TIMELY INTERVENTION:

BEFORE IT'S TOO HARD

An investigation into the effectiveness of off-site

intervention programs for students exhibiting behavioural

difficulties in mainstream schools.

A thesis submitted in total fulfilment of the requirements for the

degree of

Doctor of Philosophy

by

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March 2009

Abstract

Students who have difficulty conforming to school rules and expected school behavioural norms are at risk of being excluded from their own schools, and possibly from further education. Failure to complete twelve years of schooling places the students at a social and economic disadvantage for the rest of their lives.

Intervention programs attempt to address students' behavioural and social issues and assist them to maintain their connection with education. This thesis examines an intervention program in Melbourne, Australia which is staffed by special education teachers and located away from the home schools of the students. Inappropriate student behaviours were identified from a review of the intervention unit's historical records. These behaviours were then compared and aligned with earlier analyses of difficult behaviours, in particular the categories from the Achenbach Child Behaviour Check List.

Quantitative analysis methods were used to validate the Behaviour Rating Scale that was developed to measure pre and post intervention behaviour. The Behaviour Rating Scale outcomes were used in conjunction with a Sessional Evaluation Measure (SEM) to assess the effectiveness of the off-site intervention program.

The thesis concludes with a model identifying key elements of effective intervention programs based on both investigations undertaken and the literature reviewed.

Doctor of Philosophy Declaration

I, Denise Clarke, declare that the PhD thesis entitled *Timely Intervention: Before It's Too Hard - An investigation into the effectiveness of off-site intervention programs for students exhibiting behavioural difficulties in mainstream schools* is no more than 100,000 words in length including quotes and exclusive of tables, figures, appendices, bibliography, references and footnotes.

This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work.

Signature   Date

Acknowledgements

Table of Contents

List of Figures and Diagram

List of Graphs

List of Tables

Abbreviations and Definitions

At risk   Used in the education field in Australia and similar countries generally refers to students at risk of not completing secondary education (year 12). The term is used in this sense in literature about school retention.

Baltara School This has four campuses one of which is known as the Baltara Integration Unit (BIU). Each campus operates discretely however, weekly staff meeting of all staff discuss the functioning and operation of each unit. Changes which affect one unit are discussed by the whole staff as staff positions at each campus are fluid when necessary.

BED   Behavioural and Emotional Disabilities (Sabornie, 2006).

BIU (program) Baltara Integration Unit (program) – is a combination of the learning environment, teaching strategies, experiences provided and activities undertaken by the student. These provide opportunities for learning and developing social skills, behavioural self management skills and academic progression.

CBCL   Child Behavior Check List.

CSF   Curriculum Standards Framework

CYPA   Children and Young Persons Act.

DOE   Department of Education, Victoria. The name of this department of the Victorian state government has changed many times as the premier of the day reallocated ministries. Consequently references to documents produced for education will have a range of names depending on the era in which the document was

written. At various times it has been know as: Education Department, Victoria; Directorate of School Education (DSE); Ministry of Education (MOE); Ministry of Education and Training (MOET); Department of Education, Employment and Training (DEET); Department of Education and Training (DET); Department of Education, (DOE) (December 2006); Department of Education and Early Childhood Development (August 2007).

Disaffected or alienated Term used for "students who do not feel they belong at school, or [who] reject school values" (Willms, 2003, p. 8).

Disengaged "Is used to characterise students who do not feel they belong at school and have withdrawn from school activities in a significant way" (Willms, 2003, p. 8).

EBD Emotional and Behavioural Difficulties. These range from social mal-adaption to abnormal emotional stresses. They are persistent (if not necessarily permanent) and constitute learning difficulties Department for Education (1994), Circular 9/94 cited in (Visser & Stokes, 2003, p. 67).

EFA Education for All – UNESCO policy of universal primary education.

Engagement "The extent to which students identify with and value schooling outcomes. And participate in academic and non-academic school activities" (Willms, 2003, p. 8).

Home school Home school / Mainstream school is the school with which the student co-jointly attends with the BIU and to which the student will return at the end of the BIU program. The student also

	initially attends the BIU four days per week and maintains attendance at the home school one day per week which progressively increases as the student continues to participate in the BIU program.
Homelessness	"Primary homelessness accords with the common sense assumption that homelessness is the same as 'rooflessness'. It includes all people without conventional accommodation, such as people living on the streets, sleeping in parks, squatting in derelict buildings, or using cars or railway carriages for temporary shelter… Secondary homelessness includes people who move frequently from one form of temporary shelter to another… Secondary homelessness also includes people residing temporarily with other households because they have no accommodation of their own". (Chamberlain & McKenzie, 2003, p. 1) 36 % of homeless people at the 2001 Australian Census were under 18 years of age (Chamberlain & McKenzie, 2003, p. 4). In Australia, young people who are in care of welfare authorities are not considered homeless.
ICT	Information and Communication Technologies.
IEP	Individual Education Plan.
ILP	Individual Learning Plan.
Inclusion	This has a range of understandings within the educational environment. "The concept of 'inclusive education' has emerged in response to a growing consensus that all children have the

right to a common education in their locality regardless of their background, attainment or disability" (Prochnow & Maw, 2002, p. 18).

Inclusion   This is a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, cultures and communities, and reducing exclusion within and from education. It involves changes and modifications in content, approaches, structures and strategies, with a common vision which covers all children of the appropriate age range and a conviction that it is the responsibility of the regular system to educate all children (UNESCO, 2005, p. 13).

Inclusive education   This approach seeks to address the learning needs of all children, youth and adults with a specific focus on those who are vulnerable to marginalisation and exclusion. …. Inclusive education means that "… schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions. This should include disabled and gifted children, street and working children, children from remote or nomadic populations, children from linguistic, ethnic or cultural minorities and children from other disadvantaged or marginalised areas or groups." (UNESCO, C 2000).

Key teacher   Teacher directly responsible for managing all aspects of the students enrolment at Baltara Integration Unit – school visits,

report writing, program planning, regular contact with parents and home school.

MCEETYA — Ministerial Council on Education Employment Training and Youth Affairs.

MIPS — In Victoria, the Managed Individual Pathways (MIPs) initiative ensures that all students 15 years and over in government schools are provided with individual pathway plans with associated support as a means to continued education, training or full-time employment (Department of Education and Early Childhood Development, 2008c).

MTU — Medium Term Unit – large house for approximately 6-8 young people in care for approximately 6 to 18 months.

NESB — Non English Speaking Backgrounds.

Off-site intervention facility or unit — Intervention which occurs a place other than the regular school of the student.

Program — In the context of this thesis, is defined as the total curriculum - content and delivery styles, operating policies and procedures and underlying philosophy of the course provided for the students enrolled.

PSD — Program for Students with a Disability.

PYD — Positive Youth Development.

Resilience — The ability to continue functioning effectively in a range of difficult and challenging circumstances. It "is a process focusing up on strengths to overcome adversity" (Goldstein, 2005).

SENCO   Special Educational Needs Coordinator (Clark, Dyson, Millward, & Robson, 1999, p. 159).

SSSO's   Student Support Services Officers - psychologists and social workers.

STU   Short Term Unit – large house accommodating young people in care for short periods up to approximately 6 months.

SWS   Secure Welfare Service - male or female facility for non-offenders in need of secure care as they are "at immediate and substantial risk of harm" to themselves.

UNESCO   United Nations Educational, Scientific and Cultural Organization.

VELS   Victorian Essential Learning Standards

Chapter 1   Identification and Intervention Processes

for Students Exhibiting Behavioural

Difficulties: An Overview

"Why bother with that dropkick[1]?"
"Why are you wasting your time?"
"You're too good for that!"
"The kids aren't worth it!"
"They'll never change"

As an educator in special education I am conditioned to uninformed comments about 'wasting time' with students with special needs, or platitudes such as "you must be a saint working with those poor unfortunate children". Most people are aware that students with special needs and learning disabilities exist and are generally pleased to confine their thoughts and appease their consciences by buying raffle tickets and supporting charity fundraising for the "poor kids". A pretty smiling face from crutches or a wheelchair elicits sympathy from parents and grandparents who are thankful and grateful that their own families are not burdened with a child with special needs.

However, the empathy, extended to some groups of children with obvious special needs such as those with physical disabilities or Down's syndrome, does not generally extend to children and students with social and emotional needs and disabilities. The difficulties and behaviours of these latter children tend to alienate

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[1] 'Dropkick' is a colloquial Australian word for someone not worth bothering about. It derives from one of the least popular type of kicks in the Australian Rules Football code

them from the understanding that is afforded to other young people with special needs. Disappointingly, the comments such as those above have been made were made by special educators, indicating that tolerance levels for students with social, emotional and behavioural difficulties are sometimes very limited.

Schools are the major source of formal learning and training within any society, so there is an expectation that schools provide the best possible curriculum and maximise the learning opportunities for all students. Schools are also expected to assist students to develop social skills to allow them to integrate fully within their own society and become good citizens. Participation in the education system is particularly important for students with social and emotional problems, as schools provide a strong institutional tie to community when family connections break down (Broadbent, 2008; Burdekin, 1998; Omaji, 1992).

1.1   School Attachment

Attachment to schools and or the sense of belonging is important for all students, but in particular those with social, emotional and behavioural issues. Students who are positive about education and succeeding in school usually develop an attachment to their schools that grows stronger over time. School Attachment shown in diagram 1-1 illustrates the continuous, positively developing attachment of a typical developing student in line 'a'. Line 'a' begins above zero (no school attachment) on the y axis, indicating that students have a positive sense of attachment to schools even before they begin the preparatory grade. They have

heard from older siblings, friends and parents about the positive experiences they will have at school so they start with an expectation of belonging and attachment.
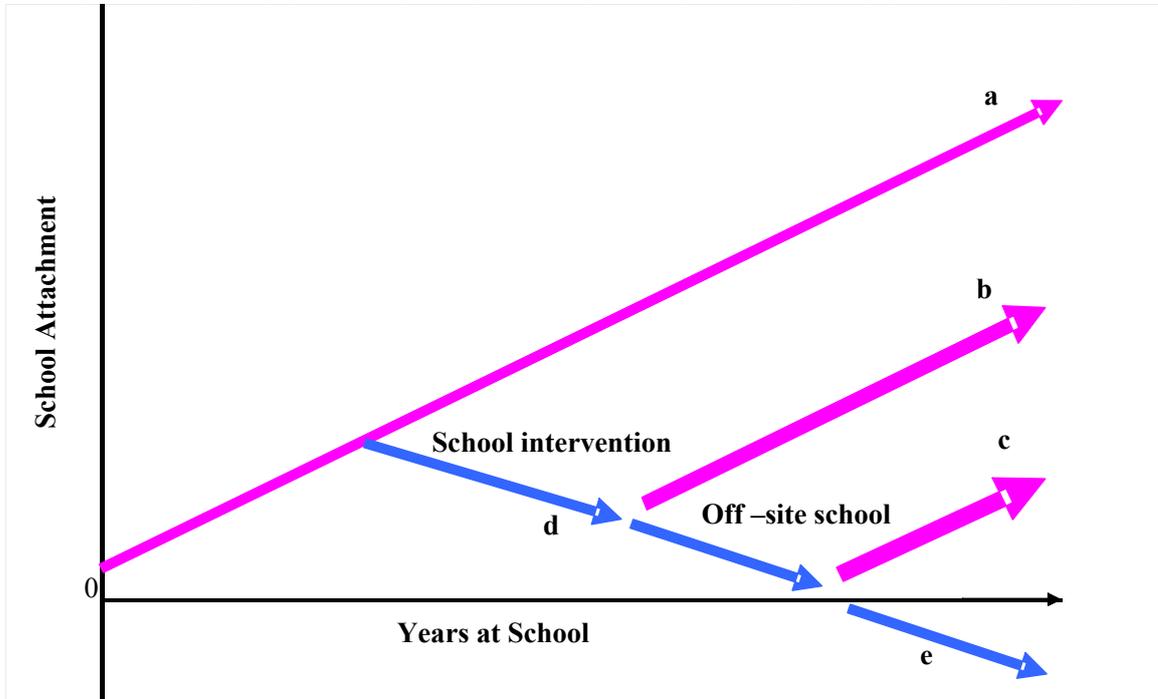
Diagram 1-1 School Attachment (Clarke, 2000)

However, Clarke (2000) suggests some students begin to lose their connection in the school attachment line with line 'd' showing decreasing attachment. Loss of attachment to school may be for a variety of reasons – students may not be experiencing success in social and academic skill areas, the program may not be catering for the students' needs, or outside factors may be having a greater influence. School intervention strategies that are employed may be effective in re-engaging and re-attaching some students to school (shown in line 'b'), but it is unlikely that they will reach the same degree of attachment as other students. The attachment of these students will remain fragile and need continuous nurturing.

9

1.2   Support and Intervention for Students

School based student interventions may be insufficient to re-engage students to positive attachment. At this stage additional resources are needed, and referring students to off-site intervention units (educational not medical) is the next step in addressing the loss of attachment. If off-site intervention is successful then students may again be guided on the path to school attachment as shown in line 'c' on Diagram 1-1. As with the earlier group, the re-attachment is less intense than the typical attachment, and these students will require on-going support to maintain connection. Some students will become totally disengaged from schools and this is represented by the line 'e' below zero on the y axis. At this stage a multi-faceted and multi-disciplinary approach is essential to have any chance of re-engagement.

Students who begin to lose or have difficulty maintaining their attachment with school, but are not yet totally alienated, are the focus of this thesis. One outcome of this thesis is the detailing of difficulties encountered by a group of students who are 'at risk' in many ways. This is done by examining students' behaviours that are challenging teachers and schools when catering for students' individual needs to assist them to maintain school attachment. These students are at risk of exclusion from schools and of not completing year 12; they are at risk of being disenfranchised from education in their early secondary years; and they are at risk of extending their anti-social, alienating activities into (if not on the cusp already) the realms of criminal behaviour. These students are candidates for referral to a behaviour intervention program aimed at improving their school participation and reduce the likelihood of early leaving.

In chapter 2 Identification and Teacher Perceptions of Difficult Classroom Behaviour the behaviours of students who have been referred to an intervention program are set in the context of earlier writers – Wickman (1928), Wheldall and Merrett (1988) - who discussed difficult students and difficult behaviour in school. Their comparisons highlight the trend towards more aggressive behaviours in students who are referred for intervention. These behaviours were also considered in terms of Achenbach's (1997) psychological model of problem behaviours. These behaviours provide an understanding of the characteristics of the students, and some of the factors preventing them maintaining full and continued participation in the education system.

1.3   Education for All

The identification of students whose behaviours contribute to their difficulty in maintaining positive connections with their mainstream schools, and whose social and emotional needs isolate and alienate them from their peer groups and their community sets the context for a two-part literature review. Chapter 3, Education for All: Relevant economic and social outcomes, outlines humanitarian investment in education for the sake of all individuals which is at the forefront of The United Nations Educational, Scientific and Cultural Organization (UNESCO) literature. Here the expenditure on education reflects each country's perceptions of education as an economic cost or as an investment with future benefits.

Current political and economic philosophies have resulted in goals for the retention of all students to year twelve in Victoria (The Allen Consulting Group, 2001), with similar high school completion equivalents throughout Australia (Ministerial Council on Education Employment Training and Youth Affairs, 2008a; NSW Public Education Council, 2005) and other developed countries (U.S. Congress, 2002). The goal of retaining all students to year twelve implies that the education system is capable of, catering for the diversity of the whole school population to ensure that all can be appropriately and positively engaged in education. In Victoria, attempts to cater for all students to year twelve are seen in the Victorian Certificate of Education (VCE) which is the usual entry pathway for tertiary studies; Victorian Certificate of Learning (VCAL) practical pathway leading to further training and employment; and Vocational Education and Training (VET) which is workplace vocational training and can contribute to both VCE and VCAL (Victorian Curriculum and Assessment Authority, 2009).

Provision of education for all leads to an examination of formal catering for students who do not have typical development and abilities, and the establishment of special schools in Victoria. The literature review further details the changes in philosophy, political influence and terminology towards the integration of students with disabilities into mainstream education. The Program for Students with Disabilities (PSD) "provides additional support within the Student Resource Package for eligible students with disabilities in regular and specialist schools" (Department of Education and Early Childhood Development, 2009c). This fosters an option for parents to select specialist or mainstream schools or a combination of both in dual enrolments. The language of integration has

developed into inclusive philosophies which have broadened thinking to include students from diverse backgrounds and cultures, as well as those with special learning needs. Currently in Victoria "the Department is committed to delivering an inclusive education system that ensures all students have access to a quality education to meet their diverse needs" (Department of Education and Early Childhood Development, 2009b).

Successful mainstream inclusion practices are documented for students with physical and intellectual difficulties, but students with social and emotional needs, although initially included, have been unsuccessful due to inadequate administrative processes, which attempt to balance the competing rights of different student groups (Clark, et al., 1999). Students with social and emotional needs have been excluded due to the perceived and observed detrimental effects of their presence on the safety and welfare of other students (Visser, Cole, & Daniels, 2002). Therefore the literature examines good practice examples of proactive student engagement and learning environments which establish a sound educational program for all students in mainstream schools

The second part of the literature review Chapter 4, Intervention and Accountability, examines intervention from a welfare perspective, and provision of supports for students. It discusses general provision and the need for more specific and targeted support. There have been a variety of intervention programs established to address the needs of students with social, emotional and behavioural difficulties. Intervention programs have operated within schools, in off-site and clinical locations and in juvenile justice facilities; and by their

intensive nature are more costly than mainstream education programs. Consequently, there is much criticism of the lack of quantifiable evidence about the effectiveness of these programs.

In the climate of scarce resources there is a growing expectation for intervention programs to produce quantifiable data that can be analysed to determine the impact and the (cost) effectiveness of programs (U.S. Congress, 2002). In Victoria the Review of Alternative / Ancillary Programs Report (Department of Education, 1998c) indicated that there was not a common form of assessment that is used by the multiple of student intervention programs funded by the Department of Education at the time and that there was a need "to determine common measurable outcomes for all programs" (p. 12). However, this recommendation is still to be achieved. An examination of available behaviour measuring instruments illustrated an absence of teacher focused tools. Consequently, the need to develop teacher friendly methods of quantifying improvement in students' behaviour and collectively providing a measure of success of teacher and school behaviour intervention programs was established and undertaking the challenge was a goal of this study.

1.4   Baltara – A Case Study

Winding throughout the thesis are regular references about Baltara, a specialist school for students with social, emotional and behavioural difficulties. These include the nature of the students and goals for intervention, educational provision for the students, developing a tool to measure their progress and subsequently

determining the effectiveness of the intervention. Chapter 5 A Case Study of Intervention: History and Metamorphosis of the Baltara Integration Unit details the development of the Baltara Integration Unit which is an off-site intervention unit for students with social, emotional and behavioural needs. It is an example of an intervention program that is staffed by teachers with an education bias. The Baltara Integration Unit evolved as part of the Baltara School, the history of which led to its establishment, and enshrined the philosophy of the school as engaging students in learning and providing educational opportunities for all.

1.5 Research Goals and Methodology

The hypothesis for this research study is that off-site intervention programs for students with social, emotional and behavioural needs are effective in maintaining the students' connection to the education system and increasing their levels of participation in schools. In testing this hypothesis I am assuming that the effectiveness of intervention programs can be measured in quantifiable terms. Further, I am asserting that the effectiveness of a program is based on the improved behavioural performance of the students who complete the program, and finally that an effective and reliable measure of behavioural change in a school setting is either available or can be developed.

Chapter 6, Identification and Intervention Processes for Students Exhibiting Behavioural Difficulties, discusses the methodology of the thesis which includes examination of archival data from the Baltara Integration Unit and program data. Firstly, the archival data gives an understanding of the behaviours of students

which teachers consider are impacting on their students' capacity to productively participate in education.

Secondly, for this thesis, literature about special education research and data collection are examined. Missing data intrinsic in special education research and methods of appropriate attention are also discussed. Here, special education research mainly examines small group and individual performances, and while this can give insight for working with larger populations, it does not examine large populations of students as occurring in other areas of education.

Being both a practitioner and researcher in this study has various implications. It has been positive in terms of understanding the nature of the students and their needs; understanding the management difficulties their behaviours made in mainstream schools; being in a position to influence the intervention program delivered to the students; daily discussion with intervention teachers about student progress and strategies used; and accessing written information.

There were however, negative effects in the early years of this study; firstly by being part of the daily milieu and its constant demands, as a close and involved, rather than distant, observer; as a researcher knowing control of program data collection relied on the school's data management processes; and the ethical distance that needed to be enforced between program data collection and myself. Despite the concerns of ethicists, the position of leadership in the school and the expectation of consensus decision-making did not provide the power to make unilateral decisions that could have expedited the research. One example

discussed is about the trialing of a Sessional Evaluation Measure (SEM) in which a five point scale was proposed but was rejected by staff who only agreed to trial a three point scale. However, a later review of the trial data by staff concluded that a five point scale was necessary, and accepted thereafter. This was frustrating at the time but it reinforced the need for a five point scale by practitioners and as such made the SEM and its outcomes more credible.

1.6 Evaluation of Intervention

The literature review identified the need for the development of an evaluation tool. Chapter 7, Identification, Development and Validation of Behaviour Rating Scale, details my development of a Behaviour Rating Scale (BRS), to measure pre and post intervention behavioural performance by students. The BRS is intended to be used by a classroom teacher prior to referral of a student to an intervention program. The BRS is then repeated after the intervention period to determine if there has been a change in behaviour. This process provides quantifiable evidence of student improvement and success of program implemented. The BRS was specifically designed as a quantifiable and reportable measure of student progress, in terms of behavioural expectations, for students attending Baltara Integration Unit. The validation and reliability analysis of the BRS is described in this chapter.

Chapter 8, Evaluation of Baltara Integration Unit Data, details the application of the BRS at Baltara Integration Unit (BIU). The BRS was completed prior to students' enrolment by their referring teacher. On completion of the intervention

period at the BIU referring teachers were requested to evaluate the students' behaviour again. The differences between pre and post intervention evaluations were examined. The referring teacher provides verification of changes in behaviour and school participation by a source external to the teachers providing the intervention. Further the results of the Sessional Evaluation Measure, which details the levels of performance during the intervention program, are discussed.

1.7 Goal Setting and Model of Intervention

Teachers clearly identify aberrant behaviours but it is interesting to uncover their perception of the needs of students exhibiting these behaviours. Chapter 9, Intervention in Practice: An Analysis of Objectives and a Model for Intervention, examines the range of objectives recommended for the students who attended the Baltara Integration Unit. Behaviours and objectives were aligned in the Achenbach CBCL categories to examine the relationship between the behaviours and objectives set and determine if the objectives were directly matched to the behaviours observed or the objective related to the teacher's opinion of student needs.

1.8 Minimising Early School Leaving and Addressing Retention issues

Schools which attempt to achieve their goals particularly those related to student retention tend to be well organised and provide a stimulating, supportive and safe environment for all students. They have a system of policies and procedures that

ensure that all members of the school community are aware of their rights and responsibilities to enable harmonious and productive outcomes for all students within the school community. School policies can be supportive of students and the learning culture; however student welfare and discipline policies which are narrowly designed and rigidly interpreted may make it difficult for many students to comply with school rules, and stay connected to complete their secondary education. An example of this is the secondary school, which by the end of the first term one year (approximately ten weeks) had suspended a first year student for a total of 11 days and was requesting assistance from a behavioural intervention unit[2].

The model of intervention proposed in Chapter 9 relies heavily on aspects of good teaching practice appropriate for all students, not just those with additional needs. The model requires well trained teachers who: are creative and supportive in their teaching; can be consistent in their expectations of and dealings with students; have a positive orientation towards students; who engage parents in the education process; and who use their influence to assist students make better behavioural and social choices.

In summary, this thesis identifies the behaviours of a group of students with social, emotional and behavioural difficulties for whom current school practices are insufficient; it develops a Behavioural Rating Scale (BRS) which is a teacher controlled evaluation tool used to gauge change in behaviours of individual students over time; it uses this BRS tool to demonstrate collective student

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[2] Conversation between author and the principal.

behavioural change, which contributes to evaluating the effectiveness of the intervention program for individual students and the total population. It concludes with a model which includes best practice from the literature in the context of the case study of the Baltara Integration Unit.

Chapter 2   Identification and Teacher Perceptions of Difficult Classroom Behaviour

This chapter discusses the behaviours identified, by teachers, as causing concern in the classroom, and more importantly, the effect the behaviours have on students' learning. Comparison is made between teachers perceptions of difficult behaviours that were previously documented and the more difficult behaviours actually collated from referrals to the intervention unit which is discussed later in chapter 5.

Classroom behaviour of students has a significant impact on their learning and that of the students around them. Teachers, who are well prepared, organised and maintain good order, ensure that their classrooms operate in the most effective way, employ clear and articulated expectations of students which then ensures all students are engaged in learning. Good student management skills usually comprise having a set of expected student behaviours, which ideally have been negotiated with the students and consistently applied, and the use of appropriate consequences to encourage compliance with the expectations. The most effective teachers are also flexible enough so they can encourage co-operation when unplanned events occur, as well as being able to seize educational opportunities so the class can pursue themes of learning that were not originally planned but are appropriate outcomes from the current lessons.

Despite the preparedness, organisation and effectiveness of the best teachers there are still a number of students who need additional inputs to access successfully the learning program in their schools. Teachers often have to refer some of their students, whose behaviours impact negatively on their own learning as well as on classroom order, to school student support staff (for example guidance officers / psychologists) or to outside clinical agencies for assessment and advice regarding behaviour management programs.

In referring students for additional support, teachers document the behaviours which are causing concern. In this chapter, student behaviours that teachers identify as difficult to manage, and those needing specialist teacher intervention and attendance at an off-site intervention program, are discussed. The behaviours are listed and then compared to another list of difficult to manage classroom behaviours.

2.1 Historical Perceptions of Difficult Behaviour

2.1.1 Wickman 1928

The work of Wickman which was undertaken in 1928 appears to have become a standard starting point for most reviews of student behaviours. His methods have been criticised, however, the behaviour lists he compiled have been consistent with later works with stronger methodologies. Wickman asked elementary school teachers to list what "constitutes undesirable behaviour" (Williams, 1974, p. 6). He compiled a list of 185 separate behaviours identified from a group of 27 teachers in Cleveland. He later repeated the exercise with teachers at a school in

another state and the results were similar. He was able to categorise the behaviours into seven groups listed in Table 2-1 below.

Table 2-1 Wickman's Categories of Student Behaviours

Category of Behaviour	Examples of Category
Violations of General Standards of Morality and Integrity	*Dishonesties (lying, cheating), "Immorality" (bad physical habits, obscenity), Stealing, Profanity (swearing), Smoking*
Transgressions against Authority	*Disobedience, Disrespect to authority, Defiance.*
Violations of General School Regulations	*Truancy Tardiness*
Violations of Classroom Rules	*Disorderliness, Interruptions, Too social & whispering; Restlessness*
Violations of School Work Requirements	*Inattention & lack of concentration Laziness, lack of effort. Carelessness, Lack of interest*
Difficulties with other Children	*Annoying other children (including fighting & bullying); Tattling Other –Disregard of rights of others*
Undesirable Personality Traits	*Negativism (stubborn, sulkiness); Unacceptable Social manners (Impudence, impoliteness discourtesy), Self-indulgence (selfishness), Arrogance (overbearing, forwardness...) Diffidence (bashfulness, shyness...) Evasions – (in-sincere, failure to confess fault) Interferences (destructiveness, curiosity...) Lack of emotional control (temper, lack of self control), Undesirable mental states (dissatisfied, unhappy)*

These behaviours are a reflection of what teachers considered inappropriate behaviour in 1928. Wickman recorded the number of times each of the seven categories was mentioned and the number of teachers who referred to a particular category. The following Graph 2-1 shows the percentage incidence of occurrence for each category of undesirable classroom behaviour mentioned.

