

2008

Educating secondary school students with learning difficulties: The teacher's perspective

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Educating Secondary School Students with Learning Difficulties: The Teacher's Perspective

Christine Potter

A Report Submitted in Partial Fulfilment of the
Requirements for the Award of Bachelor of Arts (Psychology) Honours,
Faculty of Computing, Health and Science,
Edith Cowan University.
Submitted (October, 2008)

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Acknowledgements

I would like to acknowledge the support and assistance from a number of people who have helped me to complete this thesis.

I wish to thank my supervisor, Associate Professor Lynne Cohen, for her time, support, expert advice, and positive encouragement at all times during the past year.

I would like to thank Bronwyn Harman for her assistance with the editing process, practical advice, and emails of support. Thank you also to Dr Justine Dandy and Carole Gamsby for their ongoing assistance and helpful advice.

I would like to acknowledge and thank the incredible teachers who put aside time during their school holidays and busy work schedules to participate in my research. It was wonderful to gain an insight into their work with students with learning difficulties and the dedication they have towards their work.

To my husband Jeff, and boys Andrew and Ewan, thank you for your constant support and encouragement over the past five years, even at those times when it was overwhelming. Thank you especially to Jeff who appreciated how important my study and research was to me. Finally, thank you to my extended family and friends for their ongoing encouragement and praise.

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Educating Secondary School Students with Learning Difficulties: The Teacher's Perspective

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Abstract

Educating students with learning difficulties in mainstream classrooms has been a major concern for educators (Elkins, 2007). This paper reviews the research relating to the issues teachers' experience when teaching students with learning difficulties (LD) in secondary schools. The review initially provides an overview of the definition of LD and the academic, social, and behavioural characteristics experienced by students with LD. The review explores student, teacher, and school environment factors that impact on the teachers' role when students with LD are educated in mainstream classrooms. The analysis of the research in this area showed that teacher's attitudes, views, and concerns regarding the education of students with LD in mainstream classrooms can influence the outcomes students' experience. In addition, the review highlights the support teachers required to meet the needs of students with LD. The current review has identified methodology issues (Avramidis & Norwich, 2002; Klassen & Lynch, 2007) within the research literature. Limitations of the review and future research are noted.

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Submitted: August, 2008

Educating Secondary School Students with Learning Difficulties: The Teacher's Perspective

Over the past twenty years there has been a distinct shift in the philosophy relating to the education of students with learning difficulties (LD), with an international movement to include these students within the mainstream classroom (Avramidis & Norwich, 2002). The current philosophy, that the mainstream environment can provide invaluable opportunities for students with LD to experience similar educational and social experiences appreciated by all other students, has gained momentum on an international scale and also within the Australian context (Anderson, Klassen, & Georgiou, 2007; Westwood & Graham, 2003). In the same period, a major concern for Australian educators has been students who experience learning difficulties at school (Elkins, 2007). The Adelaide Declaration of National Goals for Schooling in the Twenty-First Century stated that schools should promote social justice for all students, develop their personal talents and abilities, and provide an environment free of discrimination of any form, including in terms of this review, disabilities (Ministerial Council of Education, Employment, Training and Youth Affairs (MCEETYA), 1999). In Western Australian (WA), the Department of Education and Training (DET)(2003) announced through their Building Inclusive Schools policy that, "all children, including those with disabilities and learning difficulties, are educated in supportive, heterogeneous, age appropriate, natural, and least restrictive student-centred school environments" (DET, 2003, p.18).

In essence, LDs are viewed as a mainstream issue by the government states and territories, and it is the role of schools to support students who are not achieving acceptable academic levels due to LD (Elkins, 2000, 2007; Rivalland, 2000). It is estimated that nationally 20% of school students have problems in academic areas (Graham & Bailey, 2007). This figure is supported by the Western Australian Child Health Survey which found

that one in five WA school students were below academic competency in relation to their age (Zubrick et al., 1997).

Secondary school students with LD are taught mainly in mainstream classes (Watson & Boman, 2005). The outcomes for these students have not always been positive and a policy of inclusion can for some students lead to early school leaving, unemployment or low paid employment, juvenile delinquency, and mental health problems (Prior, 1996; Watson & Boman, 2005). The social and economic consequence of these outcomes affects not only the individual students but their families and society as a whole (Watson & Boman, 2005). The accumulation of difficulties connected with LD makes the promotion and enhancement of the educational and mental well-being of students with LD through teachers extremely important.

The provision of education for students with LD can have consequences for the mainstream teacher's role (Ashman & Elkins, 2002), an issue highlighted in the Building Inclusive Schools (BIS) policy (2003) which recognised the challenges for mainstream teachers of students with LD (Anderson, Klassen, & Georgiou, 2007). The impact on teachers may be more profound in secondary schools where there may be more emphasis on academic success and political/ economic agendas compared to accommodating diversity within the student population (University of Canberra, 2007). Teacher attitudes and beliefs concerning students with LD also impacts on the effectiveness of their teaching and the subsequent outcomes for students.

This review recognizes that due to limited research on students with LD and their teachers in secondary schools as compared to primary schools (Watson & Boman, 2005), some literature presented will relate to primary schools only. Learning difficulties are for life (Prior, 1996); 70% of students with LD in literacy at seven years of age continued to struggle at age 15 (Snowling, 2000). Therefore, the inclusion of primary school research is relevant for a review at a secondary school level (Watson & Boman, 2005).

To understand the effect on schools and their teachers this review will examine the issues inherent to the teaching of secondary students with LD. The starting point for this review will be defining LD and then outlining the characteristics of LD and any associated problems. A review of teachers' ever changing role in relation to providing for the educational and emotional well being of secondary students with LD will be presented. The beliefs, attitudes, and perceptions of teachers regarding students with LD in their regular classrooms will be discussed. Finally, the support teachers require and the services that can provide this support are considered. Adolescence is a complex stage in any student's life and this review will acknowledge throughout its impact on the student with LD and their teachers.

Defining Learning Difficulties

Defining learning difficulties (LD) has been an issue internationally and within Australia as a number of terms are used to describe the same construct (Rivalland, 2000; Watson & Boman, 2005). The two major expressions used in the Australian education system are: learning disabilities, which include a small subgroup of students who display severe learning problems often with no explanation for their existence; and, learning difficulties which involves a large number of students who require additional assistance with the school curriculum (Louden et al., 2000). Australian educators do not always differentiate between these terms and group students with significant academic difficulties under LD (Elkin, 2000).

It has been suggested that the lack of a clear definition arises from the interchangeability of the two terms which can complicate the identification process (Rivalland, 2000). Firth's (2008) newspaper report highlighted this complication. A female student was awarded \$80,000 in a civil action against the Victorian Education Department due to its failure to support the student with her learning disability. Firth suggested that as there was no clear definition under which the student's severe language disorder could be identified, the teachers were unaware of the persistent nature of the disability and how they

could address her academic needs. Cunningham and Firth (2005) recommended a nationally agreed definition of LD in a submission to the national inquiry into the teaching of literacy. This could limit legal actions in the future, but more significantly, as suggested by Klassen, Neufeld, and Munro (2005), assist educators in providing for the long term implications of a student's LD. The current approach for defining LD within the Australian school system requires clarification.

The Australian education of students with LD has been influenced by the United States of America (USA) where the majority of research in the area of LD is undertaken (Elkins, 2000; Ellis, 2005). The USA uses the term 'learning disabilities' to describe students who, in Australia, would be identified as experiencing LD, and it is the basis for funding of intervention programs in USA schools. The United States Department of Education (1997); Individual with Disabilities Act (IDEA) provides a definition that is widely applied in American research. This definition states that learning disabled students are those who experience specific literacy and numeracy problems but who are not mentally retarded, emotionally, environmentally, culturally, or economically deprived, or suffering from disabilities involving vision, motor skills or hearing.

This definition is very similar to the WA term 'specific learning difficulties' (referred to as LD) put forward by the Ministerial Task Force (MTF) (1993) in their report: The Education of Students with Disabilities and Specific Learning Difficulties, which reads:

'Students whose achievements in mathematics and/or language (literacy) are significantly below specified benchmarks and where these results can not be attributed to intellectual or physical disability, sensory impairment, emotional difficulties, low socio-economic background, geographic isolation, cultural background or lack of appropriate educational experiences' (original italicised), (MTF, 1993, p.19).

The underlying link between all these definitions are students within the normal range of intelligence, often determined by an intelligence test, who are failing to learn or achieve at expected levels for their age (Hammond, 1996). Psychologists worldwide adopt a classification system of differences between academic achievement and individual cognitive ability to determine the presence of a LD (Ellis, 2005). This is evident by the American Psychiatric Association's (APA) definition of learning disorders contained in the Diagnostic and Statistical Manual of Mental Disorders; fourth text revised edition (DSM-IV-TR):

Learning disorders are diagnosed when the individual's achievement on individually administered standardised tests in reading, mathematics, or written expression is substantially below that expected for age, schooling, and level of intelligence. The learning problems significantly interfere with academic achievements or activities of daily living that require reading, mathematical or writing skills (APA, 2000, p 49.).

It has been suggested that this discrepancy classification should not be a basis for the definition of LD, and a noncategorical approach should be applied to the definition (see Elkins, 2007; Klassen et al., 2005; Siegel, 1999). For example, the MTF (2003) recommended, that in addition to diagnostic assessments, observations, checklists, and interviews with teachers and parents should be utilised. This issue, however, is beyond the scope of the present literature review.

The definitions applicable within the Australian education system, the origins of their influence, and the problems they pose are not always the main focus for schools and teachers. Rivalland (2000) identified that many schools and their teachers believe that they have a responsibility to cater for all students who are not successful academically, irrespective of the cause of their underachievement. Once LD's are defined it is essential that educators have an understanding of the characteristics that students identified with LD exhibit.

Characteristics of Learning Difficulties and Concomitant Disorders

Every student with LD will be unique in the problems they experience; the only common factor for these students is academic underachievement (Hammond, 1996). Researchers (Hammond, 1996; Semrud-Clikeman, 2005) believe LD result from dysfunction in the brain's processing of language, visual, auditory, and kinaesthetic information. As a consequence, students have difficulties understanding, classifying, storing, and acknowledging the information presented to them and are likely to present with a weakness in one or more of the following cognitive functions:

- 1) Short term memory, for example, storage and retrieval;
- 2) Sequencing, ordering, and recall;
- 3) Spatial and directional awareness;
- 4) Visual and auditory perception, for example, interpreting and acknowledging information, and
- 5) Perceptual – motor functioning (Hammond, 1996).

Adolescents with LD are a diverse group and in addition to the characteristics identified by Hammond (1996), exhibit a range of characteristics within specific areas of academic and personal development (Twomey, 2006). Academically these students have limited basic skills in reading, written expression, and mathematics (Larkin & Ellis, 2004). This is the result of an inability to incorporate previously acquired knowledge into their current learning (Watson & Boman, 2005). Basic academic skills which should be learnt and consolidated in primary school (Larkin & Ellis, 2004) are not automatic for students with LD compared to their non LD peers (Bellert & Graham, 2006), leading to less efficient and effective learning (Department of Education, Science and Training (DEST), 2005).

Students with LD experience deficits in the development of organisational skills, for example, remembering assignments, having resources available to complete tasks, following

class routines, time management, meeting deadlines, and arranging a desk may be difficult tasks for the students (McMullen, Shippen, & Dangel, 2007). Bellert and Graham (2006) stated that these deficits are a consequence of the failure to automatically apply basic academic skills; therefore, focusing on organising oneself, a high-order skill, is not an option for these students.

According to Erikson (1968), identity formation is a core psychosocial conflict in the adolescent's developing personality, coupled with the added challenges of learning deficits (Klassen & Lynch, 2007); the effect on a student with LD can have profound social and emotional consequences (Bellert & Graham). Larkin and Ellis (2004) highlighted the social consequences for students with LD. They stated that students with LD usually withdraw from class activities and often will not ask questions or participate in social exchanges within the classroom context. There is an unwillingness to contribute in lessons, especially if a verbal response is required as they do not acknowledge that participation gives opportunities for learning. Involvement in extracurricular events is limited and the repercussions for the student with LD are isolation and even rejection from peers. Larkin and Ellis believe that students engage in these practices as a form of self protection from humiliation. This may lead to motivation issues.

Due to a lack of success in the past, students with LD become inactive and unmotivated in relation to learning (DEST, 2005; Larkin & Ellis, 2004). This results in learned helplessness; a belief that success is outside of their control, hence effort is pointless (Bellert & Graham, 2006; Watson & Boman, 2005), and the establishment of avoidance behaviours to reduce the stress associated with failure usually occurs (Larkin & Ellis, 2004). Avoidance strategies give the student a sense of control over the outcomes associated with learning (Larkin & Ellis, 2004). Klassen and Lynch (2007) used focus groups, involving seven specialist teachers and 28 students (average age of 14) diagnosed with a learning

disability, in a Canadian high school, to reveal the beliefs adolescent students held in terms of their academic abilities. The adolescents with LD attributed their underachievement to internal, unstable, and controllable actions; not trying or persisting with a strategy. It was found that the effort required for success was perceived as overwhelming by the student with LD. This is of concern because a number of students with LD in this study were assessed by their teachers as capable of academic success in some areas. Self protection from failure and a concealment of fear and anxiety relating to failure were revealed as influencing the attributions students expressed (Klassen & Lynch, 2007).

In addition, Klassen and Lynch (2007) highlighted the connection between motivation and self awareness; it is difficult for students to be motivated if they do not understand themselves. Megacognitive deficits relate to self awareness and students with LD lack insight relating to their academic performance (Klassen & Lynch, 2007) and are unable to articulate their strengths and weaknesses. It was suggested by Klassen and Lynch that the development of megacognitive understanding is delayed in these students. Delays in the development of social and self awareness skills can manifest themselves in emotional and behavioural problems for the student with LD.

It has been established that students with LD often co-present with clinically significant emotional and behavioural disorders (EBD) (Raphael, 2000; Rock, Fessler, & Church, 1997). In Australia, the prevalence of co-morbidity between LD and EBD is 40-50% (Prior, 1996) which is consistent with international rates of between 24-52% (Rock, Fessler, & Church, 1997). Students with LD/EBD find it difficult to access the school curriculum and develop effective strategies to manage in school. This leads to low frustration tolerance, low self-concept and self-esteem, and even depression, all viewed as obstacles to success in the school environment, and furthermore, the psychosocial development of the student (Rock, Fessler, & Church, 1997). There is a need to be aware of the relationship between LD and

behavioural disorders (Fry & Bartak, 2006); it is possible that students suffer behavioural problems due to LD or vice versa. The student with LD/EBD can often exhibit behaviours which are classified as either internalised or externalised behaviours.

