into perspective", and Chris considered the source to be "very useful." On the other hand, Cath used the advice given but adapted it as she saw fit and Ann found her contact with these sources to be of little value to classroom practices and received too late.

It appears that the value of information and the source of knowledge are related to how the teacher can apply it to the particular situation. What might be considered useful for one teacher may be regarded as impractical by another.

Here, teachers' personal practical knowledge, "that body of convictions and meanings... arisen from experience... and expressed in a person's practices" (Clandinin & Connelly, 1995, p.5) impacts on teachers' valuation of knowledge and sources of knowledge.

For the teachers in this study, training was not regarded as a primary source of knowledge. The majority of survey participants had not received training in special education (Table 1) and none of the interview participants referred to their training as contributing to their knowledge of children with disabilities. One of the few participants who had received training, having majored in special education, said the information she received in training had not been relevant to her general classroom teaching. She also attributed a time lapse between learning and using information to lessening its value.

It is a concern that most of the participants did not consider their teacher training has prepared them for the practice of inclusion. As the majority of participants had been teaching for over 14 years (see Table 1, Appendix 1), it is hoped that teacher-training institutions have addressed this issue. However, it appears this is not the case as van Kraayenoord et al.'s (2000) study found discrepancies still exist between Australian teacher education institutions as to whether, or not, they provide compulsory training in special education.

Interview data indicated that early-life experiences contributed to teachers' understanding of people with disabilities. Three out of the five interview participants discussed how their early life experiences influenced their perceptions of people with disabilities. Comments indicated that these experiences had lead to a deeper understanding of potential for development of independence and achievement. Chris perceived people with disabilities as "human," Ann considered they were able to achieve levels of independence and Edna saw people with disabilities as still having the ability to achieve, or learn. Prior experiences may be considered a source of knowledge as they lead teachers to developing perceptions that are then applied to their practical classroom teaching (Smyth, 1987; Eraut, 1995).

An interesting finding was the lack of consideration given by all participants to written sources of knowledge such as books and journals and accessing the Internet. When questioned about using reference materials one interviewee, Ann, found talking to be a better option than reading, commenting, "I haven't the time, to be quite honest." Given the complex nature of disabilities and the wealth of information available in written form, lack of use of this source is a concern. The role of case coordinators also received little attention from participants of the study. A case coordinator, a person appointed to be in charge of the child's records, could act as a facilitator of knowledge. Only one survey participant (P14) referred to accessing the case coordinator and 3 of the interview participants referred to case coordinators in their interviews, but not as a source of knowledge. Ann indicated there was a case coordinator at her school, Edna said the school was in the process of appointing one and Cath acted as a self-appointed case coordinator, developing a personal file of information to constantly refer to, and eventually pass on to the next teacher. It appears that the position of case coordinator could receive greater recognition and be better used within the process of inclusion. Case coordinators could play a pivotal role in accessing and distributing information to teachers. However, currently this source of knowledge is either not in existence, or underdeveloped.

It is apparent that a range of sources of knowledge are valued by early childhood teachers, based on their accessibility, practicality and perceived contribution to successful inclusive practices.

Forms of Common Knowledge

Participants of the study held shared understandings in regards to what knowledge they considered was necessary for teachers to know in order to include a child with disabilities into their classrooms. How they accessed and used this knowledge varied according to their own existing teaching practices, their professional landscape and their personal belief system. Teachers' understanding of pertinent terminology was also considered to impact on their attitudes, self-efficacy and how they approached teaching a child with disabilities in general education settings.

Knowledge of the Disability and of the Child

This study's findings indicated that knowledge about a particular disability and how it affects a child is a critical part of successful inclusive practice. The forms it takes vary according to what participants consider to be useful to their teaching practices and their understanding of the child, but it is, as Cath stated, "knowing the child" that leads to successful inclusive practice. Teachers acknowledged they sought two main types of knowledge about children with disabilities when faced with teaching a child with disabilities. The first form of knowledge was knowledge about the disability a child had. The second form was specific knowledge about the child and how the disability affected that particular child and his/her level of performance and learning potential. Participants of the survey specifically sought to access medical reports, therapist and psychological reports, information about the disability and information about the child's abilities and needs. Little mention was made of the child's academic history, successful teaching strategies, support agencies, family background, and behavioural strategies.

It appears that teachers perceive knowledge about the child and the child's disability is an important basis from which to develop their planning and teaching, more so than information on what had been done by the child in the past. Some teachers may have regarded past teaching practices as irrelevant to their particular situation and did not value the efforts made by past teachers. Other teachers may have felt they needed some background information on a child with disabilities, but then relied on their own expertise in planning and teaching strategies to successfully include the child in the classroom. As one interview participant, Hilda stated, "Get a starting point, as initially you're floundering around." This notion relates to teachers' self-efficacy (Buell, et al., 1999), where knowledge and belief in ability to do a task influences the teacher's attitude and approach to the practice of inclusion. Teachers may feel they have the ability to teach a child with disabilities, but need to know "what to teach," rather than "how to teach."

Participants in the interviews were more concerned with finding out about the child than knowing about a particular disability that the child had. They did not refer to accessing medical or academic reports, but approached several sources of knowledge to seek information on how the disability directly affected the child, the child's learning styles, the child's level of independence and "where the child is coming from" (Cath). When questioned about a particular disability the interview participants only provided a brief outline of the condition but were able to list several traits specific to how the child they had taught was affected. They were also able to speak about how the disabilities impinged on their teaching of the particular child and the day-to-day

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functioning of the child. This substantiates their belief that it is important to "know the child."

Knowledge of a child's disability contributed to teachers developing an initial "awareness" of what was involved in having a child with disabilities in their classroom. This knowledge provided teachers with a general picture of the child in comparison to other children. Though helpful in understanding why the child behaved a certain way or was physically different to other children, this knowledge would not have been particularly useful in planning and teaching the child.

It is "knowing the child" that enabled teachers to develop strategies to meet the child's needs. Knowing the child's specific abilities, learning and motivational preferences, communication skills, mobility and level of independence, behavioural traits and daily routines was more beneficial for planning and teaching than a broad outline of characteristics. "Knowing the child" also assisted teachers to move away from focussing on disabilities to emphasising abilities, a more positive approach towards teaching, and inclusion. Clearly, "knowing the child" was a key component of inclusive practice.

Knowledge of Definitions

Child with Disabilities

Teachers' understanding of a "child with disabilities" appears to be related to their visual perceptions of the child. Participants of the study based their interpretations of the term on the child's appearance and behaviour, through comparing the child to other "normal' children. Observations were made of how the child functioned in his/her environment, relating understanding of "disability" to the child's level of independence. Most participants saw that such children needed assistance to cope in general education settings.

In defining a "child with disabilities" the most common explanation given was to regard the child as either being outside the "norm", or requiring support due to the inability to cope with daily functions. Physical and intellectual disabilities were identified most often, with little reference made to

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emotional, behavioural or learning disabilities. When asked for examples of children with disabilities, interview participants mentioned cerebral palsy, autism and hearing impairment. One participant, Cath, also included English-as-a-second-language (ESL), based on the child's inability to function independently in the classroom.

Distinctions were drawn between children with undiagnosed disabilities and those with diagnosed disabilities. Children with diagnosed disabilities, verified by the medical profession or specialist agencies, were considered to have documented causes and recognised traits associated with specific disabilities. However, children without diagnosed disabilities also differed to "normal" children and were unable to function independently in the class, but did not receive the recognition and support they required. In teachers' experiences, this meant that teachers took on the additional responsibility of being involved in the process of early identification, referring and obtaining a diagnosis of the child's disabilities. This process was often lengthy and time consuming and involved negotiating with several interested parties, including the school administration, district psychologist and parents. Though this added to teachers' already heavy workload, official diagnosis of disabilities was considered necessary to enable teachers to access support, a critical component of successful inclusive practice.

The distinction between children with diagnosed disabilities and those with undiagnosed disabilities raises the issue of, at what point do teachers differentiate between a child as having abilities, or as having disabilities? It could be argued that teachers can only accurately differentiate between children's levels of ability through intimate familiarity with theoretical knowledge of developmental and cognitive psychology, and expertise acquired through practice. As Chris stated, "A teacher can indicate whether a child fits within a normal range, or not. But I don't think we have the skills to diagnose specifics." In this study teachers did not indicate that theoretical knowledge of child development and cognitive psychology was needed for understanding and teaching children with disabilities.

Inclusion

Inclusion was described primarily as the placement of a child with disabilities in general education, or mainstream classes. Whilst the words "include" and "integrate" were often used to describe inclusion, the notion of adapting learning programmes or planning to meet the child's needs was not associated with the concept of inclusion by survey participants. Similar discrepancies in understanding of the term "inclusion" were noted by Odom (2000), van Kraayenoord, et al. (2000) and Fuchs and Fuchs (1998).

In contrast, interview data indicated that participants referred to including the child in a normal setting and adapting the normal practices, or programmes. Either this response was due to them having time for reflection and being more able to verbalise their understanding of the term, or they were more familiar with the practice of inclusion.

If teachers are to be empowered and feel part of decision-making in the inclusive process, then they need to know what "inclusion" means and what role they are expected to play. This study's findings imply that most teachers are not fully aware of what is involved in inclusive practice and of their responsibilities in regards to teaching a child with special needs. It is also disturbing that participants of this study displayed this lack of knowledge when most of the participants had already been involved in inclusive experiences. It could be questioned as to how successful these inclusive experiences were, and what criteria was used to judge the success of each inclusive experience.

Specific Disability

The interview participants were asked to define the disability of a child they had taught, and describe how this condition affected the child and their teaching of the child. Each participant was able to confidently give a general description of a disability, being more descriptive in how it affected the child, listing at least 6 traits that impacted on their teaching of the child

The findings indicated that exposure to a child with disabilities increased participants' knowledge of the disability and how it could affect an individual's performance and ability to cope with daily routines. This implies that experience leads to teachers developing a better understanding of theories and terminology, a notion supported by educational researchers such as Connelly & Clandinin (1988; 1995) and Cochran-Smyth & Lytle (1993).

