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Attitude of students towards peers with disabilities: The effect of including students from an Education Support Centre in an inclusive middle school setting

Steven J. R. McGregor

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USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

Abstract

This research examines the attitudes of middle school students towards their peers with disabilities. The opportunity for students with disabilities to participate in inclusive education in Western Australia has increased steadily in recent years. The impact of inclusion on stakeholders within the education arena is, therefore, an important area of research. As part of this increased demand for inclusive education a trial inclusion program was set-up at a middle school in regional Western Australian. The target group for this study was all Year 8 (N=199) students at that school. The attitude of the Year 8 students towards students with disabilities was measured using the *Peer Attitudes Toward the Handicapped Scale (PATHS)*, (Bagley & Greene, 1981). The PATHS questionnaire was administered at the beginning and end of Semester 1 in 2003. Teacher perspectives of student attitude were also assessed via a focus group discussion after the second PATHS administration. Analysis of variance of the pre-test data showed the frequency of participant's prior classroom contact with students with a disability to have a significant impact on acceptance. Gender differences at the pre-test stage also proved to be significantly different in several measures. Although a repeated measures analysis showed no statistically significant change after one semester of the trial inclusion program, data trends and the focus group discussion indicated an increased acceptance of students with disabilities by their mainstream peers. The implications of these results and recommendations for future research are discussed.

Declaration

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

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

(ii) Contain any material previously published or written by another person except where due reference is made in text; or

(iii) Contain any defamatory material

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Steven J. R. McGregor

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Chapter 1

Introduction

Background to the Study

During much of modern history, people with disabilities and their place in society have been the subject of intense discussion and debate. The last century has seen a multitude of intervention strategies adopted by governments and dominant organisations of the day. Historically, these interventions have seen people with disabilities isolated, congregated and segregated from society (Cocks & Stehlick, 1996; Ryan & Thomas, 1987; Wolfensberger, 1975). In the past 50 years the treatment of people with disabilities has been increasingly underpinned by principles such as Normalisation (Wolfensberger, 1972), Social Role Valorisation (Wolfensberger, 1983), Dignity of Risk (Perske, 1972) and The Least Restrictive Alternative (Bachrach, 1985; Turnbull, 1981). These principles which called for the integration and inclusion of people with disabilities into society, have been gradually incorporated into government policy and literature. In an Australian context this is reflected by such acts as the federal *Disability Services Act (1986)*, the *Disability Discrimination Act (1992)* and the West Australian *School Education Act (1999)*. Government principles and practices that aim to facilitate the integration and inclusion of people with disabilities into society support these acts.

In Western Australia, the contemporary vision of government is one of people with disabilities living in the community with appropriate supports. This vision is underpinned by the assumption that the community is willing to, or can be encouraged to, accept and include people with disabilities in their daily lives. Society's devaluing of people with disabilities and the resultant negative treatment of and attitudes towards people with disabilities are well documented (Faber, 1968; Fitzgerald, 1998; Formentin 1997; Wolfensberger, 1981). The devaluing of people with disabilities has its roots in historical misconceptions which saw them portrayed as sick and diseased, a menace, objects of pity, in need of protection and generally not able to lead a useful life (Brown & Smith, 1996; Ryan & Thomas, 1987; Wolfensberger, 1992, 1994b). A lack of knowledge about disability issues and the person and their disability, sees much of these myths perpetuated (Annison, 1996). Consequently, many people with disabilities, although supported by law and legislation, can lead an existence that is still punctuated by exclusion in many walks of life such as socialisation, community living (O'Brien, 2003) and education (Jackson, McAfee & Cockram, 1999).

There is also much human service literature that argues societal values are increasingly dominated by individualism, materialism and utilitarianism and that ultimately this will have a negative and indeed harmful effect on people with disabilities (Wolfensberger, 1994a). By valuing attributes that are not readily associated with or obtainable by people with disabilities, Cocks (1998) argues there is an increased likelihood of people with disabilities and other vulnerable groups being devalued and marginalised. To counter such societal trends, Cocks (1998) calls for a shift from the current economic rationalist paradigm to a "community paradigm". One characteristic of such a paradigm he states is "promoting the interest and involvement of ordinary citizens in the lives of people with disabilities" (p. 18). I⌐ ₋fying current community attitudes towards people with disabilities, then, would seem a natural part of this process. It will only be through the identification of real and prevalent community attitudes and dealing with issues that arise from them can it be hoped to involve ordinary citizens in the lives of people with disabilities and vice versa. Given that schools have been shown to reflect prevalent community attitudes, with students very likely to bring those attitudes to the school environment (Falvey, Coots & Bishop, 1990) this study considers the attitudes of Year 8 middle school students.

Purpose of the Study

The aim of the study reported in this thesis was to determine the impact of inclusive education on the attitudes of students towards peers with disabilities. To do this, student attitudes were examined prior to and following, student participation in a trial inclusion program. By comparing the pre-test and post-test attitudes of students after exposure to an inclusive setting, an assessment of inclusion as an agent for changing attitudes could be made. In addition, if it could be shown that inclusive education positively influenced the attitude of students towards their peers with a disability then a contribution towards the argument for inclusive education could be made.

Inclusive Education

Given the inclusive middle school setting for the study reported in this thesis, it is necessary to give a brief overview of inclusive education. Inclusive education has been to the fore of education debate since the late nineteen eighties when a world-wide push by advocates toward full inclusion began, culminating in the drafting of the Salamanca Statement (UNESCO, 1994). The Salamanca Statement (UNESCO, 1994) was adopted by many nations and international organisations and asserted every child's fundamental

right to education and access to regular schools (Lindsay, 2003). Within a Western Australian context and after much lobbying by advocates for inclusive education, a pilot inclusion program was established in government schools in 1995 (Review of Educational Services for Students with Disabilities in Government Schools, Discussion Paper 2001). This inclusion program saw five children with an intellectual disability being taught in regular classrooms alongside their peers (Chadbourne, 1997). The number of participating students with an intellectual disability increased in subsequent years reaching 86 students by the year 2002 (Forlin, 2003). The Inclusion Program as it became known was replaced by The Supported Education Program in 2002 (Centre for Inclusive Schooling, 2003).

Although the number of students with a disability participating in the supported education program in Western Australia, is significant and increasing, there is no legal mandate for their inclusion into mainstream education (Forlin, 1998). The final decision rests with the state Department of Education and Training (DET) as to what area of education a child can access (Centre for Inclusive Schooling, 2001). The continuum of services currently operating within the education system for students with disabilities and as described by the Centre for Inclusive Schooling (2001), ranges from Education Support Schools (separate schools for students with high support needs), Education Support Centres (autonomous schools within a mainstream school catering for students with moderate support needs), Education Support Units (separate classes within mainstream schools) to the inclusion program (now the Supported Education Program) which sees students with disabilities participate in regular classes.

Currently, most of the supported education program options within Western Australia are mostly located in the primary school system. The need to expand the inclusive options for students with an intellectual disability has been strongly expressed by Western Australian families and advocates of students with an intellectual disability (Review of Educational Services for Students with Disabilities in Government Schools, Discussion Paper 2001). This explicit need has been recognised and acknowledged by the Western Australian DET (Fieldwick & Bamford, 2002; Review of Educational Services for Students with Disabilities in Government Schools: Consultation Paper, 2002).

The move toward including students with disabilities in education has by no means been a unified one. Forlin (2003) splits the debaters into three camps by highlighting those who favour full inclusion on the grounds of improved social,

psychological and cognitive outcomes for students with disabilities (and their mainstream peers), those who argue that all the needs of students with disabilities cannot be met in mainstream education and that full inclusion can undermine the needs of regular students and finally those who see inclusive education working under certain conditions and with appropriate support for the educators involved. Regardless of the difference of opinions as to the benefits and viability of inclusive education the increasing presence of inclusion as an option for students with disabilities warrants continued research to assess its impact on all stakeholders.

Much of the research on inclusive education has been based in the traditions of special education emphasising the medical, psychological and charity based paradigms (Moss, 2003). Consequently, the diversity of the school community in contemporary Australia has not always been fully recognised. Within a Western Australian context, however, research that recognises diversity within schools and indeed extends beyond disability to recognise differing cultural, social and economic circumstances is well underway as evidenced by the use of the *Index for Inclusion* (Ainscow, 2003; Forlin 2003).

Definition of Terms

Attitudes
This section defines key terms used within this thesis. Jary and Jary (1991) defined 'attitude' as:

> A learnt and enduring tendency to perceive or act towards persons
> or situations in a particular way....It is therefore useful to see
> attitudes as involving three elements: 1. a cognitive component -
> beliefs and ideas; 2. an affective component - values and emotions;
> and 3. a behavioural component - predisposition to act and actions.
> (p. 32)

Attitude Scale
Jary and Jary (1991) define 'Attitude Scale' as "A way of measuring attitudes which relies on the fact that holding an attitude leads to consistency in response to a particular person or situation" (p. 32).

Inclusion

The Western Australian DET defines inclusion as "the practice by which a child with a disability is enrolled full time in the regular classroom and accessing the regular curriculum (with or without modification)" (Education Department WA, 1998, p.12).

Intellectual Disability

The term Intellectual Disability is widely used in Australia. The equivalent term in an American context is Mental Retardation. The American definition of Mental Retardation is widely used in Australia to define intellectual disability. The American Association on Mental Retardation states that:

> Mental retardation refers to substantial limitations in present functioning. It is characterised by significantly sub average intellectual functioning [IQ Standard Score of 70 to 75 or below] existing concurrently with related limitations in two or more of the following applicable skill areas: communication, self-care, home living, social skills, community use, self-direction, health and safety, functional academics, leisure and work. Mental retardation manifests before age 18. (American Association on Mental Retardation, 1992, p. 1)

Education Support Centre

The Western Australian Department of Education and Training (DET) (2003, p. 1) describe Education Support Centres as "smaller facilities that are located on the same campus as a mainstream school but operated independently with separate administration. Students may be integrated into the mainstream school for some programs". Eligibility for placement in an education support centre in Western Australia is determined by DET and school psychologists. Generally, students who attend Education Support Centres have a mild intellectual disability and moderate support needs.

Middle Schooling

The Middle Schooling Association of Western Australia (2003, p. 2) state that "The middle years of schooling are defined by the adolescent stage of development between child and young adulthood. This stage typically spans the 11-15 year age group and generally corresponds to years 6 to 10 in Western Australian schools"

Chapter 1 has provided justification for this research. In Chapter 2 the findings and relevance of previous research will be reviewed followed, in Chapter 3, by discussion on the significance of the research presented here. Chapter 4 will describe the setting for the research and highlight the methodologies used. Finally, Chapter 5 will present the findings followed by discussion and conclusions in Chapter 6 to close.