Internalised behaviours include withdrawal, anxiety, and depression and are an individual's inner emotions, making them more difficult to assess (Prior, 1996; Raphael, 2000). Externalised behaviours which include defiance, impulsivity, hyperactivity, aggression, frustration, and antisocial tendencies are due to the interactions between an individual and their external environment (Prior, 1996; Raphael, 2000). Examples of disorders associated with externalised behaviours are Conduct Disorders, Oppositional Defiant Disorders, and Attention Deficit Hyperactivity Disorder (ADHD) (DSM-IV, 2000). ADHD is the most prevalent disorder, present in 14% of all 13-17 year olds measured in the national survey of the mental health and well-being of children and adolescents (Sawyer et al., 2000). These behaviours (internalised and externalised) are the consequence of many variables inherent to the student with LD.

Adolescents with LD/EBD display inappropriate social skills in the school context (Bellert & Graham, 2006) as they are unable to perceive the school environment and the interpersonal interactions taking place which manifest in social isolation and their psychological needs left unfulfilled (Abrams, 2005; Svetaz, Ireland, & Blum, 2000).

Perception improves with maturity but unfortunately it has long been established that a lag occurs in this development during the adolescent years (Svetaz, Ireland, & Blum, 2000).

Svetaz, Ireland, and Blum (2000) highlighted the importance of connectedness with one's school and how it can help to alleviate many of the internalised and externalised behaviours for students with LD. They suggested that the sense of belonging associated with connecting with one's school assists in the promotion of emotional well-being. It provides the protection students with LD require to adjust to the complex social situations at school. Connectedness

not only offers protection but also acts as a monitor for inappropriate behaviour as students do not want to risk the gains they have made (Hawkins, Catalano, & Miller, 1992).

Studies reviewing the negative impact of the inability of students with LD to adapt to the behavioural/ emotional expectations of school reveal that students usually have little insight into their disruptive behaviours, generally blaming others for their actions (Abrams, 2005). When the student with LD can no longer control their emotions the school is not a safe place for them as they are ignored by their peers and teachers may become angry, with punishment the likely outcome (Abrams, 2005; Morris, 2002). Diminished levels of self-concept and self-esteem usually occur as the student with LD is seldom praised or positively reinforced for appropriate behaviours (Rock, Fessler, & Church, 1997). However, diminished self-concept may only occur in academic areas (Sridhar & Vaughn, 2002) and low self-esteem may not be a result of LD but the ongoing inability to succeed academically (Westwood, 2004) therefore allowing students with LD to be optimistic about school and the future.

Prior (1996) stated that students with LD who persevere, can make academic progress through adolescence, with more positive prospects for the future, so failure is not unavoidable. This view has been supported in an analysis of research involving low achieving students, limited in their opportunities to complete secondary school and enter university but who were still in a position to obtain rewarding employment or further education and training (e.g., TAFE) (Marks, 2006). Marks (2006) conducted this analysis on the educational and employment outcomes of participants during the 2000 and 2001 period based on data initially collected from a longitudinal study of Australian students (n=13,500) undertaken by the Australian Council for Educational Research during 1995. Marks (2006) found there was a gender difference with boys (80%), compared to girls (65%), being more successful in acquiring employment due to the academic skills required for specific jobs, an outcome for

which educators must make allowances. The heterogeneity of the characteristics of student's with LD provided in this review and the evidence that failure is not inevitable places a significant value on the role of teachers in the education of these students.

The Teacher's Role

The literature suggests that due to the ever changing economic, political, and social agendas of secondary schools, inclusion must impact on the roles of teachers, and more appropriate descriptions for teachers would be advisors, coordinators, and assistants (Forlin, 2001; Pearce & Forlin, 2005). Teaching students with LD requires knowledge in effective learning strategies to develop communication skills, resilience, and social competence within the regular classroom (Zipin, 2002). One term describing students with LD in WA is "students at educational risk" (Rivalland, 2000, p.14). The role of the teacher under the students at education risk policy includes:

- 1) devising and implementing a meaningful curriculum which meets the unique strengths, interests, and needs of students at risk;
- 2) use benchmark data and expected academic outcomes as indicators for planning for these students;
- 3) consulting with parties (carers, parents, and outside agencies) on the content of the intervention plans required;
- 4) providing feedback on the students performance, and
- 5) advising the principal of professional development required to meet the needs of students at risk (DET, 2001).

The curriculum is an effective tool for breaking the cycle of underachievement of students with LD (Vaughn, Gersten, & Chard, 2000). Varying the difficulty of the work required and the assessments set, students are given opportunities to succeed and demonstrate what they have learnt (Shaddock, Giorcelli, & Smith, 2007; Vaughn et al., 2000). It has been

suggested that when adapting the curriculum teachers be aware of students' attitudes.

Shaddock et al. (2007) reported that students with LD often want to attempt the same lessons as their peers, even if the work is too difficult for them. They do not want to be singled out for special attention (Shaddock et al., 2007), or to be seen as the person to be humiliated in front of their peers (Pearce & Forlin, 2005).

Educators should base their alterations to the curriculum with coexisting problems being acknowledged as postulated by Semrud-Clikeman (2005). Development of plans that promote the individual students overall social and emotional well-being (Murray, 2002) and not just academic skills is imperative. It is necessary that self-esteem and motivation issues together with megacognitive skills are considered in these plans as they have a significant impact on the underachieving student with LD (Twomey, 2006). Attributions (Klassen & Lynch, 2007) could be discussed to delineate those that are counter effective for learning (Vaughn, Gersten, & Chard 2000). According to Elbaum and Vaughn (2003), discussions enable students to adjust their self-perception in response to the information provided in intervention programmes. Improving the academic skills of students with LD through their perceived academic self-concept, esteem, and efficacy is important for progress (Vaughn, Gersten, & Chard 2000).

Vaidya (2001) argues that teachers should use strategies that are evidence based. The role of the teacher is to access research findings that focus on current intervention programmes that have effective teaching strategies for students with LD (Rohl & Milton, 2002). Learning Difficulties Australia (LDA) (2007) considered this essential and made the following submission to the Victorian Parliamentary Inquiry into Effective Strategies for Teacher Professional Learning: "reliable, trustworthy and valid evidence exists that if the particular intervention approach is implemented students can be expected to experience adequate learning gains" (LDA, 2007, p.2).

Teachers identify students with LD as they are adept at recognising skills necessary for academic success (Prior, 1996). It is their role to refer students to professionals for further assessment. Teachers can become defensive when these situations arise as they may feel that referrals undermine their teaching abilities and the subjectivity of their opinions for specific students. The decision to refer is taken very seriously and not without trepidation and usually because the teacher has exhausted their own resources to change the situation for the student with LD (Athanasiou, Geil, Hazel, & Copeland, 2002).

Learning difficulties can coexist with other mental health problems (Raphael, 2000; Rock, Fessler, & Church, 1997). Improving the mental health of students through counselling and behavioural interventions can have a positive effect on academic and behavioural outcomes (Pattison & Harris, 2006). It is imperative that teachers refer students who may benefit from counselling. Pattison and Harris' (2006) literature review found that cognitive therapies are clinically effective for young people. This study involved young people not presenting with a learning difficulty and the outcomes for students with LD need to be considered with this limitation in mind. However, modifying the therapy plans for students with LD to accommodate their cognitive deficits may be an option for professionals counselling these students.

Teachers have an obligation to relate to students the expectations they have for them and then teach them the skills to achieve these expectations (Lane, Pierson, & Givner, 2004). In the Lane, Pierson, and Givner (2004) study a social skills rating system was given to 240 USA teachers from four ethnic diverse high schools. From this a number of social skills were identified for success in the school context. A three point Likert scale; not important, important, and critical was utilised to identify self control, defined as controlling ones temper in interactions with teachers/peers, and cooperation skills as equally important for school success. These findings need to be considered with caution as the data was derived from self-

reports and the behaviours identified for successful experiences may not actually be occurring in the schools participating. Lane et al. (2004) suggested that any social skills programmes, based on their findings, must be developed and implemented so that the skills acquired can be generalised to varied situations within the school environment (e.g., interactions with other students and different course teachers). Schumaker and Ellis (1982) found that not all students with LD generalised the social skills learnt to other circumstances. Therefore, in addition to teaching social skills, generality to other contexts must be included as part of the intervention.

Teachers have a role in disclosing the skills they perceive as important for social interactions in the regular classroom. Reed and Spicer (2003) looked at the teacher's perspective of how a conversation between a teacher and student should be. Australian teachers (n=143) from 17 private secondary schools completed a questionnaire, which involved ranking (forced choice) 14 communication skills by importance. The results revealed that teachers gave particular importance to narratives (relaying a story, presenting views in a logical manner, clarification, perspective taking), views of other participants in dialogue, and turn taking. As this study involved non LD students, the expectations for teachers of students with LD may differ. For example, eye contact, which did not rate highly in this study (Reed & Spicer), may be considered important in the communication between a teacher and student with LD. These findings could be extrapolated in future research to consider the expectations of teachers relating specifically to students experiencing LD.

For some teachers intervention is only successful if academic competence improves (Athanasίου et al., 2002). It is important to note that the gains from social skills training may not improve the academic competency of students with LD in the short term; however, they can have a positive effect on attitudes and behaviours which can be built on in the long term for academic progress (Hawkins, Doueck, & Lishner, 1988). Murray (2002) stated that it is

not sufficient for teachers to identify and communicate their expectations; they must model these skills themselves and then insist that the students do the same. Success requires a secure, dependable, and predictable relationship built on trust between the student with LD and their teacher.

For the promotion of a student's well-being positive student/teacher relationships are essential (Kortering & Braziel, 2002). 'Good teachers' were identified as caring, who developed active programmes, and provided individual attention to students. Zundans (2003) looked at this relationship from Joe's point of view, a 14 year old student with LD. Joe expressed that a good teacher recognised his efforts and therefore he was not afraid to approach them to ask questions. Several studies provide contrasting evidence for the nature of these relationships.

A longitudinal study (Midgley, Feldlaufer, & Eccles, 1989) involving three high schools averaging 1300 students, and their teachers, hypothesised that the perceived relationship between students and their teachers would affect the enthusiasm they held for maths. If students went from a more supportive to less supportive environment their enthusiasm would decline. This decline would be higher for low achieving students who were more sensitive to teachers' attributes as a result of their low academic outcomes. The results supported the theory that a causal relationship existed between motivation for maths and the strength of the student/teacher relationship. The characteristics of the participants may confound the results as the low achieving adolescent student's perception of school may influence their feelings towards their teacher. Birch and Ladd (1997) found that primary students who perceived their relationship with teachers as supportive were more academically competent compared to students who perceived a conflict in this relationship. The following evidence presented for students with LD supports this outcome.

In their cross-sectional study of 289 primary school students' measure of student/teacher relationships, Murray and Greenberg (2001) found a main effect for LD, in particular, with a concomitant emotional disorder. A correlation between student/teacher relationships and social/emotional adjustment was found. The nature of the relationship was not the same for non LD versus LD students. Students with LD expressed little trust, respect, security, or individual attention, only conflict with their teacher which often led to behavioural problems. There is a need to consider the effect of self-reporting bias on these findings, observational and teacher reflections may provide further evidence for the outcomes reported. In addition, the effect of the co-morbidity of disorders must be acknowledged.

In support of this result, further evidence suggested that the structure of secondary schools (e.g., class sizes, different subject teachers, and timetabling) reduced opportunities for strong relationships between students and teachers to develop (Hargreaves, 2000; Murray, 2002). The establishment of a pastoral care system in secondary schools in Australia is one step schools are taking to improve relationships between students and their teachers (Pearce & Forlin, 2005; Zundans, 2003).

In summary, the research revealed that teachers who recognised the importance of their role in curricula modifications, evidence based learning strategies, communication and social skills training, referral procedures, and promoting healthy student/teacher relationships created a classroom environment which accommodates the academic and psychological needs of students with LD. When attending to the problems characterised by students with LD the attitudes and beliefs of the mainstream teacher is fundamental.

Attitudes and Beliefs of Teacher's towards Students with Learning Difficulties

Teacher's attitudes can present hurdles for the educational opportunities of students with LD. Weiner (2003) found that when teachers were required to rank the essential requirements for mainstreaming students with special needs, 74% indicated that the teacher's

attitude was the most important variable for success. A recent study in the United Kingdom (UK) involving 99 mainstream, education support, and special education teachers in a primary school setting found that teacher's attitudes and expectations directed their behaviour (Woolfson, Grant, & Campbell, 2007). The teachers in the study were required to scale vignettes relating to students with LD, utilising a Likert scale. Mainstream teachers believed that compared to students without LD, students with LD had significantly limited control over their academic results. It was suggested that pity lowered the expectations teachers had for these students which negatively affected future academic attempts. In addition, the study revealed that from the teacher's perspective these students were not receptive to changing their academic outcomes. It is evident that the teachers attributed the difficulties as internal to the students.

In another attitude study, from the USA, Cook, Cameron, and Tankersley (2007) analysed the attitudes of teachers who were required with limited time, training, and support to instruct students with disabilities including learning difficulties. Teachers were asked to rate individual students based on hypothetical statements demonstrating attitudes of attachment, concern, indifference, and rejection. As hypothesised, students with learning difficulties were rated significantly higher in concern, indifference, and rejection, and significantly lower on attachment compared to their non disabled peers. Behaviour problems, for example, being disruptive and unresponsive, were identified as the issue pertinent to the attitudes expressed. As the attitudes were determined from one session the results need to be interpreted with this limitation in mind, a longitudinal study including observations may reveal different results.

A study conducted by Levins, Bornholt, and Lennon (2005) established an opposite trend. The explicit or direct thoughts and feelings, assessed from statements pertaining to students with special learning needs, were significantly related to the behavioural intentions

of teachers. The results indicated that teachers on average had more positive explicit thoughts about these students which led to a willingness to pursue further experience in the area of LD. Future studies could determine if these behavioural intentions are pursued. Examining teacher's attitudes to students with LD facilitates the understanding of the views teachers hold for including these students in the regular classroom.