Van Kraayenoord, et al.'s (2000) study of the status of inclusion in Australian schools found similar variations in understanding of definitions and advocated that uniform definitions of "disability" and "inclusion" be circulated in educational circles and supporting agencies. It is a concern that inconsistencies in teachers' understandings of terms may influence teachers' practical application of their knowledge, impacting on the implementation and effectiveness of inclusive practice.

Attitudes, Values and Expectations

People learn and develop values, attitudes and expectations, based on the constructions they make of received information and in relation to their existing knowledge (Borich & Tombari, 1997). This learning process includes making meaning of their own perceptions, past experiences and input from various sources of knowledge. In this way teachers develop values and attitudes about children with disabilities and expectations in regards to their behaviour and performance within general education settings.

Teachers' Attitudes

Whilst participants of the study were generally positive towards including a child with disabilities into their classroom, most set conditions for inclusion to take place. Considerations included adequate support and knowledge, the severity of the child's disability, the teachers' workload and stress factors and provision of appropriate training, findings shared by Forlin (1995), Scruggs and Mastropieri (1996) and Odom (2000).

Teachers' reservations about inclusion appear to be related to limited access to specific information regarding a child with disabilities, combined with a lack of positive prior knowledge (Elbaz, 1983; Shulman, 1990), including negative or few early life experiences involving people with disabilities. Positive attitudes towards inclusion were expressed by 3 interview participants, Edna, Cath and Chris, who made comments that they considered inclusion was important and necessary. They saw it as part of their job, holding benefits for both for the child with disabilities and for the other children in the classroom. All 3 teachers acknowledged they had positive early life experiences with people with disabilities, proactively sought new information and had gained from their experiences of teaching children with disabilities in general education settings. This indicated that the provision of information enabled these teachers to build on their prior knowledge to develop positive attitudes towards inclusive teaching.

Teachers' Expectations

Although few survey participants referred to identifying parents' expectations as part of knowledge needed by teachers to include a child with disabilities in their classroom, the interview participants spoke of their experiences in collaborating with parents. They identified parents' expectations as wanting their child to be safe, happy, involved and accepted without prejudice, and considered as teachers they shared these expectations. Shared and realistic expectations may lead to an increase in the likelihood of these objectives being met, particularly if the goal is behavioural and can be generalised and reinforced in different settings (Snell, 1993).

Inappropriate expectations made by teachers, particularly in regards to academic achievement, behaviour and social skills contributed to teachers' negative perceptions of their experiences of inclusion, as well as feelings of frustration. Participants in the study alluded to whether, or not, the child with disabilities met their expectations, in regards to non-academic and academic progress. Non-academic achievements, including social skills, participation, developing self-esteem and "being accepted and safe" (P1), were considered to be contributing factors to successful inclusive experiences. Although specific academic skills were not stated, participants referred to the child falling behind (P10) and being unable to work independently (P7), and behavioural and social problems as contributing to unsuccessful inclusive experiences.

Failure to meet expectations appears to be derived from teachers having a poor understanding of the child's condition and potential for learning, which leads to the setting of inappropriate goals. These findings indicated that having realistic expectations of the child with disabilities in inclusive settings, both academic and non-academic, relies on participants "knowing the child" and applying this information to their existing knowledge. Only one interview participant, Ann, referred to developing academic expectations of the child and the failure of the child to meet them. She saw this resulted from her being provided with little information about the child, as well as lack of assistance and support. Ann also relied on her belief that people with disabilities could be independent, developed from early life experiences. She indicated frustration when the child did not appear to want to be independent. Ann did acknowledge, however, that she had learnt from this experience and now felt better prepared to include a child with disabilities into her classroom.

Teachers' expectations and attitudes impacted on whether they considered their experiences in teaching children with disabilities to be successful or unsuccessful. Successful experiences tended to result from teachers and parents sharing non-academic expectations, whilst unsuccessful experiences could be attributed to having too high an expectation of academic performance. Knowing what is appropriate to expect of a child with disabilities, and knowing the child well appears, once again, to be a significant factor of successful inclusion.

Teachers' Personal Belief System

Teachers develop an educational philosophy, based on what they consider to be relevant and important to teaching and what they hope to impart to students under their care. Their personal belief system is reflected in their teaching style, daily practices and prioritising of educational goals.

Participants of the survey demonstrated that they applied their existing educational philosophies regarding general education to inclusive situations, rather than developing a personal belief system specifically related to teaching children with disabilities. Comments were made in regards to maintaining a child's self-esteem, the need for a child to achieve a level of success, and "Treating the child as I treated all the other children" (P4). Interview participants made similar comments that alluded to all children, regardless of ability, including "valuing the child" (Edna), "all children have specific preferences and learning styles" (Chris), and "treating the child as a being, an individual, and getting past the disability" (Cath). Words like "patience", "tolerance" and "understanding" were also used to describe several teachers' belief in an appropriate approach to inclusive teaching. These teachers developed expectations of the child based on the child's ability to participate in the learning environment and develop affective skills and social skills. They perceived their experiences of inclusion were successful if the child met these expectations. For some teachers the affective and social domains of learning were equally, if not more, important than intellectual domains. In demonstrating their priorities teachers were indicating that having an affective, or caring, disposition contributed to the success of inclusive experiences.

The need for teachers to demonstrate a caring disposition in inclusive settings was further illustrated in comments made by one interview participant, Cath, who sought to provide a caring supportive environment so that the child with disabilities would be safe and accepted. Cath found that although she had become disillusioned with placement of children after Pre-primary education, she had learnt to be more tolerant of children with disabilities, "accepting them for what they are, not what you think they should be." Her educational philosophy was to foster a sense of community: belonging and involvement, concepts related to a caring education (Noddings, 1992). Cath's comments implied that inclusion requires teachers to act with social and civic responsibility and consider the act of inclusion on a broader scale, with benefits for both the community and the child.

In contrast, other teachers commented on "the need to look after other children too" (P19) and effectively utilise their time, rather than focussing only on the child with disabilities. When faced with the dilemma of "promoting the common good and meeting individual needs without infringing the basic rights of others" (Curriculum Council, 1998, p.325), these teachers seemed to value and be committed to promoting the common good. That is, teachers prioritised their social responsibility to the whole group over respect for the individual rights and needs of the child with disabilities. Furthermore, these teachers saw themselves as generalist teachers, not specialist teachers, and were more inclined to teach to the majority rather than to the minority. As generalist teachers they were concerned with whole group management and this impacted on their instructional style, classroom management and expectations of their

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students. This belief influenced the degree to which these teachers planned, modified and developed individual personalised programmes (IEPs and ITPs) for the child with disabilities, limiting the success of their inclusive practice.

This study's findings indicated that teachers adapted their personal belief system to inclusive experiences, using educational philosophies that applied to all children regardless of ability, or disability. Teachers did not actually verbalise beliefs that specifically related to teaching a child with disabilities but indicated what qualities they considered were desirable in a teacher involved in inclusive practice: caring, patience, tolerance and flexibility. These qualities are also considered to be part of exemplary teachers' personal belief systems, and contribute to effective teaching practices (Rosenshine, 1986; Collinson, Killeavey & Stephenson, 1999).

Support and Collaboration

Support is a critical factor to developing teachers' positive attitudes and expectations and self-efficacy, leading to successful inclusion. Tied to this is knowing how and where to access support. The realization that inclusion cannot be carried out alone is also an important component of a teachers' knowledge of teaching children with disabilities. At the same time, it is also important for teachers to be aware that whilst they rely on the support of others, they are ultimately personally responsible for successfully including the child with disabilities into their classroom.

Participants of the study stressed the value of support: either through support agencies, parents, education assistants or their teaching colleagues, the other children in the class and the school administration. These findings reflect conclusions drawn by other studies, including Scruggs and Mastropieri (1996), Werts, et al (1996), Westwood (1997) and Vaughn, et al. (1999). Teachers' reliance on various forms of support when teaching a child with disabilities indicated that teachers do not consider they can carry the task out independently. Rather, they perceive it as a shared responsibility and a "collaborative effort", a finding shared by Buell, et.al (1996) and Snyder (1999). The notion of inclusion being a "collaborative effort" was illustrated in the interviews, where all participants referred to accessing support agencies, communicating with parents and having a special-needs teacher aide. One interview participant, Hilda, saw a need to develop a supportive school atmosphere, particularly so that playground problems could be avoided. Edna also spoke about problems experienced in the playground with a deaf child and the need to work as a team to solve issues. Edna was adamant that the experience of teaching a child with disabilities had taught her to value collaborating and sharing of ideas.

Associated with this valuing of support and collaboration, was the awareness that a teacher needs to be proactive and to know where to access forms of support. Whilst participants indicated that a lack of knowledge contributed to negative experiences of inclusion, they did not acknowledge that it was actually their responsibility, under the AECA code of ethics, to access information about the child with disabilities, in order to meet the child's needs (DECS, 1998; Snyder, 1999). The idea of "knowing where to start looking and who to go to" (Edna), became part of the knowledge participants acquired through personally experiencing frustration or failure in their teaching role. As Cath commented "I had no idea where to start...I became more proactive.... Knowing something is better than knowing nothing."

It appears that teachers need to value their sources of knowledge and rely on these sources for support if they are to successfully include a child with disabilities into their classroom. This reliance on support requires teachers to make changes to their existing teaching practices and beliefs. In order to collaborate with others teachers must be prepared to develop their skills in communication and the ability to work and share with others. Successful inclusion relies on the teacher not only accessing support but also effectively planning and utilizing this support for the benefit of the child with disabilities.