Chapter 2
Review of Related Literature

Overview

The review of related literature was primarily concerned with studies looking at the attitudes of students toward peers with disabilities within mainstream educational settings. Consequently, the articles discussed stem from the last ten to fifteen years reflecting the strong move toward inclusive education during that time. Table 1 summaries empirical research on the impact of inclusive education on student attitude towards peers with disabilities. Although the models of inclusive education varied between articles and are not always identical to the model of inclusion in the trial inclusion program, the concept of inclusive education and an attempt at being as inclusive as possible is a common theme. Table 1 indicates the inclusiveness of the education settings reviewed by referring to them as 'fully inclusive' (i.e. in keeping with the definition of inclusion adopted by the Western Australian DET) or 'partly inclusive'. 'Partly inclusive' was used to identify studies where the student with a disability was not included in all aspects of school life, all of the time. Typically, some studies saw students involved in 'inclusion' for only two days per week or taken from regular classes for specialist education elsewhere. Where the inclusive education setting also included systematic intervention strategies aimed at raising awareness, dispelling myths and facilitating social interaction between students with and without disabilities the comment 'with intervention strategies' is used. To complete the review, other significant and relevant articles on inclusion are discussed along with relevant literature on the psychology of attitudes which provide a background to and an understanding of, the psychological aspects to attitude formation.

Inclusive Education and Student Attitudes Towards Peers with Disabilities.

Recent research that examines the impact of including children with disabilities in mainstream education on the attitudes of students towards their peers with disabilities was quite substantial. Results, however, varied. Some studies conclude that inclusive education has had a positive impact on the attitudes of students towards their peers with disabilities (Chadbourne 1997; Clunies-Ross & O'Meara, 1989; Gerson, 1995; Lawrence 1995; Marino, 1994; Roberts & Lindsell, 1997) whilst others have shown that it may have a negative impact (Liffick, 1999; Rosinski, 1997). Others still, have found that

participating in inclusive education has had no significant impact on student attitudes towards peers with disabilities (Battista, 1999; Hasting & Graham 1995; Howell, 1996; Nowicki, 1998). Where the inclusive education setting, however, included systematic intervention strategies aimed at raising awareness, dispelling myths and facilitating social interaction between students with and without disabilities, the acceptance of students with disabilities and the enhancement of positive attitudes towards them was found to be more likely (Clunies-Ross & O'Meara, 1989; Marino, 1994).

Table 1

Review of Articles Looking at the Effect of Inclusive Education on the Attitude of Students Toward their Peers with Disabilities

Article and geographical location	Inclusion setting	Study design	Sample (n) non-inclusion vs inclusion students	Measurement tool	Outcome after inclusion +ve / -ve / no change (nc)	
(Battista, 1999) / United States.	Partly inclusive	Quantitative Assessment via Likert-Scale.	265 vs 80.	Attitude Toward Disabled Persons (ATDP) Scale Yuker, Block (1986).	nc	No significant difference in attitude of inclusion students towards peers with disabilities when compared with students with no experience of inclusion.
(Chadbourne, 1997) / Western Australia	Fully inclusive	Qualitative	0 vs 5	Interviews	+	Attitude of inclusion students towards peers with disabilities perceived by parents and teachers to be more positive after inclusion.
(Clunies-Ross & O'Meara, 1989) / Australia.	Partly inclusive with attitude intervention strategies	Quantitative Assessment via Liekert-Scale.	30 vs 30.	Peer Attitudes Toward the Handicapped Scale (PATHS) (Bagely & Greene 1981).	+	Increase in positive attitude after participation in inclusive education.
(Gerson, 1995) / United States.	Fully inclusive	Qualitative.	Not Identified in Article.	Observations / Interviews / Focus Groups.	+	Attitude of inclusion students more positive than non-inclusion students.
(Hastings & Graham, 1995) / United Kingdom.	Partly inclusive	Quantitative.	(~) 88 vs 44.	Questionnaire (Adapted from Abrams, Jackson & St. Claire 1990).	nc	No significant difference in attitude of inclusion students towards peers with disabilities when compared with students with no experience of inclusion.

(table continues....)

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Table 1 . (*continued*)

(Howell, 1996) / United States.	Fully inclusive with attitude intervention strategies	Quantitative Assessment via Likert-Scale.	67 vs 74.	Voeltz-Myer (1980) Social Acceptance Scale.	nc	No significant difference in attitude of inclusion students towards peers with disabilities when compared with students with no experience of inclusion.
(Liffick, 1999) / United States.	Partly inclusive	Quantitative Assessment via Likert-Scale.	51 vs 52.	Voeltz (1980) Acceptance Scale.	-	Attitude of inclusion students more negative than non-inclusion students.
(Lawrence, 1995) / United States.	Partly inclusive	Quantitative Assessment via Likert-Scale.	503 vs 260.	ATDP Scale (Yuker, Block 1986).	+	Attitude of inclusion students more positive than non-inclusion students.
(Marino, 1994) / United States.	Fully inclusive with attitude intervention strategies	Quantitative Assessment via Likert-Scale.	100 vs 100.	Friendship Activity Scale (Siperstien, 1980).	+	Attitude of inclusion students more positive than non-inclusion students.
(Nowicki, 1998) / United States.	Partly inclusive	Quantitative Assessment via Likert-Scale.	0 vs 15.	ATDP Scale (Yuker, Block 1986).	nc	No significant difference between pre inclusion attitude measurement and post inclusion attitude measurement.
(Roberts & Lindsell 1997) / Australia.	Fully inclusive	Quantitative Assessment via Likert-Scale.	62 vs 81.	Peer Attitudes Toward the Handicapped Scale (PATHS) (Bagley & Greene 1981).	+	Attitude of inclusion students more positive than non-inclusion students.
(Rosinski, 1997) / United States.	Partly inclusive	Quantitative Assessment via Likert-Scale.	46 vs 59.	The Acceptance Scale (Myer, 1994).	-	Attitude of inclusion students more negative than non-inclusion students.

Note. A 'fully inclusive' setting is in keeping with the definition of 'inclusion' as defined in this thesis. A 'Partly Inclusive' setting indicates a setting where the student with a disability was not included in all activities all of the time. 'Attitude Intervention Strategies' indicate settings where there were administrative policies and practices aimed at promoting social acceptance and inclusion.

Although there was consistency in the findings of the articles that reported a positive increase in attitude, there was less consistency with the measurement tools employed to assess this. Of particular relevance here is the use of the *Peer Attitude Toward the Handicapped Scale* (PATHS) as this has been validated for use in the Australian context. Previous research in Australia to use PATHS was undertaken by Clunie-Ross and O'Meara (1989) who assessed attitudes of Year 4 students in Victoria, towards peers with an intellectual disability. Attitudes were investigated before and after participation in a partly inclusive education setting (the students with a disability were included in regular classes for two days per week) and an participation in attitude development program. Clunie-Ross and O'Meara (1989) also tested a control group consisting of students who participated in the attitude development program but not in inclusive education. They found that the group who participated in the attitude development program and inclusive education showed a much greater positive increase in attitude towards peers with disabilities. A post-test survey of student attitude after they spent another three months in the partly inclusive environment replicated the positive increase. Although this survey was primarily aimed at testing the impact of the attitude development program, it provided validation of the use of PATHS in Australia.

In a Western Australian context one of the few surveys to directly assess student attitudes toward peers with a disability was that undertaken by Roberts and Lindsell (1997). They used PATHS to assess the attitudes of students in Year 4 and Year 5. Their research revealed a more positive attitude towards peers with disabilities by students who had experienced inclusive education. They reported the internal consistency of the scale to be .89 (odd-even, split-half coefficient) with a test-retest coefficient of .75. Roberts and Lindsell (1997), however, only reported on attitudes toward students with physical disabilities. In another Western Australian study and although not directly assessing student attitudes, Chadbourne (1997) in a mainly qualitative review of the Western Australian Inclusion Program, reported that teachers and parents observed a more positive attitude towards peers with an intellectual disability by mainstream students after their participation in the inclusion program.

Of the six surveys shown in Table 1 that demonstrate evidence of a positive change in student attitude, Lawrence (1995) and Marino (1994) had large samples in comparison with most other studies. The findings of Lawrence (1995) are perhaps further strengthened by the use of the Yuker and Block (1986) Attitude Towards

Disabled Persons (ATDP) Scale. This scale has been widely used in the United States since the 1960's, with contemporary modifications, to assess people's attitudes towards those with disabilities. As identified by Lawrence the reliability coefficient was .73 to .89. The Yuker and Block (1986) ATDP Scale, however, has not been validated for use in Australia.

Outcome After Inclusion - Negative Attitudes toward Students with Disabilities
While some researches reported the benefits of inclusion others have identified negative or no changes in attitudes. Rosinski (1997) used the Myer (1994) Acceptance Scale to assess student attitudes in an inclusive and non-inclusive setting and found that students in an inclusive setting had a more negative attitude toward peers with a disability. Close examination of the study, however, revealed serious, self identified, limitations with the Likert-Scale used. Most questions asked on the questionnaire merely led to multiple further questions from the respondents who were then told to only answer as they thought the question read. A pilot study may have helped the reliability of these findings, although the limitations of Rosinski's (1997) research does highlight potential problems with Likert-Scales.

Liffick (1999) concluded that children in an inclusive educational setting were likely to express more stigma towards children with Down Syndrome than students in non-inclusive settings. It was unclear in the survey as to what role the teachers played in facilitating the inclusion of the child with the disability or how the child was included within the classroom. Given the critical importance of positive teacher attitude toward the inclusion process (Avramidis, Bayliss, & Burden, 2000; Everington & Stevens, 1999; Treder, 1999) and the relatively small sample number in quantitative terms, Liffick's (1999) findings are open to debate.

Outcome After Inclusion - No Change in Attitude Towards Students with Disabilities
In an indication of the range of research outcomes, Battista (1999) found no significant change in student attitudes between inclusive and non-inclusive settings. According to Battista (1999) the attitudes of the inclusive students might not have been greater than non-inclusive students because of the short time the inclusion program had been running (one year). Also reported by Battista (1999), the students with disabilities did not spend their entire week with their peers without disabilities, possibly singling them out and highlighting them as unequal or different. In addition, Howell (1996) also found that

there was no significant difference in attitude between inclusion and non-inclusion students towards peers with disabilities. Howell (1996) suggested that this may have been due to the high level of contact non-inclusion students had in earlier schooling. In the United States, where his research took place, inclusive schooling had been a significant part of many schools in the education district he looked at.

Summary of literature on student attitude in inclusive education

In summary, while all articles in Table 1 hypothesised that the attitudes of students without disabilities towards their peers with disabilities would be more positive for students in an inclusive setting than those in a non-inclusive setting and/or that exposure to an inclusive setting would improve student attitudes, findings were mixed. This can be partly attributed to the large amount of variables that impact on student attitudes and the variety of attitude scales in use. On balance the research would seem to favour a positive increase in attitude, particularly if full inclusion is the independent variable. The various levels of inclusive settings amongst surveys is another variable that may impact on the relationship between inclusion and positive attitudes.

Other Significant Literature on Inclusion and Attitude.