A number of variables influence the attitudes and views held, for example, the nature of the LD and any coexisting disorders were shown in an early study (Clough & Lindsay, 1991) to affect the views of teachers. Clough and Lindsay's (1991) UK study involved surveying 584 primary school teachers to ascertain their opinions as to which students should be taught in mainstream classrooms. The results indicated that teachers felt they would have difficulties meeting the needs of students with emotional/behavioural disorders, followed by students with LD. Significantly, this view has not changed over the past decade as research by Briggs, Johnson, Shepherd, and Sedbrook (2002) and Westwood and Graham (2003) found that teachers continue to view these disorders as difficult to provide for. It was suggested that negative attitudes were related to the student's continued lack of ability to meet the expectations of their teachers (Briggs et al., 2002), which affected the smooth running of the classroom (Hargreaves, 2000). Contrasting findings were reported for teacher's views when perceived competency and numbers of years teaching students with LD were considered.

Soodak, Podell, and Lehman (1998) surveyed 188 teachers to establish their responses (hostile/receptive or anxious/calm) to the acceptance of students with LD in mainstream classrooms. Being receptive to accepting students with LD in the mainstream classroom was significantly related to the teacher's level of teacher efficacy (a belief that teaching can influence student's academic outcomes), and personal efficacy (a belief that one is confident and competent to achieve acceptable academic outcomes for students). Higher

teacher/personal efficacy related to more receptive/calm responses to acceptance and also higher teacher efficacy related to a willingness to adapt curricula. Future research could focus on how these responses from teachers translate into behaviour towards students with LD. Other studies (Briggs et al., 2002; Forlin, 2001; Van Reusen, Shoho, & Barker, 2001) have indicated similar results; the more extensive the training and experience teachers have with students experiencing LD the more positive their views and the less stressful it is for them teaching these students in regular classrooms. This relationship was based on the belief that teachers were more competent and confident in delivering the curriculum to students with LD.

In contrast, a personal experience of contact with a child with LD was cited by Levins et al. (2005) as having little influence on the attitudes of teachers. Pre and in-service teachers with between 2-15 years experience expressed similar attitudes. Having social contact with students with LD, for example, through family, did not significantly affect the teacher's attitudes towards them.

Teaching experience and its influence on teacher's views has been the focus of several studies. Forlin (2001) showed that teachers with 10 years or more experience expressed a lack of acceptance for children with LD, finding it one of the most stressful components of their careers. It was suggested that teachers were concerned that their roles had changed and more children with LD were being accommodated in regular classrooms. Similarly, Soodak et al. (1998) found that a teacher's willingness to accommodate students with LD declined with the number of years that they had practiced in the profession. Soodak et al. proposed that for all their teaching efforts, students were still not achieving expected outcomes and recently graduated teachers may have more strategies to meet the needs of students with LD. These studies highlighted a pattern relating to years of experience and negative attitudes, however, in a study by Van Reusen, Shoho, and Barker (2001), where

47% of the participants had 16 years or more general teaching experience, it was suggested that no significant relationship was established between years taught and attitudes held.

Another factor that has attracted attention is the knowledge teachers have regarding LD. Heiman (2001) surveyed mainstream teachers with an average 12 years experience prior to their attendance at an in-service course. Of the 116 teachers, 28% had no appropriate knowledge relating to the specific LD present in their classrooms and therefore their attitudes towards these students were unclear. This study by Heiman was conducted in Israel, but the outcome has been noted internationally. The findings of an Australian study by Rohl and Greaves (2005) noted that many graduate teachers felt they were unprepared to teach students at risk due to their limited background knowledge of LD. This included 47% for literacy and 72% for numeracy, and represents a concern for education departments as these student teachers are soon to commence a teaching career.

Finally, Watson (2004) and Watson and Bond (2007) found an unexpected result in their studies that an understanding of the characteristics of LD did not have any relationship to the attitudes held about students experiencing LD. The 280 teachers surveyed for their studies generally held negative views, which did not relate to their understanding, which was deemed low. The method for data collection (web based survey), may have limited the ability of the research team to reach the target sample population and therefore the demographics of the participants may be a confounding factor in terms of the results.

A number of studies (Athanasidou et al., 2002; Forlin, 2001; Hargreaves, 2000; Heiman, 2001; Schumm & Vaughn, 1998; Scott, Vitale, & Masten, 1998; Westwood & Graham, 2003; Wright & Sigafoos, 1998) have identified classroom and school issues which create obstacles and benefits for the successful inclusion of students with LD, especially in secondary schools. These studies conducted in Europe, America, and Australia all reveal similar obstacles including the negative attitudes of non LD students and other teachers,

disruptions to the positive climate of the classroom, catering for the needs of all students, impeding the progress of non LD peers, workload, lack of resources, stress, guilt, anxiety, and fear of not providing for their needs, the feasibility of adapting the curriculum to meet the individual needs of the students with LD, large class sizes, timetabling concerns, and a lack of adequate support.

In contrast, the benefits included the awareness, acceptance, and social support non LD students can provide, the support, if any, provided benefits for the whole class, and finally the satisfaction achieved from meeting the needs of these unique individuals (Anderson et al., 2007; Heiman, 2001; Weiner, 2003; Westwood & Graham, 2003). The evidence presented highlights teacher's attitudes and their views, including their concerns regarding inclusion in regular classrooms, therefore, providing the basis for where support is needed.

Support for Teachers and the Source of Delivery

Under the arrangements of inclusive education it is the responsibility of the mainstream teacher to develop and delivery programs for students experiencing LD (Anderson, Klassen, & Georgiou, 2007; Westwood & Graham, 2003). As a result, it is often beyond the capacity of teachers to cater for the needs of students with LD without support (Fry & Bartak, 2006). Support for teachers is required to meet everyday obstacles, provide for their emotional and psychological well-being, and to assist them in the development of positive attitudes towards students with learning difficulties. Westwood and Graham (2003) found that teachers expressed the support they received was of value but more was needed, especially in training and professional development, a result reinforced in the reflections of teachers in a study by Watson and Bond (2007). In their submissions to a Ministerial Task Force on public education, the Australian Resource Educators' Association (2000)

recommended increased professional development for teachers in the area of LD and the appointment of a teacher in every school with specialised knowledge and training in LD.

In a national sample of 103 Australian primary and secondary teachers, Shaddock, Hoffman-Raap, Smith, Giorcelli, and Waddy (2007) reported that teachers required: a) professional development (PD) based in the classroom that focussed on practical strategies; b) PD delivered by experts/teachers who acknowledged the importance of the current classroom context; and, c) PD involving networking and observing others. Barriers to these requests centred on funding, conflicting priorities, and time. The teachers commented that PD through specific university courses was not as important as PD in context. They also expressed that they did not need PD about consultation with other professionals, collaboration with peers, or assistants even though they were of value to support systems. In contrast, a number of papers have noted the importance of collaboration (e.g., co-teaching and mentors) (Bartak & Fry, 2004; Heiman, 2001; Pearce & Forlin, 2005). It was perceived as practical in its approach to addressing problems as they arise in the classroom and allowing for ongoing support and training as required. Shaddock et al. (2007) suggested that teachers in their study may have underestimated the benefits of collaboration.

The literature has highlighted the influence of teacher's attitudes and views regarding students with LD. Professional development programmes need to address this issue due to their effects on teacher/student relationships and successful learning. Van Reusen et al. (2001) postulated that for attitudes to change, PD needs to offset the anxiety and frustration teachers experienced. Research undertaken by Weiner (2003) found that once teachers were advised of, and given support in terms of their roles, responsibilities, and expectations to meet the needs of children with diverse learning needs their self-efficacy increased. A flow on effect occurred for the attitudes teachers held which resulted in improved academic outcomes for students.

A study by Forlin (2001) identified the factors contributing to the stress teachers experienced in their work. The most stressful factor was catering for the needs of all students in a regular classroom when having to provide on-going assistance to a student with difficulties. The stress relating to teachers perceived professional competence. It was suggested that the identification of these stressors in PD programmes would allow for additional support to be provided for teachers. Teachers can also check and manage their stress by talking to a supportive principal, colleagues, mentors, and family and friends who can give them a different perspective on their experiences (Abrams, 2005; Richardson & Shupe, 2003). If these support networks are not available the literature suggests approaching a school psychologist who may be supportive in a number of areas.

The role of school psychologists in supporting teachers of students underachieving at school was outlined in a report by Elliot (2007). Elliot stated that to give meaning to the consultations between teachers and psychologists regarding student's strengths and weaknesses and the interventions to accommodate them psychologists must embrace the process teachers engage in to identify low achieving students. The psychologist must perform classroom observations so students can be seen in the context of the learning environment. This allows the psychologist to determine where intervention is required and the extent of training involved for the teacher. It was proposed that observations would also limit misdiagnosis and unwarranted referrals.

Teachers often do not identify psychologists as being part of their framework for teaching students with LD. In one study by Anderson et al. (2007) only 10% of WA teachers (n=162) considered the work of psychologists as important to their professional role. Furthermore, they did not feel that psychologists offered any assistance beyond the evaluation, classification, and placement of students with LD in regular classrooms. It was postulated that due to psychologist's extensive knowledge relating to LD they need to

anticipate the needs and support of teachers in this area. In addition, psychologists are in a position to enhance teacher's sense of well-being and promote their needs to principals and education departments. This study was conducted in WA and therefore the generalisability of the results may be limited in relation to other states.

Farrell, Jimerson, Kalambouka, and Benoit (2005) utilised a questionnaire to assess the support psychologists offered to 1105 teachers from eight countries. Results indicated that although the service was valuable there was limited time for consultation. Teachers viewed the psychologist's role as providing them with more consultation time, training, and advice on curriculum issues and less on assessments of students with special needs.

In contrast, Athanasiou et al. (2002) found that a stronger relationship existed between teachers and psychologists. Psychologists provided emotional support by listening and appraising teacher's efforts as educators, intervention support by integrating intervention programmes for specific students, and practical support through open communication and sharing workloads. In this study teachers expressed they did not require the psychologist to fix students' problems but provide team support for all the parties involved in the lives of students with academic and/or behavioural problems. Teachers in this study received unlimited support from psychologists, not the current practice in most schools (Farrell et al., 2005) which may account for the positive results reported.

In summary, the literature suggests that if teachers are to successfully educate students with LD and provide a worthwhile learning environment, it is imperative the support teachers identify and require is made available. This will enable teachers to develop the necessary skills to meet the needs of this heterogenous group of students.

Methodology Concerns

Of importance to the current paper was that the majority of the literature reviewed relied on Likert scales to determine the participant's support or lack of support for the

variables under investigation. How the teachers in these situations interpreted the variables, for example, social skills may influence the level of support allocated to it. Avramidis and Norwich (2002) suggested that vignettes which include specific operational definitions for variables allow for more interpretable results. Another issue is the use of self-reporting open ended questionnaires and surveys, as these methods would be more meaningful if used in conjunction with observational procedures. This could partially control for the influence of participant bias.

Klassen and Lynch (2007) stated that a reliance on quantitative methods to analyse self-reported data, measuring for example, attitudes on inclusion, lessens the influence of the participant's personal reflections in relation to the variable in question. In response to this argument Lindsay (2007) suggested that qualitative methods provide no data to advocate the conclusions made. However, to obtain a sense of the psychological meaning of a variable, for example, a reflection on the support needed by teachers, qualitative research is of significant value. Importantly, the application of a mixed methods approach (see Watson & Bond, 2007) may go part way to resolving this dilemma; a view supported by Miles and Huberman (1994) who stated that utilising qualitative and quantitative methods for data analysis can improve the validity and interpretations of major research results.

Limitations of the Review

Research appears to be limited in the Australian secondary school context in relation to some of the issues being explored in this review, for example, the attitudes and beliefs of teachers towards students with LD. A majority of the papers reviewed either originated from the USA or were from the perspectives of primary schools. An implication of this limitation is that the conclusions drawn from this review may not be fully applicable to the Australian education system and its secondary school teachers who may adopt different philosophies, definitions, policies, and practices.

Conclusions and Future Directions

The purpose of the current review was to evaluate the research relating to the issues teachers' experience when teaching students with learning difficulties (LD) in a secondary school setting. The academic and psychological outcomes for secondary students with LD are of concern to educators. Identifying these students is confounded by the lack of a clear definition of LD. The literature reviewed provided a comprehensive overview of the diverse characteristics students present with and acknowledges the importance of a supportive learning environment for the students. The outcomes for students experiencing LD is influenced by the relationships they have with their teachers. A number of teacher, student, and school variables interact to direct these relationships and the literature shows that they are not always positive. The role of the teachers is ever changing and continued support, for example, through consultation, professional development, training, and collaboration is essential to meet their professional and emotional needs. The literature demonstrates that support does not necessarily have to come from outside sources; the expertise of the support is of most value to teachers.

The current literature review has indicated that a major portion of the research has investigated learning difficulties in primary school settings. Future research should examine the experiences of secondary school teachers who are dealing with the challenges of teaching different groups of students with LD. This research must focus on the pre-service and in-service attitudes, values, and needs of regular classroom teachers to determine the priorities of support. In addition, this research may provide valuable information on areas where changes are required or current effective practices continued. This area would also benefit from longitudinal studies involving observations to examine the changes that occur in these attitudes, values, and needs over time, thus providing pertinent information for pre-service and current teaching professionals in terms of providing training for our future teachers or

professional development for those currently in the education system. This future research allows for positive experiences for the teachers which flow onto the learning experiences of students with LD.

References

- Abrams, B.J. (2005). Becoming a therapeutic teacher for students with emotional and behavioral disorders. *Teaching Exceptional Children, 38*, 40-45.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., text revision). Washington, DC: American Psychiatric Association.
- Anderson, C.J.K., Klassen, R.M., & Georgiou, G.K. (2007). Inclusion in Australia: What teachers say they need and what school psychologists can offer. *School Psychology International, 28*, 131-147.
- Ashman, A., & Elkins, J. (2002). *Educating children with diverse abilities*. Sydney: Prentice Hall.
- Athanasiou, M.S., Geil, M., Hazel, C.E., & Copeland, E.P. (2002). A look inside school-based consultation: A qualitative study of the beliefs and practices of school psychologists and teachers. *School Psychology Quarterly, 17*, 258-298.
- Australian Resources Educators' Association. (2000). Public education: The next generation. *Australian Journal of Learning Disabilities, 5*, 4-7.
- Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education, 17*, 129-147.
- Bartak, L., & Fry, J. (2004). Are students with special needs in mainstream classes adequately supported? Perceptions from teachers in Victoria. *Australian Journal of Learning Disabilities, 9*, 16-21.
- Bellert, A., & Graham, L. (2006). Caught in the middle: Reaching and teaching middle years students with learning difficulties. *Australian Journal of Middle Schooling, 6*, 3-10.
- Birch, S.H., & Ladd, G.W. (1997). The teacher-child relationship and children's early school adjustment. *Journal of School Psychology, 35*, 61-79.