Changes to Teaching Practices

Incorporated in a teachers' knowledge is the awareness that changes need to be made to meet the needs of the child. Part of the survey and subsequent interviews investigated what teachers need to know and what changes they would make to include a child with disabilities into their classroom. The following sections look at what changes the participants of this study considered were necessary for teaching a child with disabilities in an early childhood general education setting.

Organization of Time

Part of a teacher's role is to plan in advance what they intend to teach and to organise their time so that they can adequately meet the needs of all the children in the classroom.

Although interview participants considered time to be an important factor in their experiences of inclusion, few teachers made mention of time in their responses to the survey. Ann was concerned with being "fair to all children" and found she had to plan to "share time out" so that other children were not disadvantaged by her having to spend time with the child with disabilities. Edna had to plan for time to accommodate visiting teachers who worked with the child, otherwise the child missed out on important activities and interaction with the class. Chris planned for short bursts of successful on-task time, incorporated with having a "change of scenery," rather than longer unproductive lessons. Cath and Hilda learnt to adjust the time of some lessons as they found a child with disabilities took longer to complete tasks.

Teachers in the study found that the organization of time developed through the process of teaching a child with disabilities, rather than from received information. Teachers learnt "on the job" what the child could do and how long it would take the child to complete tasks. Time only became a part of their planning after they had learnt what was involved in teaching a child with disabilities in their classroom. Participants of the interviews did indicate that they learnt from early inclusive experiences and had a greater awareness of time factors in other, and ongoing, inclusive experiences.

These findings are supportive of Scruggs and Mastropieri's (1996) research synthesis, where most studies indicated teachers require additional time for inclusive activities to take place. It appears that time is a factor in successful inclusive practice and teachers need to be aware of this when teaching a child with disabilities in a normal classroom setting.

<u>Planning</u>

Teachers are required to plan in order to access appropriate resources, allocate sufficient time to learning tasks and ensure they are meeting the needs of all their students. Planning enables teachers to develop short-term and longterm objectives and organize themselves to implement strategies that will strive to achieve these goals. Planning requires an input of knowledge and application of expertise to ensure all students develop their learning potential. Odom (2000) stresses that planning is critical for effective inclusion to take place.

The participants of the survey gave little indication of this aspect of their teaching in relation to inclusive practice. Knowledge of a disability and the child's condition was considered critical to successful inclusion, yet less than half the survey participants mentioned they needed to plan to use this knowledge in their teaching. It is also a concern that although Individualised Education Programmes (IEPs) are considered an accepted practice for meeting the needs of the students-at-risk (Snell, 1993; Lerner, 1997; Cook, et al., 1996), only two of the survey's participants mentioned this form of planning. This finding implies that IEPs may not be widely used, or that their use is not part of early childhood teachers' knowledge and practice.

Interview participants indicated they understood inclusion to mean planning and adapting the programme to meet the child's needs. In recounting their experiences they referred to "planning" in general terms and related incidents where they had had to plan, often as a result of the experience of teaching the child with disabilities and experiencing failure. This included modifying the amount of work a child with disabilities was expected to complete and writing work out on paper when one participant discovered the child couldn't see the blackboard.

Interview participants also indicated they tried to plan ahead. Only Hilda specifically said she developed an IEP for each child with disabilities. Hilda also referred to the education assistants' involvement in planning, through both incidental discussions and a communication book. Edna held weekly "staff meetings" with her education assistants to inform them of what was happening in the following week and to seek their input. She alluded to not only planning ahead but also being flexible. Cath developed a "plan of action and attack", using knowledge gained from the child's mother and the Cerebral Palsy Association, in relation to ensuring the child was safe in the learning environment. Chris said she used background knowledge of a child with autism to plan, limiting situations where the child would fail and display inappropriate behaviours.

The interview findings indicated that participants understood that planning is a critical part of teachers' knowledge for teaching a child with disabilities, yet this was not reflected in the survey's findings. Emphasis needs to be made of the knowledge, that, in order to meet a child's needs teachers must plan ahead to make this happen. Use of IEPs for children with disabilities is commonplace overseas (Buell, et al., 1999; Odom, 2000), yet appear to be underused by participants of this study. It is all very well accessing information but if it isn't utilized then the knowledge is not valued.

Learning Environment

Participants of the study were aware that to include a child with disabilities often involved changes to the learning environment, including physical changes or special resources and equipment. Participants also considered that the required changes would depend on the nature of the disability. These changes included requiring additional space, changing seating and accessibility around the room and providing large, or modified equipment.

In the interviews participants spoke about particular incidences where they had learnt to make changes to the learning environment. These changes included seating arrangements and access around the room, access to toilets, and ramps made to doorways. Chris and Edna also considered noise levels as a distraction to a hearing-impaired child and children with autism.

These findings indicated most participants were aware that physical changes to learning environment are part of teaching a child with disabilities, the changes being dependant on the child's particular needs. Perhaps these changes are the easiest to meet, as they are the most visually explicit and feasible to carry out. It might also be that physical changes to the learning environment are not necessarily the responsibility of the teacher. The school administration is usually involved in allocating funds and arranging structural changes to the school grounds. Physical changes to the learning environment could be considered a shared responsibility, within the school community.

Resources

Many of the study's participants indicated that resources were needed for successful inclusion to take place. These included computers and visual aids and large equipment for mobility and safety. One participant (P12) specifically mentioned that a teacher needed to have access to funding for necessary equipment. Teachers who had taught children with cerebral palsy also indicated that the child required specialised equipment such as star typewriters and modified desks to participate in class activities.

Participants found they needed to access support agencies and communicate with parents in order to ensure the child was suitably equipped to be included in a general education setting. Teachers also needed to access sources of knowledge to gain information on how to use and maintain resources specific to the child they were teaching. This practical knowledge only developed from the experience of having taught a particular child with disabilities in their classroom.

Teachers perceive that resources are a part of successful inclusion when they can assist the child to participate in class activities and to develop the child's level of independence. This appears to be particularly relevant to teaching children with physical disabilities.

Teaching Practices

Participants of the study indicated that they needed to know teaching strategies that would assist in the inclusion of a child with disabilities. This included routines to be developed, strategies for successful learning, what has worked for other teachers and strategies for individual, small group and whole class work and behavioural management strategies. No specific teaching techniques, such as task analysis, precision teaching or peer tutoring (Snell, 1993; Lerner, 1997) were mentioned. In the interviews, apart from use of "trial and error" as a teaching strategy, participants didn't allude to specific teaching techniques. Many of the strategies they spoke about only arose from having to teach a child with disabilities and were not deliberate, pre-planned approaches. Most common strategies included modifying the amount of work expected from the child, developing routines and sitting one-to-one with child in order to ensure tasks were attempted. Other teaching strategies utilised by the teachers included reducing the amount of group work, specific placement of the child in floor and seating activities and changing the structure of lessons so they were comprised of short structured on-task sessions followed by intervals of play.

Teachers modified existing practices rather than adopted specialised practices known to be effective for teaching children with special needs. Similar findings were reported by Schumm & Vaughn (1998) in their research into instruction of students with learning disabilities. Teachers in this study appeared to be concerned with teaching to the "whole," rather than to the individual. Examples of this approach to teaching included using the Cantor Approach for discipline, increasing structure and repetition in lessons, minimising class excursions and offering all students a choice in the form of learning task they completed: pictorial, concrete or written. Although the child with disabilities was encouraged to use resources, such as typewriters, abacus and cue cards, no mention was made of specialised direct instruction being given by the teacher.

This practice of modifying existing practices is contradictory to recommendations made by Odom (2000), where the use of specialized, naturalistic instruction is considered necessary to successful inclusion. Odom (2000) also suggests that teachers apply a constructivist approach to their teaching to actively engage the child in meaningful activities. As years of research have gone into developing, testing and refining specialized techniques suited to meeting the needs of children with disabilities (Snell, 1993; Cook, et al, 1996), it is important that teachers use them. Teachers need to be aware that strategies that work for "normal" students may not be adequate when applied to teaching a child with special needs. Faced with this understanding, teachers need to acknowledge their own inadequacies, and access appropriate professional development to improve their teaching practices.

Participants did express the view that they valued the experience of their support staff in carrying out their instructions in the classroom, in regards to teaching the child with disabilities. Teachers relied on education assistants to ensure the child followed instructions given to the class and it was often left to the discretion of the assistant to help the child to complete activities or withdraw the child from the class if they were experiencing behavioural problems. Some teachers used education assistants for the benefit of the whole class rather than just the child with disabilities, so that all children benefited and the child with disabilities learnt to develop a level of independence. Van Kraayenoord et al.'s (2000) study also noted these practices, expressing concern that children with disabilities are often instructed or "taught" by untrained personnel, rather than the teacher, yet it is the teacher's responsibility to ensure the child's needs are being met. The findings of this study indicate that teachers consider the responsibility should be shared, particularly if they feel their self-efficacy is lacking and that the child can benefit more from working closely with the education assistant rather than by themselves.

This study indicates that modifying existing teaching strategies is part of the participants' knowledge of teaching children with disabilities. It is a concern that some participants considered it important to find out about different teaching strategies, including what worked for other teachers, but did not indicate that it was necessary for them to adopt new strategies and approaches in their teaching practices. Rather, through informally adapting their current teaching practices participants of the study perceived they were meeting the child's needs.

It is apparent that for teachers to adopt new and specialised teaching strategies they require some form of professional development in this area. They also need to learn how to plan to incorporate these strategies in their classroom teaching, rather than relying on education assistants to bear the responsibility of instruction. As Chris suggested, she found it beneficial for her and the education assistant to go to PD together so they could learn and work together for the mutual benefit of the child.

Impact on People Involved

People working closely together may inadvertently influence eachothers' behaviours and attitudes. The inclusion of a child with disabilities into a general education setting was perceived by participants of this study to have both positive and negative effects on those involved in the experience of inclusion. Comments were made by the participants relating to inclusion's impact on the child with disabilities, the other children in the classroom, parents of the child with disabilities, the support aides and the teacher.