Roberts and Naylor (1994) and Roberts (1995), although not specifically measuring attitudes, undertook research within a Western Australian context that focused on the relationship between students with disabilities and their peers. Roberts and Naylor (1994) found that children with mild intellectual disabilities were more frequently rejected and felt more lonely than their peers without disabilities whilst Roberts (1995), found that the mere placement of students with a mild intellectual disability into a classroom did not result in higher levels of acceptance of those children and that structured opportunities for positive interaction and cooperative learning must be provided.

A Meta-Analysis of school-age children's attitudes towards persons with physical or intellectual disabilities from 1990 to 2000 was undertaken by Nowicki and Sandieson (2002). Six of the 20 studies they looked at considered inclusive education as an independent variable. Conclusions were similar to previous findings in that the majority of research reported that experiences of inclusion had a positive effect on attitudes. Nowicki and Sandieson (2002) concluded their article, however, by stating that the attitude of school age children in general, towards people with disabilities, was in need of improvement.

Literature on Attitudes

A review of literature on attitudes reveals that the subject of 'attitude' is vexing in the extreme. The concept of attitudes is intertwined with other concepts such as values, ideologies, opinions, beliefs, behaviours, habits, traits, motives and personality. Textbooks reviewed (Ajzen, 1988; Fishbien, 1967; Greenwald, Brock & Ostrom, 1968; Insko, 1967; Kiesler, Collins & Miller, 1969; Lemon, 1973; Opennheim, 1984; Shaw & Wright, 1967) revealed the complexities and challenges of measuring attitudes but generally concluded that despite the difficulties in defining and measuring them, 'attitudes' were a legitimate course of study and interpretation both psychologically and sociologically. There was also a general consensus across the texts that 'attitudes' were learned and that they could be changed.

From the literature it could be seen that some people argued that attitudes are a reflection of social constructs such as economic factors and that only a change in the social construct can bring about changes in attitude. Such a scenario supports the contention of Cocks (1998) and Wolfensberger (1994a), that it is the changing of modernistic values and economic rationalism that are increasing the likelihood of negative attitudes towards and treatment of vulnerable people in society. This is supported by the observation that despite government rhetoric and legislation and recent historical improvements in the lives of people with disabilities, born out of the post-war social movements such as Normalisation, there is still resistance to their inclusion in some parts of everyday life such as education (Jackson, McAfee & Cockram, 1999). To change attitudes, then, it may well take both a shift in social construct preceded by an increased knowledge or re-education of an individual's understanding and awareness of a particular group of people. Shaw and Wright (1967) state "If one wishes to change an attitude in an unfavourable (favourable) direction an attempt would be made to bring about acceptance of the proposition that the attitude object possesses negatively (positively) valued attributes" (p. 13). By identifying specific attitudes it will then be possible to change these attitudes, if necessary.

When considering the attitudes of people without disabilities towards people with disabilities the majority of the research since the 1960's has been undertaken by Yuker and Block, Voeltz, Weiner and Myer. These authors feature strongly in the literature reviews of the articles in Table 1. Their research suggests that in social psychology it is well established that proximity boosts liking and that attitudes follow behaviour and

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when status and relationships are equal and interpersonal experience is positive, people like each other more. The evidence also suggests that when children perceive others are not similar to themselves an obstacle to friendship formation can be created (Yuker, 1988). Such considerations make student attitudes within inclusive education an important and relevant field of study.

Chapter 3

The Significance of the Study

Proponents for the inclusion of people with disabilities into society argue that the devaluing of people with disabilities can be best overcome by supporting them to participate in everyday life and in valued social roles (Wolfensberger, 1992). By being supported to participate in inclusive schooling, students with disabilities are fulfilling a valued social role (Wills & Jackson, 1996). It is also argued that including students with disabilities in regular classrooms will help breakdown negative stereotypes and that closer contact may induce positive attitudes towards students with disabilities (Hastings & Graham, 1995). By comparing the pre-test and post-test attitudes of middle school students after exposure to an inclusive setting an assessment of inclusion as an agent for changing attitudes can be made.

Currently, families of children with an intellectual disability do not have the automatic choice of seeing their son or daughter placed in a regular classroom setting (Forlin, 2001). If it can be shown that inclusive education can positively influence the attitude of students towards their peers with a disability a contribution towards the argument for inclusive education will have been made. Any positive attitudes that are encouraged during school years will arguably also flow onto later life in areas such as employment, recreation and community living. Given also the increase in inclusive education for people with an intellectual disability in Western Australia in recent years, a survey assessing the impact on the attitude of students without a disability seems timely.

Of further significance in an Australian context is the transition form the primary school system to a middle school or high school setting where the inclusivity of the Supported Education Program becomes a harder proposition to maintain. Research has shown that families of children with disabilities have numerous concerns about the inclusivity of high schools and their ability to fully include students with disabilities (Thomas & Graham, 2002). Research that looks at middle or high schools will be contributing toward the understanding of inclusion in secondary education. In the study presented as part of this thesis a middle school in Western Australia catering for students in Years 8, 9 and 10 will be the focus of attention.

Statement of the Hypotheses

Although results of previous research varied, the majority of the literature reviewed indicated a positive attitude change after student experiences of inclusive education. It is on this basis that it will be hypothesised that Year 8 adolescents will have a more positive attitude toward peers with a disability after their experiences in an inclusive middle school setting.

Research Questions Addressed in this Study

In an effort to facilitate the inclusion of Year 8 students from an Education Support Centre a trial inclusion program was established in a Western Australian middle school. Sufficient resources were allocated to this program to support all stakeholders involved. This study evaluated the effect of that trial inclusion program on the attitude of mainstream students toward included students from the on campus Education Support Centre. The following questions guided the analysis of the data recorded at the start of the trial inclusion program and were aimed at establishing existing attitudes of mainstream students:

1. What was the attitude of Year 8 students at the start of the semester toward their peers with physical, intellectual and behavioural disabilities?

2. Did female and male students differ in their attitude towards students with a disability at the pre-test stage?

3. What was the effect of prior contact with people with disabilities on the attitude of mainstream students?

The main questions guiding this research concerned the assessment and comparison of attitudes at the start and end of Semester 1 in 2003. The two main research questions were:

1. Will the attitudes of middle school students towards peers with a disability differ before and after participation in a trial inclusion program?

2. Will female and male students differ in their attitude toward peers with a disability after their experiences in the trial inclusion program?

These questions will be addressed in Chapter 5 and explored further in Chapter 6.

Chapter 4
Methodology

Setting

The research took place at Halls Head Community College in regional Western Australia. The college, in conjunction with the on campus Halls Head Education Support Centre set up a trial inclusion program to support six Year 8 students with an intellectual disability to attend regular middle school classes. Located in the coastal city of Mandurah, Halls Head Community college opened in 2001 and is regarded as one of Australia's first purpose built middle schools catering for students in Years 8, 9 and 10. Its state-of-the art facilities include a Performing Arts Centre, specialist music teaching and rehearsal areas, a tiered lecture theatre, specialist blocks for subjects such as media, visual arts, design and technology, a specially designed undercover canteen area, a large gymnasium for use by the school and the local community; and Learning Team areas (School Information Handbook, 2003). With its contemporary architectural style and layout, set in well maintained grounds, coupled with a collaborative and *Learning Team* approach to teaching, the school has attracted students from surrounding districts and beyond.

The learning team approach adopted by the school caters for the academic, social and pastoral care needs of the students in each year level. Each learning team consists of 100 to 120 students and four dedicated teachers who work collaboratively to plan the curriculum and educational outcomes. The trial inclusion program was established to enable six students from the Education Support Centre to be fully incorporated into one Year 8 learning team.

The Model for the Trial Inclusion Program

In essence, the program selected six students with an intellectual disability from the Education Support School to attend the mainstream school within the following parameters:

1.   Only students with a mild intellectual disability were eligible for selection. Students had to express a desire to be part of a Year 8 learning team and have the support of their parents or guardians. Students with a past history of extremely disruptive behaviour were not eligible for selection.

2. Students were placed in two classes of a Year 8 learning team with a maximum of three per class and were able to attend regular and options classes with their mainstream peers.

3. The mainstream Year 8 team leader determined pastoral care and behavioural management responsibilities in relation to the included students. An Individual Education Plan was drafted for each included student. The Year 8 students received report cards as per mainstream students.

4. Additional support staff for the trial inclusion program consisted of a full-time Inclusion Co-ordinator and an Education Assistant. The inclusion coordinator's duties included: assisting team staff to modify curriculum to accommodate included students; training and support for learning team staff in special needs and general teaching whilst the mainstream teacher worked with small groups. The support staff worked between the two classes with included students and performed general education duties. The inclusion coordinator or the education assistant were always present in each of the two inclusion classes.

5. The students with a mild intellectual disability participated in regular school life and attended mainstream classes on a full-time basis. Whilst at the community college they spent their entire class day with their regular class and had the option of spending their recess time as they chose.

It was the intention of the trial inclusion programme to draw as little attention as possible to the included students (D. Fieldwick, personal communication, February, 2003). This saw the education assistant and inclusion coordinator support the whole class as opposed to just the included students. In addition, the included students were simply allowed to take their place in the classroom and were not introduced or highlighted as having a disability.

Participants

The target population for this study was all Year 8 students attending Halls Head Community College in 2003 ($N=199$). This population was split into two samples. The first sample consisted of Year 8 students who had a student with a disability attend their class as part of the inclusion program (Two classes, $n=51$) and the second sample consisted of those Year 8 students who had no student with an intellectual disability attend their class (Six classes, $n=148$). Of the students with disabilities participating in the program five were female and one was male.

Instrument and Materials

The primary method of assessment was a quantitative approach using a pre-designed attitude measurement scale, namely the *Peer Attitude Toward the Handicapped Scale (PATHS)* constructed by Bagley and Greene (1981). PATHS was designed to gauge the attitude of respondents towards students with disabilities. The closer the respondent wanted to work with a student with a disability the more positive their attitude was deemed to be. The measurement tool used descriptions of fictional students with physical, intellectual and behavioural disabilities to facilitate assessment of attitudes toward each disability and combined responses to assess attitude toward disability in general. It is important to note that although the primary disability of the included students from the education support centre was intellectual, qualitative data gleaned from this research indicated that minor behavioural issues were encountered during the program and that one or two students had an obvious physical disability. This helped to establish relevance between what the students were seeing in the class room and the questions posed by PATHS, in terms of behavioural and physical disabilities.

Although designed for use in the USA, the scale has undergone rigorous reliability, scientific, statistical and psychological verification processes for use in Australia (Clunies-Ross & Thomas, 1986). For the purposes of the current research the term "Learning Disability' employed on the original scale was replaced as the focus was on including students with an "Intellectual Disability" [The term "Learning Disability", used in the United States of America, was used by PATHS to describe one of the three subscales]. The term 'Intellectual Disability" is more appropriate for an Australian setting. Research into the interchanging of language in attitude questionnaires has shown that there is little or no bearing in the reliability or the validity of the results when terms are replaced with culturally appropriate or contemporary equivalents (Nowicki, 1998). A copy of the modified PATHS is included as Appendix A.