Wickman - Percentage of Difficult Behaviours

Graph showing horizontal bars for behaviours versus percentage (x-axis 0.0 to 35.0), with categories labelled: Undesirable Personality Traits; Violations of General Standards of Morality and Integrity; Violations of Classroom Rules; Violations of School work Requirements; Difficulties with other Children; Violations of General School Regulations; Transgressions against Authority.

Graph 2-1 Reported Occurrence of Wickman's Undesirable Classroom Behaviours

The above graph 2-1 demonstrates that the number of reported occurrences of undesirable personality traits were almost double the violations of general standards of morality and integrity (the next highest mentioned behaviour). This description is of the behaviours that generally affects the individual teachers.

It is interesting to consider the number of the twenty-seven teachers in Wickman's study (see graph 2-2) who were concerned about the above behaviours. This indicates how many teachers mentioned a behaviour that matched a particular category, and the reported occurrence of that behaviour category in the overall list.
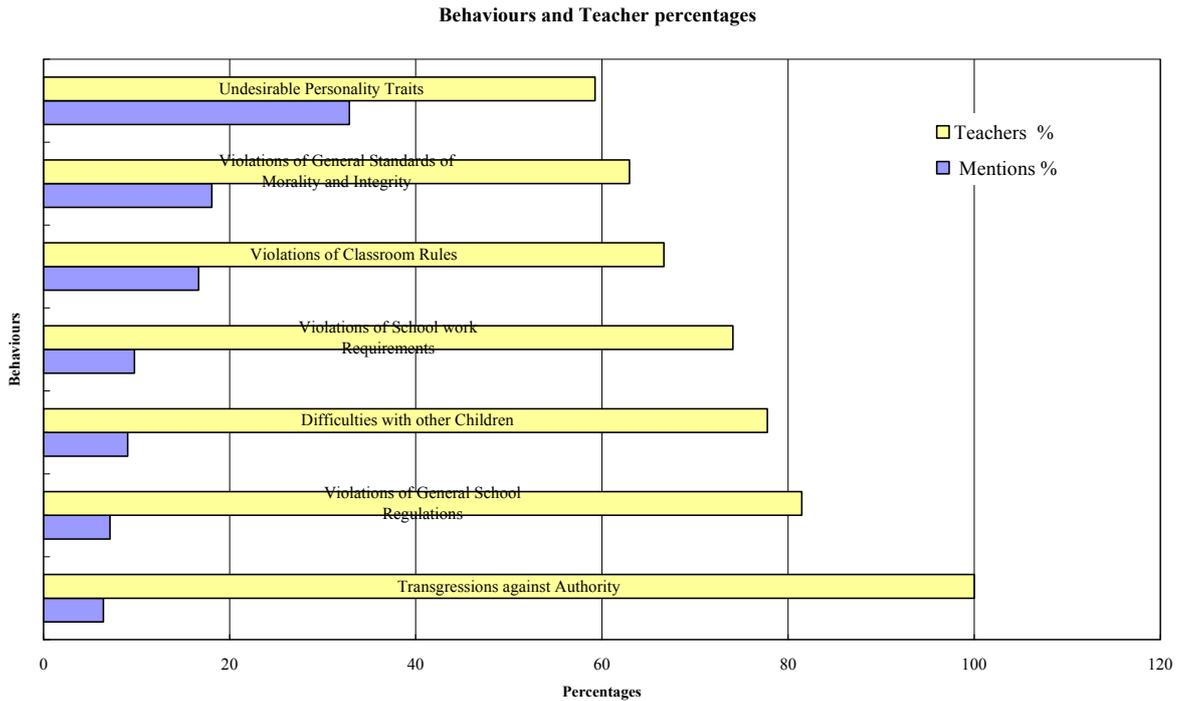
Graph 2-2 Percentage of Teachers Reporting Wickman's Categories of Behaviours

Graph 2-2 above illustrates that although *transgressions against authority* constitute 6.4% of the total behaviours it was mentioned by 100% of the teachers. This means that every teacher mentioned at least one behaviour in this category, but the total number of these behaviours was not as numerous as the behaviours listed in other categories. The 100% mention of transgressions against authority could be a reflection of the institutional nature of schools where there is clear demarcation between leaders (teachers) and followers (students), and where there is little room for compromise as maintaining order constitutes a major task of teachers.

Conversely, the items that constituted *undesirable personality traits* provided 32.6% of all mentions but were only cited by 59% of the teachers. This is still a

high percentage of teachers who find this a concern in their teaching and classroom. It could indicate that 41% of teachers do not see these as a problem, and are managing the diversity of personalities and their manifestations. As the teachers in the survey had different levels of experience, one might consider that more experienced teachers would have the skills required to manage most situations and consequently do not identify undesirable personality traits as a concern or the problems are outside their realm as a classroom teacher.

2.1.2   Wheldall and Merrett 1988

Wheldall and Merrett (1988) were concerned that teachers "frequently cite classroom behaviour problems as one of their major difficulties" (p. 13). Further there has been "little research concerned to identify the behaviours which classroom teachers find most troublesome" (p. 13). Wheldall and Merrett referred to the work of Wickman (1928) and Ziv (1970), and discussed the 1983 work of Whitmore and Bax who studied the behaviour of children aged 5 years on entering primary school claiming, "6% of these students had 'disturbed behaviour' (and) by the time the children were ten the figure was 9%" (p. 13). Wheldall and Merrett contended that the Whitmore and Bax study indicated that it was not necessarily the same group of children who had problems throughout those years. The behaviour of some students had been resolved and other students were presenting with problems.

Other studies cited by Wheldall and Merrett indicated that primary age children who exhibited behaviour difficulties ranged from 6% -25% of that population.

The variation "probably reflects differences in the ages of the children, differences in the geographical location … and varying techniques for identifying children with problems. [However], only about 5% of the sample were identified by both parent and teacher as having behaviour problems" (Wheldall & Merrett, 1988).

This section of the thesis was designed to detail the work of Wheldall and Merrett (1988) as a comparison point to earlier perceptions of difficult behaviour identified by Wickman (1928). However a number of later researchers including Bibou-Nakou Kiosseoglou and Stogiannidou (2000) and Efrati-virtzer and Margalit (2009) tried to identify the nature of the difficult behaviour as previous research in this area was lacking. Bibou-Nakou Kiosseoglou and Stogiannidou (2000) followed the work of Wheldall and Merrett (1988) and examined a range of behaviours and their causes as attributed by teachers. Efrati-virtzer and Margalit (2009) discussed behaviours of students with behavioural difficulties which were of the magnitude of those identified in references to Baltara..

Wheldall and Merrett (1988) defined the concepts behind behaviour identification as having:

- identified the incidence of children with behaviour problems – this led to focusing on the children rather than the behaviour,
- not defined or described the difficult behaviour – not all teachers find similar behaviours difficult, or
- discussed the rate of the behaviour and not the severity of it.

Wheldall and Merrett (1988) undertook their own study to determine the most frequent and most troublesome behaviours. They surveyed 198 randomly selected teachers from 32 infant and junior schools (students aged 5 -11 years) in the UK to determine the most troublesome behaviours for teachers and the behaviours of the most troublesome students. Their results have been tabulated in Table 2-2 below.

Table 2-2 Wheldall and Merrett's Categories of Behaviours

	Category of Behaviour	Examples of Category
A	*Eating*	*Chewing gum, paper or equipment, eating sweets in class*
B	*Making unnecessary noise (non verbal)*	*Banging objects /doors, scraping chairs, moving clumsily*
C	*Disobedience*	*Refusing/failing to carryout instructions or to keep class or school rules*
D	*Talking out of turn*	*Calling out, making remarks, interrupting and distracting others by talking/chattering*
E	*Idleness/ slowness*	*Slow to begin or finish work, small amount of work completed*
F	*Unpunctuality*	*Late to school/lessons, late in from playtime/lunch break*
G	*Hindering other children*	*Distracting others from their work, interfering with their equipment of materials*
H	*Physical Aggression*	*Poking, pushing, striking others, throwing things*
I	*Untidiness*	*In appearance, in written work, in classroom, in desks*
J	*Out of seat*	*Getting out of seat without permission, wandering around.*

Wheldall and Merrett attempted to move from generalised most troublesome behaviour to specific behaviours of the most troublesome students for the individual teacher. These represent more accurately the behaviours that are difficult for teachers to manage rather than those that are mainly nuisance value. Graph 2-3 below illustrates the difference between most troublesome behaviours and behaviours of the most troublesome students.

Wheldall & Merrett - Most Troublesome Behaviours

Graph showing horizontal bar chart with behaviours listed: Talking out of turn, Hindering other children, Disobedience, Physical Aggression, Idleness/ slowness, Out of seat, Making unnecessary noise (non verbal), Untidiness, Unpunctuality, Eating. X-axis labeled "Percentage" from 0 to 50. Legend: Most Troublesome Child, Most Troublesome Behaviour %.
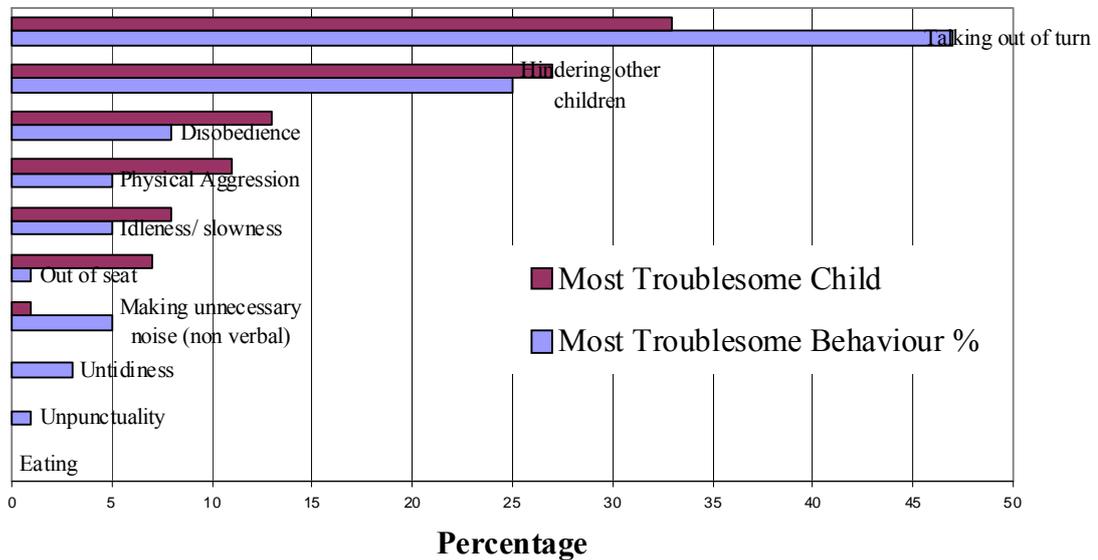
Graph 2-3 Wheldall and Merrett's Most Troublesome Behaviours and Most Troublesome Children

There is a considerable difference between Wheldall and Merrett's "most troublesome behaviour" and the behaviours of the "most troublesome child". Behaviours, which could be characterised as annoying to the teacher such as talking, making noises, untidiness and unpunctuality, rated much higher than did the behaviour of the actual troublesome students. Talking out of turn was troublesome behaviour to almost 50% of teachers but in considering a specific student it was only mentioned in 30% of cases.

The behaviours of specific troublesome children tended to be overt behaviours such as physical aggression, disobedience and hindering other children. The specific children's behaviour was rated higher in these areas than the generalised

29

list of troublesome behaviours. Basically teachers tend to list things that annoy them as troublesome, but when thinking of specific students these behaviours do not often recorded them.

In Graph 2-4 the Wheldall and Merrett troublesome behaviours have been aligned with the categories used by Wickman. Troublesome behaviours were used rather than the behaviours of troublesome students, as Wickman's was a generic list from teachers, but not necessarily with specific students in mind.

Wheldall & Merrett in Wickman's Categories
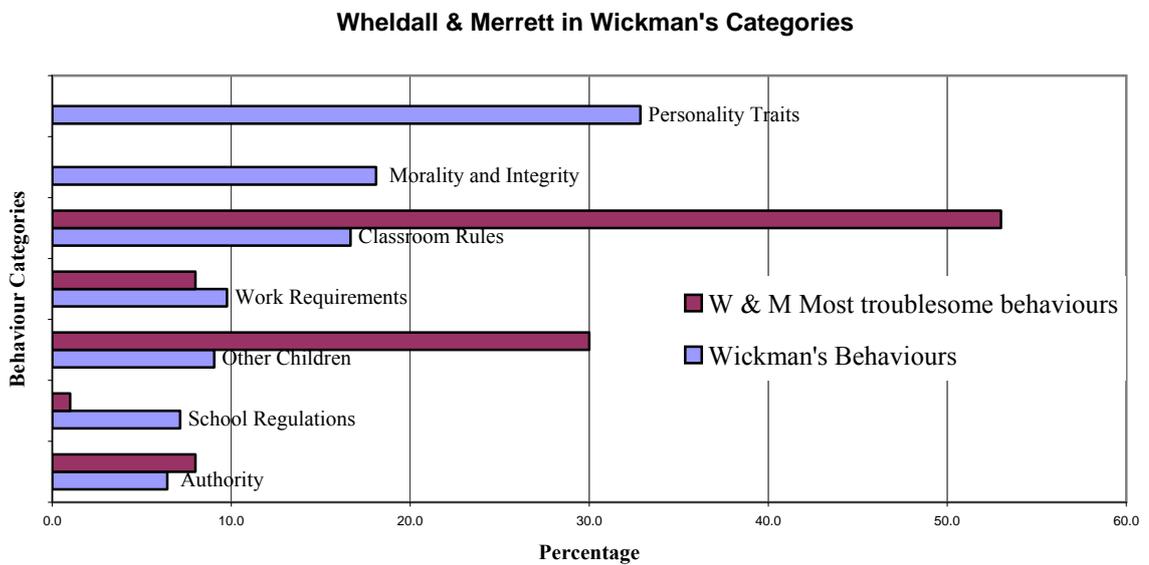
Graph 2-4 Wheldall and Merrett's Behaviours in Wickman's Categories

The areas of commonality of the two sets of data are school focused behaviours – classroom rules; work requirements; other children; school regulations and authority. Classroom rules which are mainly about orderliness and other children (difficulties with and or hindering), safety and the learning environment were the main concerns in the latter of the two studies. The above comparisons are with

teachers from mainstream schools and do not appear to be framed on more severe behaviours causing students to become alienated within and without the school.

2.2   A Current View of Difficult Behaviours

Teachers today have more pre-service training and on-going professional development than ever before. Teachers in Wickman's day mainly would have had on-the job training and minimal formal training. In the 1980s, Wheldall and Merrett's time, three year teacher training was the norm, whereas in Victoria today new teachers must have four years of pre-service training post year 12 completion to be registered (Victorian Institute of Teaching, 2007b, p. 4) and must invest in a minimum of 100 hours of Professional Development (Victorian Institute of Teaching, 2007a, p. 2) over a five year period to maintain that registration.

The extended teacher training now available, allows pre service teachers to undertake courses which give them broader understandings of child development, and psychology; greater depth in curriculum knowledge; and practical training in lesson preparation and class management. Teacher registration criteria expects new teachers to have professional knowledge, professional practice and professional engagement (Victorian Institute of Teaching, 2007b, p. 5) as defined in the following eight standards:

- teachers know how students learn and how to teach them effectively;
- teachers know the content they teach;
- teachers know their students;

- teachers plan and assess for effective learning;

- teachers create and maintain safe and challenging learning environments;

- teachers use a range of teaching practices and resources to engage students in effective learning;

- teachers reflect on, evaluate and improve their professional knowledge and practice; and

- teachers are active members of their profession.

Teacher training today requires four years of tertiary study including a course in teacher education for registration (Victorian Institute of Teaching, 2005). There are clear competency expectations (Victorian Institute of Teaching, 2003). In a survey of graduates "91% felt their teacher education program had been effective" (Richardson, 2008, p. 46). In response to the question "Do you think your pre-service teacher education program prepared you for teaching by equipping you to establish clear expectations of students' behaviour for a safe learning environment for all students? 68% of responds agreed" (Richardson, 2008, p. 24). This would imply that with clear competency expectations of new teacher graduates about understanding and managing student behaviour there is a reduction in the incidence of the low level inappropriate classroom behaviours which caused concern in 1928 and 1988.

Schools have a range of strategies and processes that cater for managing most of their students and system resources such as *Effective schools are engaging schools: student engagement policy guidelines* (Department of Education and Early Childhood Development, 2009a). However, despite the higher levels of

teacher training and teacher skills, some students need support beyond that which can be provided by the school (Northern Metropolitan Region, 2007). Students may be referred to a range of school and community based services to gain additional support. Some of these students may have physical or mental health issues combined with inappropriate expression of their needs in a school environment. Schools identify the problem or difficult behaviours, and based on those seek support through referring their students to the most appropriate intervention unit. The following sections will discuss the difficult behaviours that are of concern to current teachers and demonstrate that these behaviours are of greater importance than 'eating in class' and 'tardiness', and need more specialised attention.

2.2.1.1 Current Difficult Behaviours – Data Collection

The referral of a student to an intervention provider can take many forms. Written reports are regularly requested with information gathered to explain the behaviours and situations that occur, and the strategies that are used to minimise such inappropriate behaviours. Other referrals request that the teacher complete a standardised form possibly to diagnose specific conditions for example attention-deficit, hyperactivity disorder (ADHD), covering a range of behaviours in a variety of situations. Here the respondent can "tick the box" to indicate the presence, frequency and intensity of specific behaviours. In these circumstances, teachers are usually responding to a specific list of behaviours devised by psychologists for generic use, and not always specifically for their school environment. At times these forms do not address the concerns of the teacher nor mention the specific behaviours that affect the learning environment.

In this study an analysis was made of the referrals to the Baltara Integration Unit, a short term intervention program for students with social, emotional and behavioural difficulties. The referrals provide details of the inappropriate behaviours and problems students are having in their school programs. The behaviours are written in the words of the teachers making the referrals. There is no checklist of behaviours so all responses are open-ended. The referral guidelines for Baltara Integration Unit request a brief school history and details about specific behaviours that necessitated the referral. Often the school history identifies behaviours which are not included in the list of specific problem behaviours. It appears that defining the student behaviours is a difficult task and often, generalised statements are used such as "his behaviour is inappropriate in class". In the school history teachers regularly wrote about specific incidents which clearly identified the problem behaviours, but were unable to make specific reference to them in the appropriate sections. The behaviours listed in the school history as well as in the specific behaviours section were both used to document the range of behavioural issues that teachers identify, because these give a more comprehensive view of the students' overall behaviours.

The referring teachers and schools attempted a range of intervention strategies and sought additional support. The range of documented behaviours, which were difficult to manage and affected the learning environment, were not simply annoying or troublesome behaviours. The behaviours were of a severity that prior to the referral, strategies implemented by schools may have included: individual

behaviour contracts; time out arrangements; reduced school attendance time; school suspensions; and in the worst-case scenario, exclusion from the school.

The behaviours from the referrals to Baltara Integration Unit have been placed in context of the difficult behaviour lists discussed earlier in the chapter. The behaviour lists discussed previously were made in different time periods so a comparison of the individual behaviours and groups of behaviours can assist in noting changes in attitudes and perceptions of teachers over time as well as in illustrating similarities in consistently difficult behaviours. The marginally older cohort of Baltara Integration Unit students 10-15 years compared with the mainly 5-12 year olds in Wickman (1928) and Wheldall and Merrett's (1988) work may also have had some bearing.

There were referrals of 81 primary and secondary students to the Baltara Integration Unit over an approximate 10 year period. These referrals were examined in detail. Initially approximately 110 different behaviours were identified. There was diversity in the expression used to describe student behaviours however there were commonalities in the behaviours listed. Some identified behaviours, which have a subtle difference in meaning, but with a common theme, were blended for initial analysis of data. Other behaviours, whilst similar, needed to be viewed and individually entered on the data sheets as discrete variables. This reduced the list of behaviours to 36 different behaviours. For simplicity these will be referred to as 'Baltara behaviours' from here onwards.

In alphabetical order the initial Baltara behaviour groups were as follows:

Table 2-3 Behaviours Identified in Baltara Referrals

Behaviour Category	Individual Behaviours Recorded
Absenteeism	Absenteeism. Wagging, regular lateness, School refusal
Academic skills	Academic skills -poor achievement low/ low literacy
ADHD	ADHD
Aggressive -physical	Aggressive - bully / Physically abusive/ intimidation / extortion
Alienation	Isolation / alienation/ victim/ believes others are name calling him
Anger	Anger
Anti-social	Anti-social / inappropriate behaviour / immature
Anxiety	Anxiety with peers/ anxiety
Assaultive	Assault of students /staff
Attention-seeking	Attention seeking - impressing peers /need to be noticed
Breaks rules	Breaks Rules/ school rules/smoking
Challenging teachers	Challenging teachers requests/ confronting /defiant, argumentative/ power games/ psychologically dominant oppositional, ODD
Conflictual	Conflicts with peers /fighting
Depressive moods	Depressive moods/depression/repressed grief
Destructive	Destructive/ vandalism
Distractive	Distractive Behaviours /disrupts
Impulsive	Impulsive/ Hyperactivity in yard
Interaction skills poor	Interaction skills poor/inappropriate/group skills poor / inability to relate
Language - abusive	Language -abusive, insulting, rude, aggressive
Language Disorder	Language Disorder
Language -offensive	Language - offensive, inappropriate, racially intolerant, sexually inappropriate
Literacy poor	Literacy - poor skills
Negative attitude	Attitude - negative to school/ resentment / lack of interest
No responsibility	No responsibility for behaviour /unwilling to deal with problems /amoral behaviour/ no remorse for behaviour / revenge/ refuses to listen/ not responding to counselling
Non –relating	Doesn't relate to peers /staff
Non-compliant	Comply Refuses to /non compliant/unco-operative/ ignores staff
Over-reacts	Over reacts/ Reaction excessive to incident
Self- esteem low	Self-esteem – low / low self worth / lack of confidence/ poor self image
Short attention span	Concentration Poor / short attention span / distractible/ low frustration point / impatience poor coping skills/ poor organisational skills, can't follow instructions
Stealing	Stealing -/Lying / forging parents signature
Threatens self-harm	Threatens suicide/self mutilation
Threatens violence	Threatens violence to teachers/ threatening behaviour /hoards plays with potential weapons
Unpredictable	Unpredictable behaviour/ mood swings
Violent	Violent Behaviour/ Dangerous behaviour/ violence
Withdraws	Withdraws (won't communicate)/passive resistance
Work avoidance	Work avoidance low work output/resists challenges in work, fails to complete work requirements

The following Graph 2-5 shows the frequency of the behaviours in order. In the most frequently cited behaviours, aggression, violence and abusive and offensive language featured heavily. These are the most difficult behaviours to manage in a school environment because they put other students and staff in an unsafe environment. The second most frequent behaviour cited was poor academic skills.

One questions the relationship of poor achievement with aggression and violence and the capacity for an improvement on one aspect to produce an improvement in another. In their study Fletcher, Tannock and Bishop (2001) "identified the marked overlap between behavioural problems and academic difficulties that has been well documented in the literature" (p. 70).

In the Baltara list the number of different behaviours that were listed was unmanageable for analysis purposes. Consequently this historical data was reduced to fewer behaviour categories for further analysis. At this point it was prudent to refer to the work of others rather than develop a new set of groupings or categories. The first comparisons were with the Wickman (1928) and the Wheldall and Merrett (1988) models.
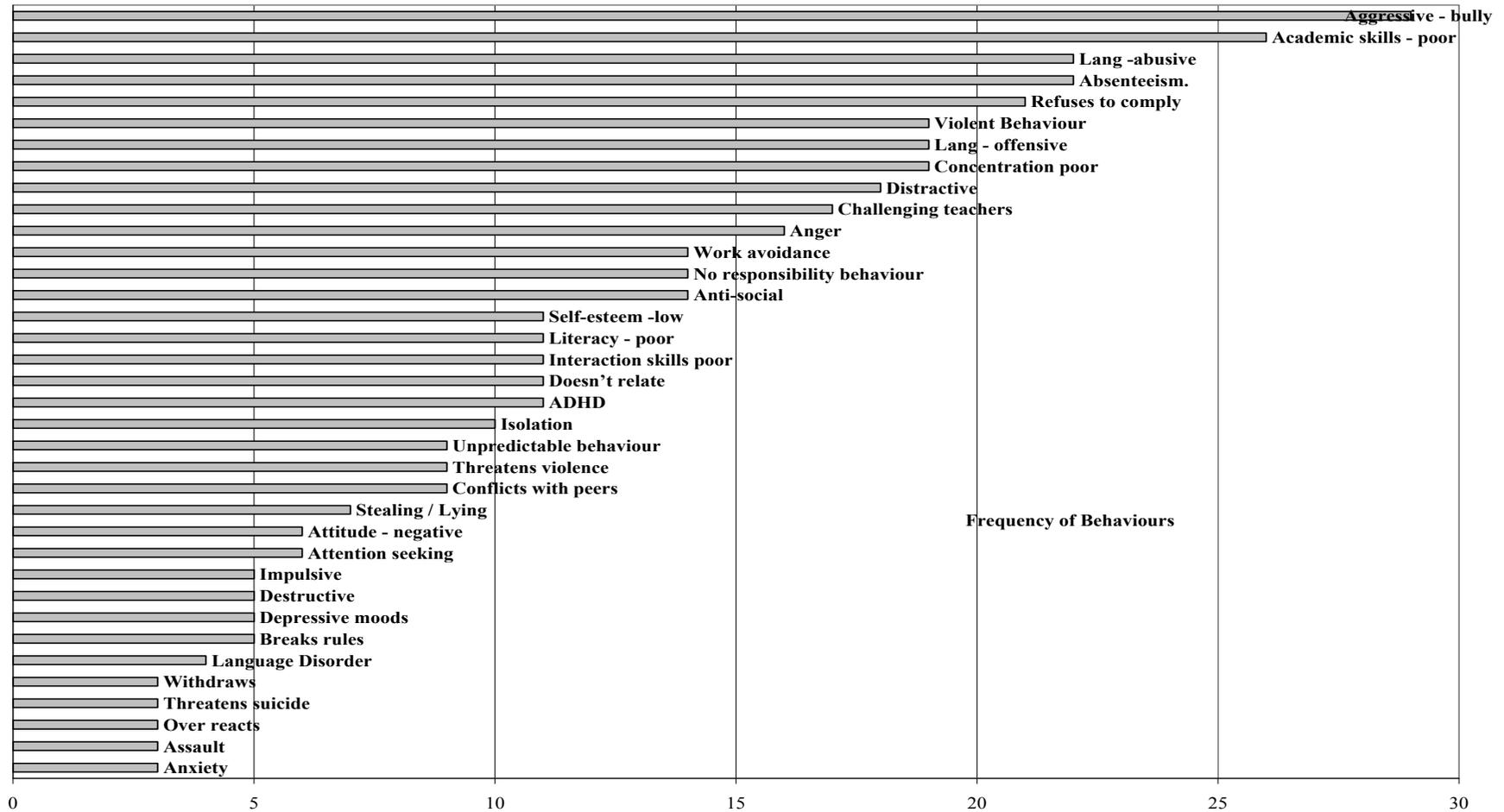
Graph 2-5 Analysis of Frequency of Behaviours of Students Referred to Baltara Integration Unit.