Most participants of the study believed that inclusion allowed children with disabilities to achieve both academically and non-academically, developing their self-esteem and social participation. Interview participants related incidents where the child made gains, socially and academically, and was happy and involved as part of the school community. It appeared that these teachers had developed what they considered to be realistic expectations in regards to the goals of inclusion. In their experiences of inclusion, these teachers felt their expectations had been achieved. In unsuccessful inclusive experiences teachers considered the child with disabilities made poor academic progress, or became frustrated and displayed behavioural problems. These negative developments could have resulted from these teachers receiving inadequate information and developing unrealistic expectations. It may also be that these teachers were unable to fully understand the child with disabilities or develop a working relationship with the child, and as a result made inappropriate attempts to meet the child's needs.

Other children in the class also benefited from the experience of inclusion. Participants of the study considered these children learnt to be tolerant, supportive and to be better people. Some children developed protective, caring and sharing qualities. Teachers considered some children in the class became aware of differences, leading them to be sympathetic, ignoring behaviours associated with the disability and accepting the child as a person. These qualities were in keeping with the goals of a caring education, demonstrating that the experience of inclusion taught children to respect people with disabilities as individuals (Noddings, 1992; Sims, 1999). In contrast, several teachers also recounted negative experiences where other children in the class bullied or ostracised the child with disabilities. No explanations were given as to what measures these teachers took to overcome these problems. It would be hoped that teachers when faced with inappropriate behaviours take action to change the behaviours, becoming responsible for not only children's academic growth but also their social and emotional growth. Some teachers expressed concerns that other class members might "miss out," finding it difficult to understand why one child should receive more attention from the teacher or the aide. Perhaps in practising inclusion a concerted effort needs to be made to involve other class members in the process so they become more aware and tolerant of people's individual differences. Once again, this applies to the concept of a caring, global education (Noddings, 1992).

Few participants commented on how inclusion impacted on the parents of a child with disabilities. They did, however, consider it important to communicate with the child's parents, seeking support and information. Cath perceived inclusion enabled the parents of a child with disabilities to feel involved and not isolated, part of the school community. Hilda spoke about developing an empathy with the parents of a disabled child, where familiarity with the child and knowledge of the child's condition made her realise what the family were faced with. She also found she was able to share strategies she used in teaching a child with autism with the child's mother to enable the mother to develop a morning routine with the child. These comments indicated that some teachers considered part of the experience of inclusion was to provide support for the family, not just the child. They built relationships with each other, relying on communication and mutual trust and support.

Little mention was also made of the impact of inclusion on the education assistants, also known as special-needs teacher aides or teacher assistants. Most of the teachers indicated that their education assistants had either previous experience in dealing with children with disabilities or undertook training when they commenced their support role. Edna found working as a team helped to "develop their potential" and Chris mentioned that having an education assistant, regardless of training, meant they could learn together. There were several indirect references to the quality of education assistants, when teachers related their inclusive experiences. Most teachers valued the education assistants' input, and enjoyed working as a team, but didn't comment on whether the special-needs education assistants reciprocated their feelings.

Many participants of the study indicated they found that successful experiences of inclusion had given them personal satisfaction. Benefits included feeling they (the teachers) had somehow made a difference, enjoying the experience of collaboration and becoming more knowledgeable in the area of children with disabilities and the teaching of children with disabilities. Some teachers also found they had gained confidence and became proactive, seeking information and planning ahead. Even though several teachers had negative experiences of inclusion they acknowledged that they had learnt from the experience and indicated they were receptive to future inclusive experiences provided certain conditions were met, such as adequate support, training and information. As with any new task people are often initially overwhelmed by the experience. For teachers it may appear hard to admit that they have made mistakes in past inclusive experiences, but having learnt from their experiences most of the teachers in the study appeared to be better prepared for future experiences of inclusion, knowing what is involved and what is necessary for the experience to succeed.

The findings of this study indicate that inclusion does impact, not only on the child with disabilities, but also with those involved in the process of inclusion. As Hilda stated, "It's a huge learning curve." Awareness that inclusion does affect all those involved in the process may be knowledge that is worth knowing, as it may lead teachers to pre-empting potential problems associated with the strategy of inclusion. Once, again, this relies on the teacher developing sensitivity to the situation, and planning ahead.

Summary

In this study the early childhood teachers' knowledge of children with disabilities and the teaching of children with disabilities primarily developed through having to teach such children. The experience of inclusion resulted in participants accessing information sources that they otherwise wouldn't find relevant to their classroom teaching practices. Most of the knowledge held by the participants appeared to be of a practical nature, where general pedagogical knowledge and knowledge of context were considered to be more relevant than subject matter knowledge or pedagogical content knowledge (Grossman, 1990).

Participants were concerned with "knowing the child," and the child's disability, and how it related to their teaching. Knowledge attributed to successful inclusive practice included knowing what knowledge sources to access and how to access forms of support and resources, collaborating with those involved in the inclusive process, utilizing methods of planning and time management, and making adaptations to meet the child's needs. Positive attitudes and caring dispositions were also seen to impact on successful inclusive practice.

How teachers used this knowledge varied according to the professional landscape the participants found themselves in (Clandinin & Connelly, 1995), and their level of self-efficacy (Beull, et.al, 1999). Time, support, resources, planning, other children in the class and belief in one's abilities all influenced participants' inclusive practices. Ultimately these considerations impacted on the success of inclusive experiences for the child and those involved in the inclusive process.

CHAPTER SEVEN: CONCLUSION

This chapter draws conclusions from the findings and considers the limitations of this study. Recommendations are made in regards to improving early childhood teachers' knowledge of children with disabilities and inclusive practices and a concluding statement is made.

Significant Understandings

The practice of integrating children with disabilities into mainstream education is becoming more commonplace in Western Australian schools, particularly in the early years of education, where general education settings are increasingly viewed as appropriate locations for meeting the needs of students with disabilities (Williams, 1996; School Education Act, 1999). Teachers are expected to use their knowledge and expertise to successfully include such children into the education system, adapting their practices to meet these children's needs.

This study investigated early childhood teachers' knowledge of both children with disabilities and the teaching of children with disabilities in order to gain insights into the forms of knowledge teachers possess. Shared understandings arose in the study to reveal what is considered important by early childhood teachers to teaching children with disabilities in inclusive settings. Most of the participants' knowledge in the study was derived from the experience of having taught children with disabilities in general education classrooms.

Accessing Knowledge: Being Proactive

Part of the participants' knowledge was to know what sources of information were available and how to access them. Participants of the survey only accessed a limited range of sources, relying on support agencies for information and colleagues and parents for practical advice. Other sources, such as their teacher training, written reference materials and the Internet, were grossly under-utilised, which questions their immediacy and accessibility to the teaching profession. Related to this limited accessing of information, was the under-use, or non-existence of case coordinators, who could act as monitors to administer and assist in the access of services. Accessing case coordinators' information could prove time saving for teachers, eliminating duplicity and the possibility of vital sources of knowledge being overlooked. For children with disabilities it makes sense to have a case coordinator who conducts case conferences, of which the teacher is a contributing member. The value of this source of knowledge requires further investigation and clarification.

Knowing the Child: Vital Information

"Knowing the child" appears to be a vital key to successful inclusion: understanding why the child is like he/she is, what has happened to the child previously and what the child may be currently capable of doing and may potentially achieve. Participants of this study indicated that it is through "knowing the child" that teachers can plan and strive to meet the child's particular needs.

Early childhood teachers' practice of observing children in their learning environment to determine their level of development often proves to be inadequate in the case of a child with disabilities. Although teachers' observations can detect obvious physical and behavioural problems, a child's emotional, social, cognitive and medical concerns may not be visually apparent. A child with disabilities is also likely to have particular daily routines and require support to function within his/her environment. Often, by the time the child has commenced school, several professional bodies such as the Disabilities Service and the Cerebral Palsy Association, are already involved in the child's development. Learning programs may already have been developed by appropriate therapists to meet the child's specific needs. This means that teachers have a responsibility to access sources of information to identify the child's particular abilities and needs, the child's current routines and learning program, and required level of support.

"Knowing the child" enabled teachers in this study to plan to include the child, and to make appropriate changes to their teaching practices. Planned changes included modifying the learning environment, accessing resources and support, accessing appropriate PD and training, and making time allowances and structural changes to learning activities. "Knowing the child" also enabled teachers to develop realistic expectations of the child, improving the likelihood of successful performance and participation in the learning environment. What was interesting however was that "knowing the child" did not necessarily result in the teacher assuming full responsibility for developing individualised education programs (IEPs) or in planning for opportunities to teach the child on a one-to-one basis. Teachers may require additional knowledge, in particular knowledge of their responsibilities towards a child with disabilities, in order to expand on their applying "knowing the child" to planning and instruction. This may lead to improvements in the quality of inclusive practice.

Valuing the Child: A Caring Disposition

Related to "knowing the child" is the development of empathy for the child, and the child's family. It appeared that those participants who expressed positive statements towards inclusion had a propensity, or disposition (Wenzlaff, 1998), towards working with such children. Words such as "caring," "tolerance," "flexibility" and "awareness" were used by these participants to portray the qualities required of a teacher of a child with disabilities. Qualities such as these are considered to be more than teachers' attitudes towards inclusion, as they encompass both a "pattern of behaviour exhibited frequently ... and a habit of mind" (Wenzlaff, 1998, p.567). These features are also considered to be attributes of exemplary teachers, where they exhibit care and respect for students, as well as demonstrate an ethic of care (Collinson, et al., 1999).