- Briggs, J.D., Johnson, W.E., Shepherd, D.L., & Sedbrook, S.R. (2002). Teachers attitudes and attributions concerning disabilities. *Academic Exchange Quarterly*, 6, 85-89.
- Clough, P., & Lindsay, G. (1991). *Integration and the support service*. Oxford, UK: NFER-NELSON Publishing Company Ltd.
- Cook, B.G., Cameron, D.L., & Tankersley, M. (2007). Inclusive teachers' attitudinal ratings of their students with disabilities. *The Journal of Special Education*, 40, 230-238.
- Cunningham, E., & Firth, N. (2005). *Swinburne University learning difficulties project: Submission to the national inquiry into the teaching of literacy* (Submission No. 96). Retrieved June 4, 2008, from http://www.dest.gov.au/sectors/school_education/policy_initiatives_reviews/key_issues/literacy_numeracy/national_inquiry/documents/pdf/Sub_96_Cunningham_and_Firth_pdf.htm
- Department of Education and Training. (2001). *Students at educational risk*. Retrieved February 18, 2008 from <http://www.det.wa.edu.au/policies.asp>
- Department of Education and Training. (2003). *Building inclusive schools: A professional learning package*. Perth, Western Australia: Department of Education and Training.
- Department of Education, Science and Training. (2005). *Schooling issues digest: Students with learning difficulties in relation to literacy and numeracy*. Retrieved June 4, 2008, from <http://dest.gov.au/schools/publications/digest>.
- Elbaum, B., & Vaughn, S. (2003). For which students with learning disabilities are self-concept interventions effective? *Journal of Learning Disabilities*, 36, 101-108.
- Elkins, J. (2000). All empires fall, you just have to know where to push: Antecedent issues for a study of learning difficulties in Australia. *Australian Journal of Learning Disabilities*, 5, 4-7.

- Elkins, J. (2007). Learning disabilities: Bringing fields and nations together. *Journal of Learning Disabilities, 40*, 392-399.
- Elliot, J. (2007). Providing academic support for teachers and students in high stakes learning environments. *Journal of Applied School Psychology, 23*, 87-107.
- Ellis, L.A. (2005). *Australian education review: Balancing approaches: Revisiting the education psychology research on teaching students with learning difficulties*. Retrieved February 18, 2008, from <http://www.acer.edu.au/research/programs/documents/literaturereview.pdf>.
- Erikson, E.H. (1968). *Identity: Youth and crisis*. New York: Norton.
- Farrell, P., Jimerson, S.R., Kalambouka, A., & Benoit, J. (2005). Teachers' perceptions of school psychologists in different countries. *School Psychology International, 26*, 525-544.
- Firth, N. (2008, February 25). Let's define 'learning disabilities' at last. *The Age*. Retrieved June 4, 2008, from <http://www.theage.com.au/news/education-news/lets-define-learning-disabilities-at-last/2008/02/22/1203467395731.html>
- Forlin, C. (2001). Inclusion: identifying potential stressors for regular class teachers. *Educational Research, 43*, 235-245.
- Fry, J., & Bartak, L. (2006). Teacher perceptions of the support needs of students with learning difficulties and emotional/behavioural disorders in mainstream primary and secondary schools. *Australian Journal of Dyslexia and Specific Learning Difficulties, 1*, 24-30.
- Graham, L., & Bailey, J. (2007). Learning disabilities and difficulties: An Australian conspectus introduction to the special series. *Journal of Learning Disabilities, 40*, 386-391.

- Hammond, L. (1996). *When bright kids fail: How to help children overcome specific learning difficulties*. Sydney, Australia: Simon and Schuster.
- Hargreaves, A. (2000). Mixed emotions: Teachers' perceptions of their interactions with students. *Teaching and Teacher Education, 16*, 811-826.
- Hawkins, J.D., Catalano, R.F., & Miller, J.Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin, 112*, 64-105.
- Hawkins, J.D., Doueck, H.J., & Lishner, D.M. (1988). Changing teaching practices in mainstream classrooms to improve bonding and behavior of low achievers. *American Educational Research Journal, 25*, 31-50.
- Heiman, T. (2001). Inclusive schooling-middle school teachers' perceptions. *School Psychology International, 22*, 451-462.
- Klassen, R.M., & Lynch, S.L. (2007). Self-efficacy from the perspective of adolescents with LD and their specialist teachers. *Journal of Learning Disabilities, 40*, 494-507.
- Klassen, R.M., Neufeld, P., & Munro, F. (2005). When IQ is irrelevant to the definition of learning disabilities: Australian school psychologists' beliefs and practice. *School Psychology International, 26*, 297-316.
- Kortering, L., & Braziel, P. (2002). A look at high school programs as perceived by youth with learning disabilities. *Learning Disability Quarterly, 25*, 177-189.
- Lane, K.L., Pierson, M.R., & Givner, C.C. (2004). Secondary teachers' views on social competence: Skills essential for success. *The Journal of Special Education, 38*, 174-186.
- Larkin, M.J., & Ellis, E.S. (2004). Strategic academic interventions for adolescents with learning disabilities. In B.Y.L. Wong (Ed.), *Learning about learning disabilities* (pp. 375-414). San Diego: Elsevier Academic Press.

- Learning Difficulties Australia. (2007). *Submission by learning difficulties Australia to the Victorian parliamentary inquiry into effective strategies for teacher professional learning*. Retrieved June 13, 2008, from http://www.parliament.vic.gov.au/etc/Submissions/prof_learn/learningdifficultiesaustralia050707.pdf
- Levins, T., Bornholt, L., & Lennon, B. (2005). Teachers' experience, attitudes, feelings and behavioural intentions towards children with special educational needs. *Social Psychology of Education, 8*, 329-343.
- Lindsay, G. (2007). Educational psychology and the effectiveness of inclusive/mainstreaming. *British Journal of Educational Psychology, 77*, 1-24.
- Louden, W., Chan, L.K.S., Elkins, J., Greaves, D., House, H., Milton, M., et al. (2000). *Mapping the territory. Primary students with learning difficulties: Literacy and numeracy*. Retrieved February 18, 2008, from http://www.dest.gov.au/sectors/school_education/publications_resources/profiles/mapping_territory_primary_students_difficulties.htm
- Marks, G.N. (2006). Influences on, and the consequences of low achievement. *The Australian Educational Researcher, 33*, 95-115.
- McMullen, R.C., Shippen, M.E., & Dangel, H.L. (2007). Middle school teachers' expectations of organizational behaviors of students with learning disabilities. *Journal of Instructional Psychology, 34*, 75-80.
- Midgley, C., Feldlaufer, H., & Eccles, J.S. (1989). Student/teacher relations and attitudes towards mathematics before and after transition to junior high school. *Child Development, 60*, 981-992.
- Miles, M.B., & Huberman, A.M. (1994). *Qualitative data analysis: An expanded sourcebook*. Thousand Oaks, CA: Sage.

- Ministerial Council of Education, Employment, Training and Youth Affairs. (1999). *The Adelaide declaration of national goals for schooling in the twenty-first century*. Retrieved May 31, 2008, from <http://www.mceetya.edu.au/mceetya/nationalgoals/natgoals.htm>
- Ministerial Task Force. (1993). *The education of students with disabilities and specific learning difficulties*. Western Australia: Ministry of Education.
- Morris, S. (2002). Promoting social skills among students with nonverbal learning disabilities. *Teaching Exceptional Children, 34*, 66-70.
- Murray, C. (2002). Supportive teacher-student relationships: promoting the social and emotional health of early adolescents with high incidence disabilities. *Childhood Education, 78*, 285-290.
- Murray, C., & Greenberg, M.T. (2001). Relationships with teachers and bonds with school: Social emotional adjustment correlates for children with and without disabilities. *Psychology in the Schools, 38*, 25-41.
- Pattison, S., & Harris, B. (2006). Adding value to education through improved mental health: A review of the research evidence on the effectiveness of counselling for children and young people. *The Australian Educational Researcher, 33*, 97-122.
- Pearce, M., & Forlin, C. (2005). Challenges and potential solutions for enabling inclusion in secondary schools. *Australian Journal of Special Education, 29*, 93-105.
- Prior, M. (1996). *Understanding specific learning difficulties*. East Sussex, UK: Psychology Press, Publishers.
- Raphael, B. (2000). *Promoting the mental health and well being of children and young people*. Retrieved June 12, 2008, from [http://www.healthconnect.gov.au/internet/main/publishing.nsf/Content/48F5C63B02F2CE07CA2572450013F488/\\$File/promdisc.pdf](http://www.healthconnect.gov.au/internet/main/publishing.nsf/Content/48F5C63B02F2CE07CA2572450013F488/$File/promdisc.pdf)

- Reed, V.A., & Spicer, L. (2003). The relative importance of selected communication skills for adolescents' interactions with their teachers: High school teachers' opinions. *Language, Speech and Hearing Services in Schools, 34*, 343-357.
- Richardson, B.G., & Shupe, M.J. (2003). The importance of teacher self-awareness in working with students with emotional and behavioral disorders. *Teaching Exceptional Children, 36*, 8-13.
- Rivalland, J. (2000). Definitions & identification: Who are the children with learning difficulties? *Australian Journal of Learning Disabilities, 5*, 12-16.
- Rock, E.E., Fessler, M.A., & Church, R.P. (1997). The concomitance of learning disabilities and emotional/behavioral disorders: A conceptual model. *Journal of Learning Disabilities, 30*, 245-263.
- Rohl, M., & Greaves, D. (2005). How are pre-service teachers in Australia being prepared for teaching literacy and numeracy to a diverse range of students? *Australian Journal of Learning Disabilities, 10*, 3-8.
- Rohl, M., & Milton, M. (2002). What's happening in schools for primary students with learning difficulties in literacy and numeracy? A national survey. *The Australian Journal of Language and Literacy, 25*, 25-48.
- Sawyer, M.G., Arney, F.M., Baghurst, P.A., Clark, J.J., Graetz, B.W., Kosky, R.J., et al. (2000). The mental health of young people in Australia key findings from the child and adolescent component of the national survey of mental health and wellbeing. *Australian and New Zealand Journal of Psychiatry, 35*, 806-914.
- Schumaker, J.B., & Ellis, E.S. (1982). Social skills training of LD adolescents: A generalization study. *Learning Disability Quarterly, 5*, 409-414.

- Schumm, J.S., & Vaughn, S. (1998). Introduction to special issue on teachers' perceptions: Issues related to the instruction of students with learning disabilities. *Learning Disability Quarterly*, 21, 3-5.
- Scott, B.J., Vitale, M.R., & Masten, W.G. (1998). Implementing instructional adaptations for students with disabilities in inclusive classrooms. *Remedial and Special Education*, 19, 106-119.
- Semrud-Clikeman, M. (2005). Neuropsychological aspects for evaluating learning disabilities. *Journal of Learning Disabilities*, 38, 563-568.
- Shaddock, A., Giorcelli, L., & Smith, S. (2007). *Students with disabilities in mainstream classrooms: A resource for teachers*. Retrieved February 18, 2008, from http://www.dest.gov.au/sectors/school_education/publications_resources/profiles/learning_outcomes_students_disabilities.htm
- Shaddock, A.J., Hoffman-Raap, L., Smith, S., Giorcelli, L., & Waddy, N. (2007). *What are the professional development needs of mainstream teachers who have students with a disability in their classrooms?* Retrieved February 18, 2008, from http://www.dest.gov.au/sectors/school_education/publications_resources/profiles/learning_outcomes_students_disabilities.htm
- Siegel, L.A. (1999). Issues in the definition and diagnosis of learning disabilities: A perspective on Guckenberger v. Boston University. *Journal of Learning Disabilities*, 32, 304-319.
- Snowling M.J. (2000). *Dyslexia* (2nd ed.). Oxford, UK: Blackwell.
- Soodak, L.C., Podell, D.M., & Lehman, L.R. (1998). Teacher, student, and school attributes as predictors of teachers' responses to inclusion. *The Journal of Special Education*, 31, 480-497.

- Sridhar, D., & Vaughn, S. (2002). Bibliotherapy: Practices for improving self-concept and reading comprehension. In B.Y.L. Young and M. Donahue (Eds.), *The social dimensions of learning* (pp. 161-188). Mahwah, NJ: Lawrence Erlbaum Associates.
- Svetaz, M.V., Ireland, M., & Blum, R. (2000). Adolescents with learning disabilities: Risk and protective factors associated with emotional well-being: Findings from the national longitudinal study of adolescent health. *Journal of Adolescent Health, 27*, 340-348.
- Twomey, E. (2006). Linking learning theories and learning difficulties. *Australian Journal of Learning Disabilities, 11*, 93-98.
- United States Department of Education. (1997). *The individuals with disabilities education act (IDEA) amendments*. Retrieved June 16, 2008, from <http://www.ed.gov/offices/OSERS/Policy/IDEA>
- University of Canberra. (2007). *Project to improve the learning outcomes of students with disabilities in the early, middle and post compulsory years of schooling*. Retrieved February 18, 2008, from http://www.dest.gov.au/sectors/school_education/publications_resources/profiles/learning_outcomes_students_disabilities.htm
- Vaidya, S.R. (2001). Research for classroom teachers. *Education, 122*, 151-153.
- Van Reusen, A.K., Shoho, A.R., & Barker, K.S. (2001). High school teacher attitudes toward inclusion. *The High School Journal, 84*, 7-17.
- Vaughn, S., Gersten, R., & Chard, D.J. (2000). The underlying message in LD intervention research: Findings from research syntheses. *Exceptional Children, 67*, 99-114.
- Watson, J. (2004). *Teachers' talk: Perceptions of Queensland secondary teachers about students with learning difficulties*. Retrieved February 16, 2008 from <http://www.aare.edu.au/04pap/cra04084.pdf>

- Watson, J., & Boman, P. (2005). Mainstreamed students with learning difficulties: Failing and underachieving in the secondary school. *Australian Journal of Learning Disabilities, 10*, 43-49.
- Watson, J., & Bond, T.G. (2007). Walking the walk: Rasch analysis of an exploratory survey of secondary teachers' attitudes and understanding of students with learning difficulties. *Australian Journal of Learning Disabilities, 12*, 1-9.
- Weiner, H.M. (2003). Effective inclusion: Professional development in the context of the classroom. *Teaching Exceptional Children, 35*, 12-18.
- Westwood, P. (2004). *Learning and learning difficulties: A handbook for teachers*. Camberwell, VIC: ACER.
- Westwood, P., & Graham, L. (2003). Inclusion of students with special needs: Benefits and obstacles perceived by teachers in New South Wales and South Australia. *Australian Journal of Learning Disabilities, 8*, 3-15.
- Woolfson, L., Grant, E., Campbell, L. (2007). A comparison of special, general and support teachers' controllability and stability attributions for children's difficulties in learning. *Educational Psychology, 27*, 295-306.
- Wright, S.L., & Sigafos, J. (1998). Teachers and students without disabilities comment on the placement of students with special need in regular classrooms at an Australian primary school. *Australian Journal of Special Education, 21*, 67-80.
- Zipin, L. (2002). *Too much with too little: Shift and intensification in the work of ACT teachers*. Retrieved June 9, 2008, from <http://www.aeuact.asn.au/info-centre/documents/WorkloadReport.pdf>
- Zubrick, S.R., Silburn, S.R., Gurrin, L., Teoh, H., Shepherd, C., Carlton, J., et al. (1997). *Western Australian Child Health Survey: Education, health and competence*. Perth,

WA: Australian Bureau of Statistics and the TVW Telethon Institute of Child Health Research.