The chart shows the following behaviours and their frequencies:

- Aggressive - bully
- Academic skills - poor
- Lang -abusive
- Absenteeism.
- Refuses to comply
- Violent Behaviour
- Lang - offensive
- Concentration poor
- Distractive
- Challenging teachers
- Anger
- Work avoidance
- No responsibility behaviour
- Anti-social
- Self-esteem -low
- Literacy - poor
- Interaction skills poor
- Doesn't relate
- ADHD
- Isolation
- Unpredictable behaviour
- Threatens violence
- Conflicts with peers
- Stealing / Lying
- Attitude - negative
- Attention seeking
- Impulsive
- Destructive
- Depressive moods
- Breaks rules
- Language Disorder
- Withdraws
- Threatens suicide
- Over reacts
- Assault
- Anxiety

Frequency of Behaviours

Some Baltara behaviours aligned with the Wickman and the Wheldall and Merrett behaviour categories, however there are a number of behaviours which did not fit into a category. Twenty five of the above behaviours fitted within the Wickman categories. But there were eleven behaviours which were described as 'other':

- Academic skills -poor
- Impulsive
- Literacy - poor
- Unpredictable behaviour
- ADHD
- Isolation
- Self-esteem – low
- Withdraws / passive resistance
- Anxiety
- Language Disorder
- Threatens suicide

The following Table 2-4 aligns the Baltara behaviours with the categories defined by Wickman. It also aligns the Wheldall and Merrett categories with both Wickman and Baltara.

Table 2-4 Baltara Behaviours in Wickman's and Wheldall and Merrett

Categories

Wickman's Categories	Baltara Behaviours	Wheldall & Merrett Categories
Violations of General School Regulations	Breaks Rules Absenteeism.	Unpunctuality
Violations of Classroom Rules	Distractive Behaviours	Making unnecessary noise (non verbal); Eating; Talking out of turn; Out of seat
Violations of School Work Requirements	Concentration Poor Work avoidance	Idleness/ slowness Untidiness
Difficulties with Other Children	Aggressive – bully Violent Behaviour Conflicts with peers Interaction skills poor Threatens violence ; Assault Doesn't relate	Hindering other children Physical Aggression
Undesirable Personality Traits	Attitude - negative Anti-social; Attention seeking Challenging teachers No responsibility for behaviour; Destructive; Overreacts; Depressive moods; anger	
Violations of General Standards of Morality and Integrity	Language - offensive Language –abusive Stealing /Lying	
Transgressions against Authority	Refuses to Comply	Disobedience
Other - Behaviours which are not included in Wickman	Academic skills & literacy-poor Self-esteem-low; ADHD; Anxiety; Isolation; impulsive Unpredictable behaviour; Language Disorder; Threatens suicide; Withdraws /passive resistance	

Graph 2-6 below is a graphical analysis of the incidence of the behaviour and was

developed as a means of drawing together extant data from Wickman (1928) and

Wheldall and Merrell (1988) and new data gathered as part of the current study.

Behaviours

- □ Wheldall & Merrett Most Troublesome
- ■ Baltara Behaviours
- ■ Wickman's behaviours

(Categories shown: Other, Personality Traits, Morality and Integrity, Classroom Rules, Work Requirements, Other Children, School Regulations, Authority)

Incidence percentage (x-axis: 0.0, 10.0, 20.0, 30.0, 40.0, 50.0, 60.0)

Behaviour (y-axis)
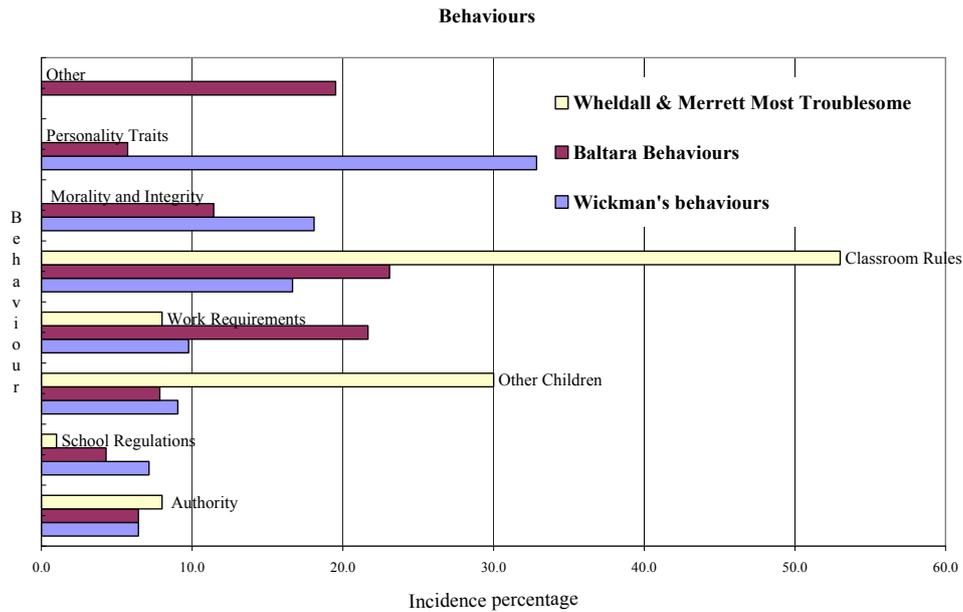
Graph 2-6 Baltara and Merrett and Wheldall Behaviours in Wickman's Categories

Wickman does not mention some of the behaviours identified in the Baltara data. As there is no Wickman category for these Baltara behaviours they are included in a category call 'other'.

The two Wickman categories in which Baltara data was most frequent are violation of classroom rules and violation of school work requirements. The third most frequent category was 'other' which described the behaviours not considered by Wickman.

A more appropriate set of categories needed to be devised to provide a structure for understanding the behaviours. The development of a set of categories which describes the behaviours that are causing students to be identified as having behavioural difficulties in school has been challenging. The model is shown as Table 2-5.

Table 2-5 Continuum of Baltara Behaviours

Behaviour Category	Increase in Behaviour manifestation			
Internalising Problems	Lack of Self esteem	Self Harm		Threatening suicide
	Anger		Violence	
			Destructive to property	
Social Interaction Difficulties	Does not relate	Verbal abuse	Threatened abuse	Physical Abuse
Classroom/learning	Restlessness Annoying	Distraction & distracting	Poor academic performance	Affecting others learning

The selected behaviours form a continuum from least to most difficult or harmful and was developed and classified behaviours into three areas – Internalising Problems; Social Interaction Difficulties and Classroom Learning difficulties. It also shows the increasing manifestation of the behaviours over time.

Internalising problems mainly affect the individual and become progressively more harmful if not addressed. An example is the student who feels he/she is worthless due to lack of success in a particular area, or in the worse case is regularly criticised by others. Girls in this situation are likely to scratch "until bleeding" (Cyr, McDuff, Wright, Theriault, & Cinq-Mars, 2005, p. 58) or cut themselves with sharp implements, at best leaving scars, at worst cutting blood vessels as is evidenced by the pre – entry scars witnessed on students enrolled at the female Secure Welfare Service (SWS) (see pages 3, 154 and 155) campus of Baltara. The precautions in the SWS classroom include removal of any objects which could be broken to be used as a cutting tool such as glass mirrors and the use of only one sharp tool such as scissors at any one time in the classroom.

"Females (82%, n573) were more likely than males (18%, n516) to report having engaged in DSH [Deliberate Self Harm] wrist cutting (67%), cutting skin other than wrists (55%), burning skin (42%), overuse of medications (42%), scratching self (42%), hitting/poking self with sharp objects (34%), punching walls (32%), scab picking (31%), rubbing skin (31%), head-banging (31%), and hair pulling (16%)" (Sim, Adrian, Zeman, Cassano, & Friedrich, 2009, p. 82)

The language of the girls changes and they start talking about it would be better if they were not here, if they were dead. "Females more often reported they wanted to 'show how desperate they were feeling', 'to die', 'to punish themselves', and 'to get relief from a terrible state of mind' than males" (Scoliers, et al., 2009, p. 603).

Social interaction difficulties cause frustration with other people and the level of inept responses increases. Students who cannot gain the attention of others through normal means may then use verbal abuse to get attention or show their disapproval. As this behaviour does not improve their relationships, they increase their abusive behaviour to threats of violence and even physical attacks on others. These behaviours can also be identified as bullying behaviours (Bernard, 2007; Salmivalli, 2007)

Classroom and learning behaviours initially affect the students' own learning but eventually affect the learning of others also. At one end of classroom behaviours are behaviours that simply annoy teachers such as restlessness, at the other end are

the progression of these simple behaviours to bigger issues. Students may be having difficulties with the school work and find relief or distraction within the classroom. The distraction may increase to making inappropriate noises or comments which distract other students and possibly give the student the status of 'class clown'. In such cases the student does not get support for his difficulties; rather he incurs consequences for his behaviours. Thus teacher attention is not only taken away from the class teaching and the difficult student fails to have his learning needs met. Other students have reduced teacher time and their learning is affected.

Referred Behaviours

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                          ┌─────────────────┐
                          │   Aggression    │
                          └─────────────────┘
                          ┌─────────────────┐
                          │  General anger  │
                          └─────────────────┘
          ┌─────────────────────┐        ┌─────────────────────┐
          │       Verbal        │        │      Physical       │
          └─────────────────────┘        └─────────────────────┘
          ┌─────────────────┐   ┌─────────────────┐   ┌─────────────────┐   ┌─────────────────┐
          │  Towards others │   │  Towards others │   │  Towards Self   │   │ Towards Property│
          └─────────────────┘   └─────────────────┘   └─────────────────┘   └─────────────────┘
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Verbal – Towards others	Physical – Towards others	Physical – Towards Self	Physical – Towards Property
Arguementative	Bullying / physical abuse	Threatens Suicide/ Self Mutilation	Destructive
Conflicts with peers	Assault of Students / Staff		Vandalism
Challenging teacher requests	Dangerous behaviour		
Distracts / Distupts classes	Fighting		
Offensive , inappropriate language	Extortion		
Racial Language	Harrassing students & staff		
Abusive, insulting, rude	Intimidation		
Sexual	Overreaction to incident		
Overreaction to incident	Violent behaviour		
Power games/ Psychologically dominant			
Threatens violence to teachers			

Figure 2-1 Categories of Aggressive Baltara behaviours

The three part model however has not accommodated all the behaviours demonstrated by students referred to the Baltara Integration Unit during the years 1995 through to 2003. Therefore a different approach was taken to examine the aggressive behaviours demonstrated by students as is shown in Figure 2-1. Aggressive behaviours formed the largest percentage of all Baltara behaviours.

In this study it became apparent that simple models of behaviours such as Wickman and Wheldall and Merrett would not suffice in categorising such behaviours and that a more clinical model may offer a better option. A psychological model for analysis of behaviours was needed as many of the behaviours cited were more deviant than one would normally expect within a school population.

There are a number of models from previous relevant works which incorporate standardised psychological behaviour checklists, and use sub scales to categorise behaviours. However, the work of Achenbach (1978) was considered the most relevant. The Achenbach System of Empirically Based Assessment (ASEBA) (Achenbach & McConaughy, 1997) of which the Child Behavior Check List (CBCL) is a standard, has been used in many countries. Achenbach devised similar assessment instruments that could be used by parents, teachers or day-caregivers, and in the cases of 11-30 year olds by the young people themselves. The tools also have two levels for children - infants aged $1^1/_2$-5 years and school children aged 6-18 years. The latter are the focus of this discussion, however there are a further two levels for adults 18-59 years and older adults aged 60-90 years plus.

The alignment of the school behaviours to standard behaviour categories that are used in psychological analysis, illustrate the areas of a total psychological analysis that are not normally identified in school-based descriptions of behaviours and concerns that make school assimilation difficult for some students. Schools either do not refer students with somatic complaints or thought problems to teacher based intervention programs and use other agencies or they do not recognise these categories of concern.

Achenbach's analysis of behaviours consists of eight main categories. Table 2-6 below illustrates behaviours he considers are typical of each category. He further groups the behaviours into "*internalizing* … problems that mainly involve inner distress, in contrast with *externalizing* problems, which mainly involve conflicts with others and with social mores" (Achenbach & McConaughy, 1997, p. 57). These two areas were similar to those identified in the Table 2-5. Achenbach also identified behaviours which were in neither the internalising nor externalising scales.

Table 2-6 Baltara Behaviours in Achenbach's Categories*

	Achenbach's Categories	Achenbach's behaviours	Baltara Behaviours
Internalizing Scales	Social withdrawal	Would rather be alone; Refuses to talk; Secretive; shy, timid; Stares blankly; Sulks, Under active; unhappy, sad, depressed; Withdrawn	Isolation Withdraws
	Somatic Complaints – those with a physiological origin; - non-neurological.	Feels Dizzy; overtired; aches, pains; Headaches; nausea; eye problems; Stomach aches, Vomiting	
	Anxiety Depression	Lonely; cries a lot; fears impulses; Needs to be perfect; feels unloved; Feels persecuted; Feels worthless; Nervous, tense; fearful, anxious; Feels too guilty; self-conscious; Suspicious; unhappy, sad, depressed; worries	Anxiety Depressive moods Self-esteem –low Attitude – negative Anti-social
Neither Internalizing nor Externalizing	Social Problems	Acts too young; too dependent; Doesn't get along with peers; Gets teased; Not liked by peers; clumsy; prefers younger kids	Doesn't relate Interaction skills poor
	Thought Problems	Can't get mind off thoughts; Hears things; repeats acts; Sees things; strange behaviour; Strange ideas.	
	Attention Problems	Acts too young; can't concentrate; Can't sit still; confused; Daydreams; impulsive; Nervous, tense; poor school work; Clumsy; stares blankly	Impulsive; Unpredictable behaviour; Academic skills – poor; Short attention span; Literacy - poor skills; Work avoidance
Externalizing Scales	Delinquent Behaviour – also called Rule-breaking Behaviour	Lacks guilt; bad companions; Lies; prefers older kids; Runs away from home; sets fires; Steals at home; steals outside home; Swearing, obscenity; Truancy; alcohol, drugs	Absenteeism; Breaks Rules; Stealing /Lying; No responsibility for behaviour; Attitude – negative; Language – offensive [3]
	Aggressive Behaviour	Argues; brags; mean to others; Demands attention; Jealous Destroys own things; fights Disobedient at school, Attacks people; screams; Shows-off; stubborn, sullen; Talks too much; Teases; Temper tantrums; Threatens; Loud	Anger; Attention seeking; Challenging teachers; Non-compliant; Conflictual ; Distractive Behaviours; Over reacts; Threatens self harm Aggressive – physical; Assaultive Destructive; Language - abusive [4]; Violent Behaviour; Threatens violence.

*Adapted from Items Defining the Cross-informant Syndrome constructs from the child Behaviour checklist, youth Self-Report, and Teacher's Report Form (Achenbach & McConaughy 1997, p. 24)

[3] Offensive language has been considered as swearing and obscenities in the Delinquent Behaviours category

[4] Abusive Language is directed at someone and fits into the Aggressive Behaviour category

Although Achenbach's categories give a starting point for categorisation of Baltara behaviours there are two areas – Thought Problems and Somatic Complaints – in which no Baltara behaviours are recorded. Other categories such as Aggressive Behaviour, Delinquent Behaviours and Attention Problems included a high incidence of behaviours recorded at the Baltara Integration Unit. Graph 2-7 below indicates the incidence of Baltara behaviours within Achenbach's categories.

Baltara Behaviours in Achenbach Categories
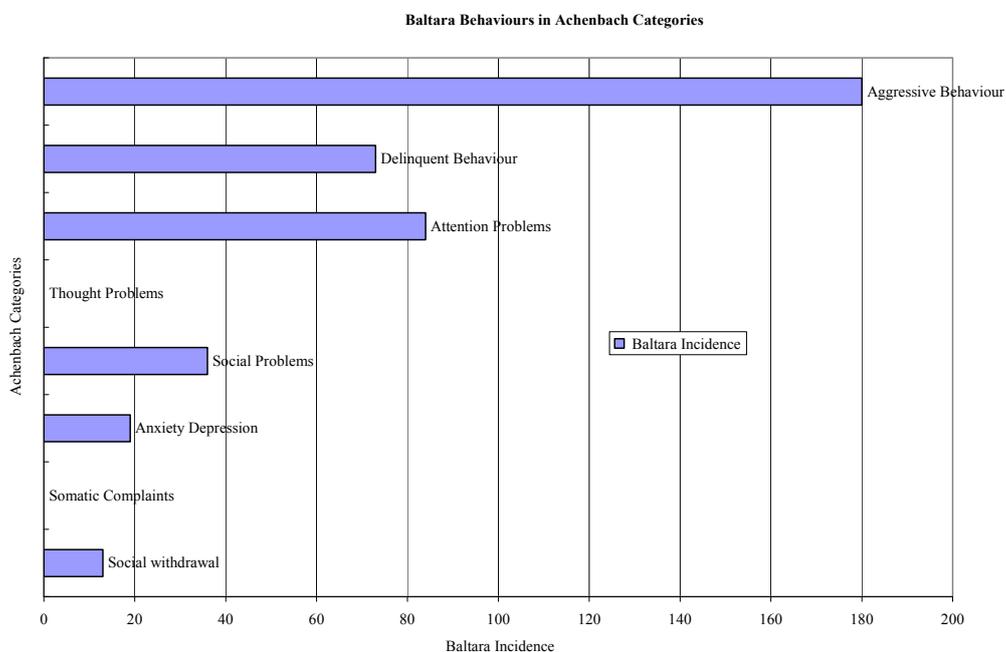
Graph 2-7 Baltara Behaviours in Achenbach's Categories

In the Baltara data there is a low incidence of internalizing scale behaviours (32) including social withdrawal and anxious / depressed, and a significantly higher number in the externalizing scale (253) representing delinquent and aggressive behaviours. Social problems and attention problems are in neither scale, and account for about 120 of the Baltara behaviours listed.

48

It is not surprising that externalising behaviours are cited most frequently in referrals as these behaviours are easily observed by members of a school community, and there is pressure on teachers and administrators to maintain good order within the school.

2.2.2   Modifications of Achenbach

The focus of this study is behaviour occurring in school settings that are in the realm of teachers to address. A clinical diagnosis of a disorder is not necessary as referrals are to teachers not psychologists or other clinicians. Consequently, if students are perceived, for example, to have somatic and thought problems which are part of the Achenbach CBCL, they are unlikely to be referred to Baltara as a first option. Students are referred to a behavioural program because their behaviours are putting them in the 'at risk' of leaving school before completing year 12, either through the student 'dropping out' of school or his/her behaviour causing them to be excluded by the school.

Additionally, using Achenbach's CBCL in a school setting provides a limited reference to school performance. Achenbach's Attention Problems sub scale was divided into two areas: - self-management attention problems and learning attention problems. The first sub category includes immaturity and self control issues, whereas the second is specifically related to academic learning.

In a school situation aggressive behaviour is treated in two different ways. Behaviours which are physically aggressive, violent and directed at a specific

student or target are seen as more dangerous to the immediate welfare of individuals and are treated more strongly than non specific or general verbal aggression and challenging behaviour. In a school setting differentiation between the two levels of aggressive behaviour assists in developing strategies for modifying such behaviour.

Table 2-7 Modified Achenbach's Behaviour Categories

	Achenbach's Categories	Baltara Behaviours	Modified Achenbach's Categories
Internalizing Scales	Social withdrawal	Anti-social Isolation Withdraws	**Social withdrawal**
	Somatic Complaints – those with a physiological origin; - non-neurological.	ADHD Severe Language Disorder	**Diagnosed Clinical Difficulties**
	Anxiety Depression	Anxiety Depressive moods Self-esteem –low Attitude – negative	**Anxiety Depression**
Neither Internalizing nor Externalizing	Social Problems	Doesn't relate Interaction skills poor	**Social Problems**
	Thought Problems		
	Attention Problems	Impulsive; Unpredictable behaviour;	**Attention Problems** - Self-management
		Academic skills –poor; Short attention span; Literacy - poor skills; Work avoidance	**Attention Problems** – learning
Externalizing Scales	Delinquent Behaviour – also called Rule-breaking Behaviour	Absenteeism; Breaks Rules; Stealing /Lying; No responsibility for behaviour; Attitude – negative; Language – offensive [5]	**Rule-breaking Behaviour**
	Aggressive Behaviour	Anger; Attention seeking; Challenging teachers; Non-compliant; Conflictual ; Distractive Behaviours; Over reacts; Threatens self harm	**Aggressive Behaviour General**
		Aggressive – physical; Assaultive Destructive; Language -abusive, [6] Violent Behaviour; Threatens violence.	**Aggressive Behaviour Targeted.**

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[5] Offensive language has been considered as swearing and obscenities in the Delinquent Behaviours category.
[6] Abusive Language is directed at someone and fits into the Aggressive Behaviour category

The goal of compiling and categorising the list of behaviours, that teachers have identified in students who are at risk and need referral for intervention, is to determine the behaviours most prevalent in detracting from students' school success and any associated patterns. Structuring these patterns into Achenbach's model leads to a set of labels associated with school behaviours. These categories also assist teachers in developing and targeting intervention programs.

In this chapter I have discussed the behaviours of students which led to their referral for intervention at Baltara Integration Unit to clearly establish levels and severities of these behaviours in school settings. Referred students need assistance so that on-going education is still an option for them. Knowledge of the range and intensity of aberrant behaviours of students with social, emotional and behaviour difficulties in schools provides the basis of understanding the students' needs and a context for provision of their education which is discussed in the next chapter. Chapter 3, Education for All, explores the literature about inclusion of all students in education and the barriers and difficulties of including students with the behaviours described in this chapter.

Chapter 3　　Education for All: Relevant economic and social outcomes

"Everyone has the right to education."

Article 26 (i) United Nations Universal Declaration of Human Rights (1948, p. 12).

"Everyone has the right to education" is the premise on which the following review is based. This principle has stood for nearly sixty years and has been re-iterated, reviewed and expanded by the United Nations to meet the challenges of the times. "Our efforts [UNESCO] will be directed towards developing education systems that are authentic, affordable and modern, and accessible to all without exclusion or discrimination and that inspire a universal culture in which all human beings can share" (UNESCO, 2000b, p. 5). The extension of the UNESCO vision is embodied in its "Education for All by 2015" goal which it monitors rigorously (UNESCO, 2007).

This chapter explores the reasons for provision of education for all mindful of the difficulties of students who do not complete their secondary education and the cost to society of allowing it to occur. This chapter particularly details the attempts to include all students in education and the shortcomings for students with social, emotional and behavioural difficulties. Good classroom practices and other influences which maximise the opportunities for all students to succeed are also described.

3.1 Access to "Education for All" – Provision Issues

The provision of education for all begins with the development of appropriate policies by each state / country which sets goals for education in the context of that state (UNESCO, 2000a). The policies need supporting organisational and facilities' infrastructure to deliver education. Provision of and access to education alone is insufficient to ensure that all participate in education (Campbell, 2003). There needs to be a well defined implementation plan which incorporates a high degree of accountability, to ensure that the resources are provided where they are needed and are appropriate to the needs of the students (Hardman, 2006). Students and parents need to be supported to enable students to access education programs.

In Australian research, Taylor and Nelms (2006) suggest that schools and policies can contribute to increasing access to education by supporting a climate of inclusion of all students and ensuring that costs of full participation, for example excursions, do not exclude any students. They also emphasise the need for staff to listen to and engage with students, and absenteeism to be addressed promptly and prudently. Further, they suggest that the relevance of education is addressed when students have flexible pathways and there are ways back to education for early leavers and when post-compulsory education is affordable (Taylor & Nelms, 2006, p. iv).

In many countries, supporting participation in education may mean addressing the poverty issues which go hand in glove with access to education. Bolton (2007) recalls Maslow's hierarchy of needs in which people need to have their physiological needs for survival, food, clothing and shelter met before they can

consider their safety needs. These needs must be met prior to moving towards satisfying higher level social, esteem and self-actualisation needs.

Parents who are struggling to maintain their families financially often see educational and associated expenses as a drain on their resources. It is not simply in third world countries where support is needed to extend participation in education. In the United States and the United Kingdom many school districts provide free or subsidised lunches for students of low income families (Kopkowski, 2008; Marley, 2008) and in many areas free transport is provided (Murphy, 2007). The Department of Education in Victoria has attempted to provide some financial assistance in the form of:

- School Start Bonus to assist parents/guardians of Prep and Year 7 students in meeting the start-up costs of sending their children to school;

- Educational Maintenance Allowance (EMA) for children under 16 whose parent or guardian receives an eligible benefit for unemployment, sickness or disability and holds a health care card or pension card; and

- Youth Allowance Scheme for young people who are studying, undertaking training or an approved apprenticeship, looking for work, or who are sick (Department of Education and Early Childhood Development, 2008a).

The above targeted support recognises government responsibilities not only for providing infrastructure for education but also for assisting reduction of some of the financial barriers to accessing education. There are however, many more poverty related issues that affect access to, and participation and continuation in

education which need to be addressed as part of the ongoing goal of providing education for all (Boese & Scutella, 2006; Scutella & Symth, 2005).

The political and philosophical principles will now be considered moving towards the policies and practices of providing education for all. One emphasis of this chapter is to explore the phrase "without exclusion or discrimination" from the UNESCO Education For All (EFA) goal quoted above, in ensuring educational opportunity for students with particular special needs.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) representing 190 member countries is the major international policy maker in education. An historical perspective of their deliberations and refinements in relation to students who have special needs can be seen in Figure 3-1. The humanitarian aspect of education for all is a compelling argument even when funding of education is accepted as a political issue. Funding decisions vary depending on whether expenditure in education is considered an expense or an investment. The humanitarian philosophy is supported by strong economic arguments which demonstrate clear economic and social gains from education expenditure. UNESCO considers education is an investment in individual people as well as in the state because "Education is an effective way to fight poverty and to build well-functioning democracies and peaceful societies" (UNESCO, 2002, p. 2).

The Rights Framework for Inclusion

UN Disability Convention (in progress)
Promotes the rights of persons with disabilities and mainstreaming disability in development.

← **2005**

EFA Flagship on The Right to Education for Persons with Disabilities: Towards Inclusion

← **2001**

Salamanca Statement & Framework for Action on Special Needs Education. "…schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions. "This should include disabled and gifted children, street and working children, children from remote or nomadic populations, children from linguistic, ethnic or cultural minorities and children from other disadvantaged or marginalised areas or groups." (para 3)

• **World Education Forum Framework for Action, Dakar, (EFA goals) + Millennium Development goals.** Ensuring that all children have access to and complete free and compulsory primary education by 2015. Focus on marginalized + girls

← **2000**

← **1994**

1993 →

• **The UN Standard Rules on the Equalisation of Opportunities for Persons with Disabilities Rule 6.** Not only affirms the equal rights of all children, youth and adults with disabilities to education but also states that education should be provided in "an integrated school settings" and in the "general school settings."

• **The World Declaration on Education for All** (Jomtien Declaration)

← **1990**

1989 →

• **UN Convention on the Rights of the Child**
Ensures the right for all childten to received educaton without discrimination on any grounds

1948 →

• **Universal Declaration of Human Rights**
Ensures the right to free and compulsing elementary education for all children

Figure 3-1 The Rights Framework for Inclusion (UNESCO 2005, p. 14)

The economist Adam Smith's concept of the invisible hand (quoted in Figure 3-2) where an individual striving for his own gain, inadvertently creates positive outcomes for others, exemplifies this idea.

Adam Smith – the invisible hand

*...every individual necessarily labours to render the annual revenue of the society as great as he can. He generally, indeed, **neither intends to promote the public interest**, nor knows how much he is promoting it. By preferring the support of domestic to that of foreign industry, he intends only his own security; and by directing that industry in such a manner as its produce may be of the greatest value, he intends only his own gain, and he is in this, as in many other cases, **led by an invisible hand** to promote an end which was no part of his intention. Nor is it always the worse for the society that it was no part of it. By pursuing **his own interest he frequently promotes that of the society** more effectually than when he really intends to promote it. I have never known much good done by those who affected to trade for the public good. (Smith, 1776 Book 4 Chp 2 para 9)*

Figure 3-2 The Invisible Hand - Adam Smith

A government investing in education to improve the economic situation (Welfare for Society) of the country inadvertently improves the situation for the recipients of education (Welfare for the Individual). Figure 3-3 following is a continuum illustrating that the purpose-of-education may have humanitarianism (for the

benefit of the individual) at one extremity and investment (for the good of society) at the other.