"Caring teachers purposefully know their students well and establish relationships with them" (Collinson, et al., 1999, p.350). Although participants in this study considered "knowing the child" to be important most teachers gave little indication that they established relationships with a child with disabilities in their care. The child's disability seemed to be more of a "hurdle to overcome" than teachers considering the child as an individual and respecting him/her for what he/she was. Time constraints, demands by other children in the class and the child's level of communication and social skills may have hindered opportunities for a relationship to develop, as would the child with disabilities being placed in the care of the support aide for the majority of the school day. Most teachers in this study found these factors limited their ability to apply personal beliefs of "care and respect for the individual" to all students.

One interview participant did indicate that she attempted to overcome barriers to forming teacher-child relationships. Cath expressed the belief that "You need to get past the disability and look at the child." It is possible that teachers possess caring dispositions towards children with disabilities but are not able to articulate their beliefs, or find they lack opportunities to apply their beliefs to practice, and develop relationships with such children. A closer look at the affective skills and behaviour of teachers in inclusive situations is required in order to determine teachers' dispositions to effectively teach students with disabilities.

Support and Empowerment: Valuing Others

Another key component of participants' knowledge was the valuing of support and collaboration. Most participants of this study realised that successful inclusion relied upon input from several sources, not just the teacher. Teachers needed to develop communication, negotiation and team management skills in order to fully value and utilize the skills of those involved in the inclusion process. Those involved in collaboration for inclusive practice included parents, education assistants, support agencies (including EDWA), colleagues and the school administration.

Closely related to this was the need for participants to feel empowered and involved in decision-making processes regarding the placement of a child with disabilities in their classroom, and the management and care of this child. Some participants felt burdened by additional responsibilities placed upon them, without consultation. According to Forlin (1995) lack of empowerment contributes to teachers negating responsibility for the child, particularly when they lack self-efficacy in regards to inclusive practices. Most participants of this study allowed the education assistant to assume many of the teaching roles related to teaching the child with disabilities. This is a concern, as it is a teacher's responsibility to plan to meet the child's needs, provide appropriate instruction and monitor the child's progress.

Self-Efficacy: A Huge Learning Curve

There appears to be a link between teachers' self-efficacy and successful inclusive experiences, supported in literature by Sims (1999), Buell, et al. (1999) and Forlin (1995). Self-efficacy, a combination of teachers' knowledge and belief in personal ability to apply and implement that knowledge into teaching practices, influences the inclusion of a child with disabilities into general education settings (Buell, et al., 1999). Participants considered lack of knowledge and frustration lead to negative experiences, "trying everything you know, but not finding a solution" (P17). Inadequate existing knowledge impacted on teachers' ability to fulfil their responsibilities towards the child with disabilities. It may be that teachers get to know the child and access all the appropriate sources of knowledge but if teachers do not feel they have the skills to utilize this knowledge then they are unlikely to succeed in inclusion.

Teacher confidence and conceptions of self also appear to be challenged and undermined, affecting teachers' attitudes and dispositions towards working with children with disabilities. This is where support from colleagues and the school administration, in the form of collaboration and professional development may be a critical factor. It is not just the child that requires support, but the teacher as well.

Planning: Meeting Needs and Goals

Planning is an integral part of the teaching process. Although participants considered knowledge about the child, and the disability, as important, it appeared that few fully utilized this knowledge in their planning or made significant changes to their teaching practices. Consideration of time, classroom organization, management of support, the child's learning modes and specialized teaching strategies are all part of the planning process. Most participants in this study did not indicate they used, or had knowledge of, Individualised Education Programmes (IEPs) or Individualised Teaching Programmes (ITPs). These forms of planning are considered necessary for successful inclusion to occur (Odom, 2000).

Whilst teachers strongly indicated that planning was considered essential to successful inclusion, many participants used "trial and error" to teach the child and modified work in a rather "ad hoc" process during their teaching. This indicates a lack of specific planning to meet the child's needs. Interview participants acknowledged that they developed an awareness of the need to plan however there was little evidence this was actually put in practice. Teachers interviewed did indicate they learnt from past mistakes and were more proactive and prepared for new inclusive situations but did not state what form their planning would take.

As planning provides the means for achieving goals and outcomes (Cook, et al, 1996), greater emphasis needs to be made of the development of IEPs and ITPs (Snell, 1993; Lerner, 1997). All teachers should be aware of such teaching practices as they have a responsibility to meet the needs of all their students (DECS, 1998), including "students at risk" and children with disabilities.

Teaching Strategies: Making Adaptations

Odom (2000) specifically advocates the use of individualised and specialized instruction in naturalistic settings to fully include a child with disabilities in a general education setting. Similarly, Cook, et al. (1996) refers to naturalistic and incidental or milieu teaching, where the teacher structures lessons to create a need for the child with disabilities to be involved, using prompts and cues to develop the child's compliance. Instructional strategies of this nature were not mentioned by participants of this study.

Teachers in this study indicated that the approach they took was to modify the workload or make adaptations to whole-class activities, rather than provide specialised instruction. Most relied on the education assistant to supervise the child with disabilities and were not directly involved in instructing the child or ensuring how tasks were completed. Some interview participants did indicate they used generic instructional strategies such as routines and behavioural modification, but these strategies were applied to all class members.

It appears that specialized and individualised instruction is not part of this study's participants' knowledge for teaching children with disabilities in inclusive settings. As such instruction is considered crucial for successful inclusion to take place (Odom, 2000) it is a concern that teachers either lack this knowledge or do not apply this knowledge to inclusive situations in general education settings.

Limitations

As with any human endeavour there is scope for improvement, and the same can be applied to this study. If given additional time and opportunity the study's credibility and reliability could have been improved by increasing the number of participants in both the survey and the interviews. It would have also been desirable to observe the interview participants teaching in their classrooms. This would have reinforced the belief in "what they say is what they do," and clarified any constructions made by the researcher.

As this study was predominantly of a qualitative nature the findings may not be generalized or relevant to other teaching environments. The nature of the methodology used in this study relied on the researcher accurately interpreting participants' comments to build constructions of their knowledge. It is possible that the researcher's existing knowledge and beliefs may have inadvertently affected the conclusions reached. It is also acknowledged that participants' knowledge is constantly changing as they engage in experiences of inclusion, so that what they expressed in the surveys and interviews may no longer be their "truths," or constructions of their realities.

Recommendations

The understanding that emerged from this study is that the participants do possess an evolving knowledge of children with disabilities and the teaching of such children. Unfortunately factors such as time constraints, limited planning, lack of resources and support, and inexperience hinder teachers' ability to use this knowledge to fully include children with disabilities into their classrooms. These constraints also impinged on teachers' self-efficacy and feelings of empowerment, limiting their confidence and ability to develop close relationships with those involved in the inclusion process. Work needs to be done for teachers to develop positive attitudes and caring dispositions towards the practice of inclusion. Ultimately, these factors impact on teachers' belief in inclusion as a viable educational practice In order to apply any educational theory to practice, changes must be made to ensure that those involved in the process of change are empowered and committed to the implementation of the educational policy. As Forlin (1991, p.9) states "how change is put into practice determines to a large extent how well it fares." In the case of inclusion, being able to include a child with disabilities into general education settings requires teachers to make changes to existing knowledge and teaching practices. Teachers need to have knowledge of children with disabilities and knowledge related to teaching children with disabilities to develop their self-efficacy and meet the demands of inclusive practice. Improving teachers' knowledge relies on making sources of knowledge accessible, developing and implementing relevant teacher training courses, and providing appropriate professional development.

It appears that improvements need to be made to ensure teachers access available sources of knowledge. Policies need to be developed by educational administrators to establish case coordinators for children with disabilities, so that each case is dealt with on an individual basis to maximise the diagnosis, planning and communication processes. This will ensure that information is readily available to those concerned with the children's well-being. This relates to the concept of "transdisciplinary team approaches" (Cook, et al., 1996, p.25), where all professionals across services and directly concerned with the child work together, sharing expertise and crossing professional boundaries to best meet the child's needs, through shared communication and monitoring of progress.

Teacher training institutions also have a responsibility in ensuring that teacher education students receive essential pedagogical content knowledge, at an appropriate level, for beginning teaching. Teacher education programs should include a nationally recognised core unit providing instruction in special education techniques and strategies to meet children's special needs. This recommendation was also made in van Kraayenoord et al.'s (2000) summary of findings.

Professional development courses (PD) play an important role in the continuing education of early childhood teachers working within the education system. Retraining of personnel is necessary to ensure they are kept abreast of current educational philosophies and are informed of best practice, in regards to inclusion. Most participants appeared to still consider "normalisation" (Sims, 1999, p.6) the basis of inclusion; making the child "fit in" rather than more recent approaches that value the child as an individual with special needs. This was reflected in the participants' practice of adapting curricula and their current teaching practices, instead of taking on new or specialised approaches. Several participants also alluded to developmental differences between children with disabilities and "normal" children, relying on developmental psychology to understand the behaviour of children with disabilities. Training in cognitive psychological approaches may also prove beneficial to expanding teachers' knowledge of inclusive practice.

Consideration should also be given to utilizing the practical knowledge early childhood teachers have developed through their experiences of inclusion. As participants of this study indicated, colleagues are a valued source of practical knowledge. Teachers experienced in inclusive practice could act as valued contributors to professional development seminars. Opportunities also need to be created, in non-threatening environments, where teachers can share their experiences, learn from others and feel their efforts are valued. The practice of reflective thinking, regarded as a powerful learning tool, may offer teachers the chance to reflect on their personal experiences and ratify that their knowledge is worthwhile (Wenzlaff, 1998; Black & Halliwell, 1999). Districtbased networking, or a localized buddy system may be other avenues of collaboration and professional development to explore.

Further research in this field, utilising different and varied methodological approaches, may yield new and different constructions of teachers' knowledge of children with disabilities. Research into inclusion has the propensity to enrich current understandings of teachers' knowledge of children with disabilities and the teaching of children with disabilities, and hopefully lead to better inclusive practice.