The PATHS adopted a five-point Likert-Scale requiring participants to indicate their proposed placement for a hypothetical student with a disability. Responses varied from *In My Group* (5), *In Another Group* (4), *In No Group* (3), *Outside of Class* (2) to *At Home* (1). Of the 30 statements requiring a response, 12 related to a student with a physical disability, 10 to a student with an intellectual disability and eight to a student with a behavioural disability. In keeping with PATHS interpretation procedures (Bagley & Greene, 1981) the results were calculated as a mean total score for all items and for

the three subscales (i.e. physical, intellectual and behavioural disabilities). The higher the score was the more positive the attitude was deemed to be.

The total raw score and the physical, learning and behavioural subscale raw scores were obtained by totalling the numerical value of the Likert-Scale scale responses e.g. responding *In My Group* (5), for all 30 questions would provide a total raw score of 150 and would equate to the most positive attitude possible. The internal consistency of the total score was reported by Bagley and Greene (1981) as .89 (using an odd even split half reliability) and .85 (using a first-second split half reliability). Bagley and Green (1981), also reported a test-retest coefficient of .75 indicating satisfactory stability. Clunies-Ross and Thomas (1986), confirmed the construct and factorial validity of the scale, but did not report on internal consistency within an Australian context.

Procedure

PATHS was administered by the regular Year 8 teachers to students in the mainstream classroom setting. Pre-tests were completed during the first week of Term 1. After an oral introduction by the administrator the majority of students read and completed each of the 30 items by themselves. The teachers of the two classes that had the included students chose to read the PATHS questions aloud to the whole class to avoid drawing attention to the included students who may have had difficulty in reading the questions. Post-tests were completed in a similar manner during the last week of Term 2, 21 weeks later. The PATHS took a maximum of 30 minutes to complete. To facilitate pre-test and post-test comparison of results students were asked to put their names on the score sheets. This information remained strictly confidential. The names were replaced with unique identifying codes immediately after the completion of the post-test scale and the matching of the two administrations.

Focus Groups

In order to substantiate and supplement the results of the attitude questionnaire a Focus Group session was held at the school after the final administration of PATHS. Participants were the researcher, two of the four mainstream Learning Team 1 teachers, the inclusion coordinator and the Year 8 Co-ordinator. Logistical considerations prevented two mainstream teachers and the education assistant from attending the Focus Group, however, one mainstream teacher and the education assistant were interviewed individually outside of the group setting. Holding a Focus Group session was in keeping with applied social science research that calls for a combined quantitative and qualitative

approach to research methodologies (Sandelowski, 1986). The Focus Group was completed in one half hour session during which time four open ended questions were discussed. The session was tape recorded with the researcher extrapolating the conversations retrospectively so that comments made by the participants could be transcribed accurately. The four questions put to the Focus Group are presented in Appendix B.

Data Analysis

A total scale score (N=30 items) was calculated at both the pre and post administrations of the PATHS to obtain an overall measure of student attitude towards peers with disabilities. Similarly, total subscale scores were determined to identify any differences in attitude towards a student with physical (n=12 Items), intellectual (n=10 Items) or behavioural (n=8 Items) disabilities. A one way ANOVA was employed to assess the impact of eight independent variables on the sample population at the first administration. A repeated measures ANOVA (2 (Pre & Post) x 2 (Inclusion & Non-Inclusion)) was subsequently used to compare the attitudes of the sample population (i.e Year 8 students) before and at the end of two terms of involvement in the trial inclusion program. In addition, a multivariate analyses of variance MANOVA (2 (Pre & Post) x 2 (Inclusion & Non Inclusion) x 2 (Male & Female) was employed to look at gender differences, pre and post test, between the groups of classes with and without included students. Student attitude was the dependant variable for the survey.

Independent Variables

In order to compare attitudes between the two inclusion classes and the six non-inclusion classes and to identify gender influences and the impact of prior contact with people with disabilities the current study considered the following independent variables for the whole Year 8 cohort (N=199): *Class* (*classes with included students* or *classes without included students*) *Gender* (*male* or *female*); Contact: Outside of school – *Previous Contact* (*yes* or *no*); *Duration of Contact* (*A lot* (1), *Some* (2), *Very Little* (3), *None at All* (4)); *Type of Disability* (*Physical* or *Learning*); Contact: Inside of School – *Previous Contact* (*yes* or *no*); *Duration of Contact* (*A lot* (1), *Some* (2), *Very Little* (3), *None at All* (4)); *Type of Disability* (*Physical* or *Learning*).

Classification of Attitude Scores

The PATHS booklet contained a manual to convert the total mean raw scores and subscale raw scores to a Normal Curve Equivalent (NCE). The NCE equivalents were used by PATHS to determine the level of attitude (i.e. positive or negative) and to compare attitude levels across the three subscales. It should be noted that while it is possible to compare mean responses within the Physical, Learning and Behavioural subscales, cross comparison between subscales using the mean response is not valid due to the different number of items (i.e. questions) in each scale. After conversion to an NCE, however, the subscales were comparable. The NCE scores are deviation standard scores from the cumulative frequency distribution of raw scores and provide a frame of reference or 'benchmark' based upon the standardisation sample provided by Bagley and Greene (1981).

The NCE represents a normalised standard score with a mean of 50 and a standard deviation of 21.06. As a result the NCE scores have the added property of normality allowing researchers to apply parametric statistics for comparison purposes. In the American context the PATHS and NCE model allowed comparison of attitudes at a school, district, state and federal level. The Clunies-Ross and Thomas (1986) validation survey for the use of PATHS within an Australian context concluded that the normative data provided by PATHS were applicable to Grade 6 students in Australia. The Clunies-Ross and Thomas survey was conducted in Victoria where Grade 6 equates to Grade 7 in Western Australia. This provided a close match with the Year 8 cohort investigated in the current research project.

The NCEs were used to determine if an attitude was very positive, above average, average, below average or very negative. The raw scores and the equivalent percentile and NCE ranges adopted by PATHS to classify attitudes and validated for the Australian context, are detailed in Table 2.

Table 2

PATHS Classification of Attitude Scores

Total raw score	Physical subscale raw score	Intellectual subscale raw score	Behavioural subscale raw score	Percentile rank	NCE range	Attitude measure
122 - 150	56.5 - 60	43 - 50	30.5 - 40	93-99	81-99	Very positive attitude
109 - <122	50.3 - <56.5	38..3 - <43	24.6 - <30.5	76-92	65-80	Above average attitude
84 - <109	35.3 - <50.5	35.7 - <38.3	17 - <24.6	26-75	36-64	Average attitude
70 - <84	27.5 - <35.3	27.5 - <35.7	13.5 - <17	8-24	20-35	Below average attitude
30 - <70	12 - <27.5	10 - <27.5	8 - <13.5	1-7	1-19	Very negative attitude

Chapter 5
Results

The pre-test results were examined to give an overview of the attitudes of the Year 8 Cohort as a whole at the start of Semester. This additionally facilitated comparison with previous surveys to establish validity of the scale and subscales. The pre-test data are presented as an NCE for each independent variable for the total score and each of the three subscales. Examination of the post test results consisted of a repeated measures analysis of variance between the inclusion and non-inclusion classes, at the beginning and end of the Semester and a multivariate analysis of variance to compare gender attitude between the inclusion and non-inclusion groups at the start and end of semester. Mean scores, within subscales, which were statistically significant are discussed.

Analyses of Pre-Test Results

The pre-test results showed no significant difference in student attitudes toward peers with a disability between all eight Year 8 classes in the learning team under study (N=199). This enabled all classes to be combined to form one data set for pre-test analysis. In addition, there was no statistically significant difference in attitudes between the two classes with included students and the six mainstream classes with no included students.

Total score and subscale analysis

At the start of the semester the target Year 8 students were assessed by the PATHS as having an 'average attitude' toward students with a disability, in other words neither negative or positive (NCE=44). When individual subscales were examined it could be seen that there was a slightly more positive attitude toward people with a physical disability (NCE=48) than there was towards students with an intellectual (NCE=44) or behavioural (NCE=44) disability (See Table 3). All three NCEs, however, fell within the NCE range of 36-64 used by Bagley and Greene (1981) to quantify an 'average attitude' (See Table 2).

The means and standard deviations of the PATHS subscale and total scores for the Year 8 cohort as a whole (N=199) are shown in Table 3. Also shown, for comparison, are the scores from the Year 6 Cohort (N=138) in Clunies-Ross and Thomas (1986) and the Year 4-8 Cohort (N=756) in Bagley and Greene (1981). Note that the two previous surveys tested only student attitude at a given point in time and not

across time such as before and after student experiences of inclusion, as undertaken in this research.

Table 3

PATHS Subscale and Total Scale Means and SDs Compared with Previous Studies that used PATHS as the Instrument for Measuring Attitudes

Subscale	Trial Inclusion Program			Clunies-Ross and Thomas (1986)			Bagley and Greene (1981)		
	Mean	SD	NCE	Mean	SD	NCE	Mean	SD	NCE
Physical	41.5	10.8	48	42.2	10.2	49	42.0	10.0	49
Intellectual	31.5	8.3	44	34.5	6.7	54	33.0	7.0	48
Behavioural	18.8	5.3	44	20.0	5.5	48	20.0	6.0	48
Total	90.5	20.5	44	96.7	18.7	52	95.0	18.0	50

Note. Higher NCE = more positive attitude.

Comparisons with previous studies showed a close match in mean scores which ranged from 41.5 to 42.2 (Physical Subscale), 31.5 to 34.5 (Intellectual Subscale) and 18.8 to 20.0 (Behavioural Subscale). In the trial inclusion program presented as part of this research and in Bagley and Greene (1981), students had a slightly more positive attitude towards peers with a physical disability than they did towards students with intellectual or behavioural disabilities. Clunies Ross and Thomas (1986), was the only survey of the three to find that students had the most positive attitude towards peers with an intellectual disability.

Consideration of independent variables

The NCEs for all independent variables were calculated and are detailed in Table 4.

Table 4
Independent Variables Pre-test Results Reported as Normal Curve Equivalents

		Normal Curve Equivalent (NCE)			
Independent variable	n	Total score	Physical subscale	Intellectual subscale	Behavioural subscale
Year 8 Classes					
Classes with included students	51	41	44	38	39
Classes without included students	148	46	47	44	45
Gender					
Male	98	42	43*	39*	47*
Female	98	45	50*	47*	40*
Outside contact with people with disabilities					
Previous contact					
Yes	86	46	48	42	46
No	108	42	45	43	41
Duration of contact					
A Lot	21	48	49	45	47
Some	24	51	52	46	46
Very Little	30	42	46	38	43
None at All	11	36	38	34	47
Type of disability					
Physical	35	43	47	38	44
Learning	36	48	48	46	47
Within school contact with people with disabilities					
Previous contact					
Yes	71	46	48	44	45
No	125	43	45	44	42
Time spent with person:					
A Lot	13	40	42	29*	49
Some	23	54	54	53*	45
Very Little	18	48	50	49*	38
None at All	16	40	41	32*	49
Type of Disability:					
Physical	23	41	44	38	45
Learning	20	40	44	38	40

* Significant Difference $p < 0.05$

Classes

No significant differences were found between the total score for the two classes with the included students and the six classes without included students (F=1.999, p=0.159). There was also no statistically significant difference the two groups of classes across the physical, intellectual and behavioural subscales.