Humanitarianism   Economics

<--->

Welfare for Individuals   Welfare for Society
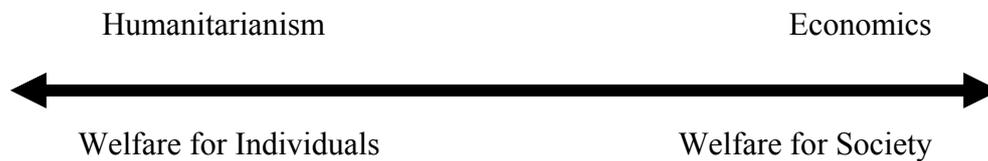
Figure 3-3 Benefit of Investment in Education

In general, governments prefer to support programs with proven positive outcomes, which is reflected in the decision-making about levels of provision. An alternative view of the educational investment decision making continuum is reflected in Figure 3-4 where the negative effect of not providing appropriate education for all is a cost to both society and to humanity.

Humanitarianism   Economics

<--->

Cost to Individuals   Costs to Society

Figure 3-4 Effects of Lack of Investment in Education

McMahon (1997) believes that market forces, which do not recognise the external social benefits of education, influence individuals to under-invest in education. Consequently, there is an onus on society to provide education to high school completion to maximise the diminishing returns to education.

This literature review develops from the positive or optimistic approach in provision of education to all, through to policies of inclusion. It also moves towards the practices which support inclusion and the consequences of a less desirable approach including exclusion and alienation. Keeffe (2007) believes "successful, inclusive education has to move beyond altruistic notions of social integration to more tangible outcomes based on achievement and retention" (p. 17). Retention is vital in the concept of 'Education for All', so current trends in this area are explored later.

The review then examines programs and strategies which are employed to engage all students, especially those for whom additional needs exist. The literature is mainly derived from Australia with the knowledge that similar work is being undertaken internationally and contributes to broaden the context and findings of this work.

Preamble to the Adelaide Declaration on National Goals for Schooling in the Twenty-first Century by the Ministerial Council on Education Employment Training and Youth Affairs (MCEETYA) states:

> "Australia's future depends upon each citizen having the necessary knowledge, understanding, skills, and values for a productive and rewarding life in an educated, just and open society. High quality schooling is central to achieving this vision" (Ministerial Council on Education Employment Training and Youth Affairs, 1999, p. 1).

The 2008 draft statement (Ministerial Council on Education Employment Training and Youth Affairs, 2008b) has been released for public comment. It recognises "fundamental changes in how students learn – driven by technology … [and] acknowledges that skills of cross-disciplinary thinking are vital (p.4). It acknowledges that the "achievement of basic literacy, numeracy, social and digital media skills" are fundamental to developing the skills in technology. In addition it reiterates the goal is not simply academic achievement but expects "values of resilience, ingenuity and tolerance... to be model[ed] … consistently and persistently" (p.4).

The draft statement concedes that "too many of our young people leave education without even basic literacy, numeracy and other life skills. The successful learning and development of young people to at least year 12 or equivalent is for almost all Australians a prerequisite for a healthy, productive rewarding and fulfilling life" (p.3). The 2008 draft statement also expects provision to allow "all students with equality of opportunity to access high-quality schooling that is free from discrimination … and difference arising from the students socioeconomic background or geographical locations" (Ministerial Council on Education Employment Training and Youth Affairs, 2008b, p. 3).

Since the early 1980s in Australia, there has been a strong acknowledgment of the need for, and consequent emphasis on, encouraging all students to complete their secondary education. Lamb et al. (2004) suggest that there has been an increase in the need for education and training in employment situations as the youth employment market has declined. They reported that one third of students in 2000

left school without completing year 12 or a senior secondary school credential. Retention therefore is a continuing theme in education as early leaving limits opportunities for employment, increases the risk of low income, and periods of unemployment, and increases demands on government assistance. Students who do not complete year 12 are at risk of exclusion from the labour market (Boese & Scutella, 2006).

Australian education ministers recognised and defined the need for retention for students themselves when they stated "Schooling provides a foundation for young Australians' intellectual, physical, social, moral, spiritual and aesthetic development. By providing a supportive and nurturing environment, schooling contributes to the development of students' sense of self-worth, enthusiasm for learning and optimism for the future" (Ministerial Council on Education Employment Training and Youth Affairs, 1999, p. 1).

In 2001 the Premier of Victoria set a retention target of 90% of young people to successfully complete year 12 or the equivalent by 2010 (The Allen Consulting Group, 2001). South Australia appointed a Social Inclusion Board which set the target of 90% of students completing Year 12 by 2014 (Social Inclusion Board, 2004, p. 1). New South Wales set a strategy to "strengthen innovative provision for 15 -19 year olds in Schools and TAFE NSW" (NSW Department of Education and Training, 2005, p. 2) but no specific numeric targets were tabled.

A comparison with the National Learning Targets for England for 2002 indicated their expectation of 85% of 19 year olds having level 2 qualifications –

approximately equivalent to completing year 12 (Department for Education and Employment England, 2001). Their data indicated an increase from the October 1998 baseline of 73.9% to 76% (Spring 2003) (Office for National Statistics UK, 2003). The 85% target was obviously beyond the capacity of the system as revised targets were set as part of the Department for Education and Skills (DfES) Public Service Agreement (Besley, 2004). The new targets, using the 2002 baseline of 75% required an improvement of 3 percentage points by 2004 of the number of 19 year olds attaining Level 2 equivalent qualifications and a further increase of 3 percentage points by 2006 (Office for National Statistics UK, 2003). In essence their target became 81% by 2006. The establishment of such targets has been accompanied by stringent accountability requirements.

3.1.1   Australian Retention Performance

In 1985 government schools in Australia had an apparent retention rate of 40%, and non-government schools of 60%. These rates rose to 74% government and 85% non-government schools in 1992 (Australian Bureau of Statistics, 1997, p. 4). The latest Australian statistics indicate that in 2007 the retention rate to year 12 was 74.3 % of all students (Australian Bureau of Statistics, 2008) and 68.3% in Australian government schools (Department of Education and Early Childhood Development, 2008f)

The Apparent Year 7-12 Retention Rates[7] in Victorian Government schools increased from 31.3% in 1983 to a peak of 85.9% in 1993 (Directorate of School

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[7] *Apparent Year 7-12 Retention Rate* refers to the number of year 12 students expressed as a proportion of the year 7 enrolment five years earlier. The term "apparent" retention rate reflects

Education, 1993). From 1993, there was a decline to a 76.0% in 1998 (Department of Education Employment and Training, 2000, p. 31). The figures at census date in August 2007 indicate a rise to 84.4% in all schools – 79.9% in Victorian government schools and 91.1% in non government schools (Department of Education and Early Childhood Development, 2008f). There is still a long way to go to achieve the 90% retention goal in government schools and only a few years to achieve it. To achieve this goal, schools need to provide programs that engage students so that they choose to complete their secondary education.

The improvements and the goals set for future retention reflect that students, who in earlier times would have left school (or would have been encouraged to leave) at the first possible opportunity, are now staying or being encouraged to stay at school longer. It is not simply an accommodation issue. Schools now have to meet the needs of a student group with a more diverse range of abilities, skills and interests. It is now appropriate to turn to policies and practices that attempt to address the diversities.

MCEETYA examined their Adelaide Declaration goal and they found that:

"some young people find their journeys more difficult and challenging. They may face problems in acquiring the knowledge, skills and self–confidence that form the foundations of their adult lives. We recognise the emotional, physical, cultural and learning barriers faced by these young people and the social, economic and locational factors that may negatively

that retention rates are influenced by factors not taken into account by the measure such as: students repeating year levels; interstate and overseas migration; transfer of students between education sectors or schools and students who have left school previously returning to continue their school education {Department of Education, 1999 #602 p:37).

impact on their lives. … We must foster an environment in which young people are nurtured and challenged—a society where all young people can realise their full potential" (Ministerial Council on Education Employment Training and Youth Affairs, 2002, p. 1).

There are some commonalities among the cohort of students who do complete their secondary education. Ainley (1998) suggests that school completion rates are influenced by social factors such as earlier school achievement (83 % of students previously ranked in the top school achievement quartile completed school compared with 22 per cent of the bottom quartile); parental occupation analysis showed 76% of students with parents with professional backgrounds graduated compared to 44% of students whose parents worked in unskilled occupations; 76% of students, whose parents had post secondary education, graduated compared with 52% of students with lesser education. Ministerial Council on Education Employment Training and Youth Affairs (2008b) confirmed theses comments by stating "Australian students from low socio-economic backgrounds are under-represented amongst high achievers and over-represented amongst low achievers (p. 3) Other factors included first generation students from non English speaking backgrounds (NESB) were more successful than second and later generations (76% to 55%) and residential location where 61% of urban students graduates compared to 51% rural students. The finding with the largest percentage variation in Ainley's (1998) report on school participation and retention is the level of school completion for students who were experiencing academic achievement in earlier years. This suggests that provision of services to assist

students achieve success needs to be implemented prior to the later years of schooling.

In a similar analysis Entwisle et al. (2005) undertook a longitudinal study of students in grade one until they reached 22 years of age. They concluded that the family social economic status was the major factor in the length of schooling and highest level of schooling attempted.

UNESCO documents the "growing consensus that all children have the right to a common education in their locality regardless of their background, attainment or disability. Concern about inclusion … challenges all exclusionary policies and practices in education as they relate to curriculum, culture and local centres of learning. … The new emphasis focuses on preparing schools so that they can deliberately reach out to all children" (UNESCO, 2000b, p. 18).

In England, according to Clark et al. (1999) integration had been the forerunner of including students with diverse needs within mainstream education in the 1970s and 1980s. Mainstream schools attempted to cater for more diverse student needs and reduce the amount of segregation. Some schools even questioned the special provisions made for students with special needs and embraced "wider responses" to cater for all students. "In extreme cases … schools dismantled their separate special education needs structures and transformed their SENCOs [Special Educational Needs Coordinator (Clark, et al., 1999, p. 159)] into 'teaching and learning coordinators' responsible for ensuring appropriate responses to the full range of learners" (Clark, et al., 1999, p. 159).

In Victoria, according to Blake (1973) the Education Act of 1890 gave the authority to establish special schools for the "feeble-minded, the deaf, the dumb and the blind" (p. 1007). In 1913 the Education Department established Fitzroy Special School for the intellectually disabled closely followed by other special schools and took responsibility for special schools which were established by voluntary bodies. The number and type of special schools increased so that by 1970 there were approximately 49 day and residential special schools catering for students with physical (including deaf and partially sighted) and intellectual disabilities as well as students in social welfare, juvenile justice and prison facilities.

Co-existing with the segregated special settings was a steady development towards inclusion. In 1970 the Department of Education espoused the:

> "view that every child has the right to a learning program that will develop him to his optimum. … The Special Services Division aimed where possible to have children with disabilities taught in normal classes with normal children. Nevertheless some children are so handicapped physically, emotionally, mentally, socially, or in any combination of these ways that their best hope lies in special educational facilities.   In all classes and schools in all dealings with handicapped children … teachers are preoccupied … with their potential and their strengths" (Department of Education, 1970, p. 3).

An integration policy was introduced into Victorian schools in 1984 as reported in *The integration of students with disabilities: school-based social justice initiatives* (Ministry of Education and Training Victoria, Federated Teachers' Union of Victoria, & Victorian Secondary Teachers' Association, 1991). It had five guiding principles which included:

1. every student has a right to be educated in a regular school;

2. service delivery will be based on students additional learning requirements rather than any category of disability;

3. services and resources should be school-based;

4. all decisions relating to students educational progress will be made collaboratively involving equal participation of all those concerned; and,

5. all children can learn and be taught (p. 6).

One strategy in the implementation of a new policy and consequent change of practice was development of new terminology to describe the expectations. "The term inclusive curriculum is used to describe the process by which schools ensure their curriculum provides access to success for all students through educational programs in which all students participate" (Ministry of Education and Training Victoria, et al., 1991, p. 6).

The Victorian state government at the time of the integration policy was committed to a Social Justice policy and consequently attempted to enact that policy in all areas of government and especially in education. "As part of the realisation of human rights in the area of the education of students with

disabilities, the Government policy seeks to ensure that the children's rights to equity of participation in educational services are upheld" (Auditor-General Victoria, 1992, p. 3).

The report of the Auditor – General Victoria (1992) stated that the integration program attempted to put teachers trained in special education into mainstream schools to ensure schools had the resources to manage and respond to the needs of the students. The audit of the program revealed some serious inadequacies. The program was not successful as only 37% of the allocated integration teacher positions were filled. Of these positions only 16% of the teachers had appropriate qualifications. This is consistent with results of injecting of funds into a Californian program to improve literacy by reducing class sizes – the additional staff recruited were inexperienced or lacking the appropriate qualifications and lowered the average teacher quality so the desired outcomes were not achieved (Hattie, 2005).

The allocation of integration resources was based on school sizes not the number and needs of the students with disabilities. At the beginning of the integration program fewer than 500 students with disabilities were integrated into mainstream schools and 4795 were in segregated settings. In 1991, 4987 students were integrated and 3677 students were segregated. The identification and funding of students with disabilities went from 0.83% (circa 1984) of the total Government school population to 1.62% in 1991.

The policy direction change in the 1990s (Pickering & Cullen Brown Implementation Advisory Committee, 1993) espoused parental choice as the determining factor in the type of school students attended. This policy was supported by a new funding model where the needs of the individual student were assessed and resources allocated based on their assessment, to whichever school the parent chose for their child to attend. This goal, which was based on equity for the student and support for parental choice, was intended to supply resources to support the mainstream school develop the capacity to adequately cater for the needs of students with disabilities within its community. A resource index, which consisted of a "range of criteria based on the educational needs of students" (Pickering & Cullen Brown Implementation Advisory Committee, 1993, p. 9) was established and this determined the amount of funding per student without regard to the school it was planned the student would attend.

Currently in Victoria, schools are required to provide evidence that students satisfy the eligibility criteria for the specific type of disability with which they are diagnosed, then funding levels are assessed using the Educational Needs Questionnaire (Department of Education, 2007).

A similar recommendation for a needs–based funding model was made in New South Wales. Dempsey et al. (2002) reported that as a result of and in conjunction with anti-discrimination legislation, most states "ensure that resources for support are available to students with a disability regardless of the chosen educational setting, or are moving in this direction" (Dempsey, et al., 2002, p. 33).

New Zealand attempted to address inclusion through their Special Education 2000 policy. "The aim of this policy is to achieve a world class inclusive education system that provides learning opportunities of equal quality to all children and school students" (Ministry of Education New Zealand, 2003, p. 2).

Wylie (2000) reviewed the New Zealand policy and indicated that 5.5% of the school population were accessing special needs support. She reported that because of the limited predictability of funding there has been a "casualisation of employment" which leads to "loss of expertise" (Wylie, 2000, p. 7). In a similar way to the Victorian Integration program, New Zealand appointed Resource Teachers of Learning and Behaviour (RTLB) to assist students in one or a cluster of schools.

The New Zealand Special Education grants could support professional development of staff "if it leads to an improvement in the learning or behaviour of students with special education needs" (Ministry of Education New Zealand, 1998, p. 2). There appeared to be a resistance to undertake Professional Development that would allow teachers and schools to accommodate the diverse range of students. Kearney & Poskitt (2001) reported "not all schools availed themselves of the opportunity for professional development" (p. 2).

3.2   The Cost of Early School Leavers

There has been mounting concern at the cost of the dropout rate in terms of lost productivity and economic prosperity (Davis & Dupper, 2004; Lafleur, 1992;

Rutherford, Mathur, & Quinn, 2004) and cost to society in terms of mental health issues and dealing with delinquency and adult crime (Quinn & Poirier, 2004). In Canada estimates suggest an annual cost of $4 billion in lost earnings, unreaped taxes and increased spending to address related social problems. In the USA "one million young people will drop out of school annually, at an estimated cost of $240 billion in lost earnings over their lifetimes, and with considerable loss of tax revenues to society (Burrup, Brimley, & Garfield, 1999, p. 366). Further, Quinn and Poirier (2004) reported estimates that "allowing one youth to leave school for a life of crime and drug abuse costs society $1,700,000 to $2,300,000" (p.78).

Research in the United States indicates that students being 'overage' for their grade level and not achieving the appropriate number of academic credits for their grade level struggle to stay connected to schools. In New York City "about half of all entering 9th graders in the 1.1 million student New York system … become overage and undercredited during high school …. The analysis notes that most of these students will never graduate" [from high school] (Robelen, 2006, p. 2). Robelen indicated that 93% of the dropouts from the 2003 cohort of students had a history of being "overage" and "undercredited".

In Philadelphia the schools system attempted to identify the students most at risk of not graduating. Students at 8th grade had "at least a three in four likelihood of dropping out; [if they were] attending school less than 80 % of the time and receiving a failing grade in mathematics and English." Further, they found that the "probability of dropping out decreases dramatically for students who make it to the 10th grade on time after entering high school" (Robelen, 2006, p. 3).

71

A report in USA Today ("High school dropouts cost country billions," 2006) described the economic costs of not retaining students at school to complete their secondary education:

- a high school dropout earns about $260,000 less over a lifetime than a high school graduate and pays about $60,000 less in taxes;

- annual losses exceed $50,000,000,000 in Federal and state income taxes for all 23,000,000 high school dropouts;

- the U.S. forfeits $192,000,000,000--1.6% of gross domestic product--in combined income and tax revenue losses with each cohort of 18-year-olds who never complete high school;

- health-related losses for the estimated 600,000 high school dropouts in 2004 totaled at least $58,000,000,000, or nearly $100,000 per student;

- high school dropouts have a life expectancy that is 9.2 years shorter than graduates;

- increasing the high school completion rate by just 1% for all men ages 20-60 would save the U.S. up to $1,400,000,000 per year in reduced costs from crime; and

- there will be a shortfall of 7,000,000 college-educated workers by 2012.

The above data illustrate that students who are not retained at school until the end of year 12, or who become "high school dropouts" are a direct economic cost to society as well as the "opportunity cost" for what they may have achieved and contributed to society. In Victoria, it is estimated that "one in five boys leave … drop out during year 10" (Taylor & Nelms, 2006, p. 4).

Reporting on disadvantage in Australia, Vinson (2007), indicates that in addition to economic benefits, staying at school has positive effects on life-time good health. It is also beneficial in overcoming negative effects of home and the community. Alternatively in discussion about criminal conviction he suggests that "the bulk of crimes are committed by people … with limited formal education" (p. 18). Further, he examined prison populations and found that "the unskilled occupational background of the majority of prisoners and the poor level of formal education – two thirds being functionally illiterate in NSW – testify to their markedly depressed economic and social backgrounds" (p. 19). In summary Vinson states "in the sphere of crime prevention, the socializing and supervisory aspects of education appear to play an important part" (p. 23).

The connection between dropping out of school and involvement in criminal activities is now established. Criminal activities can be measured in costs to society such as property damage, costs to the health system, the cost of policing, the cost of court appearances and the maintenance of Juvenile Justice Facilities and adult prisons to contain convicted offenders (Quinn & Poirier, 2004). Maintaining students at school to complete their secondary education is one aspect of reducing the risk of involvement in juvenile crime.

Sweeten (2006) discusses the effect of first time arrest and court appearances on high school students and concludes that these increase the probability of dropping out of high-school in fact … "first time-official intervention during high school, particularly court appearance, increases the odds of high school dropout by at

least a factor of three" (Sweeten, 2006, p. 463). He examined the effects of prior delinquency, prior grades and expectations variables on dropout rates and contended that these did not substantially change the effect of dropping out that was found emanated from the first court appearance. Educators who are aware of these connections are more likely to strengthen their resolve to keep students connected and engaged in school programs so that the need to seek alternative anti-social activity is reduced, legal intervention is minimised and the consequent increased propensity to dropout of high school diminished.

Kelly, Mackey and Fitzgerald (1999) in a similar theme followed up ten years later, a group of fifty young people admitted to a treatment centre for juvenile offenders. The boys' average age at admission was 13.5 years so they were all of compulsory school age. Twenty of the boys had been referred for "poor school attendance" and thirty for "anti-social behaviour, i.e. stealing, assault and malicious damage" (pp. 1-2). Only five of the young people had not re-offended. All of the students referred to the facility had at least once court appearance. The poor attendance of some students indicated a developing disengagement from school and combined with the court appearance increased the likelihood of these students dropping out of school.

3.2.1   Difficult Students – Costs and Benefits of Intervening

The foregoing section illustrated the economic imperative to address issues relating to early school leaving or high school dropouts. A social justice perspective automatically looks for the benefits of intervention for the individual.

This humanitarian perspective expressed as *education for all* is a major goal of the United Nations as mentioned in the introduction of this chapter. Despite other perspectives the economic viewpoint is often seen as more important. In general, economists agree that better education reduces the dependency on the state for social benefits. Economists from Vaizey (1973) to Burrup et al. (1999) recognised education as an investment rather than a cost to the community. McMahon (1998) contended that education has a central role in the growth process. Toh and Wong (1999) studied the rates of return from education in Singapore and stated that secondary education has the highest social yield. As economies develop and education becomes widespread the rates of return increase with the level of education. Hanushek (2006) considers that "analysis of the benefits and costs of school reform indicates investments that improve the quality of schools offer exceptional rewards to society"(p. 447).

Writers such as Conlon and Moore (2001) concede that while rates of return as measured by increase in qualifications gained are important in the economics of a country, there is "not sufficient information about the benefits of increasing participation rates and the associated rewards in the labor market" (p. 337) Australian researchers Leigh and Ryan (2008) examined the economic return of staying at school for an extra year such as from year nine to year ten. They indicated that the mean point of three experimental ways of determining economic benefit is approximately 10 per cent for the extra year at school. They conclude that the Australian states which "raised the school-leaving age in the 1960's increased the lifetime earnings of those individuals' (p. 159). A Spanish study by Arrazola et al. (2003) determined a rate of return to education from investment

was approximately 9% which is similar to the Australian return above. The implication of this is that school retention of students with difficult behaviours and likelihood of dropping out will add to their personal life time earnings and reliance on society.

In an Australian context, Junankar and Liu (2003) examined the social rate of return which measures the "net benefits to society of educating its citizens" (p. 169). They concluded that as well as more education contributing to more likelihood of finding employment and consequently higher income, it leads to "better nutrition, better living conditions, to better access to health services, and hence to a longer and healthier life" (p. 169). Junankar and Liu also considered that increased education lowered other costs to society with lowered crime rates and policing and prison expenditures.

Cohn and Geske (1990) and Burrup et al. (1999) take a human capital approach, where "Schooling provides for better citizenship, the ability to appreciate and recognise a wider range of cultural and other services, reduced reliance on [others] for such services as the filing of income tax returns, and a chance to give the next generation better education and, therefore, a better future" (Cohn & Geske, 1990, p. 35). This view is supported in Strategy and Performance (The Allen Consulting Group, 2001) where "…education and training … influences the life chances of individuals, it impacts on the strength and prosperity of the economy; it assists industry to grow and develop; and it helps build cohesive communities" (p.2). The Melbourne Declaration on Educational Goals for Young Australians (Ministerial Council on Education Employment Training and Youth

Affairs, 2008a) contends that "skilled jobs now dominate jobs growth and people with university or vocational education and training qualifications fare much better in the employment market than early school leavers. … Australia's young people must be encouraged not only to complete secondary education, but also to proceed into further training or education" (p. 4) Rising to the challenge of providing education for all is not only a altruistic goal for the welfare of young people but it is imperative for the economy. Inclusion of all students regardless of their disposition and or ability to ensure they are given the opportunity to complete school requires ongoing awareness.

3.2.2 Limits to Inclusion

There are many examples in the literature of ways in which schools respond to students with special needs especially those with physical disabilities where the responses are more identifiable and effective than they are to students with behavioural difficulties.

In a review of the cost of support to students with disabilities in the post-compulsory sector Andrews et al. (1993) defined the functional limitations of students in terms of mobility, vision, hearing, manual dexterity, learning and personal health. As in compulsory age provision it would appear that students with defined disabilities for example mobility, vision, are readily identified and accommodated.

An investigation by Clark et al. (1999) of four schools in the UK which were 'inclusive' in some ways indicated that the ways of coping with inclusiveness created difficulties. Having enrolled students with a range of abilities, one school proceeded to group the students into ability groups thus perpetuating the separation of the better and more able students from the less able students needing additional support. Similar experiences were also reported in Northern Ireland (Lambe & Bones, 2006).

Clark et al. (1999) further describe how one school which had been providing in-class support to students withdrew that support and created 'withdrawal' classes for students with behavioural difficulties. A second school which appropriately and effectively addressed the needs of students with specific learning and developmental needs was not able to extend their principles to students exhibiting behaviour difficulties in class. The two other schools which were catering to students of all cognitive levels either prevented students with behavioural difficulties from enrolling or expelled them for breaches of discipline during the time of the investigation.

The New Zealand Special Education 2000 model of funding, in addition to the on-going support of high needs students, has a Severe Behaviour Initiative (SBI) for students "whose behaviour is of such intensity, frequency or duration that it:

- jeopardises the physical safety of the student or others;
- threatens to cause or causes significant property damage; and

- severely limits the students access to ordinary settings and interferes with social acceptance, sense of personal well-being and their educational performance" (Ministry of Education New Zealand, 1998, p. 1).

The initiative above is more focussed on encompassing students who have behavioural difficulties in schools than the funding model for Victoria. Schools in Victoria applying for funding must demonstrate all of the following criteria:

- "Student displays disturbed behaviour to a point where special support in a withdrawal group or special class/unit is required and
- Student displays behaviour so deviant and with such frequency and severity that they require regular psychological or psychiatric treatments; and
- The severe behaviour cannot be accounted for by: Intellectual Disability, Sensory (vision, hearing), Physical and/or Heath issues, Autism Spectrum Disorder or Severe Language disorder, and
- A history and evidence of an on-going problem with an expectation of continuation during the school years" (Department of Education and Early Childhood Development, 2008d, p. 33).

The New Zealand Severe Behaviour Initiative (SBI) is a starting point in addressing the needs of students who are struggling to be maintained in mainstream schools due to their social, emotional and behavioural difficulties. The Victorian model is more limiting in terms of gaining funding support however students who have significant social, emotional and behavioural needs,

whether long-term or episodic, still need support to be maintained in the education system.

Visser and Stokes (2003) contend that whilst inclusion is advocated for a wide range of students with special needs, provision does not extend for those with emotional and behavioural difficulties (EBD). They argue that whilst other special needs students are included based on their human rights to mainstream education, with EBD students "other rights, legal and civil, also have to be taken into account and that these rights conflict". Further "conflicting rights and legal preferences result in segregated provision being more prevalent for pupils with EBD" (p. 1).

In an Australian context, Keeffe (2004) discussed a well known discrimination case that was lodged in the Human Rights and Equal Opportunity Tribunal against a state education department and a principal for expelling a student with a known acquired brain injury. The student had been expelled when he hit students and staff. The tribunal found that discrimination had occurred. At the time, principals around Australia were concerned about the outcome as they shared the concerns of the principal who said "I am responsible for over 1000 other students and 80 teaching or SASS [school administrative and support staff] staff. The health and safety of all these people are also of great concern …" (Keeffe, 2004, p. 63) explained the dilemma of whose rights are being eroded when inappropriate and especially violent behaviour is an issue. In the foregoing case, later appeals to the High Court found that no discrimination against the student had occurred.

In Victoria, at times there are a number of functional placements of students with social and emotional difficulties, but no intellectual disability, into specialist schools for students where one entry criterion is intellectual functioning at least two standard deviations below the mean score. In these cases the mainstream school considers it has explored all options to maintain the student in the school without success. The functional placements are approved by the regional managers when all other avenues for sourcing the necessary expertise and resources have been explored, and alternate options are not available. Specialist schools are chosen for functional placements because historically they have smaller class sizes, due to the higher needs of the students. Functional placements, whilst limited, occur for students who are too difficult to place elsewhere.