Zundans, L. (2003). Life narrative of a senior school student with learning difficulties.

Australian Journal of Learning Difficulties, 8, 22-25.

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Running head: STUDENT WITH LD: TEACHERS PERSPECTIVE

Educating Secondary School Students with Learning Difficulties: The Teacher's Perspective

Christine Potter

Abstract

Students with learning difficulties (LDs) in secondary schools are taught predominately in mainstream classrooms which can have repercussions for their social and academic outcomes (Prior, 1996; Watson & Boman, 2005). Teaching students with LDs in mainstream classrooms can have ramifications for the teacher (Ashman & Elkins, 2002). This research explored the experiences of secondary school mainstream teachers who taught students with LDs within their regular classrooms to understand the issues they encountered in trying to support these students. The qualitative study within a phenomenological framework used semi-structured interviews to understand the experiences of teachers. Nine participants were recruited from three government, one independent, and two Catholic secondary schools. Audio-taped interviews were transcribed and analysed using thematic content analysis to produce five themes; professional development and experience, support, attitudes and beliefs, emotions and coping, and managing individual differences. The results of the study provided an understanding of how teaching secondary students with LDs impacted on the teachers, for example, their attitudes, feelings, and teaching practices. The results of this research have implications for pre-service teachers and the professional development of current teachers. Limitations and proposed future research are discussed.

Author: Christine Potter

Supervisor: Associate Professor Lynne Cohen

Submitted: October, 2008

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Educating Secondary School Students with Learning Difficulties: The Teacher's Perspective

Introduction

Accommodating the needs of students with learning difficulties (LDs) is acknowledged as a significant issue for mainstream schools (Fry & Bartak, 2006). Over the past twenty years there has been a shift in the philosophy relating to the education of students with LDs with an international movement, including Australia, to embrace these students within the mainstream classroom (Avramidis & Norwich, 2002). It has been suggested that the mainstream environment can provide valuable opportunities for students with LDs to experience similar educational and social experiences appreciated by all other students (Anderson, Klassen, & Georgiou, 2007; Westwood & Graham, 2003). In the Western Australian (WA) context, where the present study was conducted, the Department of Education and Training (2003) has developed a policy of inclusive schooling which states that all children including those experiencing LDs should be able to access education in a supportive, heterogeneous, student focused learning environment appropriate to their age.

Secondary school students with LDs are taught mainly in mainstream classrooms (Watson & Boman, 2005). The academic and social outcomes for these students have not always been positive and a policy of inclusion can, for some students, lead to early school leaving, unemployment or low paid employment, juvenile delinquency, and mental health problems (Prior, 1996; Watson & Boman, 2005). As LDs are viewed as a mainstream issue (Elkins, 2000, 2007; Rivalland, 2000) and given the adverse outcomes highlighted, it is the role of schools to provide academic and emotional support to students who are not achieving acceptable academic levels due to LDs. Australian wide it is estimated that 20% of school students have difficulties in academic areas (Graham & Bailey, 2007). This estimate is supported by the Western Australian Child Health Survey which found that on average one in five WA school students were below academic competency in relation to their age (Zubrick

et al., 1997). To ensure that students do receive appropriate attention, it is essential that teachers have an understanding of LDs and the characteristics that students identified with LDs exhibit.

The Ministerial Task Force (MTF) (1993), established by the WA State Government, defined students with LDs as those:

“Students whose achievements in mathematics and/or language (literacy) are significantly below specified benchmarks and where these results can not be attributed to intellectual or physical disability, sensory impairment, emotional difficulties, low socio-economic background, geographic isolation, cultural background or lack of appropriate educational experiences” (original in italics), (MTF, 1993, p.19).

For the purposes of this study, the definition provided by the MTF will be adopted.

Every student with LD is unique in the problems they experience; the only common factor is academic underachievement (Hammond, 1996). Recognised in students with LDs are problems with following directions, sequencing, short-term memory retention, recognising and correcting mistakes, staying on task, and auditory processing (Ashman & Elkins, 2002; Prior, 1996). Adolescents with LDs are a diverse group and in addition to the above exhibit a range of characteristics relating to academic and personal development (Twomey, 2006).

Academically, adolescent students with LDs have limited basic skills in reading, written expression, and mathematics (Larkin & Ellis, 2004), leading to less efficient and effective learning (Department of Education, Science and Training, 2005). Profound social consequences may occur for an adolescent struggling with the challenges of a learning difficulty (Bellert & Graham, 2006). Students with LDs usually withdraw from class activities, are unwilling to contribute, and often will not participate in the social exchanges occurring within the classroom context (Larkin & Ellis, 2004). Involvement in extracurricular

events is limited and the repercussions for the student with LDs are isolation and sometimes rejection from peers (Larkin & Ellis, 2004). These social consequences can manifest themselves in emotional and behavioural problems (Klassen & Lynch, 2007).

Emotional and behavioural problems are found to co-exist in students with LDs (Ashman & Elkins, 2002). In Australia, the prevalence of co-morbidity between LDs and emotional behavioural disorders (EBD) is 40-50% (Prior, 1996). Students with LDs/EBD find it difficult to access the school curriculum and develop effective strategies to manage in school. This can lead to negative behaviours including hyperactivity, aggression, poor self-control, anxiety, and depression (Abrams, 2005). Research shows that students usually have little insight into their disruptive behaviours, generally blaming others for their actions (Abrams, 2005). This inability to adjust to classroom routines can have detrimental effects on their personal, social, and academic growth (Morris, 2002).

The provision of education for students with LDs has ramifications for the mainstream teacher (Ashman & Elkins, 2002). The impact on teachers may be more profound in secondary schools where there may be more emphasis on academic success compared to accommodating diversity within the student population (University of Canberra, 2007). The teacher's role, outlined in the Western Australian Department of Education and Training: Students at Educational Risk (2001) policy, includes developing, planning, and reporting on a curriculum which addresses the individual needs of students at risk. This may include modifying the curriculum to vary the difficulty of the work and the assessments set so that students are given opportunities to succeed and demonstrate what they have learnt (Shaddock, Giorcelli, & Smith, 2007; Vaughn, Gersten, & Chard, 2000). Vaidya (2001) argued that teachers should use teaching strategies that are evidence based. The role of the teacher is to access research findings that focus on current intervention programmes that have effective teaching strategies for students with LDs (Rohl & Milton, 2002). It is also important

for teachers to refer students to an appropriate agency when these strategies are no longer effective (Prior, 1996).

Teachers have an obligation to relate to students the social expectations they have for them. Lane, Pierson, and Givner (2004) presented a social skills rating system to 240 teachers from four ethnically diverse high schools within the United States of America (USA) and from this a number of social skills were identified for success in the school context. Self control, defined as controlling one's temper in interactions with teachers/peers, and cooperation skills were rated as equally important for school success. In a different study (Reed & Spicer, 2003) teachers disclosed the skills they perceived as important for social interactions in the regular classroom. Reed and Spicer (2003) looked at the teacher's perspective of how a conversation between a teacher and student should occur. Australian teachers (n=143) from 17 private secondary schools completed a questionnaire, which involved ranking (forced choice) 14 communication skills by importance. The results revealed that teachers gave particular importance to narratives (relaying a story, presenting views in a logical manner, clarification, perspective taking), views of other participants in dialogue, and turn taking. Success in these areas does require a secure, dependable, and predictable relationship built on trust between the student and their teacher (Murray, 2002).

For the promotion of a student's well-being, positive student/teacher relationships are essential: 'Good teachers' were identified as caring, who developed active programmes, and provided individual attention to students (Kortering & Braziel, 2002). Evidence, however, suggests that the structure of secondary schools (e.g., class sizes, different subject teachers, and timetabling) reduces opportunities for strong relationships between students and teachers to develop (Hargreaves, 2000; Murray, 2002). The establishment of a pastoral care system in secondary schools in Australia is one step schools are taking to improve relationships between students and their teachers (Pearce & Forlin, 2005; Zundans, 2003).

When attending to the problems characterised by students with LDs the attitudes and beliefs of the mainstream teacher is fundamental. A number of variables influence the attitudes and views held. Clough and Lindsay (1991) surveyed 584 primary school teachers from the United Kingdom (UK) to establish their opinions as to which students should be taught in mainstream classrooms. The results indicated that teachers felt they would have difficulties meeting the needs of students with emotional behavioural disorders (EBD's), followed by students with LDs. This view still existed a decade later as research by Briggs, Johnson, Shepherd, and Sedbrook (2002) and Westwood and Graham (2003) found that teachers continued to view these disorders as difficult to provide for. The negative attitudes held were related to the student's continued lack of ability to meet the expectations of their teachers (Briggs et al., 2002).

Soodak, Podell, and Lehman (1998) surveyed 188 teachers to establish their responses to the acceptance of students with LDs in mainstream classrooms. Being receptive to accepting students with LDs in the mainstream classroom was significantly related to the teacher's level of teacher efficacy (a belief that teaching can influence student's academic outcomes), and personal efficacy (a belief that one is confident and competent to achieve acceptable academic outcomes for students). Higher teacher/personal efficacy related to more receptive/calm responses to acceptance and also higher teacher efficacy related to a willingness to adapt curricula. Other studies (Briggs et al., 2002; Forlin, 2001; Van Reusen, Shoho, & Barker, 2001) have indicated similar results; the more extensive the training and knowledge teachers have with students experiencing LDs the more positive their views and the less stressful it was teaching these students in regular classrooms. This relationship was based on the belief that teachers were more competent and confident in delivering the curriculum to students with LDs.

Several studies have looked at teaching experience and its influence on teacher's views. Forlin (2001) showed that teachers with 10 years or more experience expressed a lack of acceptance for children with LDs, finding it one of the most stressful components of their careers. Teachers were concerned that their roles had changed and more children with LDs were being accommodated in regular classrooms. Similarly, Soodak et al. (1998) found that a teacher's willingness to accommodate students with LDs declined with the number of years they had taught. Soodak et al. proposed that for all their teaching efforts, students were still not achieving expected outcomes and recently graduated teachers may have more strategies to meet the needs of students with LDs.

Another factor that has attracted the attention of researchers is the knowledge teachers have regarding LDs. Heiman (2001) surveyed Israeli mainstream teachers with an average of 12 years experience. Of the 116 teachers, 28% had no appropriate knowledge relating to the specific LDs in their classrooms and were unclear of their attitudes towards these students. An Australian study by Rohl and Greaves (2005) noted that many graduate secondary teachers felt they were unprepared to teach students at risk due to their limited background knowledge of LDs. This included 47% of graduate teachers for literacy and 72% for numeracy.

A number of studies conducted in the Middle East (Heiman, 2001), North America (Athanasίου, Geil, Hazel, & Copeland, 2002; Hargreaves, 2000; Schumm & Vaughn, 1998; Scott, Vitale, & Masten, 1998) and Australia (Forlin, 2001; Westwood & Graham, 2003; Wright & Sigafoos, 1998) have identified classroom and school issues which create obstacles and benefits for the successful inclusion of students with LDs. These studies all revealed similar obstacles, including the negative attitudes of non LD students and other teachers, disruptions to the positive atmosphere of the classroom, catering for the needs of all students, impeding the progress of non LD peers, workload, lack of resources, stress, guilt, anxiety,

fear of not providing for their needs, the feasibility of adapting the curriculum, large class sizes, timetabling concerns, and a lack of adequate support. The benefits included the awareness, acceptance, and social support non LD students can provide and the satisfaction achieved from meeting the needs of these unique individuals; in addition the support, if any, provided benefits for the whole class (Anderson, Klassen, & Georgiou, 2007; Heiman, 2001; Weiner, 2003; Westwood & Graham, 2003).

It is often beyond the capacity of teachers to cater for the needs of students with LDs without support (Fry & Bartak, 2006). Support for teachers is required to meet everyday obstacles and also provide for their own emotional and psychological well-being. Westwood and Graham (2003) found that teachers expressed the support they received was of value but more was needed, especially in training and professional development.

In a national sample of 103 Australian primary and secondary teachers, Shaddock, Hoffman-Raap, Smith, Giorcelli, and Waddy (2007) reported that teachers required: a) professional development (PD) based in the classroom that focused on practical strategies; b) PD delivered by experts/teachers who acknowledged the importance of the current classroom context; and, c) PD involving networking and observing others. Barriers to these requests centred on funding, conflicting priorities, and time. The teachers commented that PD through specific university courses was not as important as PD in context. They also expressed that they did not need PD about consultation with other professionals, collaboration with peers, or assistants even though they were of value to support systems. In contrast, a number of studies have noted the importance of collaboration (e.g., co-teaching/mentors) (Bartak & Fry, 2004; Heiman, 2001; Pearce & Forlin, 2005) as a practical approach to addressing problems as they arose allowing for ongoing support and training in the classroom if required.

A study by Forlin (2001) identified the stress teachers experienced in their work. The most significant stress related to the teacher's perceived professional competence in dealing

with the needs of all students within a regular classroom. Teachers often manage this stress by talking to a supportive principal, colleagues, mentors, and family and friends who can provide them with a different perspective on their experiences (Abrams, 2005; Richardson & Shupe, 2003). If these support networks are not available, school psychologists may be in a position to provide support in a number of areas.

Teachers often do not identify psychologists as being part of their framework for teaching students with LDs. In a study by Anderson, Klassen, and Georgiou (2007) only 10% of WA teachers (n=162) considered the work of psychologists as important to their professional role. Furthermore, they did not feel that psychologists offered any assistance beyond the evaluation, classification, and placement of students with LDs in regular classrooms. It was noted that as psychologists have an extensive knowledge relating to LDs they needed to anticipate the needs and support required for teachers in this area.