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Gender

Female students were found to have a significantly more positive attitude than male students towards peers with physical (F=6.055, p=0.015) and intellectual (F=6.148, p=0.014) disabilities (See Table 4). When considering behavioural disabilities the male students were found to have significantly more positive attitudes than female students (F=5.748, p=0.017).

Previous contact outside of school

There was no significant difference in attitude toward students with a disability between participants who had prior contact with people with physical or intellectual disability and those who had no prior contact, outside of school. Although not statistically significant results did show that students who had prior contact outside of school were generally more accepting toward students with a behavioural disability than students who had no previous contact with people with a physical or intellectual disability. In considering the varying durations of previous contact students had with people with a disability there was no significant difference on any of the three subscales between students who reported *A Lot, Some, Very Little or None at All.*

Previous contact within school

There was no significant difference in attitude between students who had a classmate with a disability in primary school and those who did not (F=0.542, p=0.462). When considering only students who had a previous classmate with a disability there was a significantly more positive attitude (F=5.255, p=0.03) towards students with an intellectual disability by students who reported *Some* (n=23) or *Very Little* (n=18) previous contact in a classroom environment than those who had reported *A Lot* of contact (n=13) or *None at All* (n=16).

Comparison of pre-test and post test results

A comparison of pre and post test means for the Year 8 cohort as a whole showed no significant differences between the start and end of Semester. These means are presented in Table 5. Consideration was subsequently given to the independent variables of inclusion and non inclusion and gender. There were insufficient numbers to warrant a MANOVA of all independent variables after the split between inclusion and non-inclusion classes. Only the independent variables of *Class* and *Gender* generated enough

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participants to warrant a multivariate analysis of variance, hence only these two independent variables will be presented in the analysis.

Table 5

PATHS Subscale and Total Scale Means and SDs Pre- and Post-test

Subscale	Trial Inclusion Program, Pre-Test (N=199)			Trial Inclusion Program (Post Test) (N=166)		
	Mean	SD	NCE	Mean	SD	NCE
Physical	41.50	10.83	48	41.2	9.92	47
Intellectual	31.50	8.34	44	31.4	6.96	44
Behavioural	18.80	5.35	44	19.14	6.30	46
Total	90.51	20.50	44	91.85	18.41	46

Inclusion vs Non-Inclusion Classes

A repeated measures ANOVA (2 (pre and post test) x 2 (inclusion and non-inclusion)) was carried out to determine the impact of the trial inclusion program on the attitudes of students in the inclusion classes in comparison with the attitudes of students in the non-inclusion classes. Results are shown in Figure 1. Although no differences in attitude were of statistical significance some trends did emerge from the analysis. An increase in attitude was noted for the total score and the intellectual and behavioural subscales for the two inclusion classes. The most positive increase within these two classes was toward students with a behavioural disability. By contrast this was the subscale with the least increase in attitude in the six classes without included students. The total attitude score of students in the six classes without included students, however, was found to have increased slightly more than the two classes with included students.

Figure 1 Pre and Post-test PATHS mean scores - Inclsuion vs Non-inclsuion classes

When considered as NCEs results show the two inclusion classes, after participation in the trial inclusion program, to have the most positive attitude toward students with behavioural disabilities (Behavioural NCE=46, Physical NCE=41, Intellectual NCE=40). This contrasted with pre-test NCEs where the two inclusion classes showed the most positive attitude toward students with a physical disability (Physical NCE=44, Behavioural NCE=40, Intellectual NCE=39). The NCEs for the six non-inclusion classes changed little between pre test (Physical NCE=46, Intellectual NCE=44, Behavioural NCE=44) and post test (Physical NCE=46, Intellectual NCE=45 Behavioural NCE=45), with attitudes toward students with physical disabilities slightly more positive at both the start and end of the semester.

Inclusion vs Non-Inclusion Classes by Gender

A multivariate analysis of variance (MANOVA (2 (pre and post test) x 2 (inclusion and non-inclusion) x 2 (male and female)) was carried out to determine the impact of the trial inclusion program on the attitudes of male and female students in the inclusion and non-inclusion classes. Results are shown in Figure 2. Although no differences in attitude were of statistical significance some trends did emerge.

The male students in the two inclusion classes showed a more positive attitude toward students with disabilities across all three subscales and in the total score after

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their experiences of inclusion. Although not as pronounced, this was also reflected in the six non-inclusion classes. By contrast a comparison of mean scores for female students in the two inclusion classes, pre and post-test, showed a more positive attitude only toward students with a behavioural disability. In the non-inclusion classes the increase in female students attitude toward behavioural disabilities was not replicated, with the only increase being slightly toward students with physical disabilities.

When comparing female and male scores pre and post test in the inclusion classes it could be seen that at the pre-test stage male students only outscored female students in the behavioural subscale but at the post test stage male students outscored female students in all subscales and the total score. In the non-inclusion classes the pre and post test pattern remained the same with male students only outscoring female students in the behavioural subscale.
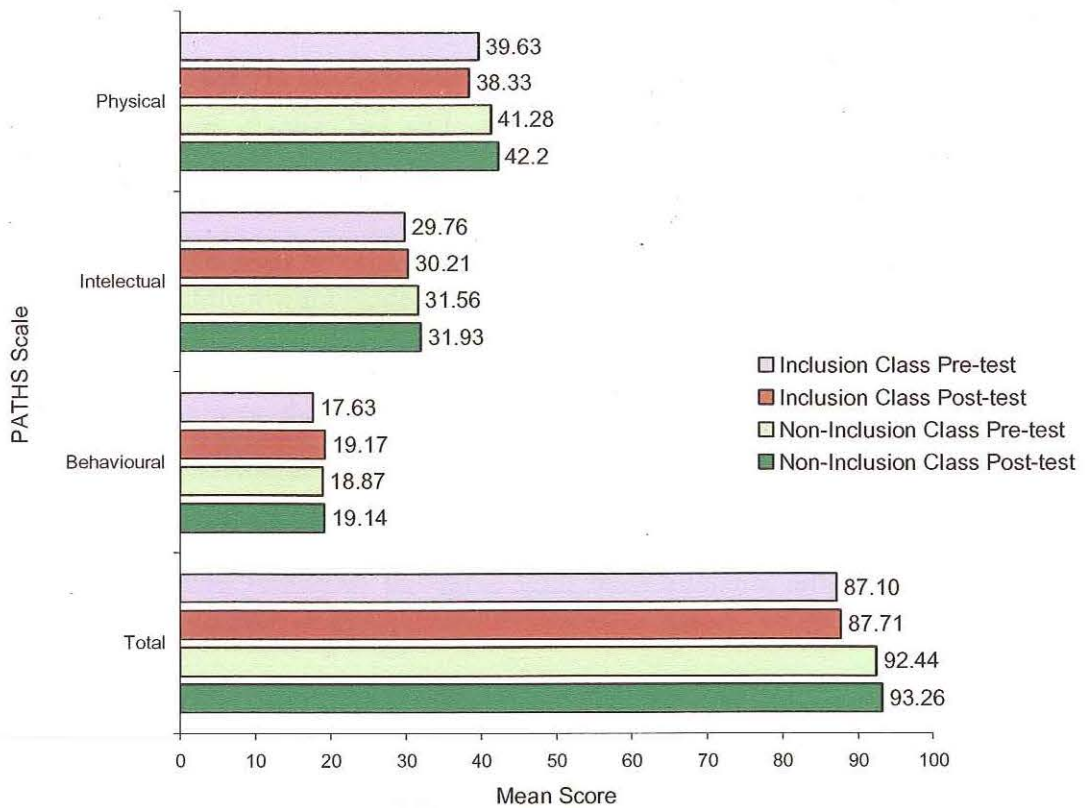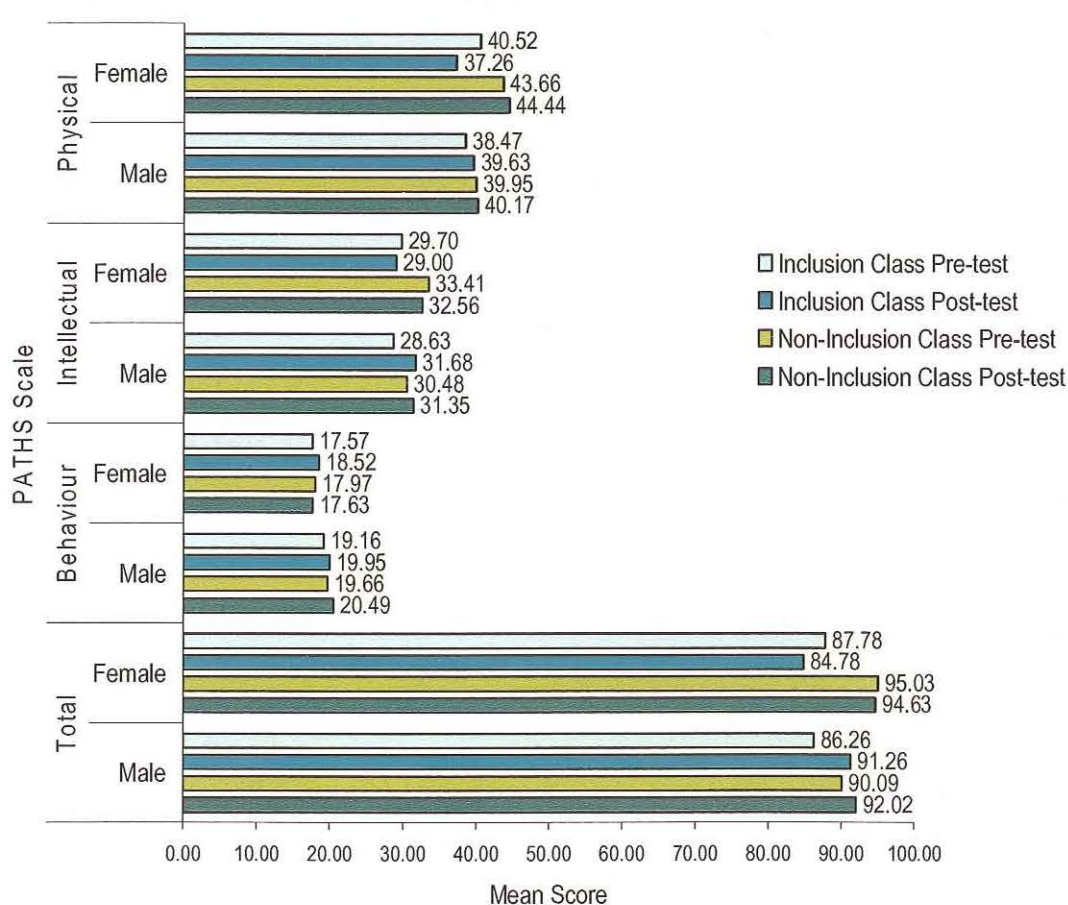

Figure 2 - Pre-and Post-test PATHS mean scores - Inclusion vs Non-inclusion classes by gender

When considering NCEs for the two inclusion classes, male students, at the start of semester, held the most positive attitude toward students with behavioural disabilities (Behavioural NCE=45, Physical NCE=42, Intellectual NCE=36). This was maintained

after their experiences of inclusion, with attitude toward behavioural disabilities still more positive than toward those with physical and intellectual disability at the end of the semester (Behavioural NCE=48, Physical NCE=44, Intellectual NCE=44). Female students though initially had the most positive attitude towards students with physical disabilities (Physical NCE=45, Behavioural NCE=39, Intellectual NCE=38) but this was not maintained post-test with their most positive attitude then shown to be towards students with behavioural disabilities (Behavioural NCE=43, Physical NCE=40, Intellectual NCE=36).