In England provision is made for "pastoral support programs" for students with special needs. Individual programs are expected to be developed for students who are "identified as being at risk of exemption or disaffection" (Visser & Stokes, 2003, p. 70) and these programs need to be "monitored and adapted where necessary. Only when a school can show that they have tried every possible avenue with a particular child and that they have failed, can a headteacher permanently exclude a pupil. The only exception to implementing a program is if a pupil has behaved in such a way as to endanger 'others' safety" (p. 70).

Visser and Stokes (2003) cite research which indicates that in schools there is less tolerance of students who are disruptive and whose behaviours may adversely affect the schools' reputation and "the schools' performance in the examination league tables" (p. 70). Pupil Referral Units (PRU) were established to provide

"suitable full-time or part-time education at school or otherwise than at school for those children of compulsory school age who, by reason of illness, exclusion from school or otherwise, may not for any periods receive suitable education unless such arrangements are made for them" (United Kingdom Parliament, 1993Section 298 (1)). There was an intention of including students needing on-going medical treatment and those who feared for their safety at school. Despite the broader definition, PRUs are usually associated with, and have more students with EBD enrolled than any other category of need. This was the opinion of the Principals of the two PRUs when visited in November 2004.

Visser and Stokes (2003) consider the media portrays disruptive behaviour as a rise in school violence and connects PRUs as able to deal with violence. They also argue that there are inconsistencies in the system catering for students and that the Government, instead of addressing the inconsistencies has made "it easier for schools to permanently exclude troublesome pupils and to expand the use of off-site units and Pupil Referral Units" (Visser & Stokes, 2003, p. 70).

The Pupil Referral Units were "required by the Dfee [Department for Education and Employment] to operate a 'revolving door policy' which means that students will, wherever possible, attend the P.R.U for a maximum of 2/3 terms" (Victoria House Pupil Referral Unit, 2003). The principals of the PRUs reported that there was consistent difficulty in negotiating re-enrolment of their students back into schools as mainstream principals were reluctant to enrol students who were still going to need additional support and who could lower the schools' performance measures.

Schools are encouraged to focus on academic achievement reinforced by the publication of the schools' annual performance data. In England the league tables are published both in newspapers and on the internet. The tables "give information on the achievement and attainment of pupils in local secondary schools, and how they compare with other schools in the local authority (LA) area and in England as a whole" (Department for Education and Skills, 2005, p. 1). Newspaper articles with titles such as "Trafford hits the top but Bristol sinks" (Halpin, 2006); "A critical extra edge for leading grammar" (Halpin & Blair, 2006) "Academies are failing on GCSE results" (Hackett, 2006) and "Schools that must try harder" (Blair, 2007) maintain pressure on schools to keep their academic performance ratings as high as possible.

In Victoria, the results of the schools' performances in the Victorian Certificate of Education (VCE) including completion rates, median study scores and percentages of study scores of 40 and over for all schools delivering the VCE are published annually. The emphasis is on measurable outcomes of education. The pressure for results can reduce the student friendly environment and encouragement required to maintain marginal students in school. In 1999 the Office of Review acknowledged that schools have a wider brief than just results, and published a paper that discussed social aspects of education, and provided a module to assess social performance. These social performance data are rarely reported in newspapers, if at all.

Most students are able to maintain positive participation in education until late secondary school as evidenced by 84.2% apparent retention rate to year 12 in Victorian schools in 2008 (Department of Education and Early Childhood Development, 2009d). There are however, some students identified as being "at risk of not completing secondary education" (Batten & Russell, 1995, p. 1), who need an encouraging and supportive environment and additional resources to stay at school. This can create a philosophical dilemma for schools that need to decide whether they should attempt to include all students which may necessitate administrative as well as pedagogical changes and risk losing their standing on the 'league tables'.

The range of at-risk students includes students "whose school achievement is significantly below their potential achievement level, thus indicating they are not benefiting from attendance at school" (Batten & Russell, 1995, p. 1) and students whose aberrant behaviours are excluding them from the school environment: the 'too hard kids' (Goudie, 1988). Broadbent (2008), Burdekin (1998) and Walters et al. (1991) valued the need for the social connection with schools for homeless students but confirmed that negative school experiences reduced the confidence of young people to survive in formal education

Extending the above theme, Cunneen and White (1995) consider that "where people are separated from development institutions such as the education system … the consequence is activity which is anti-social or rebellious. A sense of powerlessness and vulnerability can manifest itself in varying kinds of self-destructive and anti-social behaviour. Suicide represents one such response" (p.

127). Proactively Cunneen and White (2006) consider that "positive participation in one developmental institution usually implies that a young person is simultaneously nested in a web of supportive relationships" (p. 310).

Evans and Gardiner (1994) contend that schools are suspending and expelling students who are difficult to manage. They consider that schools are using discipline policies, which allow suspension of students and can lead to total exclusion, as the first step in providing deterrents for unacceptable behaviours rather than exploring other options to modify the behaviours. This contention is supported by Jenkin (1994) who suggests that "children with behaviour and learning difficulties … are most likely to suffer the consequences of suspension (Jenkin, 1994, p. 28). Rogers (1992) produced figures indicating a doubling of suspension rates from 1985 to 1990 in Victoria. This coincided with the first wave of increased school retention rates from 39.4% to 62.8%. At the same time the Government secondary school population reduced from 254,919 to 228,269 (Directorate of School Education, 1993, p. 50). Also corporal punishment was banned in Victorian Schools from January 1983 which Bouhours (2007) suggests was the catalyst for a "rise in the number of suspensions and exclusions", as "official exclusions in Victorian primary schools were unknown before 1983" (p.22).

Multiple suspensions can alienate students from their schools and lead to early school leaving. The outcomes may include long-term social and monetary costs to society as well as the students. Consequently there is a need to address the issue and minimise the factors which limit inclusion.

3.2.3   Inclusion and Resistance to Change

Inclusion may only require a mindset change and a commitment to practices and school structures whereby all students have the opportunity to maintain their enrolment, have appropriate educational experiences and complete their education. However, this is not always the case. In Australian and New Zealand experience of integration was problematic. In discussing the Victorian and New South Wales attempts at integration it was contended that "there was considerable resistance both from mainstream teachers and from special education teachers who felt threatened by the closure of special schools" (Dempsey, et al., 2002, p. 39). Further investigation of integration indicated that "principals may discourage enrolment of a student with disabilities and advise parents to approach an alternative mainstream school which places greater priority on the provision of facilities and resources to support students with disabilities" (Dempsey, et al., 2002, p. 40).

Resistance to change is not the prerogative of teachers and schools alone. Teacher education institutions have shown minimal change. Loreman (2002) reported a 1992 study of secondary school teachers which "revealed that Victorian secondary teachers lacked the skills required to modify the curriculum for students with disabilities…." (p. 1). In an investigation with Deppeler in 2001, Loreman found teachers in focus groups reported "feelings of inadequacy and perceived themselves and their colleagues as being under-trained when it came to students with disabilities" (p. 1). In the intervening years there appears that little has been done to improve pre-service teacher education to equip graduates with the skills to provide inclusive classrooms. Loreman examined the pre-service teacher

education courses in 16 Australian universities. Of the 73 courses available, only 34 had compulsory units in special education and a further nine had optional units. He also found that the units available were limited to one semester only. In summary Loreman concluded that "Universities have, … proven themselves to be reluctant in offering 'special education' as part of their program except in situations where the government has made mandatory subjects in this area a requirement for teacher registration" (p. 7). The lack of courses to cater for diversity and inclusion was also reported in the United States by Jennings (2007).

In Victoria, Special Education one year post graduate courses which are required for teachers to be registered in Special Education, must equip graduates with:

- sound knowledge and first-hand experience of working with disabled/impaired students;

- knowledge and skills in behavioural management;

- knowledge and skills in educational assessment and specific assessments (as appropriate for various settings);

- knowledge of relevant support services and communication systems for disabled/impaired students;

- knowledge and skills in curriculum development relevant for students with particular disabilities;

- some experience in the skills of consulting/negotiating/facilitating as related to the role of an integration teacher; and

- ability to communicate with disabled students (including deaf or visually impaired students as appropriate), their parents and support staff (Victorian Institute of Teaching, 2007c, p. 1).

A brief review of the available Special Education courses in Victoria (Victorian Institute of Teaching website (2007c)) shows a trend towards focussing on physical (including hearing and vision impaired) and intellectual impairment and Autism Spectrum Disorder. Some included a 'challenging behaviour' subject, but there is a scarcity of subjects relating to students with social and emotional difficulties.

Jung (2007) was aware that lack of confidence and knowledge was regularly cited as a key factor in teachers' unresponsiveness to inclusion. He attempted to provide pre-service teachers with the knowledge, skill and tools through specific compulsory coursework in first year teacher training at California State University, Fullerton. Some of the pre-service teachers who also undertook guided fieldwork "expressed significantly more positive attitudes towards inclusion than student teachers who only completed a course toward including students with special needs" (Jung, 2007, p. 110).

There are some positive signs in developing an inclusive culture. Angelelides (2008) reports a study of a group of high achieving pre service teachers (student teachers) in Cyprus. The pre-service teachers were interviewed, observed in the classroom and re-interviewed to discuss the classroom observations. Angelides found that the pre-service teachers displayed positive attitudes towards all students, ensured participation of all students in classroom activities, addressed the barriers to inclusion and collaborated with school staff to develop inclusion. A case in Northern Ireland is not quite as positive. In Lambe and Bones' study (2006) of pre-service teachers, 72 % of whom came from selective entry (high

achievers) schools, findings indicated that whilst most (82%) agreed that all teachers should teach students with special needs, 44% preferred to teach in a selective entry school, 30 % disagreed and 23 % didn't know.

3.3   Proactive Learning Environments

Teachers are a key factor in the education of all students (Adalsteinsdottir, 2004; Alton-Lee, 2003; Holden, 2005; Rowe, 2003). "The broad consensus is that "teacher quality" is the single most important school variable influencing student achievement" (Organisation for Economic Co-operation and Development, 2005, p. 26). The effectiveness of teachers is paramount to achieve positive learning outcomes for students (Owston, 2007). Their ability to teach and foster the educational development of students influences the success of each student. Teachers have the responsibility to engage students in the curriculum activities, support and encourage them to develop skills with which they can explore their world and acquire, accommodate and assimilate new knowledge whilst developing critical thinking skills to evaluate new knowledge. Skilled teachers who demonstrate their effectiveness by engaging students, maximise the learning outcomes of the students.

There is the general expectation that students have a responsibility to participate and co-operate with staff to progress their own learning. Participation of students in class and in educational programs varies greatly and it is the skill of the teachers that engages the less enthusiastic students and also maintains the challenges for more able and committed students. Zbar, Marshall and Power

(2007) suggest that effectiveness of teachers demonstrated by positive student progress is a combination of teaching skills, professional characteristics and classroom climate. These will be discussed in the following sections.

3.3.1 Teachers' Skills

Teachers are the key adults in the educational life of students - they plan lessons, implement the curriculum and assess student learning, manage the classroom, enforce discipline expectations and provide welfare and support. Much is currently being written about enhancing the standards and skills of current and pre-service teachers (Ingvarson & Kleinhenz, 2003; Ingvarson, Meiers, & Beavis, 2003). Teachers' skills are demonstrated in a variety of ways including in the delivery of the curriculum to their students. The following sections describe ways in which teachers' skills are integral to most aspects of teaching and learning processes.

3.3.1.1 Class Management Skills

In the earlier discussion of teacher education the general skills of prospective teachers have been discussed. Several writers focus especially on the class management skills which teachers need to develop. McNally et al. (2005) express concern for new teachers in an environment where management of student behaviour is a major issue due to increasing anti-social behaviour and the United Kingdom policy of social inclusion which is extended to schools. Teacher trainees at a University in Scotland discussing their first school placement were able to relate their experiences where behavioural issues were a major concern in terms of

some of the theory to which they had been exposed. Many saw the behaviour as part of a multi–faceted and dynamic picture, including underlying relationships. McNally et al. concluded that in training teachers there needed to be a balance of theory in behavior management, combined with practical strategies that can be used. As teachers develop experientially they are then in a position to reflect on their practices and seek a boarder base for their theoretical framework.

Martin et al. (1999) studied the relationships between teacher confidence and responses to misbehaviour in schools. They found that teachers frequently requested information about behaviours and positive strategies and that this suggested that current teacher education did not provide pre-service teachers with the skills to successfully manage problem behaviours. Other studies (Arbuckle & Little, 2004) reinforced the findings that on-going school based and in-service professional training is desired by many teachers to increase their understanding, confidence and information about managing the behaviours. Raising the skill levels of teachers is important so that when they consider outside intervention for their students, teachers have explored school possibilities, and with an awareness of the advantages and disadvantages of off-site intervention refer the student for the advantages of the unit and not as an alternative to planning an effective program for the student.

In private schools, where parents have been pro-active in finding appropriate schools for their children and pay high fees to educate their children, there is an expectation of outcomes which reflect the parents' investment in education as was exemplified when a parent demanded the return of school fees when his twin sons

failed the Victorian Certificate of Education (year 12) (Hudson, 2008). The expectation of providing appropriate education for all students is widespread.

3.3.1.2 Teachers' Philosophies, Expectations and Spiritual Capital

Teacher expectations of students have significant effects on learning achievements of students. A study by Rubie-Davies et al. (2006) examined the effects of expectation on the achievements for students in four ethnic groups in New Zealand. They found that notwithstanding similar achievement levels at the start of the year, where teachers had a higher expectation of achievement the students did perform as expected. The student group where teachers had the lowest expectation (Maori) did not make the same progress as the other students and their final achievement level was below the relative actual performance level they had prior to the start of the school year. Rubie-Davies et al. implied that not only did students sense the lower expectations of them but also that teachers unconsciously did not always provide the Maori students the same level of challenging opportunities in their learning. Expectations are often transferred to students through unintentional body language signals that are emitted by teachers. This has been well documented (Rosenthal, 1994, 2003) since the early 1900's with the story of "Clever Hans - the horse who could count" but who in fact responded to the unconscious signals of his owner (Marshall & Linden, 1994).

Davis and Dupper (2004, p. 184) cited a study where at the start of a school year, randomly selected names of students were given to teachers who were told that the students were expected to excel. These students did excel during the year and

the students' IQ levels also increased. This is an example of 'self-fulfilling prophesy' where students achieved to the expectations the teachers set, without regard to their actual capacity. When expectations are higher the student benefits, but when expectations are low most students sense this and perform poorly as expected by the teacher.

The reformation of schools has been the ongoing context of the work of Caldwell and Spinks. Their current book *Raising the Stakes* (2008) specifically examines transformations needed to focus "firmly on the individual learner, … if all learners are to realise success in education" (p. xi). They reflect on the notion of personalised learning as one of the keystones of transforming schools to cater for all students. Successful schools, according to Caldwell and Spinks, need to align their resources around individual students. They consider that resources are comprised of the intellectual capital of staff, the social capital of the school and its community and partnerships, the financial capital to fund the school, and the spiritual capital which is the combination of "values, beliefs about life and learning … [and the] ethics and values shared by members of the school and its community" (p. 32).

Marlowe and Disney (2006) discussed Fritz Redl's five strategies for teachers to handle behaviour problems. These were: changing - the students' values, beliefs, expectations; managing the situation to minimise the likelihood of a student producing the difficult behaviour; tolerating some level of inappropriate behaviour uncontrollable by the student; preventing students from harming

themselves of others; and accommodating the unchangeable aspects of a student's behaviour by providing appropriate routines, expectations to support them.

3.3.1.3   Peer Relationships

Teacher relationships are not the only important relationships which determine students' perceptions of their school environments. Positive peer relationships are important to everyone throughout life. Students without friendship groups find it difficult to develop a sense of belonging no matter how much they want it. An illustration of the effect of peer relationships is a longitudinal study by Buhs et al. (2006) which examines the effect of peer rejection and peer abuse on a cohort of students from kindergarten until grade five. They found the effects of both student rejection and abuse were connected to poor classroom participation and lower achievement, and in the case of the peer abuse led to school avoidance.

Closs et al. (2001) also discussed students who were friendless, some because of peer neglect, others because of active rejection. Henricsson and Rydell (2006) identified that externalising behaviour problems which are generally harmful to others such as aggression and temper tantrums can lead to peer rejection and are associated with low school achievement and poor work skills. They also reported internalising behavioural problems were associated with poor peer relationships.

Johnson and Johnson (2007) discuss the social interdependence theory as a basis of positive peer relationships. They promote the use of co-operative learning tasks, in which group members contribute and support each other to achieve a

common goal, to develop positive peer relationships and generally reduce bullying between and alienation of students.

3.3.1.4 Curriculum

Curriculum can be interpreted in a number of ways. In simple terms it can be seen as the syllabus, a course of study or "official document of stated curriculum intention" (Reid, 2005, p. 11) or it can be extended to encompass all aspects of education within a school. Toombs and Tierney (1993) identify curriculum as the total educational program of a school, the study required to gain a qualification, the content of a particular course offered to students. The teachers' role is to provide an engaging curriculum within the boundaries of course guidance.

3.3.1.4.1 Student Centred Learning and Relating Curriculum to Student Interest

Student or child centred learning has been discussed in a range of teaching philosophies including inquiry-based learning, problem-based learning, project curricula, constructivist approaches, and developmentally appropriate practice. Paris and Combs (2006) considered the "student is the starting point for curriculum making, teachers and students are co-participants in the learning process and the teachers strive towards intense student engagement with the curriculum" (p. 576).

Curriculum materials need to be relevant and interesting, and methods of delivery suitable for the age and learning styles of the students and success-based (Lawrence, 2006; Prensky, 2005). Younger students do not have the same level of

flexibility in the selection of subjects and pathways as those in years 11 and 12. The same pressure does not exist though in earlier years for schools' performance to be assessed as it is in league tables the like referred to earlier for final year results.

The terminology of child-centred curriculum has changed to accommodate more prescribed curriculum which reflected changing values of society (Vartuli & Rohs, 2006) demonstrating the power of the social context in curriculum development and implementation   This is supported in the call for an Australian national curriculum in mathematics, English, science and civics as a response to the changes in "economic, political, cultural and environmental globalisation and the growth of information and communications technologies … and to meet the demands of new economies, facilitate life-long learning …" (Reid, 2005, p. 10).

Reid acknowledges that within the context of a prescribed curriculum what is planned may or may not intersect with what actually happens. In figure 3-5 following Reid illustrates his recognition of the preactive (what is planned to happen) curriculum as the documented curriculum and the interactive curriculum of what actually happens, and points of commonality that occur, not necessarily at the same stages of the curriculum process. Within this scenario there is flexibility for student centred activities.
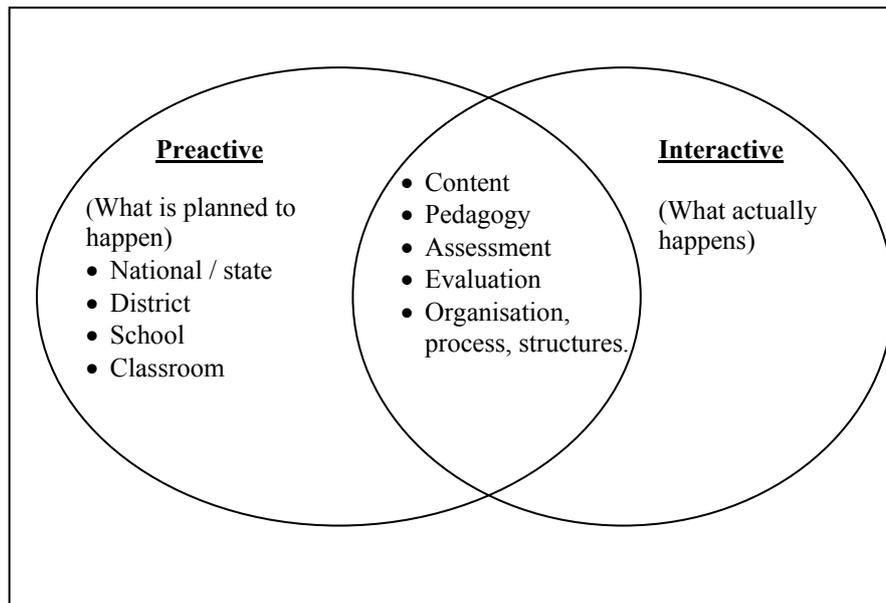
Figure 3-5 Two Curriculum Moments (Reid 2005, p. 12)

Vartuli and Rohs (2006) defined units of work that were teacher directed with: skills based lesson planning; themes which integrated learning from different disciplines, included a variety of activities and allowed input from students; and projects that allowed student input into planning, opportunity for individual, small group and whole class activity and were research based with open-ended outcomes. In essence there is opportunity for teachers to be creative and prepare and plan to cater for the individual needs and differences of students within a prescribed curriculum.

3.3.1.4.2 *Engagement of Students*

A curriculum that is enticing is the first factor in engagement of students. This is the domain of teachers. Relevant and interesting classwork is the first consideration for engaging students. The second factor is student engagement

which Kuh (2003) defines as the "time and energy students devote to educationally sound activities" (p. 25).

In primary school and lower secondary school classes there are compulsory curriculum areas to be studied and choices are gradually introduced later. Since the curriculum is the vehicle that allows students to develop skills that they utilise for their own learning tasks and students do not choose the subject areas, effective teachers select topics and teaching methods suitable for their students in essence "teachers must practice (sic) putting engagement before content when teaching" (Prensky, 2005, p. 10).

A number of studies (Arbuckle & Little, 2004; Martin, et al., 1999; Stephenson, Linfoot, & Martin, 2000) discuss the concern of teachers with the level of distractibility of students and lack of time on task. In contrast parents often report that while their children lack concentration in school they can spend hours in full concentration on their hobbies especially on computer games. Students who are engaged in activities are less likely to be distracted.

In recent times researchers have investigated the engagement and concentration that comes with the use of computer games. Particular attention has been paid to ways in which this can improve the attention behaviour and concentration of students (Cardona, Martinez, & Hinojosa, 2000; Navarro, et al., 2003). Teachers who reflect on the content of the class tasks, the level of interest to students and appropriateness of the material for the students, become less critical in their evaluation of the distractibility of students on tasks.

3.3.1.5   Student Considerations

Student performance may vary during the day. Antrop et al. (2005) examined the behaviour of ADHD students compared to a control group. They found that student restlessness was greater in the afternoon than the morning. In the mornings they found that hyperactive behaviour reduced after a morning break but increased after an afternoon break. Antrop further concluded that ADHD students had difficulty with transition periods and settling down afterwards. He recommended prompting students prior to the transition. He further re-iterated the "importance to schedule as many academic subjects in the morning hours as possible, leaving more active non-academic subjects until the afternoon" (Antrop, et al., 2005, p. 40).

Callan (1999, p. 295) discussed studies that determined that students with a morning study preference perform better in the morning as did afternoon study students in the afternoon. He also suggested that morning study students overall finished high school with a score better than the afternoon study students. The scheduling of the major exam for university entrance in the USA the Scholastic Assessment Test (SAT) exclusively in the morning suggests students with a morning study preference would achieve better results than the students who preferred afternoons. Callan reported also that most school dropouts had a preference for afternoon study.

Klein (2004) reported that adolescent students tend to be more alert later in the day and in the early evening which does not correspond to regular school hours. As adolescents go to sleep late, rising for an early school start can deprive adolescents of much of their sleep time. Attempts to start school days later in the day have been found to have a range of consequences (Holloway, 1999; Klein, 2004). Most teachers reported a reduction in motivation and behaviour later in the day. In lower socio-economic areas students relied on the time after school for employment to supplement the family income; and many extra-curricula activities for example sporting practice were held after school and not possible with the extended school day as it would be too late, darker and potentially more dangerous for students to travel home independently.

The Age newspaper (10th August 2008) reported on a sleep study of teenagers at of Flinders University Child and Adolescent Sleep Clinic (Gradisar, Terrill, Johnston, & Douglas, 2008), which found "that children who were getting fewer than eight hours' sleep a night were able to perform less than two-thirds of the [memory] tasks, whereas children who had slept for eight or nine hours were able to complete 80% of the tasks" (The Age, 2008). This indicated lack of sleep diminished teenage students' memory capacity for tasks.

The Age quoted other Melbourne psychologists Michael Carr-Gregg and Andrew Fuller, who argue "that school start times are at odds with teenagers' natural body clocks, and school should start later" (The Age, 2008). These arguments were trialed by Mark Heuston, principal of the Berengarra School in Melbourne which caters for students with social and emotional difficulties, who trialed starting

school 40 minutes later than the usual 9 o'clock start. According to Heuston there was a reduction from 50% to 21 % of problem behaviours in the morning periods and 30% reduction overall (The Age, 2008).

Wolfson and Carskadon (2005) also reported that teenagers do not get enough sleep. In a study in Minneapolis, where school times changed from 7.15 to 8.40 a.m. they noted that attendance rates rose, continuous enrolments increased, and grades improved slightly. They commented that a similar result was obtained in an English experiment where students reported that they had extra sleep, that there was academic improvement and less lateness.

Klein (2004) also reported that "difficulty in concentrating at certain periods does not necessarily indicate poor performance… Teachers who note flagging attention often employ a variety of corrective measures. They may utilize active learning and integrate materials that create greater motivation and stimulation" (Klein, 2004, p. 444).

In contrast to the earlier reported studies, Klein (2001) studied students in grade five and ten and reported that the attention of grade five students rose from in the morning to afternoon, and grade ten students' attention was greater in the morning and reduced in the afternoon. Klein's (2004) study of middle school students reported that in a school day starting at 8.00 a.m. and finishing at 2.30 p.m., performance increased as the day progressed. After a 20 minute break at 10.00 a.m. performance dropped but lessons beginning between 11.00 a.m. and 12 noon had the highest achievement rating but also the variance between high and low

achieving students was greater in this period. Performance dropped between 12 noon and 1 p.m., and increased between 1 p.m. and 2 p.m. The early afternoon student performance reduction is consistent with the bio-rhythms of the community (Klein, 2001).

3.3.1.6   Student Control and Taking Responsibility for Learning

Prensky (2005) suggests that the "true prerequisites for learning" are engagement and motivation which he considers are achieved when students are active participants in classroom curriculum decision making, particularly in activities which use technology where students are generally highly skilled (and regularly more advanced than teachers) from their leisure-time pursuits. Prensky further suggests that instead of "herding" students into education, teachers need to consider personalised instruction in student selected groups for learning.

Generally, part of the engagement involves students' acknowledgement that the activities are relevant and a worthwhile use of their time. Willms (2003) extends the notion of engagement beyond the physical participation in school activities (behavioural component) to add a sense of (psychological) belonging as well. Janosz et al. (2008) discuss a similar view combining behavioural and the affective co-identity which includes "socioemotional interest in school" (p. 22) and cognitive dimensions. These challenging concepts contend that if students do not feel welcomed and included in the school community, and are not provided with positive reinforcement from teachers or peers, there is a limit to the students' on-going active engagement no matter how relevant, pleasurable or enjoyable it

maybe. Positive social interaction and sharing the participation or the outcome of an activity with someone who is interested or cares increases the pleasure of an activity. In summary, effective engagement occurs at social, emotional, behavioural and physical levels.

The concept of total engagement can be taken a step further where students are progressively given opportunities to participate in decision making about aspects of their learning. Benson et al. (2006) hypothesise that "when youth themselves take action to improve their contexts, their efforts are empowering and also improve the contexts for themselves and their peers" (p. 4). Students grow up into adults, and throughout their development they progressively want and need to be allowed to take increasing responsibility for various aspects of their lives. In schools, their decision-making can be supported and guided. Leren (2006) discussed student participation in decision-making in terms of ownership and maintains that having a say and ownership of their work is a motivating factor for students.