Athanasiou, Geil, Hazel, and Copeland (2002) found that a stronger relationship can exist between teachers and psychologists. Psychologists provided emotional support by listening and appraising teacher's efforts as educators, intervention support by integrating intervention programmes for identified students, and practical support through open communication and sharing workloads. In this study, teachers expressed they did not require the psychologist to fix students' problems but provide team support for all the parties involved in the lives of students with academic and/or behavioural problems.

Given the complexities of secondary school and adolescent students the majority of research has involved primary schools (Australian Resources Educators' Association, 2000). Learning difficulties are for life (Prior, 1996); 70% of students with LDs in literacy at seven years of age continued to struggle at age 15 years (Snowling, 2000). Due to the lifelong nature of LDs (Watson & Boman, 2005), the high number of students taught on a daily basis in secondary schools (Hargreaves, 2000), the stress associated with teacher roles and

responsibilities (Forlin, 2001), and the support required to accommodate students with LDs (Westwood & Graham, 2003) there is a need to explore the impact of educating students with LDs on secondary mainstream teachers. To date, the research in this area has relied predominantly on quantitative methods (Avramidis & Norwich, 2002). Klassen and Lynch (2007) have stated that a reliance on quantitative methods to analyse this data lessens the influence of the participant's personal reflections in relation to the variable in question. This current research conducted within a qualitative framework explored the phenomenon in question by presenting the following research questions:

- a. What are the experiences of secondary school teachers in mainstream classrooms who teach students with learning difficulties?
- b. What issues do teachers encounter in trying to support students with learning difficulties in class?

Method

Research Design

The research design emerged from a need to understand mainstream teachers' everyday experiences of teaching secondary school students experiencing LDs. The present study adopted a phenomenological approach as this approach seeks to understand a participant's lived experience of a situation within a given context (Giorgi & Giorgi, 2003).

In phenomenology, reality for the participant is understood through their individual experiences (Starks & Trinidad, 2007). The phenomenological method also allows the researcher to capture the essence and meaning shared by a number of participants experiencing a similar situation (Giorgi & Giorgi, 2003; Starks & Trinidad, 2007).

A semi-structured interview design was adopted (Liamputtong & Ezzy, 2005). Semi-structured interviews allow the researcher to draw on a set of questions to shape rather than dictate the flow of the interviews (Smith & Osborn, 2003). The benefits of semi-structured

interviews include the bond which often develops between the researcher and participants, the importance of adhering to the order of the interview schedule is relaxed, and they allow the researcher to clarify and elaborate on areas of interest to the participant. Due to this flexibility richer data can often be collected from semi-structured interviews (Smith & Osborn, 2003).

Participants

The sampling frame for the research (Liamputtong & Ezzy, 2005) was secondary school teachers who currently taught students with LDs within a mainstream classroom setting. Nine secondary school teachers, one male and eight females, participated in the study. Five of the teachers taught in government schools, two in independent schools, and the remaining two in Catholic schools. Seven teachers taught in schools in the northern suburbs of the Perth metropolitan area, one in the southern suburbs, and one in a rural location north of Perth. A demographic profile of the participants is provided in Table 1 (see Appendix A).

Materials

The interview schedule (see Appendix B) was comprised of open-ended questions which encouraged discussion on the issues faced by secondary school teachers educating students with LDs. For example, questions included 'what are your experiences of teaching secondary school students with learning difficulties?' The interviewer asked probing questions to encourage participants to elaborate on; or clarify details of their experiences. The individual interviews were recorded using a portable tape recorder.

Prior to the interview the participants were provided with an information sheet (see Appendix C) and an informed consent form (see Appendix D). In addition, a brief questionnaire pertaining to each participant's teaching profile (see Appendix E) was completed. Table 1 (see Appendix A) provides a summary of the information collected.

Procedure

A snowball sampling method was followed to recruit participants (Liamputtong & Ezzy, 2005). Secondary school teachers personally known to the researcher were approached regarding the study. They were screened to check that they fell within the sampling frame applicable to the study, that is, mainstream secondary school teachers educating students experiencing LDs. The initial respondents were then asked to suggest other teachers who might be willing to participate in the study. The identified teachers were sent an information letter (see Appendix C) outlining the nature of the study and the procedures involved. The information letter also included the researcher's contact details so those teachers willing to participate in the research could contact the researcher directly to organise a suitable time and location for the interviews.

Individual interviews were arranged to take place at a mutually agreed place and time. Prior to the commencement of the interview the participants were advised that participation was voluntary and that they could withdraw from the study at any time without any adverse outcomes. The researcher emphasised the confidentiality of the participant's contributions and that no identifying information was required or would be used in the final research report. Each participant was given an opportunity to ask questions and once they indicated they were willing to proceed with the interview, they were asked to sign a consent form and complete the teacher profile questionnaire provided (see Appendix E). The participants were advised that the interview would be audio-taped and that the duration of each interview would be approximately 30-60 minutes. Participants were asked whether the researcher could contact them if necessary to verify the accuracy of the transcripts and analysis.

Two participants were unable to take part in audio-taped interviews due to location and time constraints so their responses were provided in writing. The two participants were emailed information letters, consent forms, and the teacher profiles to consider. The consent

forms and teacher profiles were returned either by mail or email. Prior to providing their written responses to the research questions they were given an opportunity to ask questions regarding the nature of the research and the procedures involved. The researcher asked the participants if they could be contacted by email for elaboration or clarification of the written responses they provided.

Data Analysis

All tape recordings were transcribed verbatim and then checked for accuracy.

Thematic content analysis was employed to interpret the transcribed data. Thematic content analysis involves coding the interview data to identify recurring themes which then become the categories of analysis (Liamputtong & Ezzy, 2005). Open coding was initially used to establish underlying themes and patterns in the data. The relationship or connections between these themes were established by axial coding, and finally a core category was identified by the selective coding of the data (Liamputtong & Ezzy, 2005; Starks & Trinidad, 2007). To facilitate this coding process the transcribed data was read a number of times which enabled the researcher to become familiar with the data collected (Smith & Osborn, 2003).

To ensure rigour of the study, criteria including credibility (internal validity), transferability (external validity), and dependability and confirmability (reliability) must be adhered to by the qualitative researcher (Libarkin & Kurdziel, 2002). This was ensured by an 'audit trail' of thorough records of interviews, original notes, and observations, together with documentation of the stages of the analysis (Mays & Pope, 1995). The project supervisor also conducted a review of the interview transcripts to enhance the reliability and validity of the data and to control for researcher biases (Libarkin & Kurdziel, 2002; Mays & Pope, 1995).

Findings and Interpretations

The completed data analysis produced the following five themes; professional development and experience, support, attitudes and beliefs, emotions and coping, and

managing individual differences. Each theme was significant in terms of the teacher's perceived ability to educate secondary students with learning difficulties (LDs). From these five main themes sub-themes emerged which together have been presented in Table 2. Table 2 also provides the order for discussion of the themes and sub-themes. For the purpose of clarity, the findings and interpretations will be presented within these themes and interpreted with reference to previous research. Each theme will include quotations from the participants.

Table 2

*Themes and Sub-themes: Teacher's Perceptions Educating Students with Learning**Difficulties*

Themes	Sub-themes
Professional development and experience	Experience and knowledge
	Professional development
Support	Teachers aides
	School psychologists and educational support
	Collaboration
	Student peer support
	Parental support
Attitudes and beliefs	Personal beliefs
	Relationships with students
	School culture
Emotions and coping	Stress/competence
Managing individual differences	Individual needs
	Resources
	Modifying curriculum

Professional Development and Experience

Experience and Knowledge

Many of the teachers reflected that their years of teaching experience enabled them to conduct their roles in a more efficient manner. For example, *'you've got all that experience to draw from and kids emerge as types over the long period'*, one teacher explained the benefit of experience:

... how to lead kids to an end point and you spend less hours generating stuff to get there, you sort of find the path through a bit more quickly and more efficiently.

This did not necessarily make it any easier for them, *'doesn't get easier, maybe you are just not so shocked; not so frightened'*.

The difficulties teachers faced during their early careers when they were inexperienced as teachers of students with LDs are captured by the following, *'at the beginning you are frightened'* and a... *'little overwhelmed'*. A more experienced teacher offered the following:

...you just have to adjust your lesson plan around it [LDs]. That's easier to do if you have experience. It's harder for a first year out to just walk in, sense it, realise it, and then adjust as you go.

In contrast, one teacher felt that teachers new to the profession often *... 'have a little more of a handle on it'*... a view supported by Soodak et al. (1998) who suggested that graduate teachers may have more strategies to meet the needs of students with LDs.

The views expressed here are consistent with several studies (Briggs et al., 2002; Van Reusen et al., 2001) who found that more extensive experience with students with LDs led to more positive experiences in the regular classroom. It was concluded that the teachers were more confident and competent in delivering the curriculum because of their experience, a conclusion not fully supported in the current study where some teachers felt the job never got

easier. This could be related to other factors, for example, timetabling, or class sizes which are explored in later themes.

A number of the teachers felt they did not have the knowledge of specific LDs to enable them to carry out their duties, *'lots of problems I don't understand'* and *'knowledge of some of the more urgent types of LDs is much more important than having none'*. Heiman (2001) noted that teachers in their study with an average of 12 years teaching often had little knowledge relating to specific LDs in their mainstream classrooms, and Rohl and Greaves (2005) found that Australian graduate secondary school teachers felt unprepared to teach students at risk due to their limited knowledge of specific LDs.

The teachers agreed that research on teaching strategies for LDs was important, an issue postulated by Rohl and Milton (2002), however, many did not have the time to carry out research relevant to their duties, *'try to do your own research'* and *'there's not a lot of time to research the particular needs of any type of disability'*.

Professional Development

This theme emerged from the data and highlighted the major contribution of professional development (PD) and the value to teachers of PD in context. The reality of PD was expressed in the following reflections:

...it's not enough... consider went to uni 25 years ago, and ...professional development with this [LDs] ... is not good.

...tell me what do I do in the room... help me out and I don't think that ongoing PD is good enough, and finally,

...PD an ongoing thing... coming into my room and feeding me information and maybe we'd work together with these kids.

These findings are very similar to those reported by Shaddock et al. (2007) who established that teachers requested PD that focused on practical strategies which

acknowledged the importance of the context of the classroom. One teacher was conscious of the reasons for not participating in PD:

... 'I don't think a lot of people take on the opportunity... not valued enough... put that [PD on Aspergers] down the ladder in terms of what your needs are'.

Elkins (2000) noted that universities do offer courses or in-service programmes on LDs; however there was no incentive for teachers to undertake the opportunities to attend as expressed by the above teacher. There was a strong feeling of the roles of universities in terms of training and PD on LDs, *'teacher education did not equip me well to cater for the needs of students with disabilities'* and *'strategies to cope with them [LDs] have probably changed completely as to what I covered very quickly in my uni degree'*. These views are supported by the Shaddock et al. (2007) study where teachers placed little importance on the roles of universities in the training and PD process.

It is apparent from the views expressed that experience is valuable in teaching students with LDs. In conjunction with relevant knowledge and PD provided in context the learning environment for both teachers and students can be further enhanced. The issues raised by the teachers can be contributed in part to the levels of support they receive in their individual schools.

Support

The second theme to emerge from the data was the availability and types of support needed to enable mainstream teachers to cater for the needs of students with LDs. The literature in this area identifies that it is often beyond the capabilities of a teacher to educate students with LDs without ongoing support to meet everyday obstacles (Fry & Bartak, 2006). Westwood and Graham (2003) found that even though teachers valued the support they received, more was required. One teacher felt, *'it's really difficult to be expected to do it all on your own'* but felt that *'teachers don't ask for that, help, necessarily'*.

Teacher's Aides

Every teacher acknowledged the value to them and their students of additional help in the classroom. One teacher said, *'to help sort problems, to guide, to ask appropriate questions, or just to present a modified program'*. Another told of the consequences for students with difficulties if teacher aides were not available, *'without the support if you can't get to them they don't learn anything'*. Teachers are aware that the teacher's aide *'just can't be anyone'* and schools need to educate the teachers on how to get the most from their aides, for example, *'as teachers we're not really educated as to the best way to use teacher's aid'*. One teacher felt the role of the teacher's aide could be extended as shown by the following quote:

...a teachers aide with a really good knowledge base that's prepared to muck in and say this is this kid, this is kid X and this is their LDs, this is their needs, this is what I can do and be a bit more proactive in supplying that sort of information.

The overwhelming response of the teachers was that more teacher aid time would be *'fantastic'*; however, they were well aware of the costs associated with their employment in the classrooms, for example, *'I think that the funding for teacher's aides is inadequate'*.

In support of these comments research by Westwood and Graham (2003) revealed that teachers placed significant value on the support they received from their schools, in particular, support in terms of teachers aide time. They did find difficulties in finding time to liaise with the aides to develop plans and often the aid time was limited to only one or two sessions a week. These difficulties were not expressed by teachers in the current study who may have appreciated any form or amount of aid time provided at the secondary school level.

School Psychologists and Educational (Ed) Support

The reflections of the teachers in terms of school psychologists and Ed support varied considerably from *'limited interaction... in terms of LDs'* and *'we have a coordinator of kids*

with LDs and the information that I've received from them would be minimal' to 'we have fairly regular meetings...they discuss issues...where we go from here...2 or 3 times a term' and 'coordinator...writes 'I type' things on certain students in our school'. It was evident from some teachers that the part-time nature of support staff affected the teacher's ability to often obtain practical and relevant information from them. As Pearce and Forlin (2005) stated only having one educational support teacher in a large secondary high school significantly decreases the impact they can have on a mainstream teacher's role and how much assistance they can actually provide. One teacher expressed 'how urgently they [psychologists] are needed' and the value to teachers of students with LDs no matter how many years experience a teacher has:

...whether you've got 22 years of teaching or 2 months...to sit down with a professional and say...I need some ideas for what's the next best thing I should do to help them.

These quotes are consistent with the results of research conducted in this area. Anderson et al. (2007) found that only 10% of WA teachers thought psychologists in particular could enhance their role, and in terms of helping students with LDs they felt that psychologists offered little assistance beyond diagnosis. The provision of intervention support on a regular basis as expressed by one teacher is highlighted in the results of a study by Athanasiou et al. (2002) who found well established working relationships between teachers and psychologists.