Finally, in the current educational climate early childhood teachers need to be prepared to accept that change is inevitable and that they have a role to play in its accomplishment (Forlin, 1991). It is significant that the findings of this study, and of Schumm and Vaughn (1998), indicate little change is made to teaching practices when teachers are involved in inclusion. Regardless of the existing demands placed upon them, or whether the educational change is imposed or voluntary, teachers need to alter their existing teaching practices to accommodate children with disabilities in their classrooms and strive to meet their needs. Teachers have a responsibility to proactively seek information and access training and professional development opportunities to improve their knowledge of children with disabilities and the practice of inclusion (Cochran Smith & Lytle, 1993; Sims, 1999; Snyder, 1999). Acknowledgement of this responsibility might be the most crucial knowledge of all, and lead to successful inclusive practice.

Conclusion

This study has endeavoured to provide an insight into the complex nature of early childhood teachers' knowledge of children with disabilities and the teaching of children with disabilities. Clearly the acquisition of knowledge is an ongoing process, where teachers use new information to construct more sophisticated understandings based on their existing knowledge. What may appear to be discrepancies in early childhood teachers' knowledge of children with disabilities and the teaching of children with disabilities alters, as teachers are exposed to new teaching experiences and information about children with disabilities and the teaching of children with disabilities.

Successful inclusion of a child with disabilities into a general education setting relied upon teachers accessing information to develop a knowledge of a child with disabilities then planning and using this knowledge to meet the child's specific needs, within a caring, sharing and collaborative learning environment. In conclusion, this study found that early childhood teachers' knowledge of children with disabilities and the teaching of children with disabilities was an important component of successful inclusive practice.

Appendix 1

Table OneDemographic Outline if Survey Participants

Participants	Gender	Age	Teachin	Teaching Qualifications						Teaching D	Teaching Details		
-	'		Tchg Cert	Dip. Ed	B.Ed	Dip.ECE	B.ECE	Grad.Dip	Spec. Ed Training	Years of Tchg	Current Tchg Level	Tchg Child/Chn. with Disabilities	
1	F	50s			*				1 unit	20	3	1	
2	F	40s		*					None	20	2/3	-	
3	F	50s	*					· · · · · · · · · · · · · · · · · · ·	None	17	1	-	
4	F	30s					*	(None	9	PP	-	
5	F	50s		*					None	29	3	1	
6	F	40s		*				· · · · · · · · · · · · · · · · · · ·	None	15	2	1	
7	F	40s	*	*				· · · · · · · · · · · · · · · · · · ·	None	27	2	2+	
8	M	40s		*				*	None	21	3	2+	
9	F	50s		*	*	,			None	15	3	2	
10	F	60s	*	*		·	· · · · · · · · · · · · · · · · · · ·		LATC	43.5	2/3	2+	
11	F	40s				*	*		2 electives	17	K	1	
12	F	40s		*				*	Grad.Dip	19	PP	1	
13	F	40s		*	*	,	,	· · · · · · · · · · · · · · · · · · ·	Major for	23	1	-	
/	'	1'			'	· '	'	1'	Dip.Tchg				
14	F	50s		*	*	· · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	None	14	PP	1	
15	F	40s				*	· · · · · · · · · · · · · · · · · · ·	·	None	19	K	1	
16	F	20s				,	*	*	None	1	PP		
17	F	30s					*	·	None	7	PP	1	
18	F	40s			*		, , , , , , , , , , , , , , , , , , ,	·	None	7	1	2+	
19	F	20s			*		,	· · · · · · · · · · · · · · · · · · ·	None	9	PP	1	
20	F	30s		*	*		,	· · · · · · · · · · · · · · · · · · ·	None	16	3	-	
21	F	50s			*		,	· · · · · · · · · · · · · · · · · · ·	None	33	1/2	-	
22	F	20s			*			· · · · · · · · · · · · · · · · · · ·	2 units	9	PP	1	

Note. 22 Participants involved. F=female; M=male; s=age in years range; * = level of academic attainment; Tchg = teaching; Cert.= certificate; Dip.=diploma;

Ed.=education; ECE= early childhood; Grad.= graduate; Spec.Ed.= special education training; K= Kindergarten; PP= Pre Primary; Chn.= children; + = more than one child.

Page 1

Form	
Issue Date	
Collection	Date

A SURVEY ON

EARLY CHILDHOOD TEACHERS' KNOWLEDGE OF CHILDREN WITH DISABILITIES AND TEACHING CHILDREN WITH DISABILITIES.

The purpose of this study is to describe early childhood teachers' knowledge of children with disabilities, and of the teaching of children with disabilities.

In light of current trends to include such children in the mainstream education system, this information may prove valuable in identifying effective inclusion practices and areas for future professional development.

Please read through all the questions first, to get an idea of what the survey is about. Allow yourself time to reflect. Attempt to answer all the questions. Your experiences and thoughts are valued.

A time will be arranged to collect the survey form (as indicated on top of the form).

Thank you for your participation.

Background Information About Participant

This information may prove important to the study. Please complete, omitting any names and locations. This data will be treated as confidential and part of the study.

There (is / is not) a Special Education Unit on the school grounds.

1. Explain your understanding of the term "children with disabilities".

2. Explain your understanding of the terms "*inclusion*" and "*inclusive practice*".

3. Where did you first become aware of these terms? In what situation were they referring to?

4. What sources (if any) have you used to find out information about "*children with disabilities*"?

5. What training (cite any forms) have you received in teaching "*children with disabilities*"?

6. How did this training contribute to your understanding?

Appendix 2 (Continued) Page 3 Survey Questions (Continued) Please answer questions 7 & 8 if applicable to your teaching experiences.

7. Describe what you regarded as <u>successful experiences</u> in teaching "children with disabilities."

What made these experiences positive?

8. Describe what you regarded as <u>unsuccessful experiences</u> in teaching "children with disabilities."

What made these experiences problematic?

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9. What do you think <u>you need to know</u> to effectively teach "*children with disabilities*" in your classroom?

10. What <u>changes</u> (if any) do you think would be necessary to include a "*child with disabilities*" in your classroom?

11. What <u>particular information</u> about a "*child with disabilities*" would you consider necessary to have access to?

12. How do you feel about including a "*child with disabilities*" in your classroom?

Appendix 2 (Continued) Page 5 Survey Questions (Continued)

13. List what you consider to be the 5 key components (in order of importance) to include

"children with disabilities" in regular classrooms.

1. 2. 3. 4. 5.

14. A Hypothetical Case

A new child is enrolled in your class.

You are notified that this child has mild cerebral palsy and global developmental delay.

What are your reactions to this case?

What would you do to meet this child's needs?

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Appendix 3 Page One The Interview Schedule

Introduction:

The purpose of this interview is to expand on what you have written in the survey, particularly in relation to you experiences in working with children with disabilities.

Understanding of definitions:

In the survey you have written your understanding of the term "children with disabilities." In you own words can you just describe what you see as a child with disabilities as being.

What sort of disabilities might this term cover?

What do you understand by the terms inclusion" and "inclusive practice"?

What other terms come to mind in relation to this area?

Sources of Knowledge:

Where did you come across these terms?

How do this relate back to your training?

When you were training what was the attitude of special education as to general education? How do you think this impacted on your teaching?

Thinking back I what you to recall your first encounter of a child with disabilities (it doesn't have to be related to teaching). Would you share this experience (what really sticks in your mind)?

How might this experience have influenced your knowledge of children with disabilities?

Are there any other instances, outside of teaching, that may have contributed to your knowledge of children with disabilities?

Experiences of Teaching Children with Disabilities:

What I want to talk about is your experiences of teaching children with disabilities. I want you to relate an experience that was particularly significant, be it successful or unsuccessful. Can you start with the general background and scenario of the event?

How did you approach this situation?

What teaching practices had to be changed? (What about resourcing / the environment/ curriculum/ planning/ support?)

How did you feel at the end of this experience? How did this experience affect your knowledge of teaching children with disabilities? An you now recount another experience that was the opposite of this experience?.....

Would you summarise the impact this had on your teaching and knowledge of teaching.

Knowledge of Teaching Strategies.

In general, what sort of pointers or teaching strategies do see as essential for teaching children with disabilities?

Can you also give examples of these strategies and when you may apply them? (support/environment/planning/curriculum/philosophy/social v. academic etc)

Hypothetical Case

Let's now look at the hypothetical case. I'm going to provide you with 2 scenarios.

In the first, the child is brought to you the first day of school by the mother, she mentions the child has problems. How do you react to this situation and what would you do? What knowledge would you rely on?

In the second scenario you are told the previous year that you are getting a child with cerebral palsy and global devt. Delay the next year. What is your reaction this time and how does this change the approach you would take? How would this impact on your knowledge?

Summarising

Is there anything else you feel is important about teaching children with disabilities?

Would you care to summarize what you feel is the most essential knowledge a teacher can have? (and where could you access if?)

Appendix 4 Letter to Principals and Written Permission

P. Kilgallon

To The Principal,

My name is Pam Kilgallon and I am a part-time student at Edith Cowan University, studying a Masters of Education in Children with Special Needs. I am also an employee of the Education Department of Western Australia, currently on Leave-Without-Pay.

As part of the Masters degree I am required to write a thesis based on research relevant to my particular field of education. My proposed thesis is based on a study of early childhood teachers' knowledge of children with disabilities and of teaching children with disabilities.

With the trend to increasingly include children with disabilities into the general education system, information gained from this study may prove beneficial in highlighting effective inclusive practices operating in our education system. It may also prove valuable in determining professional development needs of early childhood teachers.

In order to conduct my research it is necessary to gain written consent from principals of schools whose teachers may be involved in the study.