3.3.1.7 Personalised Learning

The foregoing discussion leads fluidly into personalised learning which "can be seen as an approach in educational policy and practice whereby every student matters" (Järvelä, 2006, p. 9). Personalised learning is characterised by student-centred learning, using Information and Communication Technologies (ICT) as a key tool leading to lifelong learning and involvement in communities of collaboration. Hopkins (2006) suggests that diversity, flexibility and choice are

the major demands of today's society. He further believes that personalisation is derived from ethical and moral purposes which can be aligned with the spiritual capital of teachers.

Personalised learning concerns personal empowerment which necessitates "building the organisation of schooling around the needs, interests and aptitudes of individual students: it means shaping teaching around the way different youngsters learns; it means taking the care to nurture the unique talents of every pupil" (Miliband, 2006, p. 2). Advocates of personalised learning strongly support student empowerment and choice within education (Jaros & Deakin-Crick, 2007; Miliband, 2006). Students view things they have chosen more favourably than things that have been imposed.

Personalised learning empowers students to take responsibility and ownership for their learning and develop their own pathways (Jaros & Deakin-Crick, 2007). In many schools students often believe they have no or very limited choices. Personalising learning reduces the 'helpless' student and increases their capacity to be "actively, continually engaged in setting their own targets, …choosing from among a range of different ways to learn" (Leadbeater, 2006).

3.3.1.8 Social Considerations

Formal learning and academic achievement rely on the readiness of underlying skills (Slavin, 1997, p. 81) which incorporate the following social and emotional conditions being satisfied.

- students need to participate and be engaged in a program to learn.

- students need behaviour that is socially acceptable to access their potential learning as well as allowing students around them to learn (Coolahan & Fantuzzo, 2000).

- students need to develop good work habits i.e. completing tasks, to gain benefit from the learning environment.

- students need to demonstrate some level of readiness for behavioural change (Cohen, Glaser, Calhoun, Bradshaw, & Petrocelli, 2005)

Agostin and Bain (1997) comment that when there is a change in kindergarten school-preparation practices from those which focused on "socialization through play" to "preparation to meeting first grade expectations" there were "as many as 50% of children repeating kindergarten in some school districts. Retaining first grade students had also become common practice" (Agostin & Bain, 1997, p. 219). They further comment that there has been extensive writing about the classroom adjustment and the importance of social skills. Their study explored screening of kindergarten students based on a range of measures to identify students at risk of repeating grades. "Early identification of children with social skill deficits or problem behaviours … could … lead to early intervention programs and alleviation of classroom behaviours that interfere with academic success" (Agostin & Bain, 1997, p. 227).

Social skills development and acquisition is a key element in developing and maintaining relationships which are part of our daily lives and supports us in our endeavours.

3.3.2   School Relationships

School relationships and attachments are an important part of all students' lives. For many years student attachment to schools has been recognised as a major factor in resilience for students. Burdekin's (1998) report on youth homelessness cites school attachment as one of the last connections students have before becoming homeless. Broadbent (2008) also supports this contention.

Most students enjoy going to school and the major incentive is their relationship with friends. School relationships have positive effects on students' perception of school and school life. Attachment theories which consider "all children, regardless of socio-economic or ethnic background, require warm, supportive relationships with caring helpful and receptive adults for health development" (Rey, Smith, Jina, Somers, & Barnett, 2007, p. 347) are currently receiving renewed prominence in relation to school psychology. Rey et al. further suggest that positive relationships formed with the main caregiver at home extend positively into school relationships. The quality of attachments and relationships with teachers is important in the students' lives as the outcomes are reflected in the interest, involvement, behaviours and connectedness of students in school activities. Having a similar concept Clegg and Sheard (2002) contend that challenging behaviour, in a range of ability and age groups, can be partly attributed to insecure attachments. Their contention is supported by Venet et al. (2007) who found "that insecure children and adolescents experience more-socio-emotional, cognitive and academic difficulties than their secure peers" (p. 283).

This reinforces the concept that students need to feel safe – emotionally and physically - to be comfortable in the school environment.

Libbey (2004) undertook an analysis of a range of studies measuring school relationships. She identified nine elements of connectedness some of which, namely academic engagement, belonging, peer relations, teacher support and student voice are discussed within this chapter as key aspects in pro-active learning environment and essential for effective intervention. Webster and Knotek (2007) also consider that the attachment or connectedness perspective is important for all students.

3.3.2.1   Teacher - student Relationships

Most people can remember their favourite teachers at school usually because the teachers made learning interesting but because they knew and cared about the students – students felt they had positive relationships with the teachers. It was usually the class or year when the students performed to their potential. "One of the most consistent findings …is that positive, supportive relationships with adults are associated with good outcomes for children" (Anderson, Christenson, Sinclair, & Lehr, 2004).

Mawhinney and Sagan (2007) wrote about "the power of personal relationships" and the positive effects on classroom management and student learning. They consider that classrooms where students are relaxed are conducive to higher level thinking whereas students in coercive classrooms are scared and their thinking

revolves around survival in the class rather than participation in and absorption of content. Positive teacher–student relationships are based on:

- teachers knowing their students as individuals, so that they can prepare work that is related to the interest of their students;

- teachers' use of active listening skills in class demonstrates positive regard for the students' opinions and worth;

- teachers having have high expectations of all their students; and

- teachers developing strategies for repairing relationships, which are damaged by negative classroom incidents, so that the relationship and the student learning can continue (Mawhinney & Sagan, 2007).

Mawhinney further considers respect, courtesy and fairness to be teacher attributes which enhance the learning experience for all students.

Decker, Dona and Christenson (2007) examined the literature on student and teacher relationships and effects on the outcomes for students. They concluded that as the quality of the relationships between students and teachers improved there "were increases in the positive, social and engagement outcomes for students" (p. 83). Further, they considered that negative student and teacher relationships put students more at risk than expected by the student's normal risk profile.

A similar finding was reported by Davis and Dupper (2004) in their studies examining school dropouts where students without positive relationships with adults found peer inter-personal relationships, conflict resolution and problem

solving were difficult tasks (p. 186). Participation in extra-curricular activities also reduces the dropout rate however not many students with social, emotional and behavioural needs are invited to join (or are actively excluded) because of their behaviour or the perception that their behaviour would be prejudicial to the activity (Davis & Dupper, 2004). Some of these students choose not to join another activity where they believed they would not be successful. Extra-curricula activities usually involve teachers and students interacting in a more social environment. Teachers can be seen without their authoritarian image and as people with interests other than teaching (Mawhinney & Sagan, 2007) and a different type and level of relationship evolves. The broadening and strengthening of student/teacher relationships is effective in reducing and preventing dropouts.

The value and influence of school relationships with teachers and peers cannot be underestimated as they infiltrate all aspects of school life. (Anderson, et al., 2004; Buhs, et al., 2006; Davis & Dupper, 2004; Decker, et al., 2007; Mawhinney & Sagan, 2007; Webster & Knotek, 2007; Willms, 2003). Teachers are constantly interacting with students and the outcomes of these interactions are related to teacher quality, their attitudes and values and their underpinning theories of teaching and learning (Biggs & Telfer, 1987; Caldwell & Spinks, 2008; Davis & Dupper, 2004; Huitt & Hummel, 2003; Martin, et al., 1999; McNally, et al., 2005; C. R. Rogers, 1983; Slavin, 1997; Wells, 2003).

3.3.3 Parents

Relationships with teachers are not the only positive influence on student performance. Most young children want to please the significant adults in their lives starting with their parents. The parent-student relationship forms the basis for the teacher-student relationship (Clegg & Sheard, 2002; Venet, et al., 2007). Students' positive attachment and relationship with their parents provides teachers with a sound basis for developing their own relationships with the students. Insecure attachment and fractured relationships with parents increase the difficulty of teachers in establishing effective relationships with the students. It is beneficial for students if positive relationships can be forged between teachers and parents (Pogoloff, 2004). Hughes and Kwok (2007) contend that when parents "participate in their children's education, … experience relationships with teachers characterized by mutuality, warmth and respect, students achieve more …" (p. 41). The modeling of positive interactions between the most significant people in students' education should not be underestimated in terms of the skills they learn and the security they perceive.

Churchill (2003) recognises the need to fit students to the appropriate setting which she couples with a concept of "goodness of fit" in the relationship between parents and teachers. Parents and teachers have similar expectations of the need for socialisation of students however their views on management are often different. Levels of tolerance differ – teachers regularly believing that some parents have very limited or do not impose any boundaries on their children's behaviours – and these lead to difficulties in the teacher parent relationship and regularly inconsistent messages to the students. This emphasises the need for

sensitivity on the part of the teacher to engage the parent in mutual dialogue which leads to a greater consistency in behavioural expectation of the students. Pro-social behavioural changes need to be reinforced at every opportunity and the co-operation between teachers and parents is vital in the long term interests of the students.

This chapter has considered the philosophical, political and economic aspects of providing education for all; retention of all students to complete secondary education; and attempts at inclusion of students with special needs which still manage to alienate or exclude students with social, emotional and behavioural difficulties.

This chapter has also examined aspects to be considered in the provision of education and proactive learning environments. Optimal performance in each aspect could provide safer, more supportive and responsive school environments for all students. The social and relationship considerations which support students in schools were also examined. However, despite the best efforts of schools, teachers and parents, there are some students who need additional supports or intervention, to participate, even in the most proactive educational environments. The next chapter will continue the theme of intervention and supporting all students, especially those with social, emotional and behavioural needs.

Chapter 4   Intervention and Accountability

Literature about one model of preventative welfare and intervention provision is discussed together with other intervention options and considerations in this chapter. Provision of intervention services generally appear to be costly due to the small numbers of students (clients) involved. Consequently, robust and measurable benefits of programs need to be reported. The latter part of this chapter examines currently available assessment tools and the need for a more suitable tool for teachers use.

Within Victorian state schools about 5% to 7% of students have been identified and targeted for additional support through the Program for Students with a Disability (PSD). In 2007 new students applying for funding in 2008 were selected according to a stated set of rigorous criteria detailed in Program for Students with Disabilities Guidelines 2008 (Department of Education and Early Childhood Development, 2007a), and given funding to address specific learning needs associated with a disability.

Most students who are funded in this program have physical or intellectual disabilities, Autism Spectrum Disorder, or Severe Language Disorder. There are clear expectations including the development of individual educational plans by teachers with the support of parents and other professionals who are involved in the life of the students, and regular reviews are provided though Student Support

Group meetings involving teachers, parents and associated professionals (Department of Education and Early Childhood Development, 2008e).

Small numbers of students qualify for PSD funding under the category of Severe Behaviour Disorder under stringent criteria, as detailed in the previous chapter. Evidence for each application includes a written statement from the treating psychologist or a psychiatrist (Department of Education and Early Childhood Development, 2008d, p. 33). Unfortunately, many students who require funding to provide additional assistance do not meet the funding guidelines due to a combination of: limited public provision and long waiting lists for psychological and psychiatric services; lack of parents' acknowledgement that their children have difficulties; or lack of the wherewithal of parents to support their children in seeking treatment. Consequently schools have to make internal arrangements within current resources to attempt to support these students.

Mainstream schools often develop pro-active strategies and measures to set up classes, the school and its environment to maximise learning for all students. Nelson, Martella and Marchand-Martella (2002) examined effective behavioural support (EBS) for the prevention of disruptive behaviours. Schools may set up individual learning and management plans for students with behavioural difficulties in the same way they do with students who are part of the funded disabilities program, but with limitations in resources and specific teacher education in options and strategies for student management. School staff regularly attempt to address students' needs through welfare initiatives.

4.1.1 Student Welfare Support Environment

In Victoria, the Department of Education developed the "Framework for Student Support Services" (Department of Education, 1998b) as a response to the Suicide Prevention Taskforce Report July 1997[8]. The Framework has four levels of operation: Primary Prevention; Early Intervention, Intervention, and Restoring Well-being.

The Framework for Student Support Services is a broader approach which aims at developing generic programs for promoting resilience in all students, and progressively more intervention for students with difficulties in school not just those who are at risk "of depression, self-harm, substance abuse and suicide" (Department of Education, 1998a, p. 6). Although suicide and crime are potential extreme outcomes of unaddressed student behaviour problems; the Framework's four-staged response is a useful model for supporting students in all schools. Students who are having social and emotional difficulties in mainstream schools and need intense intervention in an alternative setting are included in the early intervention and intervention strategies outlined in the Framework.

Figure 4-1 indicates "how a continuum of services can be provided to students and their families within a comprehensive and integrated framework, with an increasing emphasis on preventative approaches and early intervention strategies" (Department of Education, 1998b, p. 5).

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[8] This report was the catalyst for a number of initiatives in the form of programs, some of which included "Bullying No Way" 2000; "Mind Matters" – National Mental Health program for Secondary Schools 2002, "Beyond Blue" National Depression Initiative 2000; It's Not Ok to be Away (2006) – Absenteeism; "Safe Schools are Effective Schools" – Anti-bullying program 2006. Department of Education, Victoria   http://www.sofweb.vic.edu.au/wellbeing/index.htm

THE FOUR LEVELS OF ACTIVITY

Primary prevention

Early intervention

The resilient student

Postvention

Intervention
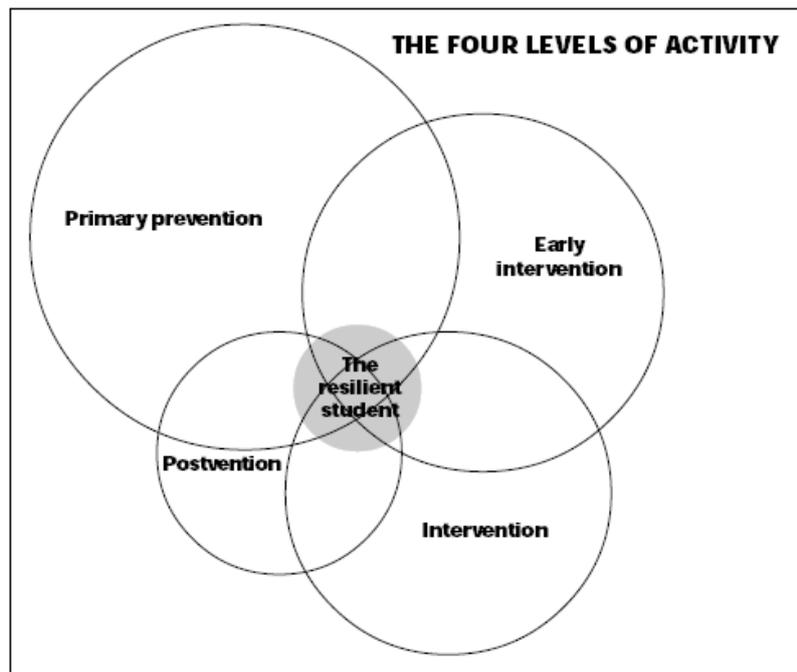
Figure 4-1 Framework for Student Support (Department of Education 1998b, p. 6)

This follows the research of Withers and Batten (1995, p. 2) who consider there is a changed emphasis on prevention rather than remediation and a shift from skills-based programs to comprehensive attempts to provide for youth.

The Framework for Student Support Services teacher resource recommends teachers develop to "strategies to support: all children and young people; children and young people experiencing difficulty in schooling; those at risk of harm; and those in crisis situations" (Department of Education, 1999). The following paragraphs outline the stages and responses within the framework of student support.

The first stage of support is **primary prevention** which covers a range of responses and is part of the first level of addressing the problems mentioned

115

above. Programs have been developed for use in mainstream schools as part of the general curricula, for example "Bullying No Way!" (Department of Education and Training, 2006b), "It's not OK to be Away" (Department of Education and Training, 2006a) and Drug Education Programs (Department of Education and Training, 2007). In the context of "at risk" students, primary prevention includes developing and implementing strong student welfare policies and strategies for providing assistance within the mainstream school context.

Early intervention strategies are second stage responses aimed at individual students. These are both within the school and at off-site facilities, engaging agencies supporting students in school. School welfare teachers, student support services officers (SSSO's) including psychologists and social workers, provide supports and interventions to individual students on a case by case basis. Some early intervention may be on an academic level when it is seen that poor academic achievement is leading to frustration, inappropriate behaviour to cover lack of success, and social difficulties. Depending on the needs of a student there may be a multi-pronged / disciplinary approach to assist. This may include referring the student to other agencies within the educational realm such as intervention units, or it could be to specialist welfare or psychiatric services depending on the perceived needs of the student. Figure 4-1 Framework for Student Support (Department of Education 1998b, p. 6) clearly shows that early intervention is the second largest activity level. It is in this stage that specially trained, skilled and experienced teachers with secondary support, mainly from psychologists, operate a range of off-site intervention programs such as the one which is the subject of this thesis. The early intervention stage of the Framework for Student Support is

still the domain of teachers, and there is an expectation of success and maintaining students in education.

Victorian education policies for student health and wellbeing also reflect a broader school wide approach with the programs mentioned above and through initiatives such as School Focused Youth Service which role co-ordinates "preventative and early intervention strategies for young people, to be delivered through school and community clusters" (Department of Education and Early Childhood Development, 2007b) and Primary Welfare officers whose role is "to enhance the capacity of schools to support students who are at risk of disengagement from school and who are not achieving their educational potential" (Department of Education and Early Childhood Development, 2008b). These two initiatives particularly support prevention and early intervention aspects of the model.

The next two stages of activity in this model are "**intervention"** which occurs at crisis point and "**postvention"** (Department of Education and Early Childhood Development, 2008b) which is the support to schools and individuals after a traumatic event. Figure 4-1 depicts these as smaller domains, where the basic intervention and recovery services are not the realm of teachers but of allied health professionals who provide treatment and counseling services.

The welfare approach is important to provide a solid, systematic and sustainable basis of support for most students but is insufficient alone to address the needs of students with social, emotional and behavioural difficulties. The welfare approach

may identify the school organisational practices which could minimise and or reduce the opportunities for inappropriate behaviour. The information can then filter down to more specific proactive provision of clear behavioural expectations of students; development of clear student welfare and discipline policies in schools and classrooms.

Incorporation of specific behavioural management approaches support students in schools supports welfare provision. Figure 4-2 Hierarchy of Behaviour Management (Clarke, 2008) depicts a staged approach to behaviour management as suggested by a number of writers. The figure gives a visual indication of levels of addressing student behaviours within a school setting.

**Individual Behaviour
Intervention Strategies**

**Strategies for Managing Difficult
Behaviour**

**Classroom - General Behaviour
Management Practices**
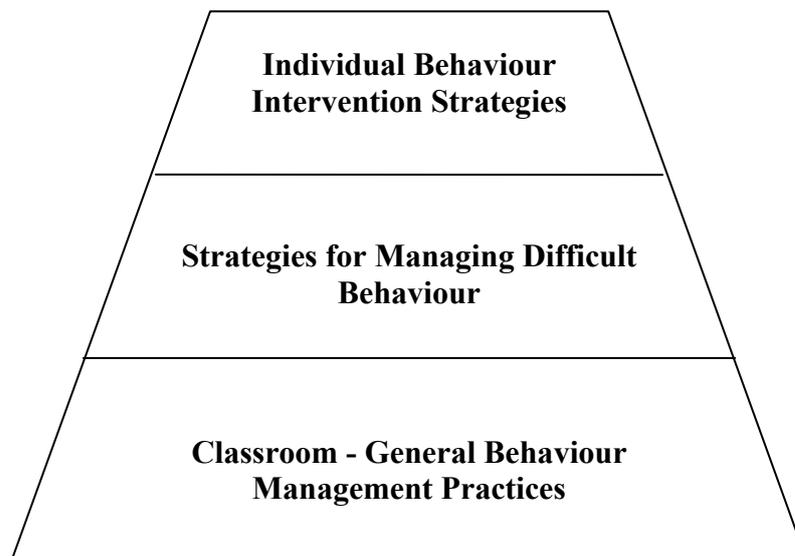
Figure 4-2 Hierarchy of Behaviour Management (Clarke, 2008)

There are three particular levels of management which usually classified as (a) general classroom management practices at the simplest level; (b) strategies for

managing difficult behaviour; and (c) at the most complex level individual behaviour intervention strategies.

The lower or first tier is the basic range of good teaching practices which operate on a daily basis to provide good order to the classroom. This may incorporate one of a few basic strategies to assist students to participate in the program.

In the second tier the teacher employs more specific and targeted strategies within the class to maintain the productive environment. This could include individual contracts with students which detail behavioural expectations.

The upper or third tier is for more targeted strategies for students whose behavioural difficulties need to be addressed individually, with specific strategies or interventions employed

Nelson, Martella and Marchand-Martella (2002) proposed an effective behavioural support (EBS) approach in a four stage planning process that uses five elements from generic whole school practices within specific interventions. This approach includes a "school wide discipline program, one to one tutoring in reading, conflict resolution, a video-based family management program, and an individualized, function-based behaviour intervention plan" (p. 136). Within the school wide positive behavioural intervention and support (SWPBIS), school wide strategies are developed, beginning with good school–wide management practice such as 'active supervision of common area' (Nelson, et al., 2002, p. 138). These lower level activities as per Figure 4-2- are prelude to the next levels where clear

and consistent behavioral expectations are established which could still remain on the lower or become more   specific at the middle level. More individualised strategies are then employed such as intervening early and providing "think time" - debriefing process.

The Review of Alternative / Ancillary Programs Report (Department of Education, 1998c) developed a "staged response to students experiencing difficulties" (Department of Education, 1998c, p. 34) This was a seven-stage recommendation beginning with simple identification of difficulties followed by intervention by the school. At stage three, outside expertise is sought, and at stage four, referral to an alternative program becomes an option. This complements the framework for student support student (Department of Education, 1999) as it focuses on the needs of individuals and recommends that at stage five application for additional supports under the program for students with disabilities (Department of Education and Early Childhood Development, 2008d) be commenced.

Porter (2008) and Rogers (2006) have presented ideas about managing a mainstream classroom. This is the first level of structured student management as suggested in the preceding Figure 4-2 in which students working in a well managed and ordered classroom provides optimum opportunities for success. Students who are the focus of intervention for this discussion have exhibited needs or behaviours beyond standard expectations.

Porter (2000) illustrated a range of seven theories for management of classroom order as follows:

- Limit Setting Approaches – where teachers/adults impose order and expectations on students with positive and negative consequences depending on compliance;

- Applied Behaviour Analysis (ABA) (previously known as behaviour modification) – behaviour continues because it is successful so to change behaviour alternative behaviours are rewarded or punishment applies to the undesirable behaviour;

- Cognitive – behaviourism – similar to ABA where behaviour is controlled by the consequences but involve students in behavioural goal setting in the discipline plan; addressing their thinking and feeling;

- Neo-Adlerian theory – students become disruptive when they are discouraged and that the goals of the disruptions namely attention, power, revenge or withdrawal are met in another way;

- Humanism – students' intellectual, social and emotional needs are meet to embrace learning. Inappropriate behaviour is addressed collaboratively with teacher and student looking for a solution not a punishment;

- Choice theory – this is the renaming and refining of Glasser's Control theory. In this theory all behaviour is seen as a choice by the student. The power to change the choice is the students; and

- Systems theory – which focuses on the relationships between teachers & students when the teachers focus on working on their half of the relationship as they cannot change that of the students. (Porter, 2000, pp. 7-9)

Although each of the models offers a particular framework for analysis and intervention, few people adhere to a single approach. Poliquin-Verville and Roger (1992) moved to the upper tier of the hierarchy of behaviour management when they defined five different approaches to understanding and addressing the problems of students with behavioural difficulties.

Poliquin-Verville and Roger discussed approaches including:

- the biological approach which is based on perceived physiological or neuro-physiological difficulties, suggesting pharmacological treatment;

- the psycho-dynamic approach is concerned with the inner conflict and helping the young person to understand his or her situation as well as its causes;

- the behavioural approach which focuses on the observable behaviour and relates it to a series of learned inappropriate responses and aims to replace the inappropriate behaviour with more suitable behaviour;

- the humanistic approach which stresses self-determination, personal growth and self-assessment, through which young people tend to reach their potential and, will find their solutions to any affective or behavioural difficulties; and

- the ecological or ecosystem approach which sees the child as part of a complex social system. Analysis of the system and chosen intervention focuses on not only the student but also his/her environment that is the home, the school and the community (Poliquin-Verville & Roger, 1992, p. 11).

Catalano (1999) takes an ecological approach in his "Communities that Care" Developmental Research and Programs document. He identifies the inherent risks in a community as well as protective factors. His premise is that "if we can reduce the risks in young people's lives or counter those risks, the chances of preventing problems associated with those risks will be greatly reduced" (Hawkins & Catalano, 1993, p. 4).

Souter (2001) also proposed a system's theory approach to behaviour problems in school. She considered that interventions used to address aberrant behaviour were based on explanation for the behaviour. However, when there are multiple factors involved, a broader (systems) approach needs to be implemented. In the case of a student who is misbehaving, the system could include the student's, school, home and his/her community. Souter contends that family therapists have embraced the systems theory approach to deal with problems whereas teachers have not. In her view, teachers tend to locate the problem elsewhere rather than as a product of the integrated system (Souter, 2001).

The professional background, philosophy and starting point for intervention, all influence the approach taken and the outcomes. Family therapists, according to Souter above, are unlikely to be involved in working through a young person's difficulties unless approached by their family for help and support. In such an environment voluntary clients are more apt and able to co-operate and work within the broader system to instigate change. In Victoria the two major facilities for intervention for young people with mental illness are the Royal Children's Hospital (Royal Children's Hospital, 2008) and the Austin Hospital (Austin

Hospital, 2008). Both expect full co-operation of the parents before beginning any program of intervention. This co-operation includes family counseling (not just counseling of the student exhibiting behavioural problems) and may include a family 'live-in' period at the treatment centre so that interaction of the family system may be observed, and if necessary suggestions for change trialed in a supportive environment.

Teachers mainly work on a behavioural approach since they are not usually qualified to use biological or psycho-dynamic approaches. However, the ecological approach is gaining strength through the various educational and welfare and school and community linked programs. In context of the framework for student support, humanism which "is a democratic approach to the prevention of and intervention with classroom behavioural difficulties" (Porter, 1997, p. 109) is preventative, minimising the likelihood of problems occurring rather than early intervention. This approach is reflected in the Primary Prevention stages of Figure 4-1 Framework for Student Support (Department of Education 1998b, p. 6) where anti-bullying programs and others are implemented.

Withers and Batten (1995) assert that effective programs for at risk youth generally use non-judgmental and non-punishing approaches focusing on the whole person and empowering young people to be actively responsible for their own learning and behaviour. Jenkin (1994) supports a holistic approach dealing with cognitive, emotional and behavioural restructuring in the development of strategies and behaviours to deal with conflict and other social situations. She takes this one step further suggesting that a better prepared teaching force is

necessary as teachers using imposed control methods for student management are actually modelling behaviours such as bullying and aggression, which they are attempting to reduce.

Wentzel (1996) reported that the pursuit of social goals (behaving in a pro-social and socially responsible way) has a strong correlation with academic motivation and consequently academic performance. Burnett (1997) cited the work of Janet Hattie who had listed a number of issues that need to be considered when implementing self-enhancement programs in schools. It was considered that program presenters should be trained in cognitive techniques as these were found to have most impact. Programs should be short and concentrated, and appropriate and dependable outcome measures should be utilised. This confirms the earlier comment that most intervention does not rely on a single focused approach. Additionally, it reinforces the idea that programs that focus on the development of internal control and attitudinal change are more appropriate than any that permit modeling of teacher coercion and bullying behaviors.

The social connections of the school are a motivating point for many students. "Conversely lack of engagement with school is seen as a cause of early school leaving" (Taylor & Nelms, 2006, p. iii). Positive school engagement according to Taylor and Nelms (2006) is enhanced through having friends, academic achievement, receptive teachers, and participation in school events such as sport. These add to the student's sense of well-being and attitude, towards completing school.   Further, as mentioned earlier, schools are often the last place of engagement for young people who become homeless (Burdekin, 1998;

Chamberlain, Johnson, & Theobald, 2007; Cunneen & White, 1995). Consequently it is important to develop and maintain school attachments for as long as possible. The Reconnect program (Department of Families Housing Community Services and Indigenous Affairs, 2008) is an early intervention strategy aiming to reconnect young people to their families but where this is not possible the focus changes to assisting school retention (Chamberlain, et al., 2007). Generally, the longer students are enrolled at school, the more they become attached to the school as suggested in Diagram 1-1. Reasons for increased attachment may include strong friendships with other students, positive relationships with significant adults (teachers), enjoyment of the school program and sense of belonging to an identified group.