Collaboration

Teachers mentioned the benefit of getting together with their peers to share ideas and plan together. One teacher suggested that collaboration was 'where most of your PD and learning comes from'. Another teacher talked about the positive outcomes generated from collaboration, 'teachers that get together and actually deliver something meaningful here. It's

going to work'. When other support networks are not available to the teachers collaboration is essential as illustrated by one participant:

...in some offices if you have staff that talk and get along they will openly offer really good advice especially if there is no psychologist there...I would see it as the well being of another professional.

Collaboration also took the form of mentor programs, '*new teachers coupled with a more experienced teacher, this was supportive*' as highlighted by one teacher. Congruent with these findings are those of several studies (Bartak & Fry, 2004; Heiman, 2001; Pearce & Forlin, 2005) who viewed collaboration and mentoring as practical solutions to addressing issues and providing support to teachers on an ongoing basis. Unfortunately many mentoring programs are being disbanded in secondary schools due to the costs involved.

Student Peer Support

Teachers spoke of the benefits of peer mentoring as a form of support for both teachers and their students with LDs. One teacher stated that '*peer instruction is always encouraged*', they are '*good role models for the ones that are weaker*'. The benefits extended to the non-LD students, for example, '*kids benefit in seeing people that aren't all 100% perfectly well functioning...that's what the world is*'. A strong comment to come from the interviews was that '*students do have an opportunity to learn tolerance and acceptance*'.

There is significant support for the notion of peer support in two studies (Westwood & Graham, 2003; Wright & Sigafos, 1998) who found that teachers included in their benefits of accommodating students with LDs the awareness, acceptance, and social support the non-LD students can offer, and the opportunities for peer tutoring and role modelling that are created in this setting.

Parental Support

Parental support is essential as it enables teachers to provide a meaningful learning experience for students with LDs. For this to succeed one teacher felt that a *'marriage between all three parties; child, teacher, parent is just crucial'*. Pearce and Forlin (2005) postulated that if parents of students with LDs are valued within the school community they will be more willing to participate in their children's education. Teachers are very aware of the struggle many parents endure to obtain an effective education for their children, as illustrated by the following participant:

...parents struggle to really fight the system to get the best for their kids...parents tread a fine line too about mentioning to teachers what's the best thing.

Overall, teachers expressed that *'parents are great'* and *'they help with homework...tend to aware of the limitations'*. One participant suggested that parents could be more supportive:

...it would be really good if you could give the teachers as much information as you can get before they even get started with the kid, so you're not chasing it up.

Difficulties arose for teachers when parents *'sometimes make ridiculous demands of you'*. Parents sometimes will not acknowledge that their child has a learning problem and this can be frustrating for the teacher in their role to provide a relevant program for the student, for example:

...parents have a responsibility to recognise and be willing to recognise the LDs, listen to advice of school psychologist and teachers...resistant to labelling to direct resources and funding.

Forlin (2001) observed the stressors teachers encountered when educating students with LDs. Interactions with parents, deemed excessive in the Forlin study, were not perceived by the teachers as stressful and the majority of the teachers in the current study had a similar

reaction. Teachers acknowledged the importance of working with parents to meet the expectations they envisaged for their children and to show empathy towards parents.

Attitudes and Beliefs

Personal Beliefs

The third theme to emerge from the data was the attitudes and beliefs teachers hold regarding students with LDs which are fundamental to the student's education. Research (Briggs et al., 2002; Clough & Lindsay, 1991; Westwood & Graham, 2003) found teachers experienced more difficulties teaching students with behavioral problems which may often co-exist with LDs. Adolescent students as one teacher revealed have '*got all those social dimensions and...the learning problems just compound that*' a view also held by Klassen and Lynch (2007). One teacher in the present study commented that students with behavioural problems, usually from a diagnosis of Attention Deficit Hyperactivity Disorder (ADHD) were '*harder to engage*' and '*they are really challenging*' but as one teacher expressed '*they are an everyday reality in the classroom that need to be taken into account*'.

The overwhelming attitude to inclusivity defined as the placement of students with LDs in regular classrooms (Avramidis & Norwich, 2002) was characterised by the following reflections:

...I think that's a good move but I'm not sure it's been implemented properly, and

...I don't feel that they shouldn't be there... that's where [they] deserve to be.

As highlighted in a study by Briggs et al. (2002) teachers negative attitudes were correlated to the expectations they held for students with LDs. Participants in the current study said, '*...the expectation is get them to be achieving as close to mainstream work as they possibly can*' and '*put expectations on each child that's achievable*'. One teacher felt it was their role to provide a positive experience for students with LDs as illustrated by this comment:

...you've got to put yourself into the place of a student who maybe doesn't have such a fabulous experience...think about what we can do to enhance their experience.

To enable these positive experiences to take place, strong relationships between teachers and students is essential.

Relationships with Students

Building strong relationships between teachers and students with LDs was crucial for the teachers in the present study and they were quite clear in their views that *'teaching is more about the relationships than the content'*, and if the student with LDs is *'not feeling valued then they are not going to achieve anything'*. One teacher felt that *'matching the student to the teacher is the important thing'* as it *'can overflow into other subjects'*. These findings provide support for Kortering and Braziel's (2002) study which postulated that the promotion of a student's wellbeing relied on the rapport between student and teacher. The structure of secondary schools may be detrimental to the building of rapport (Hargreaves, 2000), however, a pastoral care system (Pearce & Forlin, 2001; Zundans, 2003) operating in many of the schools the present participants taught in helped to improve these relationships.

School Culture

The culture of the school is very important for the successful inclusion of students with LDs. As indicated in a report by the University of Canberra (2007) and expressed in the current study *'schools that value academic success...kids [with LDs] can feel inadequate in that setting'*. This view can also create difficulties for the teachers' role as illustrated by one teacher *'you are pressured to teach content for deadlines but you know there are kids that are not able to take all that in...its harrowing'*. One teacher expressed the importance of the school culture in terms of inclusion for students with LDs when they said:

...there's a cultural acceptance within the school and within the class...very much a whole school approach...if the school doesn't encompass that in their philosophy

there's not a lot you can do as an individual teacher, it needs whole school collaboration.

This view is in support of past research (Pearce & Forlin, 2005; Watson & Boman, 2005) who noted the repercussions (loss of community spirit and connectedness) for secondary schools that do not embrace a positive culture to support the learning experiences of all students, especially those experiencing LDs.

Emotions and Coping

Stress/Competence

Teachers spoke of the stress associated with teaching secondary students with LDs.

The stress related to their perceived competence at catering for the students and their individual needs. Much stress arose because teachers '*care too much*' and one teacher felt, '*the hardest things for teachers who care is to get a good work/life balance*'. The stress stemmed from as one teacher explained:

...oh gosh I haven't helped this kid this week, he's learnt nothing, I haven't been able to get to him and he's not coping on his own.

And further:

Often times you feel inadequate... you simply can't find yourself providing a course appropriate for them.

In contrast to these views one teacher stated, '*I think carrying these students makes you more competent*'. The stress often stayed with the teachers even when the school day had finished, for example, '*you are thinking about it when you have a shower in the morning*'. How teachers cope with this stress is, '*you just work hard, I work hard at it...it's not right to slack off*'.

There were often positive moments for the teachers when a student with LDs achieved success, two teachers put it quite simply, '*success stories... it's good...really good*'.

and *'working with students with LDs seeing them progress attaining skills for their outcome that's all positive stuff for a teacher'*. A more reflective example was *'relieved, because it feels like you've got somewhere... you've made a difference'*.

These comments provide support for past research conducted in this area. For example, Forlin (2001) found that teachers' levels of stress were highest when they felt their competence was being compromised when attempting to meet the needs of not only students with LDs but all students within the regular classroom setting. Previous studies (Abrams, 2005; Richardson & Shupe, 2003) reported that many teachers managed stress by talking to colleagues, family, and friends however the teachers in the present study offered little comment on this issue. In addition, school psychologists are in a position to provide emotional support and encouragement to teachers (Athanasidou et al., 2002). Many teachers in this study considered psychologists were only available to help students with emotional concerns.

Managing Individual Differences

Individual Needs

All the teachers reflected on the difficulties encountered when catering for the individual needs of students with LDs. One teacher expressed that *'everything needs to be done on an individual situation'* however, *'every single situation is just so different'*. The overwhelming feeling was that these students, *'really needed one on one...constant support'*. To successfully achieve this one teacher spoke of flexibility, *'it is more important than knowing in lots of ways'* and, was concerned when they saw teachers who had a plan and found it difficult to *'move from that plan no matter what'*.

Barriers to meeting the individual needs of students with LDs include time and the stress associated with a lack of time (Westwood & Graham, 2003; Wright & Sigafoos, 1998). This was illustrated by the following example, *'one or two students in the classroom [with*

LDs] who just take all your time... so that puts extra stress in class'. Teachers wanted opportunities to provide one on one attention for students, one teacher remarked '*more time...and yet keep it mainstream...I don't know whether you can solve that'*. This comment reflects the nature of secondary schools when time extension is difficult when students are moving from one class to the next (Pearce & Forlin, 2005).

Research relating to the roles of secondary teachers and the obstacles they face in providing an appropriate education for students with difficulties highlights the impact of class size (Westwood & Graham, 2003), a theme every teacher in the present study reflected upon, '*with anything from 25 to 32 students...trying to cater for the individual needs of a student is never easy'*. The teachers all provided suggestions in relation to class size and the benefits of smaller classes, for example, '*it's huge, the less numbers you have the more you are able to do'*, and not only smaller classes but less classes to teach as, '*less classes...so I got to know them [students with LDs] better'*. Teachers felt they could do a better job and have more time to access resources.

Resources

Teachers in the private sector found they had access to many resources which included '*first steps... stepping out are brilliant'*. Others mentioned were *read please* and *mathletics* as helpful for a number of students experiencing difficulties. Resources included not only those specific to content but also social skills which can often be underdeveloped in students with LDs (Bellert & Graham, 2006; Larkin & Ellis, 2004), as illustrated by one teacher:

often I will try and structure it so programs that I run at year 8 level model how to socialise appropriately within a classroom cos that's one of the bits they don't get.

And further:

...very specific high interest theme [resources] they could relate to issues of self-esteem, adolescence, coping skills, anything that would help them to think good about themselves.

These quotes provide support for research conducted by Lane et al. (2004) and Reed and Spicer (2003) who rated self-control, relaying a story, and turn taking as important skills to succeed socially at school. Often secondary school teachers found that the resources available were not age appropriate for adolescent students, '*appropriate material...materials are not written for this group*'.

Modifying Curriculum

Research suggests that modifying the curriculum for students with LDs is vital as it allows the complexity of the subject content to be varied so students are provided with opportunities to succeed and show what they have achieved (Shaddock, Giorcelli, & Smith, 2007; Vaughn et al., 2000), as one teacher highlighted:

modifying the program so that they can achieve outcomes in the class and be engaged in the learning experience.

Scott et al.'s (1998) literature review found that an adaptation of the curriculum was feasible however in the practice it was difficult due to a lack of support and training, this outcome was supported by the comment of one teacher:

...30 kids in a classroom...you've got to modify your lesson plan 2 or 3 different ways...the extra challenge is enormous...I think to be realistic ...very difficult to do...to achieve...to do it justice.

Summary

The purpose of this study was to examine the experiences of secondary school teachers educating students with LDs and the issues they encountered in trying to support the students. The experiences were found to centre around five major themes which included

professional development and experience, support, attitudes and beliefs, emotions and coping, and managing individual differences. Each of these themes contributed to the experiences of teachers and impacted on their roles as the facilitators of the academic and social education of students with LDs.

The study highlighted that teachers are fully aware of the need to help all students in their classroom especially those with LDs. It was a role teachers could not undertake without ongoing support. Experience in teaching played a major role in this process as it allowed the teachers to assess the classroom situation and conduct their roles in a more efficient manner. The acquisition of knowledge appropriate to the learning difficulties present in a given classroom was essential; however the level of professional development and support was not consistent for all the teachers participating in the study. The sources of support the teachers valued the most were teachers' aides and collaborating with colleagues. It was important that these support networks were context specific and provided on a regular basis. Teachers also valued the support of parents and acknowledged the difficulties parents encountered in advocating the needs of their children. Teachers expressed the importance of peer mentoring by non LD students as it provided valuable opportunities for non LD students to learn tolerance and the understanding that people have diverse skills and needs which is not only within the school system but society as a whole.

It was apparent that the present inclusive schooling structure resulted in high levels of stress for secondary school teachers. Teachers were concerned that time constraints, class sizes, lack of relevant resources, and curriculum modifications compromised their ability to meet the needs of all students, especially those with special education and social needs. The emotional wellbeing of teachers is of significant importance to schools and the interviews conducted for the present study may have offered an opportunity for the teachers to find expression for their stress and frustrations.

The positive attitudes and beliefs held by teachers in this study were deemed important for the establishment of positive relationships with students. These positive attitudes and relationships however relied heavily on a whole school culture of acceptance and tolerance to succeed.

Limitations of the Study

The snowball sampling method followed in this research to recruit teachers may have limited the findings of this study due to perceived selection bias when the initial participants were contacted to participate in the study. The teachers who provided their perspective on the phenomenon studied may have done so due to their interest or concerns regarding secondary teachers involved in the education of students with LDs. Two participants provided written responses to the interview questions which may have lead to respondent bias. They may have influenced the results as they had the opportunity to take more time to consider and provide their responses to the questions posed.

Implications and Future Research

The findings from this study have implications for the roles secondary schools undertake to support their current and future teachers who teach students experiencing learning difficulties within a mainstream classroom setting. It is apparent from the information analysed that teachers are valuable sources of information in this area of education. Teacher input is important for the development of theoretical and practical frameworks under which secondary schools operate.

Educational support staff and school psychologists must be more proactive and provide greater support for teachers in their roles. This is not only in terms of the resources that are available to make teacher's duties easier but also to make the teachers aware that psychologists are in a position to provide emotional support and encouragement if required. In addition, resources and strategies deemed essential and supportive in terms of developing

and implementing plans to meet the individual needs of students should be made available from one central source, for example, a specific website, so teachers from all education systems including government, independent, and Catholic schools have an opportunity to access relevant information and establish networks.

The current study has highlighted that professional development must be practical and relevant to the unique characteristics of specific learning difficulties. It is imperative that professional development is more accessible for teachers and that its value to their work practices is stressed. The content of professional development must also be relevant and tailored to the level of teaching experience, the knowledge base of the teachers participating, and to the subject areas taught (e.g., Maths, English, or Visual Arts).