When considering NCEs in the six non-inclusion classes it could be seen that the most positive attitude by male students, pre-test, was slightly toward behavioural disability (Behavioural NCE=47, Physical NCE=44, Intellectual NCE=41). This order had not changed at the post-test stage (Behavioural NCE=51, Physical NCE=45, Intellectual NCE=45). When considering female attitudes the most positive attitude, pre-test in the six non-inclusion classes was toward students with physical disabilities (Physical NCE=52, Intellectual NCE=50, Behavioural NCE=41). This order did not change at the post-test stage (Physical NCE=54, Intellectual NCE=47, Behavioural NCE=40).

Focus Group

In order to substantiate and supplement the results of the attitude questionnaire a Focus Group session was held at the school after the final administration of PATHS. Initially it was intended that four questions be discussed, however, after the initial question was put to the interviewees by the researcher (Do you feel participation of mainstream students in the trial inclusion program impacted on their acceptance of students with a disability? Can you expand on what has drawn you to reach your conclusion?) extensive open ended discussion resulted. Much of this discussion pre-empted the questions not yet put to the group. In order not to disrupt the flow of the discussion the researcher allowed events to continue. The two main themes discussed during the session were *Attitude and Acceptance* and *Behaviour*. Teacher attitudes reflected during discussion are also presented.

Themes from Focus Group Discussion

Attitude and Acceptance

There were several common themes and specific remarks that emerged from the focus group discussion. All participants thought that the Year 8 students were positive in

attitude toward their peers with disabilities at the start of the Semester. According to the group the degree of acceptance varied. Some students were accepting of included students without actively seeking their company whilst others were quite active in their effort to involve and support the included students. It was also suggested by the group that this level of acceptance was at least maintained throughout the semester. Some participants had different views on whether attitudes changed over the period. One participant in the group felt they had observed no increase in willingness, on the part of mainstream students, to be closer to their peers. Most of the group, however, concluded there was an increase. This was summed up by one participant by the following comment:

> I think student attitude appeared more positive at the end of semester and there was always general acceptance of included students by their classmates over the whole term. They really mixed well together. After some initial difficulties [these are discussed following] barriers were overcome and some friendships were formed.

Other specific remarks supported the general acceptance of the included students. One focus group participant had observed that the "social mix at recess tended to be along the lines of social maturity rather than academic ability and was not along the lines of included students vs non-included students." Another participant commented that a student with an obvious physical impairment (not an included student) did not attract any negative attention. As well as recalling these positive occurrences, further discussion did ensue amongst the group when the issue of student behaviour was raised.

Behaviour

The focus group was in agreement that there was no ongoing disruptive behaviour by the included students. Minor issues, however, relating to the behaviour of some included students did arise. The group commented that the mainstream students were not fazed by these issues. If any student was misbehaving other students would simply look up then continue with their work. One student did approach a teacher to say they did not like the fact that one particular included student was always getting their own way with other included students. Some students had also noticed the inclusion coordinator was spending more time with included students than mainstream students. A more significant instance of misbehaviour saw an included student hit two mainstream students. This

matter resulted in the included student participating in a four week social skills course because of their out burst and "angry look." The focus group participants were very enthused by the fact that after the social skills intervention the included student at the centre of the outburst went on to form a real friendship with a mainstream student and from there became part of the mainstream student's friendship circle.

In conclusion, there was general consensus amongst the focus group that student attitudes were positive at the start of semester. Discussion suggested that participation in the trial program had further improved the attitude of mainstream students by the end of semester. Specific observations and outcomes indicated that minor behavioural issues were dealt with in a positive manner by mainstream and included students.

Teacher and Educator Attitudes

Although it was not the intention of the focus group to assess the attitude of teachers and educators it was clearly evident from the meeting that all teaching staff were positive and enthusiastic toward the trial inclusion program and keen to see it succeed. This reflects the outcome of previous research that found if teachers are supplied with appropriate resources then their attitude towards inclusive education is positive (Cesare, Alessandra, Scruggs & Mastropieri, 1998; Everington & Stevens, 1999; Forlin, 2001; Scruggs & Mastropieri, 1996; Villa, Thousand, Meyers & Nevin, 1996). Other research has also shown that teacher attitude has a significant impact on that of students to the extent that if the attitude of the teacher is positive then the attitude of students is likely to be positive (Avramidis et al., 2000; Everington & Stevens, 1999; Treder, 1999). The willingness of the school to provide the necessary additional resources for the trail inclusion program and the determination of the teaching staff to see the program succeed was evident during discussion. The enthusiasm of the teaching staff involved in the inclusion program was also apparent in general discussion with the principal of the education support centre and the principal of the mainstream school who were both instrumental in getting the trial inclusion program started.

Chapter 6

Discussion and Conclusion

Existing Attitudes

In order to consider attitude change during the trial inclusion program pre and post administration of the PATHS was undertaken together with a final focus group session with staff. Three research questions were addressed during the assessment of pre-test data. The first question was aimed at establishing the existing attitudes of students toward peers with a disability. The use of PATHS at the pre-test stage afforded the study the opportunity to asses the Year 8 cohort as a whole prior to their experiences of inclusion. PATHS scores obtained compared well with previous surveys in terms of mean responses indicating good reliability ($r=.75$). This finding, that PATHS scores were similar to previous surveys is important as it suggests student attitudes toward peers with disabilities have changed little in the 22 years since PATHS was first administered in Australia. In addition, all attitudes measured by PATHS in an Australian context have nearly always reported only an average attitude towards students with disabilities. This concurs with the findings of the meta analyses by Nowicki and Sandieson (2002) of research into school age children's attitude towards people with physical or intellectual disabilities that concluded that in general children's attitudes were still in need of improvement.

The second research question was designed to investigate whether female and male students were different in their attitude toward peers with a disability. This study found that there was a significantly more positive attitude by female students than male students towards peers with physical and intellectual disabilities. This was in keeping with previous research (Gerson, 1995; Hastings & Graham, 1995; Marino, 1994; Nowicki & Sandieson 2002; Townsend, Wilton & Vakilirad, 1993). When behavioural disabilities were considered, however, female attitudes towards peers were found to be significantly less positive than their male counterparts. Given the separation of intellectual and behavioural disability by PATHS it could be that females, when given the opportunity to differentiate between the two, are found to be less tolerant than males of misbehaviour in the classroom whilst at the same time still maintaining a more positive attitude than males towards students with an intellectual or physical disability.

The third research question during the assessment of pre-test data sought to establish if prior contact with students with a disability had a significant impact on

attitude of mainstream students. The confounding variable of prior contact and its duration was specifically targeted as a result of previous research by Howell (1995) who found no difference in student attitude after their experiences of the inclusion program he studied. He attributed this to the likelihood that the students may already have had a positive attitude through their previous experiences of inclusive education in earlier school years. Given the presence of the Supported Education Program in Western Australia it was felt necessary to assess this variable. There are perhaps merits in Howell's (1995) observations as the results of the study presented here revealed a significantly more positive attitude toward students with an intellectual disability by mainstream students who had spent some prior time with a classmate with a disability when compared to students who had spent no time at all with their classmate with a disability This suggests that some contact is better than no contact at encouraging a more positive attitude toward students with an intellectual disability.

The finding that a lot of prior contact with a classmate with a disability may result in a significantly less positive attitude than only some contact, suggests that there may well be negative aspects to frequent contact between students with and without disabilities and that contact improves attitude only up to a point. This raises the question as to what the students' previous contact may have consisted of. If the prior contact was likely to have taken place as part of the Supported Education Program then a reasonable expectation would be that such contact was fairly well structured and supported. Perhaps, then, this is an indication that the interaction between students with and without disabilities during inclusion does not afford enough attention to the socialisation aspects of the relationship between the students. Either way, the findings suggest that where a lot of contact occurs in the classroom it may result in not only a below average attitude (NCE=29) but also attitudes that are less positive than when only some contact is occurring. The below average attitude of students who reported a lot of prior contact with a classmate with an intellectual disability was also slightly less negative than students who spent no time at all with their classmate with an intellectual disability (NCE=32).

Previous research in Western Australia (Roberts, 1995) has shown that structured opportunities for positive interaction and cooperation are essential for increasing the social acceptance of a student with a disability. Chadbourne (1997) in his review of the inclusion program in Western Australia found that although there were positive social outcomes for included students the development of interpersonal relationship and

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inclusion in friendships groups generally did not occur. It could well be, then, that in 2003 students without disabilities are still emerging from inclusive primary classrooms without the opportunity to fully engage in positive interactions and interpersonal relationships with included students and, therefore, are still only accepting of included students up to a point.

The discussion here regarding previous effects of prior contact within the classroom on student attitude should be treated with caution. Sample numbers involved were relatively small in comparison with the Year 8 cohort (See Table 4). In addition, it was the respondent who decided if any of their previous classmates had a disability. Also, the categories used to define 'time spent' were quite broad and not specifically defined and, therefore, possibly open to differing interpretations. Finally, prior experiences of disability in the classroom could well have been outside of a supported inclusive education school environment. The suggestion from this study of the trial inclusion program, however, that some contact is better than no contact and that a lot of contact does not necessarily have positive outcomes are not unrealistic.

Changes in Attitude

The first research question regarding changes in attitude sought to determine if the attitudes of mainstream students changed after their experiences of inclusion in a middle school setting. The hypothesis that Year 8 adolescents would have a more positive attitude toward peers with a disability after their experiences in an inclusive middle school setting was not supported. The finding that a positive increase in attitude was recorded in the total score, the intellectual subscale score and the behavioural subscale was, however, encouraging. Interestingly, a similar increase in attitude by students in the six non-inclusion classes was also recorded.