On a system level socially pro-active programs assist the students to develop resilience in their daily lives which is the anticipated outcome shown in Figure 4-1 Framework for Student Support (Department of Education 1998b, p. 6) earlier in this chapter. Coinciding with social support, curriculum needs to be flexible enough to cater for the students; and teachers need to be trained sufficiently so that they are effective and develop the skills necessary to keep the students engaged. Students who are enjoying the school experience have more incentive to continue participation in the school program.

The focus of the Framework for Student Support is the development of the individual. The framework indicates that Primary Prevention for all students promotes resilience, Early Intervention for a small group develops resilience, and direct Intervention for an even smaller group improves resilience and Postvention

(later promoted as Restoring Well-being) after a trauma situation in which rebuilding resilience is the focus (Department of Education Employment and Training, 2006)

Children who grow up in warm loving families where there is support, encouragement and expectations of success enjoy an environment which assists the development of resilience. Others are not as lucky and may be at risk due to personal, family school and community related factors. Proactive assistance for those in the latter category contributes to resilience. "The concepts of resilience and protective processes offer a positive approach to the creation of programs and strategies that prevent children and young people from succumbing to marginalisation, risk and adversity (Withers & Russell, 2001, p. 9).

Goldstein and Brooks (2001) defined resilience in a child as when he/she has the

> "…inner strength to deal competently and successfully, day after day with the challenges and demands they encounter. Resilience embraces the ability of a child to deal more effectively with stress and pressure, to cope with everyday challenges, to bounce back from disappointments, adversity, and trauma, to develop clear and realistic goals, to solve problems, to relate comfortably with others, and to treat oneself and others with respect" (p. 1).

The resilience of students is a major factor in keeping them safe, connected to school, and participating positively in their own community. Students lacking resilience can develop behaviours which alienate them from positive participation

in school and their community. There is now a strong evidence base that problem behaviour in young children is one of the strongest predictors of both adolescent delinquency and later adult offending (Hamel, et al., 2006).

4.2 Intervention Environment

On the extreme end of intervention for young people is intervention once they have become involved in the juvenile justice system. Once young people are detained the various juvenile justice authorities attempt to intervene to stop or reduce the offending and return school age detainees to schools.

The Australian Institute of Criminology (2002) conducted a meta literature analysis on approximately 155 journal articles to determine *"What works in reducing young people's involvement in crime"*. The international literature indicated that:

> "The main emphasis [within Juvenile Justice policies] was found to be on the offence rather than the offender, the rights of the individual and protecting the community. All countries retained a rehabilitative element in dealing with Juvenile offenders, with custody being seen as a last resort. The sanctions and preventative programs available were also found to be similar: education and training programs, restitution, mediation and conferences were common approaches" (Australian Institute of Criminology, 2002, p. 5).

The report considered programs that worked in relation to "preventing and reducing offending behaviours in young people aged 12-25 years" (p.5). The programs identified in the major findings included:

- Social Competence Training Programs to provide training to help young people think and act in a different way, having positive effects in reducing and preventing offending behaviour;

- Programs that divert from custody;

- Education–type Programs – staying in school considered effective in preventing and reducing offending and providing a constructive and positive environment; and school organisation and curricula reinforce pro-social and academic skills. Here it is important to retain students in school as those not in school are at high risk of delinquency;

- Employment Programs - with limited effectiveness to reduce offending, with some conducted in isolation of other interventions; further short-term programs not providing long –term employment;

- Mentoring Programs with promising short term results;

- Comprehensive Programs that are effective when using a holistic and multi-disciplinary approach targeting a number of at risk behaviours. Programs that work across social settings within the family, school peers and community. They are more effective in reducing offending than intensive strict regimes such as boot camps without a therapeutic component, with young people removed from and developing skills they cannot generalise to their familiar environments; and no provision aftercare on their return;

- Recreational Programs with positive short-term effects. Sustained effects do not last as a young person returns to their original community and lifestyle; and

- Programs Targeting Specific Groups which are effective using a number of approaches in different settings (adapted from Australian Institute of Criminology 2002, p 7).

There are implications from these findings which can be applied in a school and intervention setting. Programs which are not effective, for example, intensive strict regimes without a therapy component, and those which return students to their environments without supports. These are likely to fail in school situations also.

The report indicated that effective programs: (a) develop clear aims and objectives; (b) employ well-trained, committed and enthusiastic workers with ownership of the program; (c) ensure program integrity; (d) target the needs of young people; (e) provide enough time and intensity to impact on behaviour – more intense interventions appear to be effective for younger offenders; and (f) monitor and modify as required, and evaluate so that intervention can be improved and replicated (Australian Institute of Criminology, 2002, p. 8).

The programs mentioned above have similarities to school based interventions and consideration such as trained staff (teachers) and targeted objectives. These similarities provide a good basis for inter- agency cooperation and support. An example is the Multi-Service Regional Intervention Response Team which was set

up in the Western Educational Region of Melbourne to provide options for students who need the combined support of education and welfare agencies.

The Victorian Juvenile justice Rehabilitation review (Howells, Day, & Rickwood, 2003) followed the Australian Review discussed above. It describes the following five principles of good practice in juvenile rehabilitation.

The Risk Principle includes static risk factors such as age of onset of crime, offence history and family structure, are not amenable to intervention. Dynamic risk factors can be changed however the intensiveness of the intervention must be proportional to the level of risk of the offender.

The Needs Principle suggests that interventions should target the dynamic risk/needs of the young person. "Criminogenic needs such as … drug and alcohol use, anger and violence problems and beliefs or attitudes that support offending" are significant areas for intervention" (Pg 3)

The Responsivity Principle "focuses attention on client and program characteristics that influence the offenders' ability to learn within a therapeutic situation. … Factors such as age, ethnicity, gender, disability and socio-economic status can be considered key Responsivity factors" (p. 3).

The Integrity Principle refers to the consistency and the accuracy of the delivery of the program with its stated principles and practices whist allowing for some flexibility to cater for unexpected events and outcomes.

The Professional Discretion Principle allows professionals to make decisions based on situations not covered by the above principles, (i.e. to exert their professional judgment rather strictly apply static rules).

These principles align with the effective factors in the Australian Institute of Criminology report and have ramifications for students who exhibit social emotional and behavioural difficulties. The family structure risk principle also applies to students at school and, as in juvenile justice, without access to and co-operation from the family they are not a resource in an intervention program.

4.2.1   Theories and Methods of Intervention

The main focus for intervention in this thesis is school related intervention. The program, whilst being off-site from the students' home schools, is still within a school environment and staffed by teachers who are supported by weekly consultation with a psychologist. The setting and the professional training of the staff dictate the range of methods and interventions which are available. This means that clinical counselling and chemical intervention (unless the student is independently under the care of a psychologist, paediatrician or psychiatrist) are not part of the repertoire.

As UNESCO (2000b) states "teachers obviously play a key role in the delivery of education, and the quality of instruction is to a large extent a function of whether classrooms are staffed with competent, well-trained teachers" (p. 20). This statement is a reasonable starting point, however the role of teachers today goes beyond an instructional role - competence and training alone are insufficient. In discussion about proactive learning environments in the previous chapter teachers and their skills were identified as having a key role in success for students. In this

discussion about intervention, the influence of teachers beyond the instructional tasks and how they affect students' learning is examined further.

Knowledge is not a static body of work. Students cannot be taught more aspects about what there is to know as new knowledge is being discovered daily. Access to knowledge via electronic sources expands the capacity to be informed in wider fields than can be taught in schools. Carl Rogers (1983) advocated for teachers to be "facilitators of learning". This concept exceeds a purely instructional model of teaching. Teachers as facilitators of learning ensure that students develop the tools which enable them to live effectively in their world and continually develop their capacity for lifelong learning.

Gaining knowledge alone does not allow participation in the world. All students need to develop social competencies and an understanding of social mores so they can successfully live in their communities. The new Victorian Essential Learning Standards (VELS) (Victorian Curriculum and Assessment Authority, 2004) rearranged the focus of Victorian Education Curriculum from a discipline based curriculum to broader domains of physical, personal and social learning; discipline based learning; and interdisciplinary learning. This acknowledges the value of, and need for, broader skills especially in interpersonal development and participation as a citizen of a democracy.

In teaching, engaging the students is the first task, which is closely followed by maintaining their interest. In addition to engaging the students with interesting subject matter and presentations students' relationships with teachers assist them

to learn and achieve the best outcomes they can. Inter-personal relationships between teachers and students have significant effects on the school engagement and learning outcomes in classrooms (Taylor & Nelms, 2006). Decker, Dona and Christenson (2007) reported on a study of African American students in the USA where students were as risk of being referred elsewhere because of their behaviour. They determined that as the "student –teacher relationship quality increased, there were also increases in positive social, behavioral, and engagement outcomes for students" (Decker, et al., 2007, p. 1)

The foregoing paragraph illustrated positive gains from improved student-teacher relationships. Davis and Dupper (2004) take a more critical perspective when they suggest that school factors such as zero tolerance discipline policies and teachers' low expectations of students are strong contributors to students being pushed out of school rather than simply dropping out. Stereotypical attitudes that socially disadvantage minority culture students cannot succeed, leading to self-fulfilling outcomes. Rubie-Davies, Hattie & Hamilton (2006) discuss teacher expectations having both positive and negative effects on student performance. They use the term "sustaining expectation effects" as an alternative to self-fulfilling prophecies. In this case, teachers do not respond to the evidence of change within a student and continue to perceive the student as exhibiting the same level of performance whether it is true or not. Negative teacher expectations are a major hurdle for students who could have a positive and changing experience in an intervention program.

Students often have to deal with the prejudice of "he hasn't changed" when returning to their mainstream school or classes after a withdrawal period and need the support of intervention teachers to assist in illustrating the positive changes made. This lack of recognition of change does not assist in the development of positive relationships between students and teachers. Dupper and Davis (2004) consider that trust relationships between teachers and students are necessary for positive student learning. They consider "teachers who express confidence in their students …set the foundation for building positive relationships and learning experiences" (p. 183).

One of the underlying principles of behavioural change is that in order to change the behaviour of another person, the teacher needs to change their own behaviour (Molnar & Lindquist, 1989). For example, a teacher who chooses to praise or reward a specific behaviour such as a student putting up his hand to gain attention, maybe a change for them. However, such an action is likely to elicit positive responses from other students who are not using the behaviour (Reinke, Lewis-Palmer, & Merrell, 2008). Teachers need to recognise their role in developing positive relationships and modeling appropriate behaviours.

In a school setting, teachers are intervening to change currently observed inappropriate and unacceptable behaviour to behaviour that is socially acceptable, generalising this to other contexts in a sustained way. To do this the students need to develop a new repertoire of responses that will achieve the desired outcomes without impinging on the rights of others or embarrassing themselves and their self-esteem. Cohen et al. (2005) suggest that "in order for behavioural change to

occur … the client needs to demonstrate some level of readiness for change" (p. 45). The task of the intervention teacher/s is to assist the student in developing readiness for change through finding a reason to change.

Cohen et al. (2005) discuss five stages of change – pre-contemplation, contemplation, preparation, action and maintenance of change which are mainly used for deliberate behavioural change such as adults choosing to stop smoking. This provides a template for understanding change in students and reinforcing the post change stage of maintenance to support continuation of the improved behaviours. Support for students to maintaining changes made is vital for the student.

Marlowe and Disney (2006) discussed Fritz Redl's five strategies for teachers to handle behaviour problems namely (a) changing the students' values, beliefs, and expectations; (b) managing the situation to minimise the likelihood of a student producing difficult behaviour; (c) tolerating some level of behaviours that are uncontrollable by the student; (d) preventing students from harming themselves of others; and (e) accommodating the unchangeable aspects of a student's behaviour by providing appropriate routines, and expectations to support them. These strategies add to the strategies of structure, tolerance and minimisation of opportunities for aberrant behaviours.

Behavioural learning theories "focus on the ways pleasurable or painful consequences of behaviour change individuals' behaviour over time and ways in which individuals model their behaviour on that of others" (Slavin, 1997, p. 150).

Some behavioural programs have more benefits than others depending on the principles under which they are established. An example of behavioural programs is the development of "Boot Camps" mainly used to reduce recidivism for young offenders but later extended to a broader population with social and behavioural difficulties. Boot camps, which were introduced around 1983, "imitate the structure and military-style discipline of basic training. They emphasize vigorous physical activity, drill exercises and ceremony, manual labor – and other activities that drastically reduce a participant's free time" (Wells, 2003, p. 142). However, these programs have had limited success in reducing recidivism for a range of reasons some of which include: short term nature of the intervention; limited targeted intervention for specific individuals; limited goals for re-integration into the community; and lack of follow-up re-enforcement of skills (Bottcher & Ezell, 2005; Parent, 2003; Peterson, 1996). Some of these programs were considered to do more harm than good (Associated Press 1998).

Cognitive behaviour modification is the "incorporation of various cognitive processes (i.e. thoughts, perceptions, expectancies, self-statements) within the behavioral framework. The theory is … that children … have deficient cognitive processes that guide or control their behavior. If the cognitions that direct or control behavior can be altered, behavioral change will follow" (Dembo, 1994, p. 62).

Carl Rogers (1983) described teachers as facilitators of learning. He believes that when "a teacher is real, understanding, and caring, students learn more of the "basics" and in addition exhibit more creativity and problem-solving qualities" (p.

3). Humanists consider that "(1) the behaviour of individuals is primarily determined by how they perceive themselves and the world around them; and (2) individuals are not solely the products of their environment, … but are internally directed, having free choice, motivated by the desire to "self-actualise" or fulfil their unique potential as human beings" (Dembo, 1994, p. 200). Teachers who are consciously aware of the various theories may choose what they consider to be their most appropriate response style, depending on the circumstances.

4.2.2   Professional Development and Changing the Environment

Student behaviour is rated within the context and boundaries of the referring schools. Behaviours which pre-empt suspension from school in one school environment may be dealt with differently in another. Regardless of the environment, students who are part of an intervention program and are changing their inappropriate behaviours will have to return to the refereeing school. If students return to an unaltered situation they have a higher probability of returning to the practice they used in that environment. In a broader sense Positive Youth Development[9] (PYD) strategies "emphasise transforming environments not just "fixing" kids. PYD is as much about transformation of adults and systems as it is about working directly with young people to make change happen" (Benson, et al., 2006, p. 4).

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[9] Positive Youth Development (PYD) "emerged as an approach among practitioners working with youth when they saw the benefits of using strength-based models working with children and adolescents" (Benson, et al., 2006, p. 1). It developed from examining the characteristics and strengths of some adolescents who have overcome many obstacles.

4.3 Evaluation of Interventions

There is a range of opinion regarding the success of intervention programs. In outlining the history of an intervention program, Penny (1997) cited research findings of improvement in self-esteem, attendance and self-concept but without wider or long term (post program) effects in more positive behaviours. However, Hrekow (1992) that found off-site intervention programs are not effective particularly in the area of reintegrating students back into mainstream education. Discrepancies in these findings above may stem from the expectations each had of the programs they were examining. Penny comments about the changes within the students − improved self-esteem and self-concept and their social development whereas Hrekow is critical of the re-integration to school process. However, both are valid comments and do not necessarily contradict each other. Students may have improved their social skills and changed their behaviour within a supportive environment but if the original (re-integration) school environment has not changed, the student may revert to their original behaviour. Teacher expectations of the student need to be more appropriate and realistic and support for the student made available, if re-integration of the student is to be successful.

Topping (1983) also expressed serious concerns regarding residential and day special schools for students with behavioural problems. Topping (1983) was critical, firstly because there were few program evaluations, and secondly because few of the evaluations could be replicated. He cited Cook's 1980 investigation of 272 programs where only 11 had sufficiently clear data to make the results replicable. He also put forward the concept of "spontaneous remission". Topping suggests that large numbers of students stop being disruptive after a while

139

possibly through maturation, quite irrespective of what has been done to or for them (p. 11). He illustrated the view with data from Glavin where a large number of children were initially identified as presenting behaviour problems, and only 30 per cent still had problems four years later, quite irrespective of the intervention. Topping challenges program developers "to articulate their objectives, and to do so in a way which renders the achievement or otherwise of these objectives clearly observable and/or measurable" (p. 13)

Topping (1983) further suggested that "a problem in the establishment of evaluative criteria is the question of the relative emphasis to be placed on improved behaviour and on improved attainment. Macmillan and Morrison (1979) point out that a reduction in the disruptive behaviour, tends to become the primary objective for special education facilities, possibility at the expense of attainment" (Topping, 1983, p. 15). This is a harsh criticism as students who are unable to participate in a program because of their behaviour have little opportunity of "attainment" of academic skills. Improving behaviour and social skills is also an attainment of other important like skills and provides good opportunities for other attainments.

Students attending off-site school based-intervention programs are referred by schools and generally have a similar starting point of having difficulty in school, or exhibiting behaviours which the school finds difficult to manage. The role of intervention settings in the Northern Metropolitan Region, Victoria is to "provide individualised programs for students not able to successfully access the educational opportunities provided by mainstream settings" (Northern

Metropolitan Region, 2007, p. 2). The focus of the programs is minimising behaviour preventing students from learning or "attaining". As behavioural, not academic, concerns are generally the impetus for a referral, it is not unreasonable for behavioural outcome to be the main focus.

In keeping with Topping's findings about evaluation of programs, forty intervention programs in Victoria were surveyed in 1997 – a further review was started but left in abeyance during 2008. The Review of Alternative / Ancillary Programs Report (Department of Education, 1998c) identified programs or intervention centres / units that were operating in Victoria. These programs / units had been established either by individual schools or clusters of schools to provide intervention programs for students who were not being successful in the mainstream schools. However, the review revealed that whilst each child appeared to be performing successfully there was no common evaluation across the programs. Some units had developed their own assessment tools whilst others used anecdotal evaluations or a combination of both. Twenty-five of the programs had an evaluation measure however none of these tools or measures were presented in the report. This indicates that no suitable evaluation tool was available to provide meaningful data to compare and evaluate effectiveness of the programs. The lack of uniform assessments and evaluations limited the capacity of the review to compare the effectiveness units. In addition, there was no quantitative evidence for funding authorities to report on returns for their expenditure or investment. The review made it apparent that suitable measures of success were needed in the accountability processes.

4.3.1 Demand for Accountability

The USA No Child Left Behind Act (NCLB) (U.S. Congress, 2002) which aims "to close the achievement gap with accountability, flexibility, and choice, so that no child is left behind" has raised the demand for accountability through "rigorous, scientifically valid, quantitative evaluation" (Sec. 1205). This indicates that where public money has been invested in education there is an expectation of more than anecdotal evidence to support the effectiveness of intervention programs. The US Department of Education supplements the base funding of schools by their states and school districts through targeted programs to provide an education system that provides for all students. Education grants to states for "prevention and intervention programs for children and youth who are neglected, delinquent, or at-risk" (U.S. Congress, 2002Part D Sec 1401 -1412) provide targeted grants of up to 40 % of the average per-pupil expenditure in each state (or between 32 and 48 per cent of average per pupil expenditure in the United States) per student who is enrolled in targeted specialist programs. The total funding provision in the 2008 Budget for Title 1 Part D is $48,927,000 (U.S. Department of Education, 2007).

4.3.2 Accountability Measures

Teacher practitioners who implement intervention programs and want to demonstrate improvement need to compare data from the starting point of the intervention and compare it to data collected after the intervention, using the same measures. Measures of cognitive ability and performance i.e test results are still requested more than the measures of behaviour change which are the focus for

this study. This is exemplified question asked in the UK House of Lords: "Why pupil referral units are excluded from (a) secondary (key stage 4) school performance tables, and (b) local authority averages ..." (United Kingdom Parliament, 2007).

Examination of a sample of measuring tools used in intervention programs in Melbourne, Australia, juvenile justice schools in California, USA[10] and some Emotional Behavioural Disorder (EBD) schools in England reveals that most assessment tools are used for curriculum performance standards reporting to education authorities. Some schools used the Wechsler Individual Achievement Test (WIAT) (The Psychological Corporation, 1991), others used Kaufman Test of Educational Achievement (Kaufman & Kaufman, 1985). Neither of these tests was available for teachers to use as they were restricted to use by psychologists.

Other standardised cognitive development assessments such as Achenbach's Child Behavior Checklist (Achenbach, 2001) and Connors Rating Scale (K. C. Conners, 2008) have restricted use conditions which exclude teachers. In addition, the length of the tests, that is the number of items requiring responses, was time intensive. The EPS Behaviour rating scale (Prout & Strohmer, 1991) has 135 items and is designed to be used by psychologists.

McCarney's (1989) Learning and Behaviour Problem Checklist (McCarney, 1989) was designed for teachers to mark each of the 162 behaviour items that had

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[10] I visited eleven Juvenile Justice Facilities in California in December 1998 and January 1999 to research programs, assessment and facilities. I also visited a juvenile justice facility, special schools and alternative units and two Pupil Referral Units in the UK during November 2004 to research their programs and options for students needing additional supports.

been observed in the previous month. This list provided for a diagnosis of areas of concern but no quantifiable data was collected. It appears that the number of items and length of the test was a concern for the authors as it was modified and reduced to 99 items with an expected completion time of twenty minutes and is known as the Behaviour Dimensions Scale (McCarney & Arthaud, 2008). In addition, the Behaviour Dimensions Scale is suited to pre and post testing, as behaviour frequencies are required. The diagnostic aspect of this tool is supported by material to develop intervention strategies for each item.

The Coopersmith Self-Esteem Inventory (Coopersmith, 1967) examined student self-esteem. The 58 items on the self-assessment form are useful to gauge an understanding of students' views of themselves. This is not suited to quantifying reportable improvements in students' behaviour at school. Coopersmith also produced a Behaviour Rating Form which contained thirteen items which were related to self-esteem.

Hosp, Howell and Hosp (2003) examined fourteen published, and commonly used, behaviour rating scales. They grouped them according to the stated purpose – diagnostic, planning interventions and monitoring the effectiveness of interventions over time. The third type monitoring the effectiveness of interventions over time usually occurs in a school based situation where an intervention program is delivered by teachers on a daily basis. Hosp et al. also recommended that users need to ensure that "a specific behaviour rating scale is appropriate for [the] purpose" (p. 202).

Hosp et al. (2003) were critical of many of the behaviour rating scales for including negative actions items such as "fights with…", because they lacked positive action, for example "does not turn in assignments…", or lacked negative actions for example "does not fight with …" (page 203). Their data revealed that on average 24 % of the items were positive actions; 67 % were negative actions; 7 % lacked positive and 1 % lacked negative actions. Hosp et al. applied the 'dead man' test to items on the various scales to test if a dead man could get a rating on such item. For example, "does not participate in class discussions" failed the 'dead man test' since the response for the dead man would be 'always' (p. 203).

Hosp et al. (2003) strongly suggested that behavioural rating scales should include positive items so that teachers or clinicians are not determining if an intervention is effective by simply measuring reduction in a particular behaviour without measuring the maintenance or improvement in positive behaviour. They recommend that when using behavioural rating scales, the scale "aligns with the [users] intent" (p. 207).

Figure 4-3 shows a comparison of range of rating instruments, (some of which previously mentioned), considered for measuring behaviour. A number are diagnostic and screen tools, four of the ten may be assessed by teachers, and only two are specifically meant for pre and post intervention use.

Name	No of Items	Assessed by	Purpose
Achenbach – Child Behaviour Checklist (Achenbach, 2001)	113	Masters level professionals	Diagnosis of adaptive and maladaptive functioning
BASC Behavior Assessment System for Children (Reynolds & Kamphaus, 2004)	100+	Psychologist	Measure of adaptive and maladaptive behaviour and emotions
Behaviour Dimension Scale (McCarney & Arthaud, 2008)	99	Teacher	Diagnose and place support materials to provide intervention goals and strategies based on the assessment
Burk's Behaviour Rating Scale (Burk, 2000)	100	Treatment specialist	Obtain teacher input, usually prior to treatments, and after treatment has been started.
Conners Teacher Rating Scales (C. K. Conners, Sitarenios, Parker, & Epstein, 1998)	39	Teacher	Screen students' behaviour as part of a battery of tests; pre and post intervention testing.
Coopersmith Self Esteem Inventory (Coopersmith, 1967)	58	Teachers	Student self reporting. Validity questioned (Wood & Johnson, 1972) Bias towards emotional stability questioned (Francis, 1997)
Eyberg Child Behavior Inventory (ECBI) (Eyberg, 1999)	36	Psychologist	To obtain parent responses –recording of difficult behavior problems and the frequency
Goodman - Strengths and Weaknesses Questionnaire (Goodman, 1997)	25	Clinician	Screening test. Rating prior to clinical treatment
Positive Action Student Behaviour Rating Scale (Positive Action Company, 2004)	78	Teachers	Pre and post intervention using Positive Action Program. Includes health issues for example "drinks too much soda", "eats lots of junk food"
Stephenson Centre – Emotional and Development Scale development (Stephenson Centre, 2004)	21	Teachers	Teacher developed for school purposes rating emotional and behavioral
Criteria for Measuring emotional and behavioural development (Qualifications and Curriculum Authority, 2001)	15	Teachers	Track emotional and behavioural development over time. Has five pages of descriptors to support teachers in assessing behaviours.

Figure 4-3 Range of Behaviour Rating Scales

Conroy and Stichter (2006) express concerns that measurement of intervention with students with behavioural disorders are different from measurements of disabilities. They use the Achenbach Child Behaviour Checklist as an example of a standardised measure that is suitable for diagnosis and identification but not for intervention research. They suggest that problem behaviours are influenced by context. Conroy and Stichter (2006) examine "compliance" which is dependent on the student knowing what is expected of them and actually completing the task. Compliance, if measured throughout the day would vary depending on the task or request – "some students may need to learn an academic skill to comply with a teacher's task" (p. 141).

Conroy and Stichter (2006) recommend single subject design (SSD) to identify the effects of specific interventions. Conroy and Stichter are concerned about "seeing the trees in the forest and vice versa" measuring specific behaviours which give a too detailed appraisal and the opposite, using measurements that are too general. They raise the need to be conscious of the detailed as well as the overall changes in behaviour. They recommend using "a combination of measures …wherever possible" (p.149).

In this chapter of literature review issues relating to the nature of schools, the complexity of teachers work; and the importance of successful and satisfying experiences for students, have been addressed. In addition, there is a clearly identified need for the development of an appropriate evaluation tool which may be used by teachers to provide evidence of behavioural change in a school context after a period of intervention. This thesis reports the development of an evaluation

147

/ measurement tool for use by teachers which can be used pre and post intervention, either by the teacher or within an off-site intervention program.

Chapter 5   A Case Study of Intervention: History and

Metamorphosis of the Baltara Integration

Unit

A broad description of the development and operations of the Baltara Integration Unit (BIU) is explored in this chapter. The BIU provided intervention for students who are the focus of this research. BIU referrals provided the data for difficult behaviours discussed in chapter 2 and the operations and procedures provided data at each stage of the research.

During the years from approximately 1943 until 1992, many young boys who were supported by the welfare authorities of Victoria lived at Baltara Reception Centre and attended the Baltara School. They all had different stories and reasons for being in care. The length of their residency varied from days to months. Their common requisite was a place where their basic needs – food, shelter, safety and protection – could be met.