My proposed study comprises of a survey of 20 early childhood teachers and follow-up interviews with 4 teachers. It is hoped the study will equally comprise of teachers currently teaching, and not teaching, children with disabilities. The participants will be asked to relate their knowledge of children with disabilities and experiences in teaching children with disabilities. The proposed study is not intended to impose upon their teaching time.

All information collated will be treated with confidentiality. Names and locations will be erased from data, and only my supervisor (Dr Carmel Maloney) and myself will have access to transcribed information. Participants will have the right to withdraw from the study at any time.

A summary of the findings may be made available to principals, upon request. Any queries about this study may be made to myself, Pam Kilgallon, phone number

In the event that you have a concern about this study, your queries may be addressed to Rod Crothers, Executive Officer of the Ethics Committee, Edith Cowan University, ph.

Thank you for your time and consideration in this matter. Yours sincerely,

Pam Kilgallon.

Appendix 4 (Continued)

Principal's Consent for Teacher Participation in the Study -

"A Qualitative Study into Early Childhood Teachers' Knowledge of Children with Disabilities and Teaching Children with Disabilities"

I, the principal of	
have read the	
accompanying	
letter and discussed any issues related to the proposed study with the researcher.	
I hereby grant my permission for Pam Kilgallon to access early childhood teachers within the school for the purposes of research into teachers' knowledge of childred with disabilities.	
Principal	
Dated	
Witness	
Dated	

Appendix 5 Letter to District Directors

P. Kilgallon



The District Directors

RE: RESEARCH ON EARLY CHILDHOOD TEACHERS' KNOWLEDGE OF CHILDREN WITH DISABILITIES.

Dear District Directors,

My name is Pam Kilgallon and I am a part-time student of Edith Cowan University studying my Masters in Education: Children with Special Needs. I am also an employee of EDWA, currently on Leave-Without-Pay (

I am writing this letter to inform you that, as part of my thesis, I propose to conduct post-graduate research within your school district.

The study intends to investigate early childhood teachers' knowledge of children with disabilities and teaching children with disabilities. With ongoing trends to include children with disabilities into mainstream education the findings may prove valuable in identifying effective inclusive practices and professional development needs relevant to our education system.

The research will comprise of a survey of open-ended questions to 20 early childhood teachers, and follow-up interviews with 4 willing teachers. This research is not intended to impose on teachers' teaching time or duties. Names and locations will be eradicated to preserve teachers' rights to confidentiality. No students, or reference to named students, will be involved in the study.

I propose to commence my research in Term 3, hopefully concluding any participant involvement by mid-October. A summary of the findings should be compiled by late November and the thesis paper finalized by April, next year.

I have already received written approval from Edith Cowan University's Faculty Research & Higher Degrees Committee and the Ethics Committee, on the understanding that written permission is required from school principals and participating teachers. I also feel it is a courtesy to inform you of intended research within your district.

Should you have any queries about this study, or are interested to receive a summary of the findings, please contact me by phone (or at the above address.

Yours sincerely,

Pam Kilgallon.

Appendix 6 Page One Letter of Introduction to Teachers

Dear Teacher,

My name is Pam Kilgallon and I am a part-time student at Edith Cowan University, studying a Masters of Education in Children with Special Needs. I am also an employee of the Education Department of Western Australia, currently on Leave-Without-Pay.

As part of the Masters degree I am required to write a thesis based on research relevant to my particular field of education. My proposed thesis is based on a study of early childhood teachers' knowledge of children with disabilities and of teaching children with disabilities.

Children with disabilities are increasingly being included into the general education system, especially in the early education years. This places extra demands on early childhood teachers' knowledge and abilities. Little research has been conducted in this area, particularly in Australia. Any information gained from this study is valued and may prove beneficial in highlighting effective inclusive practices operating in our education system. It may also assist in determining professional development needs of early childhood teachers.

In order to conduct my research it is necessary to gain written consent from willing participants.

My proposed study will comprise of a survey of 20 early childhood teachers and follow-up interviews with 4 teachers. It is hoped the study will have a range of teachers currently teaching, and not teaching, children with disabilities. Questions will be open-ended, involving reflection on knowledge and experiences of children with disabilities.

The proposed study is not intended to impose upon teaching time. The survey should take between 20 and 40 minutes to complete, although extra time may be required for reflection. For those teachers involved in the interviews these will comprise of 2 taped interviews, each lasting 30 to 40 minutes, conducted at a mutually convenient time. A third meeting will be arranged as an opportunity to verify the summary of written transcripts taken from the tapes, and any other issues.

All information collated will be treated with confidentiality. Names and locations will be erased from data, and only my supervisor (Dr Carmel Maloney) and myself will have access to transcribed information. Participants will have the right to withdraw from the study at any time.

Any queries about this study may be made to myself, Pam Kilgallon, ph. 9

Appendix 6 (Continued) Page 2 Letter of Introduction to Teachers (Continued)

In the event that participants feel concerned about the nature of the study, queries may be addressed to Rod Crothers, Executive Officer of the Ethics Committee, Edith Cowan University, ph. 92 738190.

If you are willing to be a participant in this study read and complete the attached consent form and survey. I will collect the forms on the given date, and be in contact with teachers who are willing to be interviewed.

Thank you for your time and participation. Yours sincerely,

Pam Kilgallon.

Appendix 7 Disclosure and Consent Form

The purpose of this study is to obtain early childhood teachers' knowledge of children with disabilities: what they know about children with disabilities, and what they know about teaching children with disabilities.

The collection of data will be based on a survey that includes open-ended questions. Participants will be given a week to complete the survey. Four teachers will then be asked to participate in two taped interviews, each no more than 40 minutes in length, to be arranged at a mutually convenient time.

All information received will remain confidential and anonymous. Names and locations will be removed from any transcripts and products of this study. Participants in interviews will have the right to review their transcripts to ensure their credibility and anonymity. Participants also have the right to withdraw from the study at any given time.

This is not a personal appraisal, but an opportunity to share your ideas and experiences. Your participation will make a worthwhile contribution to the knowledge of the inclusion process.

Any questions may be directed to the researcher, Pam Kilgallon, phone 94 094 161.

Agreement to participate in the study "A Qualitative Study into Early Childhood Teachers' Knowledge of Children with Disabilities and Teaching Children with Disabilities."

I _______ have read the provided information and any questions I have asked have been answered to my satisfaction. I agree to participate in this study, on the understanding that I may withdraw at any time.

I understand that the researcher and relevant supervisors will have access to transcripts of my interview, but that any identifying information will have been removed. I also understand I have the right to review my interview transcripts to ensure their validity.

I agree that the research data gathered for this study may be published provided I maintain my anonymity.

	Participant		
Date			
	Witness		
Date			
			· -
I am pr	repared to be interviewed as a follow-up to this survey	YES	NO
	(If yes, please provide details on how you may be cor	itacted).	
Name	Contact		
	I currently have/ have not a child diagnosed with disa	bilities in	my
classro	om		-

Appendix 8 Table 17.

Summary of Survey and Interview Findings

Common Themes	Sur	vey Par	Interviewees		
		<u>/22</u>	<u>%</u>	<u>/5 %</u>	
Knowledge	Agencies	14	63.64	2 40	
Sources	Spec.Ed.Tchrs	10	45.45	1 20	
	Colleagues	7	31.82	2 40	
	Ref. Materials	7	31.82	3 60	
	Parents	6	27.27	5 100	
Definitions of	Outside norm	11	50	3 60	
Knowledge	Require support	11	50	3 60	
	Physical	15	68.18	4 80	
	Intellectual	13	59.09	2 40	
Forms of	The Disabilities	15	68.18	0 0	
Knowledge	The Child	17	77.27	5 100	
Expectations	Non-academic	9	40.91	2 40	
	Academic	8	36.36	1 10	

<u>Note.</u> N = 22 participants; Spec.Ed.Tchrs = special education teachers from the Centre for Inclusive Schooling or Educational Support Centres; Ref = Reference materials, consisting of journals, books and the Internet; norm = normal range.

(table continues)

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Appendix 8 (Continued)

Table 17. (Continued)

Summary of Survey and Interview Findings

Common Themes of the Study		ey Part	Interviewees		
		<u>/22</u>	<u>%</u>	<u>/5</u>	<u>%</u>
Support	Education Assistants	15	68.18	5	100
and	Agencies	14	63.64	5	100
Collaboration	Parents	9	40.91	5	100
	Colleagues	7	31.82	3	60
	Children in class	4	18.18	3	60
Attitudes	Positive	8	36.36	3	60
	Conditional		54.55	1	20
	Negative	2	9.09	0	0
Philosophy	Applied to all	5	22.73	3	60
Changes to	Time	6	27.27	5	100
Teaching	Planning	7	31.82	5	100
	Environment	17	77.27	4	80
	Resources	7	31.82	3	60
	Teaching Strategies	9	40.91	5	100
Impact on Others	Child with disabilities	16	72.73	3	60
	Other children	8	36.36	4	80
	The teacher	8	36.36	5	100