A possible reason why the trial inclusion program did not increase these attitudes to a significant extent could be that although contact was improving attitude there may not have been enough opportunities for positive social interaction to make the improvement statistically significant. As previously mentioned some prior research has found that if attitudes are to be improved significantly, opportunities for positive and structured social interaction must take place. Typically previous researchers have called for attitude change programs, actively teaching communication skills, conducting disability awareness campaigns and peer tutoring and peer buddy systems for the included students (Thomas & Graham, 2002, Roberts, 1995; Roberts and Lindsell, 1997;

Roberts & Smith, 1999). Although the model for the trail inclusion program presented here was inclusive and provided generous support and resources to educators, as well as providing social skills intervention when the situation demanded it, there was no indication that pre-emptive or formal structured social interaction was actively implemented. This may explain a lack of significant improvement in the attitudes of students in the two inclusion classes.

The finding that the attitude of students in the six non-inclusion classes improved as well is perhaps not surprising. There is much prior research that contends that student attitudes toward inclusion are very likely to reflect the educational setting and the attitude of educators within the school (Avramidis, Bayliss, & Burden 2000; Everington & Stevens, 1999; Gerson, 1995; Treder, 1999). Given the enthusiasm towards the trial inclusion program by the school, the principal of the education support centre and the principal of the mainstream school, as evidence by their willingness to carry out the trial inclusion program and allocate of appropriate resources, the improvement in attitude of students in the non-inclusion classes was not surprising.

Despite the lack of significant improvement in attitudes it was quite noteworthy that the biggest improvement in attitude in the inclusion classes was toward students with a behavioural disability, whilst in the non-inclusion classes this was the attitude that showed the least improvement. The attitude toward those with a behavioural disability improved to such an extent in the two inclusion classes that it actually became more positive than their attitude toward those with a physical or intellectual disability. Anecdotal evidence from the focus group discussion indicated that there were minor instances of misbehaviour during the semester which required social skills intervention in one instance. This incident was turned around to such an extent that the particular student eventually established friendships with some mainstream students. Perhaps, then, the students' experience in dealing with these minor misbehaviours in a positive way, with the assistance of the class teacher and inclusion coordinator, resulted in their improved attitude.

The most difficult finding to explain in the repeated measures study was the decrease in attitude shown by the two inclusion classes towards students with a physical disability. The result at the end of semester still indicated an average attitude and although the decrease was not statistically significant student attitude toward physical disability in the two inclusion classes actually became less positive than behavioural disability. This goes against prior research (Bagley & Greene, 1981; Clunies-Ross &

Thomas, 1986). Arguably, this decrease is indicative of the slight variances in respondent answers that can occur in Likert-Scales-scales between tests.

Gender Differences

A common theme throughout the analyses of all pre and post test data has been the prominence of behavioural disabilities, not only in a statistically significant manner e.g. males having a significantly more positive attitude toward students with behavioural disabilities than females (pre-test analysis) but also in non-statistically significant but noteworthy trends e.g. the most positive increase by the inclusion classes, pre to post test, was toward students with behavioural disabilities. The prominence of behavioural data was reflected in gender difference with the biggest positive increase in attitude shown by female students being toward students with behavioural disabilities. In addition, both female and male students had a more positive attitude toward students with behavioural disabilities than towards students with intellectual or physical disabilities by the end of semester.

The prominence of behavioural issues in the study presented here is also reflected in other research in the fields of inclusive education and psychology. As early as the 1950s it was argued that inadequate socials skills and inappropriate behaviour resulted in the rejection of children with disabilities by peers and teachers (Yuker, 1988). Throughout the following years evidence continued to emerge showing that a lack of social skills undermined the likelihood of students with disabilities being accepted (Cook & Semmel, 1999; Hastings and Graham, 1995; Thomas & Graham, 2002; Siperstein & Bak, 1985). The data from the research presented here have shown that where the attitudes toward students with behavioural disabilities were concerned the attitudes of male and female students were maintained and improved by participation in the trial inclusion program.

Focus Group Discussion

The focus group discussion supported the findings of the quantitative data that attitudes of mainstream students had improved over one school semester. Most group participants offered only positive anecdotal evidence indicating a tangible improvement in student attitude. The qualitative aspect to the research provided by the focus group also revealed the positive impact of social skills intervention which allowed an included student (i.e. the student who hit two other students) to develop friendships despite some difficulties at the start of semester. This reflects the importance of formal structured intervention

highlighted by other research (Hastings and Graham, 1995, Yuker, 1988) and would appear to support the contention that the presence of students with disabilities alone is not always likely to produce a significant improvement in the attitudes of mainstream students.

The positive attitude shown by teachers during the focus group discussions was consistent with previous research that found teacher attitudes improved significantly if they are provided with all the necessary resources to assist them in including a child with a disability in the classroom (Cesare, Alessandra, Scruggs, & Mastropieri, 1998; Everington & Stevens, 1999; Forlin, 2001; Forlin, Douglas & Hattie, 1996; Scruggs & Mastropieri, 1996; Villa, Thousand, Meyers, & Nevin, 1996). In addition, other researchers (Avramidis et al., 2000; Everington & Stevens, 1999; Johnson Jr, 1998; Treder, 1999) have observed that teacher attitude plays a significant part in the likelihood of an inclusive setting having a positive impact on student attitudes towards peers with disabilities. Positive teacher attitudes, they found, were likely to be noticed and picked up by students thus making them more likely to be accepting of their class member with a disability. The positive attitude expressed by the teachers participating in the trial inclusion program, then, should be considered when assessing the impact of the inclusion program on the attitude of mainstream students.

Limitations

There are several possible limitations with this research. The most pressing one may be the respondent's reluctance to answer truthfully to the statements. It has been contended that there is a tendency for people to unconsciously deny any discomfort they might feel towards people with disabilities (Wolfensberger & Thomas, 1983). If, then, attitudes were found to be favourable it could be argued that respondent's were denying their own ability to reject others. Even if unfavourable attitudes towards people with disabilities were revealed there would have been no conclusive evidence as to why they existed. They may well be related to Wolfensberger's (1994a) and Cocks' (1992) contention that modernistic values are undermining societies concern for the vulnerable but there may well be other more psychological reasons.

Implications for Practice

Previous research, in a school setting, has highlighted the importance of not only active and structured social support but has also recommended extensive disability awareness campaigns via peer tutoring or buddy programs (Thomas & Graham, 2002). Although

this would mean initially identifying the student with a disability the benefits of then knowing the student and their particular situation from the outset may outweigh any negative effects of labelling. Given that mainstream students did identify the included students during classes there is perhaps nothing to be gained by not introducing the included students to their mainstream peers.

The finding that females had a more positive attitude towards students with physical and intellectual disabilities than males reflected the outcomes of other research (Gerson, 1995; Hastings & Graham, 1995; Marino, 1994; Nowicki & Sandieson 2002; Townsend, Wilton & Vakilirad, 1993). The finding, however, that males had a more positive attitude than females towards students with behavioural disabilities was not at all prominent in other literature. With behaviour in the classroom seen as a significant stressor for teachers (Forlin, 2001) any finding that sheds new light on behavioural issues is significant. Differences in gender attitude, then, warrant further consideration when looking at the placement of students with disabilities in mainstream education.

Recommendations for Future Study

It may be that after a longer period of time the trial program studied as part of this research could lead to a further, more significant, improvement in the attitude of mainstream students towards peers with a disability. Re-examination of student attitude after another semester or year of inclusion at this middle school may answer this question. In addition, a longitudinal study throughout middle and high school would give a useful insight into the long term impact of inclusive education on student attitude.

The finding that the attitude of students who had previously spent a lot of time in class with peers with a disability was significantly less positive than students who spent only some time in class is an anomaly that needs further investigation. Direct assessment of student attitude is an area of research that appears to have been neglected in a Western Australian context. Such an assessment could be conducted as students leave Year 7 and may benefit from an in depth qualitative study to establish not only student attitudes but why students hold these attitudes.

Conclusion

Within this middle school inclusive education did lead to a change in acceptance of students with disabilities and this acceptance appeared to be increased further with structured opportunities for social interaction between students both with and without disabilities. This is in keeping with several psychology based theories that argue that

proximity and positive interpersonal experiences can boost liking and acceptance (Yuker, 1988). The improvement shown by females towards students with behavioural disabilities and the finding that males maintained their more positive attitude toward students with behavioural disability during the trial inclusion program is encouraging and suggests that any barriers classroom behaviour poses to the full inclusion of students with disabilities are not insurmountable. It was clear that the amount of contact students have in-class with peers with disabilities can have a significant affect on attitude and highlights the importance of such interaction and the need to continually pay attention to it.

The movement toward inclusive education is likely to increase in coming years and thus the number of students seeking an inclusive option for their high school education will continue to rise. The obvious positive attitude of teachers in the trial inclusion program studied suggests that support for such inclusion amongst educators is possible when appropriate resources are allocated. It is imperative that the impact of inclusion in middle school and high school settings be given due consideration. Mainstream students are key stakeholders in this matter and their attitudes and willingness, or not, to accept students with disabilities necessitates not only ongoing evaluation but the development of strategies to encourage and maintain positive attitudes and acceptance.

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Appendix A.   PATHS Questionnaire

PATHS
STUDENT BOOKLET

DIRECTIONS

Please read the Student Descriptions that follow. Read about the student and decide how you *feel* about him/her. Then select or place this student where he or she should work. You have five choices:

5	Work with me in *My Group*
4	Work in *Another Group* (with someone else)
3	Work in *No Group* (with no other students)
2	Work *Outside of Class* (in another class or room)
1	*Stay at Home* (and not come to school)

IMPORTANT: On the Answer Sheet circle the number that best describes how you feel or where you think that student should work. Read each statement carefully. There are 30 student descriptions.