As mentioned, teachers play a pivotal role in ongoing research regarding learning difficulties and the impact on their role as educators. The qualitative nature of the current research allowed the researcher to attempt to understand and describe the experiences of the participants in relation to the phenomenon studied (Giorgi & Giorgi, 2003; Starks & Trinidad, 2007). To further enhance the validity and interpretations of research on this phenomenon a mixed method approach involving quantitative and qualitative data would be appropriate. This mixed method approach could include a survey requesting responses in relation to many of the issues observed in the current study and could be based on the questionnaires utilised with primary school teachers in a study conducted by Westwood and Graham (2003). The questionnaire involved a comprehensive review of teacher's perceptions in relation to obstacles and benefits of educating students with LDs in mainstream classrooms, types of LDs encountered, the adequacy of the support received; human and concrete, and the extent of training and professional development provided. Together with qualitative information obtained by a methodology similar to the present study the results can add to the field of knowledge relating to secondary students with diverse needs and abilities.

References

- Abrams, B.J. (2005). Becoming a therapeutic teacher for students with emotional and behavioral disorders. *Teaching Exceptional Children, 38*, 40-45.
- Anderson, C.J.K., Klassen, R.M., & Georgiou, G.K. (2007). Inclusion in Australia: What teachers say they need and what school psychologists can offer. *School Psychology International, 28*, 131-147.
- Ashman, A., & Elkins, J. (2002). *Educating children with diverse abilities*. Sydney: Prentice Hall.
- Athanasidou, M.S., Geil, M., Hazel, C.E., & Copeland, E.P. (2002). A look inside school-based consultation: A qualitative study of the beliefs and practices of school psychologists and teachers. *School Psychology Quarterly, 17*, 258-298.
- Australian Resources Educators' Association. (2000). Public education: The next generation. *Australian Journal of Learning Disabilities, 5*, 4-7.
- Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education, 17*, 129-147.
- Bartak, L., & Fry, J. (2004). Are students with special needs in mainstream classes adequately supported? Perceptions from teachers in Victoria. *Australian Journal of Learning Disabilities, 9*, 16-21.
-
- Bellert, A., & Graham, L. (2006). Caught in the middle: Reaching and teaching middle years students with learning difficulties. *Australian Journal of Middle Schooling, 6*, 3-10.
- Briggs, J.D., Johnson, W.E., Shepherd, D.L., & Sedbrook, S.R. (2002). Teachers attitudes and attributions concerning disabilities. *Academic Exchange Quarterly, 6*, 85-89.
- Clough, P., & Lindsay, G. (1991). *Integration and the support service*. Oxford, UK: NFER-NELSON Publishing Company Ltd.
- Department of Education and Training. (2001). *Students at educational risk*.

Retrieved February 18, 2008 from <http://www.det.wa.edu.au/policies.asp>

- Department of Education and Training. (2003). *Building inclusive schools: A professional learning package*. Perth, Western Australia: Department of Education and Training.
- Department of Education, Science and Training. (2005). *Schooling issues digest: Students with learning difficulties in relation to literacy and numeracy*. Retrieved June 4, 2008, from <http://dest.gov.au/schools/publications/digest>.
- Elkins, J. (2000). All empires fall, you just have to know where to push: Antecedent issues for a study of learning difficulties in Australia. *Australian Journal of Learning Disabilities, 5*, 4-7.
- Elkins, J. (2007). Learning disabilities: Bringing fields and nations together. *Journal of Learning Disabilities, 40*, 392-399.
- Forlin, C. (2001). Inclusion: Identifying potential stressors for regular class teachers. *Educational Research, 43*, 235-245.
- Fry, J., & Bartak, L. (2006). Teacher perceptions of the support needs of students with learning difficulties and emotional/behavioural disorders in mainstream primary and secondary schools. *Australian Journal of Dyslexia and Specific Learning Difficulties, 1*, 24-30.
- Giorgi, A., & Giorgi, B. (2003). Phenomenology. In J.A. Smith (Ed.), *Qualitative psychology: A practical guide to research methods*, (pp. 25-51). London: SAGE Publications.
- Graham, L., & Bailey, J. (2007). Learning disabilities and difficulties: An Australian conspectus introduction to the special series. *Journal of Learning Disabilities, 40*, 386-391.
- Hammond, L. (1996). *When bright kids fail: How to help children overcome specific learning difficulties*. Sydney, Australia: Simon and Schuster.

- Hargreaves, A. (2000). Mixed emotions: Teachers' perceptions of their interactions with students. *Teaching and Teacher Education, 16*, 811-826.
- Heiman, T. (2001). Inclusive schooling-middle school teachers' perceptions. *School Psychology International, 22*, 451-462.
- Klassen, R.M., & Lynch, S.L. (2007). Self-efficacy from the perspective of adolescents with LD and their specialist teachers. *Journal of Learning Disabilities, 40*, 494-507.
- Kortering, L., & Braziel, P. (2002). A look at high school programs as perceived by youth with learning disabilities. *Learning Disability Quarterly, 25*, 177-189.
- Lane, K.L., Pierson, M.R., & Givner, C.C. (2004). Secondary teachers' views on social competence: Skills essential for success. *The Journal of Special Education, 38*, 174-186.
- Larkin, M.J., & Ellis, E.S. (2004). Strategic academic interventions for adolescents with learning disabilities. In B.Y.L. Wong (Ed.), *Learning about learning disabilities* (pp. 375-414). San Diego: Elsevier Academic Press.
- Liamputtong, P., & Ezzy, D. (2005). *Qualitative research methods* (2nd ed.). Australia: Oxford University Press.
- Libarkin, J.C., & Kurdziel, J.P. (2002). Research methodologies in science education: Qualitative data. *Journal of Geoscience Education, 50*, 195-200.
- Mays, N., & Pope, C. (1995). Qualitative research: Rigour and qualitative research. *British Medical Journal, 311*, 109-115.
- Ministerial Task Force. (1993). *The education of students with disabilities and specific learning difficulties*. Western Australia: Ministry of Education.
- Morris, S. (2002). Promoting social skills among students with nonverbal learning disabilities. *Teaching Exceptional Children, 34*, 66-70.

- Murray, C. (2002). Supportive teacher-student relationships: Promoting the social and emotional health of early adolescents with high incidence disabilities. *Childhood Education, 78*, 285-290.
- Pearce, M., & Forlin, C. (2005). Challenges and potential solutions for enabling inclusion in secondary schools. *Australian Journal of Special Education, 29*, 93-105.
- Prior, M. (1996). *Understanding specific learning difficulties*. East Sussex, UK: Psychology Press, Publishers.
- Reed, V.A., & Spicer, L. (2003). The relative importance of selected communication skills for adolescents' interactions with their teachers: High school teachers' opinions. *Language, Speech and Hearing Services in Schools, 34*, 343-357.
- Richardson, B.G., & Shupe, M.J. (2003). The importance of teacher self-awareness in working with students with emotional and behavioral disorders. *Teaching Exceptional Children, 36*, 8-13.
- Rivalland, J. (2000). Definitions & identification: Who are the children with learning difficulties? *Australian Journal of Learning Disabilities, 5*, 12-16.
- Rohl, M., & Greaves, D. (2005). How are pre-service teachers in Australia being prepared for teaching literacy and numeracy to a diverse range of students? *Australian Journal of Learning Disabilities, 10*, 3-8.
-
- Rohl, M., & Milton, M. (2002). What's happening in schools for primary students with learning difficulties in literacy and numeracy? A national survey. *The Australian Journal of Language and Literacy, 25*, 25-48.
- Schumm, J.S., & Vaughn, S. (1998). Introduction to special issue on teachers' perceptions: Issues related to the instruction of students with learning disabilities. *Learning Disability Quarterly, 21*, 3-5.

- Scott, B.J., Vitale, M.R., & Masten, W.G. (1998). Implementing instructional adaptations for students with disabilities in inclusive classrooms. *Remedial and Special Education, 19*, 106-119.
- Shaddock, A., Giorcelli, L., & Smith, S. (2007). *Students with disabilities in mainstream classrooms: A resource for teachers*. Retrieved February 18, 2008, from http://www.dest.gov.au/sectors/school_education/publications_resources/profiles/learning_outcomes_students_disabilities.htm
- Shaddock, A.J., Hoffman-Raap, L., Smith, S., Giorcelli, L., & Waddy, N. (2007). *What are the professional development needs of mainstream teachers who have students with a disability in their classrooms?* Retrieved February 18, 2008, from http://www.dest.gov.au/sectors/school_education/publications_resources/profiles/learning_outcomes_students_disabilities.htm
- Smith, J.A., & Osborn, M. (2003) Interpretative phenomenological analysis. In J.A. Smith (Ed.), *Qualitative psychology: A practical guide to research methods*, (pp. 51-81). London: SAGE Publications.
- Snowling M.J. (2000). *Dyslexia* (2nd ed.). Oxford, UK: Blackwell.
- Soodak, L.C., Podell, D.M., & Lehman, L.R. (1998). Teacher, student, and school attributes as predictors of teachers' responses to inclusion. *The Journal of Special Education, 31*, 480-497.
- Starks, H., & Trinidad, S.B. (2007). Choose your method: A comparison of phenomenology, discourse analysis, and grounded theory. *Qualitative Health Research, 17*, 1372-1380.
- Twomey, E. (2006). Linking learning theories and learning difficulties. *Australian Journal of Learning Disabilities, 11*, 93-98.

- University of Canberra. (2007). *Project to improve the learning outcomes of students with disabilities in the early, middle and post compulsory years of schooling*. Retrieved February 18, 2008, from http://www.dest.gov.au/sectors/school_education/publications_resources/profiles/learning_outcomes_students_disabilities.htm
- Vaidya, S.R. (2001). Research for classroom teachers. *Education, 122*, 151-153.
- Van Reusen, A.K., Shoho, A.R., & Barker, K.S. (2001). High school teacher attitudes toward inclusion. *The High School Journal, 84*, 7-17.
- Vaughn, S., Gersten, R., & Chard, D.J. (2000). The underlying message in LD intervention research: Findings from research syntheses. *Exceptional Children, 67*, 99-114.
- Watson, J., & Boman, P. (2005). Mainstreamed students with learning difficulties: Failing and underachieving in the secondary school. *Australian Journal of Learning Disabilities, 10*, 43-49.
- Weiner, H.M. (2003). Effective inclusion: Professional development in the context of the classroom. *Teaching Exceptional Children, 35*, 12-18.
- Westwood, P., & Graham, L. (2003). Inclusion of students with special needs: Benefits and obstacles perceived by teachers in New South Wales and South Australia. *Australian Journal of Learning Disabilities, 8*, 3-15.
-
- Wright, S.L., & Sigafos, J. (1998). Teachers and students without disabilities comment on the placement of students with special need in regular classrooms at an Australian primary school. *Australian Journal of Special Education, 21*, 67-80.
- Zubrick, S.R., Silburn, S.R., Gurrin, L., Teoh, H., Shepherd, C., Carlton, J., et al. (1997). *Western Australian Child Health Survey: Education, health and competence*. Perth, WA: Australian Bureau of Statistics and the TVW Telethon Institute of Child Health Research.

Zundans, L. (2003). Life narrative of a senior school student with learning difficulties.

Australian Journal of Learning Difficulties, 8, 22-25.

Appendix A

Table 1

Teacher Profiles

Participant	Current year levels	Year levels taught	Number of years as a teacher	Number of years LD experience
T1	TEE	8-adult	20	20
T2	8, 9, 11, 12	8-12	13	13
T3	8	8-10	20	20
T4	8-11	6-12	22	22
T5	10-12	8-12	13	13
T6	On leave/relief	8-12	22	22
T7	10-12	7-12	25	25
T8	8, 9, 12	8-12	19	19
T9	9	8-10	4	4

Appendix B

Interview Schedule

1. What are your experiences of teaching secondary school students with learning difficulties?
2. What are some of the issues/challenges you encounter in trying to support students with learning difficulties in class?

Prompts

- a) Are there any teaching strategies that you can use to address the individual needs of students with learning difficulties? Tell me about them.
 - b) Are there any resources or support programmes that you can access to assist you? How do these impact on your teaching practices?
 - c) Are there benefits associated with having students with learning difficulties in your class for you and the other students? Tell me about them.
 - d) What additional assistance do you require in the classroom?
-

Appendix C

Information Letter

Dear Participant,

My name is Christine Potter and I am a student at Edith Cowan University, completing a Bachelor of Arts Honours degree in Psychology. As part of my studies I am required to complete a research project. Your principal has given permission for your school to participate in the study. The Ethics Committee of the Faculty of Computing, Health and Science has approved this study.

The aim of my study is to explore the experiences of teachers in relation to their teaching of students with learning difficulties. My study will involve a sample of secondary school teachers who are currently working with students with learning difficulties in the mainstream classroom. This research will enhance our understanding of the experiences of these teachers.

Participation in this study will involve an audiotaped interview lasting approximately 30-60 minutes. During the interview I will ask questions relating to the aim of my study. Your name will not be required for this study and your responses will be kept confidential. The audiotaped interview will be transcribed for the purpose of data analysis. No individual participant will be identified in the reporting of this study.

If you are willing to participate in this study please contact me on [REDACTED] or email me at [REDACTED]. In order to participate in the study you are asked to complete the attached consent form. Your participation in this study is voluntary and you will be free to withdraw from the study at any time without any adverse consequences.

If you have any queries regarding this research project, please feel free to contact me, Christine Potter on 9446 5726, or my supervisor, Associate Professor Lynne Cohen on 6304 5575. If you wish to talk to someone who is independent of this study, please contact Dr Justine Dandy on 6304 5105. Thank you for your time and interest in this research project.

Christine Potter

Appendix D

Consent Form

I _____ consent to participate in the research project of Christine Potter, I understand that:

1. The study is exploring the experiences of mainstream secondary school teachers who are working with students who have learning difficulties.
2. Any data collected in the study will be kept confidential and will only be discussed with the supervisor involved in the study.
3. My participation in this study is voluntary and I may choose to withdraw from the study at any time without any adverse consequences.
4. The interview will last approximately 30-60 minutes.
5. The interview will be audiotaped and transcripts of the interview will be made for data analysis purposes only.
6. If necessary I can be contacted for verification of the transcripts and/or analysis.

Signed _____

Dated _____

Appendix E

Teacher Profile

Gender: Male/Female

Number of years you have been teaching at secondary school level: _____

Number of years teaching students with learning difficulties: _____

What years have you taught (e.g., year): _____

Year currently teaching: _____

Specific Learning difficulties you have encountered: _____

Thank you for completing this form

Guidelines for Contributions by

Authors

For Research Report Only

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Your manuscript should be submitted as a Microsoft *Word* file (or *Word* compatible) attached to an email addressed to the Editor:

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