REFERENCES

- Ashman, A. & Elkins, J. (Eds.) (1994). <u>Educating Children with Special</u> <u>Needs</u>. (2nd ed.). Brunswick: Prentice-Hall.
- Australian Early Intervention Association (WA Chapter) (1999). <u>Starting</u> <u>School: A Guide for Parents of Children with Special Needs in</u> <u>Western Australia.</u> West Perth: Meerilinga Young Children's Foundation.
- Black, A.L. & Halliwell, G. (1999). Accessing practical knowledge: how? why?, <u>Teaching and Teacher Education. 16</u>, 103-115.
- Bogdan, R.C. & Biklen, S.K. (1992). <u>Qualitative Research for Education: An</u> <u>Introduction to Theory and Methods</u>. (2nd ed.). Needham Heights: Allyn & Bacon.
- Borich, G.D. & Tombari, M.L. (1997). <u>Educational Psychology: A</u> <u>Contemporary Approach.</u> (2nd ed.). New York: Longman.
- Buell, M.J., Hallam, R., Gamel McCormick, M. & Scheer, S. (1999).
 A survey of general and special education teachers' perceptions and inservice needs concerning inclusion, <u>International Journal of</u> <u>Disability, Development and Education, 46</u> (2), 143-156.
- Burn, R.B. (1997). <u>An Introduction to Research Methods</u>. (3rd ed.). South Melbourne: Longman.
- Clandinin, D.J. & Connelly, F.M. (1995). <u>Teachers' Professional Knowledge</u> <u>Landscapes.</u> New York: Teachers College Press.
- Cochran-Smith, M. & Lytle, S.L. (1993). <u>Inside/Outside Teacher Research and</u> <u>Knowledge.</u> New York: Teachers College Press.
- Collinson, V., Killeavy, M. & Stephenson, H.J. (1999). Exemplary teachers: practising an ethic of care in England, Ireland, and the United States, Journal for a Just and Caring Education, 5(4). 349-366.
- Connelly, F.M. & Clandinin, D.J. (1988). <u>Teachers as Curriculum Planners</u>: <u>Narratives of Experience</u>. New York: Teachers College Press.
- Connelly, F.M. & Clandinin, D.J. (1995). <u>Teachers' Professional Knowledge</u> <u>Landscapes</u>. New York: Teachers College Press.
- Connelly, F.M. & Clandinin, D.J. (2000). Narrative Understandings of Teacher Knowledge, Journal of Curriculum and Supervision, 15 (4), 315-331.
- Connelly, F.M., Clandinin, D.J. & Ming Fang, H. (1997). Teachers' personal practical knowledge on the professional knowledge landscape, <u>Teaching and Teacher Education</u>. 13, 665-674.

- Cook, R.E., Tessier, A. & Klein, M.D. (1996). <u>Adapting Early Childhood</u> <u>Curricula for Children in Inclusive Settings.</u> Englewood Cliffs: Prentice - Hall.
- Cornoldi, C., Terreni, T., Scruggs, T.E. & Mastropieri, M.A. (1998). Teacher attitudes in Italy after twenty years of inclusion. <u>Remedial and Special</u> <u>Education, 19</u> (6), 350-356.
- Craig, C.J. (1999). Parallel stories: A way of contextualizing teacher knowledge. <u>Teaching and Teacher Education</u>. 15, 397 –412.
- Curriculum Council (1998). <u>Curriculum Framework for Kindergarten to Year</u> <u>12 Education in Western Australia</u>. Osborne Park: Curriculum Council.
- Denzin, N.K. & Lincoln, Y.S. (Eds.) (1994). <u>Handbook of Qualitative</u> <u>Research</u>. Thousand Oakes: Sage Publications Ltd.
- Department for Education & Children's Services (1998). <u>Foundation Areas of</u> <u>Learning.</u> Campbelltown S.A.: Author.
- Dinnebeil, L.A., McInerney, W., Fox, C. & Juchartz-Pendry, K. (1998). An analysis of the perceptions and characteristics of childcare personnel regarding inclusion of young children with special needs in communitybased programs. <u>Topics in Early Childhood Special Education, 18</u> (2), 118-128.
- Drisko, J.W. (1997). Strengthening qualitative studies and reports: Standards to promote academic integrity. Journal of Social Work Education, 33, 185-197.
- Elbaz, F. (1983). <u>Teacher Thinking: A Study of Practical Knowledge</u>. Beckenham: Croom Helm Ltd.
- Eraut, M. (1995). Developing professional knowledge within a client-centred orientation. In T.R. Guskey, & M. Huberman, (Eds.), <u>Professional Development in Education: New Paradigms and Practices</u> (pp236-244). Columbia: Teachers College Press.
- Forlin, C. (1995). Educators' beliefs about inclusive practices in Western Australia. <u>British Journal of Special Education. 22</u> (4), 179-185.
- Forlin, C. Douglas, G. & Hattie, J. (1996). Inclusive practices: how accepting are teachers? <u>International Journal of Disability</u>, <u>Development and</u> <u>Education</u>, 43 (2),119-133.

- Fuchs, D. & Fuchs, L.S. (1998). Competing visions for educating students with disabilities: inclusion versus full inclusion. <u>Childhood Education</u>, <u>74</u> (5), 309-317.
- Fullan, M.G. (1991). <u>The New Meaning of Educational Change.</u> New York: Teachers College Press.
- Gay, L.R. (1992). <u>Educational Research: Competencies for Analysis and</u> <u>Application</u>. (4th ed.). New York: Macmillan Publishing Company.
- Govt. of W.A. (1999). <u>School Education Act 1999</u>. Perth: Govt. of W.A.
- Graziano, A.M. & Raulin, M.L. (2000). <u>Research Methods: A Process of</u> <u>Inquiry</u>. (4th ed.). Needham Heights: Allyn and Bacon.
- Grbich, C. (1999). <u>Qualitative Research in Health An Introduction</u>. St Leonards: Allen & Unwin.
- Grossman, P.L. (1990). <u>The Making of a Teacher-Teacher Knowledge and</u> <u>Teacher Education.</u> New York: Teachers College Press.
- Guba, E.G. & Lincoln, Y.S. (1994). Competing paradigms in qualitative research. In Denzin, N.K. & Lincoln, Y.S. (Eds.), <u>Handbook of Qualitative Research</u> (pp.105-117). Thousand Oakes: Sage Publications.
- Guskey, T.R. & Huberman, M (Eds.) (1995). <u>Professional Development in</u> <u>Education: New Paradigms and Practices.</u> Columbia: Teaches College Press.
- Heinecke, W.F. & Stohl Drier, H. (1998). Research for better classroom practice and policy. <u>The Educational Forum, 62</u> (3), 273-280.
- Lerner, J. (1997). <u>Learning Disabilities Theories, Diagnosis and</u> <u>Teaching Strategies</u>. (7th ed.). Boston: Houghton Mifflin Company.
- Mioduser, D., Margalit, M. & Efrati, M. (1998). Teachers' interpretation of ADHD behaviours in children: an issue in the development of a computer-based teacher training system. <u>International Journal of</u> <u>Disability, Development and Education, 45 (4)</u>, 459-467.
- Morton, A. (1997). <u>A Guide Through the Theory of Knowledge</u>. (2nd ed.). Oxford; Blackwell Publishers Ltd.
- Noddings, Nell. (1992). <u>The Challenge to Care in Schools: an Alternative</u> <u>Approach to Education.</u> New York: Teachers College Press.

- Odom, S.L. (2000). Preschool inclusion: What we know and where we go from here. <u>Topics in Early Childhood Special Education</u>, 20 (1), 20-27.
- Patton, M.Q. (1990). <u>Qualitative Evaluation and Research Methods</u>. (2nd ed.). Newbury Park: Sage Publications, Inc.
- Rosenshine, B. (1986). Synthesis of research on explicit teaching. <u>Educational</u> <u>Leadership</u>, 43(6), 60-69.
- Rosenthal-Malek, A. & Greenspan, J. (1999). A student with diabetes is in my class. <u>Teaching Exceptional Children, 31</u> (3), 38-42.
- Schumm, J.S. & Vaughn, S. (1998). Introduction to special issue on teachers' perceptions: issues related to the instruction of students with learning disabilities. <u>Learning Disability Quarterly. 21</u> (1), 3-6.
- Schwandt, T.A. (1994). Constructivist, interpretivist approaches to human inquiry. In N.K.Denzin & Y.S.Lincoln (Eds.), <u>Handbook of Qualitative Research</u> (p.118-137). Thousand Oakes: Sage Publications Ltd.
- Scruggs, T.E. & Mastropieri, M.A. (1996). Teacher perceptions of mainstreaming/inclusion, 1958-1995: research synthesis, <u>Exceptional</u> <u>Children.63</u> (1), 59-75.
- Shulman, L.S. (1990) <u>Paradigms and Programs</u>. New York: Macmillan Publishing Company.
- Sims, M. (1999, September). <u>The bugs in our practice for the new</u> <u>millennium: we believe, we perceive, we practice</u>. Keynote address at the 15th Conference of Early Intervention Australia Inc, Sydney.
- Smyth, J. (Ed.) (1987). <u>Educating Teachers Changing the Nature of</u> <u>Pedagogical Knowledge.</u> Barcombe: The Falmer Press.
- Smyth, J. (1991). <u>Teachers as collaborative learners</u>. Milton Keyes: Open University Press.
- Snell, M.E. (1993). <u>Instruction of Students with Severe Disabilities.</u> (4th ed.). New York: Macmillan Publishing Company.
- Snyder, R.F. (1999). Inclusion: a qualitative study of inservice general education teachers' attitudes and concerns, <u>Education. 120</u> (1), 173-180.
- Van Kraayenoord, C., Elkins, J., Palmer, C., Rickards, F.W., & Colbert, P., (2000) <u>Literacy, Numeracy and Students with Disabilities</u>. Canberra, ACT: Department of Education, Training and Youth Affairs (DETYA).

- Vaughn, S., Reiss, M., Rothlein, L. & Terejo Hughes, M. (1999). Kindergarten teachers' perceptions of instructing students with disabilities, <u>Remedial and Special Education. 20</u> (3), 184-191.
- Wenzlaff, T.L. (19980. Dispositions and portfolio development: is there a connection?, <u>Education, 118</u> (4), 564-72.
- Westwood, P. (1997). Moving toward inclusion: proceed with caution, Australian Journal of Learning Disabilities. 2 (3), 18-20.
- Williams, P. (1996). The law and students with learning difficulties, <u>Australian Journal of Learning Disabilities</u>, 1 (2), 4-13.
- Werts, M.G., Wolery, M., Snyder, E.D. & Caldwell, N.K. (1996). Teachers' perceptions of the supports critical to the success of inclusion programs, <u>The Journal of the Association for Persons with Severe Disabilities</u>, 21, 9-21.