STUDENT DESCRIPTIONS

ITEMS

Questions	In My Group	In Another Group	In No Group	Outside of Class	At Home
1. Stephen cannot follow directions, and his teacher must tell him at least three times what to do; even then Stephen might still not know what to do. He is unable to do the class work and is failing every subject. This student should work:	5	4	3	2	1
2. Anna has a hard time breathing. She always sounds like she is choking. Despite her difficulty, Anna is a good student. This student should work:	5	4	3	2	1
3. Jimmy needs to sit in a special wheel chair in class. He's smart and learns all the work. Jimmy has trouble moving around and needs special help. This student should work:	5	4	3	2	1
4. Ryan has problems with math. He uses his fingers for adding numbers and does not remember his facts. He never finishes his math assignments. This student should work:	5	4	3	2	1

Questions	In My Group	In Another Group	In No Group	Outside of Class	At Home
5. Kathy always interrupts her class by calling out, teasing and demanding the teacher's attention. She is always getting out of her seat and going to the teacher's desk. She lies, cheats, and does not make friends. This student should work:	5	4	3	2	1
6. Sally is having a very difficult time in school. She cries, bangs her head on the desk, and falls off her seat. She blacks out sometimes and doesn't know where she is. This student should work:	5	4	3	2	1
7. Sharon can't remember what she reads and this makes her upset. After Sharon reads aloud, the teacher will ask her several questions about the story. Sharon just forgets what she reads. She has a poor memory. This student should work:	5	4	3	2	1
8. Jeff's writing is very poor for a boy in Year 6. It is hard to understand because there are so many mistakes. His writing is sloppy, and his choice of words is often inappropriate. This student should work:	5	4	3	2	1
9. Peggy's eyes look inward toward her nose. She doesn't like to talk to others in the class and dislikes working in small groups with her teacher. This student should work:	5	4	3	2	1
10. Michael is hard of hearing. He wears a hearing aid and has difficulty saying words. His speech sounds different. This makes him hard to understand. This student should work:	5	4	3	2	1
11. Sean is an excellent football player. He gets along with his classmates but is unable to read any of his class material. As a result he has failed all the tests. This has upset him very much. This student should work:	5	4	3	2	1
12. Julie has only one arm because of a serious car accident. She is working below other students and has difficulty writing and completing classroom assignments. This student should work:	5	4	3	2	1

Questions	In My Group	In Another Group	In No Group	Outside of Class	At Home
13. Lee learns very slowly. His teacher has to repeat everything or Lee will just not do anything. He loses his place in reading and doesn't do homework. This student should work:	5	4	3	2	1
14. Mary is in Year 3 and can't read or spell very well. She sees things backwards and sometimes up-side down. When she is asked to read or spell, she gets upset and usually sits at her desk and scribbles. This student should work:	5	4	3	2	1
15. John has great difficulty seeing. He is unable to read from the blackboard. He is only able to read books with very large print. John wears a patch over his bad eye. This student should work:	5	4	3	2	1
16. Jill likes school and works hard but has great difficulty holding pencils or pens due to a muscle problem resulting from a serious illness. Jill can read but finds writing almost impossible to do. This student should work:	5	4	3	2	1
17. Steve is a poor learner and is failing all subjects in his class. He always disrupts the class and acts badly to his teachers. This student should work:	5	4	3	2	1
18. Brendan is very smart but is always complaining about his parents. It seams they smack him and push him away, or send him to his room. In class Jose is always "showing off" and wants to take over. This student should work:	5	4	3	2	1
19. When Amy does math she takes much longer than anyone else. When she is told to add, she subtracts: when she is told to subtract she adds. She does not understand math signs and cannot follow directions. This student should work:	5	4	3	2	1
20. Peter does not know what his teacher wants, which generally results in Peter being sent from the room. He always argues with the teacher, causing the class to become very upset. This student should work:	5	4	3	2	1

Questions	In My Group	In Another Group	In No Group	Outside of Class	At Home
21. Mary is a very poor reader and can only read a few words. She does little homework and doesn't like school. This student should work:	5	4	3	2	1
22. Carol Lee is very shy and has a speaking problem which she cannot help. She stutters on almost every sentence, making it difficult to listen to her. This student should work:	5	4	3	2	1
23. Sam is a poor student and slows the teacher's lesson. This holds back the class. He either stands off to the side or pushes everyone away, using loud and rough talk. This student should work:	5	4	3	2	1
24. Maria learns very slowly and needs to have instructions repeated several times. Even then she may not be able to do the work. This student should work:	5	4	3	2	1
25. Jim looks different because his head is very large. It makes his eyes and ears look different. He is clumsy and stumbles a lot. He spoils the team he is on in gym. This student should work:	5	4	3	2	1
26. Benny walks different because one of his feet is bigger than the other and is twisted. He limps badly, and has the name "Limpy". This student should work:	5	4	3	2	1
27. Peter doesn't like school. He is always late in the morning. When he is at his desk, he is always moving around, dropping things and making noise. He disrupts everyone and usually is punished by his teacher. This student should work:	5	4	3	2	1
28. Bill talks all the time. Everyone must do what he says. If they don't, he bites, scratches, kicks and punches. Then he goes into a rage. This student should work:	5	4	3	2	1
29. Linda has a bad scar from the top to the bottom of her lip which twists her mouth. When she talks she is hard to understand because it sounds like she is talking through her nose. This student should work:	5	4	3	2	1

Questions	In My Group	In Another Group	In No Group	Outside of Class	At Home
30. Greg is absent from school all the time and has difficulty breathing on certain days. He is always visiting the nurse's office for pills. Greg is very skinny. This student should work:	5	4	3	2	1

STOP!

Appendix B.   Focus Group Questions

62

Focus Group Questions

Do you feel participation of mainstream students in the trial inclusion program impacted on their acceptance of students with a disability? Can you expand on what has drawn you to reach your conclusion?

Did students appear less than willing to be in close proximity to the included students at the start of Semester only to a) become more willing as the Semester progressed? b) become even less willing as the semester progressed? c) show no change in the desire regarding their proximity to included students?

Were there any instances of included students displaying inappropriate behaviours? If so, what were the reactions of other students?

Please comment on the duration and severity of unsocial behaviours by the included student.

Appendix C.   Ethics Approval

Steve McGregor   CSESS: 86

█████████████
██████

12 February 2003.

Dear Steve

## RE: ETHICS CLEARANCE FOR HONOURS/MASTERS RESEARCH

I am writing to confirm that the Faculty of Community Services, Education & Social Sciences Ethics
Committee has approved your research for Ethical Clearance. This clearance was granted on the
following date: 12/02/2003.

I wish you success with your future study,

Yours sincerely,

Sarah Keam
Executive Officer
Higher Degrees Office
Faculty of Community Services, Education & Social Sciences
CC: Dr Chris Forlin

Appendix D.   Permission Slips
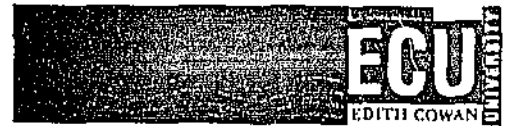
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Email: to go here

INVITAION FOR PRINCIPAL TO PARTICIPATE IN RESEARCH EXAMINING STUDENT ATTITUDE TOWARD PEERS WITH A DISABILITY
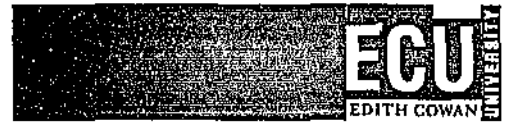
Dear Principal,

I am undertaking study at Edith Cowan University to complete a Bachelor of Social Science Degree (Honours) in Human Services. As part of my thesis requirements I hope to investigate the attitudes of students toward peers with disabilities. I would appreciate your permission to allow all of your Year 8 students to complete a questionnaire at the start and end of Semester One, 2003. The questionnaire consists of 30 statements with the students asked to respond to each statement by selecting one of five answers. In order to make the process of gathering the data as unobtrusive as possible, for the pupils, I seek your permission for the class teachers to administer the questionnaire. Copies of questionnaires and answer sheets will be provided for all students along with easy to follow instructions to assist with administration. I will also be available to answer any queries. The questionnaire can be administered to class groups and will take no longer than 30 minutes to complete. I will undertake to destroy all unused material. No real names will be used in the write up of this research.

This research has the approval of the Faculty of Community Services, Education & Social Sciences Ethics Committee. If you have any questions please contact Associate Professor Chris Forlin, Ph: 6304 5490, Email: c.forlin@ecu.edu.au or Dr Lorraine Hammond, Ph: 6304 5489, who will act as an independent authority if you have any questions regarding the research project.

Thank you for your help.

Yours sincerely

Steven McGregor
Research Student, Edith Cowan University

STUDENT PARTICIPATION IN RESEARCH STUDY
INFORMATION FOR PARENTS & GUARDIANS

Hi. My name is Steven McGregor and I am undertaking study at Edith Cowan University to complete a Bachelor of Social Science Degree (Honours) in Human Services. As part of my thesis requirements I aim to investigate the attitudes of students toward peers with disabilities. In order to complete this research I am asking Year 8 students, at Halls Head Community College, to complete a questionnaire at the start and end of Semester One, 2003. The questionnaire will be administered by the teacher and take no longer than 30 minutes to complete. All information obtained will remain confidential. The research will be undertaken in full cooperation with and only after permission from the school principal.

If you do not wish your child to participate in this research by completing a questionnaire, please sign the attached slip and have your child return it to a class teacher by the 10th of February 2003. I will undertake to destroy all unused material. No real names will be used in the write up if the research. This research has the approval of the Faculty of Community Services, Education & Social Sciences Ethics Committee. If you have any questions please contact my supervisor Associate Professor Chris Forlin, Ph: 6304 5490, Email: c.forlin@ecu.edu.au or Dr. Lorraine Hammond, Ph: 6304 5489, who will act as an independent authority if you have any questions regarding the research project.

Thank you for your help.

Yours sincerely

Steven McGregor
Research Student, Edith Cowan University

PLEASE COMPLETE THIS FORM

I acknowledge that I have read the attached information and I hereby give notice that I <u>do not</u> wish my chil
_____(print child's name) to complete a questionnaire assessing their attitude toward peer
with a disability.

Name: _____

Signed: _____   Date: _____

STAFF PARTICIPATION IN RESEARCH STUDY
INFORMATION FOR STAFF CONSENTING TO PARTICIPATION IN FOCUS GROUP DISCUSSION

Dear staff member

I am undertaking study at Edith Cowan University to complete a Bachelor of Social Degree (Honours) in Humans Services. As part of my thesis requirements I hope to investigate the attitudes of students toward peers with disabilities. I would appreciate your time to participate in a Focus Group discussion. The Focus Group will be small and consist of myself, the four learning team teachers, the inclusion coordinator and education assistant. During the discussion I intend to ask some open ended questions to assist me in understanding your perceptions of student attitudes toward peers with disabilities gained during the trail inclusion program currently under way at your school. The session will take place toward the end of Semester One. It will brief and take no more than half an hour to complete. With your permission I would also like to tape record the session to assist me in transcribing the conversations. The transcribing will be general in nature to help me pull out any re-occurring themes or particular observations. I will not be transcribing the results word for word. The tapes will be wiped when the transcribing has been completed. No participants will be personally identified in the write up of the results. The results from the discussion will be used to provide a qualitative perspective to the outcome of the survey questionnaires completed by the students.

This research has the approval of the Faculty of Community Services, Education & Social Sciences Ethics Committee. If you have any questions please contact Associate Professor Chris Forlin, Ph: 6304 5490, Email: c.forlin@ecu.edu.au or Dr Lorraine Hammond (Tel: 6304 5489) who will act as an independent authority if you have any questions regarding the research project.

Thanks for your help

Yours sincerely

Steve McGregor
Research Student, Edith Cowan University

I acknowledge that I have read the above information and I consent [ ] do not consent [ ]
to participate in an interview for the research. I give permission for my interview to be tape recorded on the understanding that all information is confidential and tapes will be wiped after use. I understand that my name will not be published and that my results will be kept anonymous. I understand that I may choose to withdraw from this research at any time.

Name (please print): _____

Signed: _____ Date: _____