Major changes in welfare in Victoria emanated from the Report of the Victorian Child Welfare Practice and Legislation Review Committee (Carney, 1985) and Children in Institutional and other forms of Care: a National Perspective (Senate Standing Committee on Social Welfare, 1985), the major change de-institutionalisation. As the years unfolded major welfare institutions were restructured and residents moved into the community. Victorian State Legislation

followed with the Children and Young Persons Act in 1989 (Parliament of Victoria, 1997). This affected the welfare services for children and young adults. Even though the structures had changed, the young people (previously in institutional care) still presented the same needs.

This chapter discusses the adaptation made by Baltara School as a result of legislation enactment, and the progress towards sustainable provision of education for students most at risk whether residing at smaller and more specific welfare facilities or residing within the community.

5.1   *Baltara Reception Centre*

Baltara Reception Centre was a short term residential facility for boys aged 10-15 years who were wards of the state or remanded in custody waiting for the outcome of the Children's Court deliberations. Some students were in need of care and protection; pastoral care due to the breakdown of their families; and others were not adequately supervised in their own homes and consequently displayed anti social behaviour which would constitute criminal behaviour for older adolescents. As the students were below the age of criminal responsibility (15 years of age) they could not be charged with criminal offences.

Baltara Reception Centre was located in Parkville near central Melbourne. It had four discrete residential units on the property and only one of the four units, Warrawong, was secured 24 hours per day. The other three units – Akora, Marwarra and Kinta - were called 'open units' meaning that the boys were free to

move around the property which had low fences and unlocked gates, so if the boys chose, they could abscond[11].

The boys were placed at Baltara Reception Centre until suitable living arrangements could be made for them in their local community – these arrangements could include return to the family, foster care, or small family care units. The boys resided at Baltara Reception Centre for undetermined time periods. These ranged from overnight to one or more three (3) weeks remand periods. In the case of two intellectually disabled brothers, they stayed for four (4) years as no suitable alternative placement had been found. At times it appeared that social workers, who were responsible for negotiating community placements for the boys, considered that as the boys were safe and well cared for at Baltara Reception Centre, they were not the highest priority for the few community residential placements available.

Baltara was a special school for socially disadvantaged students with strong social and emotional needs, and was located in the grounds of the Baltara Reception Centre. It was funded by, and was part of, the Victorian state education system. It enrolled students from the Baltara Reception Centre only. After initial settling in periods, students progressed well with regular school attendance and regular and consistent residential care. However, social workers who found residential places in the community for their Baltara clients regularly had difficulty enrolling them in a mainstream school. Baltara School had regular requests from social workers to re-enrol students who had left the Baltara Reception Centre facility. This was

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[11] In the terminology of the Department of Human Services and Juvenile Justice, non-offenders left custody by "absconding" (running away), whereas residents "escaped" from a facility for those with criminal charges and sentences.

not allowed but it illustrated the need for a school that could cater for students with intense social and emotional needs. Many students at Baltara School had attended 3-5 schools on average prior to being placed at Baltara Reception Centre. Their fractured early education meant that many were lacking age appropriate academic skills; most had poorly developed social skills; and nearly all had behavioural and emotional issues, not the least of which were caused by being in residential care and away from their families.

Some students had very sad stories. On entry to the Baltara Reception Centre the Principal or assistant Principal would meet with each new student, conduct an informal assessment of their ability levels and generally get to know the student, their likes, dislikes and understanding about why they had been sent to the centre.

> *Joe was a sad but good looking boy of approximately 13 years of age. When asked did he know why he was there he replied, "Me mum can't handle me and me dad's new wife doesn't want me…!"*

> *Peter had the weight of the world on his 12 year-old shoulders. He said he was at Baltara Reception Centre because his mother was in hospital with drug problems. "It's my fault" Peter said, "if I hadn't been born my mother wouldn't be sick." Further questioning elicited that Peter's mother had been having drug issues prior to his birth.*

As one of the interviewers I could cope emotionally with a maximum of three interviews per day.

5.2   *Children and Young Persons Act*

I was a member of the Baltara School staff prior to and in the early days of the proclamation of the Children and Young Persons' Act 1989 (CPYA) (Parliament of Victoria, 1997), and was witness to many of the changes to residential care of young people and participated in the consequent major changes and development of Baltara School.

The Children and Young Persons' Act changed many aspects of the care of young people. The first major legislation was the lowering of the age of criminal responsibility from 15 years to 10 years of age (Parliament of Victoria, 1997 S 127). As there was no facility for offenders under 15 years of age a new facility was established (s 249)

The second major outcome of the CYPA was dividing the Children's Court into a Family stream and a Criminal stream (S 8). This ensured that young peoples' most significant needs were addressed first. For example a homeless young person caught stealing a car would most likely to be sent to the Family Division to deal with his immediate lack of care. If this was dealt with successfully, the offending behaviour may no longer occur. There was a clear delineation between offenders (criminal court matters) and non-offenders (family court issues). The separation of the two functions necessitated that offenders and non-offenders could no longer be housed in the same facility.

The CYPA was proclaimed over a number of years as infrastructure to support the act was established. A criminal facility for the 10-15 year olds was established, and eventually becoming the Parkville Youth Residential Centre (S 249 (a) & (b)). This facility was established with two residential units, educational facilities, and shared educational and recreational activities rooms such as a ceramics room and gym /hall. Two Secure Welfare Service units (one male, one female) were established (S 57) and developed for young people aged 10-17 where it was determined that there was "substantial and immediate risk of harm to the child" (S 70 7 (b)). Once these facilities were established the Baltara Reception Centre was decommissioned and closed.

There were many positive changes for young people under the CYPA. Secure custody in a criminal facility was restricted to those remanded in custody by the Criminal division of the Children's Court and those serving a Youth Residential Order. Young people who needed secure care were placed in Secure Welfare Service (SWS) facilities under legislation which restricted their stay to 21 days (S 124 1 (b)). This meant that pressure was placed on social workers to develop a suitable exit plan from the moment the young person was placed in one of the SWS facilities. Young people could no longer be in care at an institution for unspecified periods. Additional medium (MTU) and short term units (STU) were established in the community to accommodate the young people who were unable to remain in the family home, or it was unsuitable for them to live in their family home. Young people of school age who lived in these units were expected to attend local schools.

5.3 Baltara Post CYPA

The Baltara School accepted the challenge of CYPA changes. It provided a team of teachers to deliver an engaging educationally based program at each of the Secure Welfare Service units as most of the residents were of compulsory school age. Subsequently, it provided teachers to deliver an education program at the Youth Residential Centre when it relocated to Parkville in close proximity to the other Baltara campuses. These teaching commitments did not engage all the existing teaching staff, so there was capacity to use the expertise of Baltara teachers to establish a school facility for students in the community with social and emotional difficulties similar to those who were in care at the Baltara Reception Centre.

Baltara School negotiated with its educational region to establish a middle years school (students 10-15 years and in grades 5-8) for students experiencing difficulty in mainstream schools and who were "at risk" of not completing their secondary education. The school proposal was deemed to be anti-integration, so a compromise short term intervention unit was agreed upon. The unit was initially established on the former Baltara Reception Centre site, and subsequently relocated to the Croxton site. The unit was called the Baltara Integration Unit (BIU). The name and history of a positive educational facility was maintained, and the term 'integration' rather than intervention was used as a reminder that the goal of the unit was to integrate students back into mainstream education.

The Baltara School 2003 Annual Report (2004) states that the school has four campuses where students are enrolled for short periods of time – from one day to

155

less than a school year. The school has maintained this same structure since that time. The main focus for the students during their period of enrolment at Baltara School is engagement into educational activities and assistance in the development of socially appropriate behaviours. These behaviours are the building blocks for student re-connection with the curriculum. The philosophy of the school is to give all students the opportunity to participate and be successful in an educational environment.

5.4   Baltara Integration Unit (BIU)

The Baltara Integration Unit operates as an off-site intervention program for students who have social and emotional issues and who may be exhibiting extreme inappropriate behaviours in mainstream schools. Schools that are finding they do not have the resources or personnel to adequately address the needs of particular students look to services that are provided by their educational region. Baltara Integration Unit enrols students who have been referred from mainstream schools in the Northern Metropolitan (Education) Region of Victoria.

The Baltara Integration Unit operates on a shared educational site with the Croxton School which is a government special school for students aged 5 – 18 years of age, and with mild intellectually disabilities. This co-location is an advantage for the Baltara Integration Unit as the other teachers on site have special education training and an appropriate philosophy to accept the student diversity. The site is located in Northcote, a suburb approximately six kilometres from the centre of Melbourne. The Baltara Integration Unit is within walking

distance to the Croxton railway station and two bus routes. Baltara uses one discrete wing of the Croxton school comprising one classroom, one woodwork/arts room and one multipurpose recreation classroom. It also has rostered access to the Croxton playground, hall and homecraft facilities. Administration of the Baltara School is located within this wing.

5.4.1 BIU Entry Criteria

The Baltara Integration Unit is accessed via a referral to an enrolment committee consisting of four Baltara staff members and a regional guidance officer (psychologist). The criteria for student entry include:

- *Age – 10 - 15 years (male and female students) Students in years 5-8.*[12]

    The Baltara Integration Unit is located in a central area supported by public transport. There is no school provided transport, consequently students must be able to travel to the school independently (or in care of their parents) and it is not considered suitable for students less than 10 years of age to be travelling independently.

    The maturity of students is a factor in their behavioural change. Students who are 10 years or older generally have enough maturity to understand that behaviour is a choice over which they have control. Maturity is also a factor in the time needed to assist students to choose more appropriate behaviour. Younger students whose maturity is still developing are better

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[12] Criteria and Referral items *in italics* (Clarke, 2004)

supported in their own environments where there is not an expectation for changes to be made in short periods of time.

- *Student is still attending their mainstream school.*

  The aim of the Baltara Integration Unit is to return students to their regular schools with improved skills and behaviour strategies so that they can maintain their attendance to complete secondary education. Students who are still connected to schools usually have a social peer group with whom they wish to connect, and this adds incentive to participate in the program so they can return to their school and school friends. Students who are no longer attending any school need additional community supports to re-connect with education.

- *Normal intelligence range*

  The intervention program is short term and ranges from 10-30 weeks' attendance. Students' capacity and time required to learn varies with their intellectual capacity. Students below the normal intelligence range require more time than other students to learn skills and change behaviours. They are however, eligible for on-going enrolment within specialist schools for students aged 5 -18 years with mild and moderate intellectual disabilities. Here they have a longer timeframe to develop social skills and self-management of behaviours.

- *Exhibiting behavioural and social difficulties*

  The intervention program has a focus on social skills development and behaviour management. Academic performance is not a criterion for entry as there is a range of ways for schools to implement programs for academic assistance. There are a number of referred students who have poor academic performance, but it is their social and behavioural performance within the schools setting that is the basis of their referral.

- *Referring school has attempted intervention strategies.*

  Most teachers and schools identify students with significant social and behavioural needs. They attempt to provide support for these students, including adapting the environment. For example: changing the students' timetable so the demands on the students are more appropriate to their needs; examining the teaching methods that are more successful for those students; and other strategies to assist the students to be maintained in schools. When teachers have exhausted their resources, the schools refer students to the more intensive and expensive intervention programs. Following is the list of expectations of schools prior to referral for any intervention service in the Northern Metropolitan Region including Baltara integration Unit:

  - Student needs have been thoroughly investigated and a range of actions undertaken in the regular classroom to meet these needs;

- Teachers / Year-Level Coordinators have contacted parents to discuss, document and implement strategies to assist the students – strategies could include:
  - Modified curriculum.
  - Modified timetable.
  - Change of class group where appropriate.
  - Peer support / mentoring.
  - Referral to Student Support Services for appropriate counselling, assessment and other interventions.
- Liaison with other appropriate services;
- Establishment of a Student Support Group; and
- Discussion with alternative programs and settings re appropriate strategies and possible referral (Northern Metropolitan Region, 2007, p. 3).

The Northern Metropolitan Region requires schools to complete a student review form to document their actions and strategies in relation to each of the above points.

If the referring school has not made any attempts to assist the student prior to the referral, it is unlikely that they will have the capacity to provide assistance during and after intervention. Schools which refer students to the Baltara Integration Unit prematurely (prior to attempting interventions) are encouraged to implement some suggested strategies to assist the student prior to consideration being given to the referral.

5.4.2   Referral Information

The Baltara Integration Unit does not issue a fixed size proforma for the referral process. It does however have a list of areas relating to the students' functioning that require open-end responses. This is a purposeful strategy, so referrals are not limited by a pre-determined allocated space, and more anecdotal comments are made, leading to better understanding of the students. Teachers confronted with forms having designated amounts of space tend to give more attention to the areas where there are bigger spaces rather than writing according to their perception of students' needs. Areas for comment in the referral process include:

- *Brief School History* (Clarke, 2004)

  Many students referred to the unit have attended multiple primary and sometimes secondary schools prior to their referral. This school history provides an understanding of a chronology of schools and problems which may have motivated the parents to change schools for a fresh start for their child either of their own accord or at the suggestion of the pervious school, or it is indicative of family mobility. Both of the above result in fractured learning and increase the chances of a student not being retained to complete year 12 (Appalachia Educational Laboratory, 2005). Regular mobility can also indicate that problems arising were not adequately addressed by the school and /or the parents. A history of repeating grades can indicate lack of maturity and other learning issues - the major reasons for repeating (Burkam, LoGerfo, Ready, & Lee, 2007; Cadieux, 2003).

- *Brief Academic Report* (Clarke, 2004)

  A student's performance is important when looking at the overall functioning of the student in school. Students who have inadequately developed academic skills may display aberrant behaviour due to frustration or as a way of covering their inadequacies. Alternatively, students who are academically competent may be indicating a lack of challenge or engagement with their current program. Performance also can indicate areas of positive participation in the program connected to a particular teacher or subject area and vice versa.

- *Student's favourite subjects / hobbies and areas of achievement* (Clarke, 2004)

  Teachers need to reflect on the positive aspects of each student and ascertain where they are experiencing success. This area was found to provide the least amount of information the review of the referrals to the Baltara Integration Unit. Such information provides the Baltara Integration Unit teachers a positive starting and incentive point for engaging students in their program.

- *Specific problems of students – reason for referral* (Clarke, 2004)

- *When is inappropriate behaviour most likely to be exhibited?* (Clarke, 2004)

- *When is inappropriate behaviour absent or less likely to occur?* (Clarke, 2004)

Teachers writing to these three criteria have the opportunity to reflect on the incidence or absence of inappropriate behaviours, and determine if a pattern of behaviour or set of circumstances becomes evident. Constructing patterns about the behaviour leads to gaining a better understanding of the student and the behaviour they exhibit. It also identifies and acknowledges any positive student - adult relationships that can be fostered to assist the students. This information gives a starting point for developing strategies which minimise situations which contribute to inappropriate behaviour and maximise the positive behaviour performance situations of the students.

- *Intervention strategies attempted and effects* (Clarke, 2004)

  The examination of what previous strategies worked or did not work provides further insight into the students' difficulties. Some strategies may have been used consistently with or without effect; others may have been successful for short periods of time or for one teacher only. This item also allows schools to reflect on the range of modifications that have been implemented to assist the students. The flexibility of the school to assist the student before referral also gives an indication of the likely support for the student during and after the program.

- *Specific aims for the Students Intervention Program at Baltara Integration Unit* (Clarke, 2004)

  Intervention programs at Baltara Integration Unit are short term and need to focus on aspects of student need that can be addressed in the time frame

163

of the program. The determination of the goals again requires the reflection of the referring teachers, about the greatest needs of the students to enable them to complete their education. Determining goals that can be achieved will contribute to the students' success during intervention and at their home school.

- *Other Relevant information – agencies involved; results of specific tests for example psychological test* (Clarke, 2004)

   Students who are referred to the Baltara Integration Unit often have needed individual or family support prior to referral. The Department of Human Services or a similar non-government agency may have been involved with the family for a variety of reasons. This information can indicate broader family issues which may be impacting on the students' exhibited behaviour, and a co-operative and coordinated approach may be necessary. The outcomes of any testing for which students have been referred are critical to adjustment of the intervention program to meet student attributes.

- *Behaviour Rating Scale.* (Clarke, 2004)

   The Behaviour Rating Scale form (see Figure 7-5 page 256) was revised in consultation with teaching staff at the Baltara Integration Unit drawing upon its previous developmental versions. It has been used to subjectively measure behaviour of the students on referral to the Baltara Integration Unit, and repeated after the intervention had occurred. Chapter 7 discusses the development and trial of the Behaviour Rating Scale. Comparisons

between the pre and post intervention ratings indicate behavioural changes that can be associated with the intervention. This quantifiable measure of behaviour change can demonstrate individual improvement and, when the data are collated, the collective improvement for students attending the Baltara Integration Unit.

5.4.3   Enrolment Procedure

The enrolment committee reads all referrals in the order received. There is critical examination of referrals, especially where the student has already attended some form of specialist intervention program. There is always a concern that schools serially refer the same student to a variety of specialist programs without developing the appropriate strategies and making the necessary adjustments to cater for students when they return to mainstream schools. In these cases the question is asked "will the Baltara Integration Unit (BIU) be able to offer the student a program that will build on previous interventions and produce more long lasting results?" If the BIU considers it can assist the student, then the enrolment is accepted. Some students do need multiple interventions and on-going home school support to make and sustain changes.

After a referral is discussed by the enrolment committee, one teacher from the BIU contacts the home school of the student to address any unanswered questions that arose in discussion about the referral, the needs of the student and how the program may cater for the student's needs. Once the additional information is

gathered and the committee agrees to process the referral, a BIU teacher visits the home school and meets the relevant staff and the student.

The student, his parent/s and a representative from the home school visit the Unit. At the visit the BIU Principal firstly explains to the student that they have been invited to attend the unit, their family and the school would like them to attend, but the choice is theirs. The choice to attend is the first step in assisting the students to take some responsibility for their own education and behaviour (Harper, 2007).

Following this, the principal attends to formalities – explaining the program logistics and content, rules and expectations of the family and of the home school. A tour of the program rooms follows which may or may not include one of the current students taking the student to see the playground areas and talking about the program in their way. The principal answers questions and then asks the student directly "Do you want to come here?" In the period during which I was principal, I did not receive one 'no' answer, although two (from 80+ students) wanted another day to "think about it" and assented later.

The starting date is as soon as possible after the visit, and not longer than 5 days afterwards. Once the enthusiasm of a student to participate in a new program is stimulated it is imperative that the program starts immediately. Experience at the unit indicated that the immediacy of the starting date after the visit was more successful than giving students time to reflect and worry about the next program.

5.4.4   Nexus between Home School and BIU

The program is promoted as comprising two interweaving parts, firstly, attendance at the off-site withdrawal unit where there is intensive intervention in a small group and secondly, home school attendance where the students maintain their connection to the local school and practice new behaviours in a larger community.

Teachers from the Baltara Integration Unit visit the student and teachers at the home school on a three week rotating basis to discuss with the appropriate staff members how the student is working on the days of attendance. This also provides an opportunity for informal professional development of the home school staff, with strategies that are working at Baltara Integration Unit being suggested for consideration. BIU staff also use the time to advocate on behalf of the students if there are changes which could be made in the schools to accommodate the students better and assist their participation in school programs. For example, Baltara staff have negotiated a change of time table so that a student has more favourite subjects and works more often with empathetic teachers, or they have suggested changes to the written expectations of students with literacy difficulties.

Sanctions imposed at one school are respected in the other school. If a student is given a two day suspension at one school, this is negotiated to be the next two days, regardless of which school the child is attending.

A home school was having difficulty with Johnny on the Wednesdays that Johnny returned. One Wednesday Johnny got into a fight at lunchtime. The consequence was Johnny being suspended for five days by the home school and since he only attended on Wednesdays Johnny would miss the next five Wednesdays. "Whew," said the home school "we do not have to see Johnny for five weeks".

"Oh oh" said the Baltara Integration Unit, "that means the home school is not participating in the program". The Baltara Integration Unit negotiated with the home school and the suspensions were to be served sequentially on the next five school days – four of which were at the Baltara Integration Unit. Johnny did not receive any more multiple days of suspension after that incident!

This scenario was the precursor to clarification of the co-operative expectations described in the paragraph above.

5.4.5   Baltara Integration Unit Program Logistics

The Baltara Integration Unit enrols students for an initial period of ten weeks and the student attends the BIU four days per week and their home school one day each week. Enrolment extensions of five weeks may be granted depending on the continuing co-operation of the student. Each extension offered coincides with an expectation of additional attendance time at the home school. The maximum period of attendance at the Baltara Integration Unit is 30 weeks.

A key teacher is appointed for every student enrolled at the BIU. The key teacher is responsible for all aspects of the student's enrolment period at the BIU. This includes preparing individual daily work for the student; monitoring daily performance through sessional evaluation; reporting performance and progress to weekly team meetings for discussion; secondary consultation with psychologists, report writing, visits to the home school, provision of informal professional development to the school as required; and initiation and coordination of review meetings.

Review meetings are held after the fourth and tenth week, and if the program continues, every five weeks thereafter. Meetings include the principal and key teacher from the Baltara Integration Unit, staff from the home school, representatives from any other agencies involved, the student's family, and ideally, the student. The student is included as part of the meeting, as the aim is for them to take responsibility for their own behaviour and educational learning so being involved in the meetings about them is highly desirable. Students have the opportunity to agree or disagree with what is said, or ask questions of the participating people. The student sits at the meeting table with a minimum of four adults. This is a daunting expectation for some students, and whilst they may be excused from the initial meetings, as the program progresses the expectation is fulfilled.

Baltara Integration Unit staff prepare a written report which includes general and academic comments as well as comments related to progress towards the goals of the program. The home school reports orally on student performance on the days

of attendance, and parents are invited to discuss changes in behaviour, both positive and negative, that have been seen at home. Changes to goals and attendance ratios are also discussed at these meetings.

As part of the symbolic philosophy of the program, the initial review meetings are held at the Baltara Integration Unit site. Then, once the student has been attending the mainstream school three days per week, meetings are held at the home school to symbolise the imminent full time return of the student, a shift in the responsibility of the two schools, and to shift thinking processes towards the closure of the BIU program and the long term engagement in the home school.

5.4.6   Baltara Integration Unit Teaching Program

Teachers at the Baltara Integration Unit have additional qualifications in either special education or student welfare. The teachers have an underlying philosophy of assisting students to develop different and more socially acceptable ways of dealing with their environment. The teachers exhibit aspects of Carl Rogers (1983) "facilitator of learner". Activities are provided so students can experience success; they get natural positive feedback from being successful and learn from their successes. Teachers use aspects of cognitive behaviourism. They allow students to negotiate the order of work, food choices for cooking, models for woodwork and activities for sport to facilitate decision making development and taking responsibility for their own learning within approved limits.

Students are constantly reminded that they have choices in the mode of Glasser's Choice Theory (1997). Sometimes they make better choices than others. Students, after they have calmed down from a poor choice of behaviour, may have a de-briefing consultation with the principal and key teacher, depending on the level of behaviour. Students are asked to explain the incident and respond to staff when they are asked questions such as "was that a good choice?", "what else could you have done?" and "what are you going to do if this happens again?" The next step in the consultation is if the student needs to 'make peace' with someone in the school community. This may be a simple apology (with a promise not to do it again) to a teacher or student, or if property damage occurred a contribution to restoring the damage if appropriate. Teachers often consider their best and most productive work was completed as part of a de-briefing conference. This allowed them to engage the student about a specific behaviour, consider the consequences of the behaviour, and develop a plan for the next time a similar incident occurred. Future planning for the student was a vital tool in their developing a repertoire of appropriate responses to use.

Family involvement is also important in the behavioural development of the students. Parents support the Baltara Integration Unit (BIU) by agreeing to collect the students early if they are having a particularly bad day and staff intervention is not being successful in re-directing and engaging them. This often prevents students doing something that may embarrass them on their return when they are calm, or require even more relationship re-building on their return. Suspension from the BIU program is considered by staff and students to be a very serious occurrence and used rarely. Students who have physically assaulted a staff

member incur an automatic suspension of usually one day. Suspension is usually reserved for physical and injurious assaults on other students after the students have been allowed to present their case, and staff from the unit consulted and a consensus made to suspend. Parents are invited to post suspension conferences with the principal, student and key teacher to discuss the seriousness of the incident and be part of the 'making peace''' or repairing of relationships within BIU.

The BIU philosophy and strategic operations are explained to parents prior to student enrolment. Parents are also made aware of the structure of the daily teaching program which incorporates the main curriculum areas of all schools. The daily program has been designed to give students maximum opportunity for success. Recess time (20 minutes) and lunch time (30 minutes) are fully supervised and structured with teachers participating in or leading the games selected by students. Times are limited to minimise unstructured activity by the students. The day is divided into three major sessions.

The first session allows thirty minutes of social games time where students can participate in recreation games such as table tennis, billiards and pool, and board or card games with other students or staff. Apart from informal social interaction between teachers and students and students with each other, the major goals of this activity are to model and practise turn taking, following game rules and appropriate responses towards winning and losing. As students come from a wide geographic area and may need more than one form of public transport to travel to school, the social session also caters for staggered times of student arrivals.

The more formal part of the first session is approximately 70 minutes of literacy and numeracy activities. Students are giving individual work activities at their current level of functioning, and an amount of work that with diligent application can easily be completed within the time frame. The students can choose to do their work in any order. Teachers teach and revise new topics as required with each student and support them in completing set work. Students who satisfactorily complete their work prior to the end of the period are given incentives such as access to an educational computer game.

The second session is social group activities. Generally, round table discussions about health issues and social skills, or practical group work in science and physical education, provide the catalysts for working together and developing interpersonal skills as well as enhancing knowledge of a subject area.

The third session after lunch is a practical session with cooking, art, woodwork or outdoor education activities, planned on a weekly basis. These afternoon sessions are designed for students with more practical interests. These activities provide opportunity for individual tasks in cooking, woodwork and art, as well as group socialisation within the activity time in outdoor education where, for example, bike riding is an individual task within the group dynamic of riding to a destination together.

The three sessions are planned so that individual activities occur at the beginning of the day, group activities when attention is increasing, and the practical sessions after lunch. This is in keeping with research on student alertness which contends

that "performance improves between the beginning and end of the morning, deteriorates during the mid-day recess (postprandial slump), and then improves again, to a greater or lesser extent, in the course of the afternoon (Janvier & Testu, 2007, p. 329) As students finish school at 2.45 p.m. the last afternoon improvement is not within the school day.

5.4.7 Reporting Progress

Students who attend the Baltara Integration Unit have initially had one form of assessment including written reports detailing the students' performance. Every five weeks these are presented to a student review meeting of Baltara's principal and student's key teacher, the student, parents, one or more representatives from the home school and any other agency which may be involved. Feedback about the students' performances at home and from the referring schools after the students had begun the program are also discussed. The reports have a general section but focus is on the progress being made on each of the objectives set for the student as goal/s for their intervention program. Objectives which are overarching or not measurable in some way make it difficult to report on the effectiveness of the program. Consequently, the objectives are couched in reportable terms.

This research introduced two additional forms of assessment as part of the program. Firstly, the development and trialing of the sessional evaluation measure (SEM) tracked students over the period of their enrolment. This was devised so that daily performance was assessed quantifiably in each of the three sections of

the day and in three categories – period of participation during the session, behaviour during the session and task completion. These performance ratings indicate patterns in performance both within the week and from week to week. Ratings were averaged on a weekly basis to gain a long term view of an individual student's performance and collated to determine if there were collected patterns of performance over the period of the intervention period. Key teachers completed the SEM for each student at Baltara.

Secondly, the development and trialing of the Behaviour Rating Scale prior to mainstream validation introduced a pre and post intervention measure which was completed by referring teachers. Students were rated by their referring teachers using the Behaviour Rating Scale described in Chapter 7, Figure 7-4. This generic tool covers a range of behaviours that contribute to experiencing success at school. The Behaviour Rating Scale was then repeated at the end of the program by the same teacher (if possible) who referred the student. A change in rating indicated the effect of the Baltara Integration Unit program. A higher rating on the repeat Behaviour Rating Scale indicated a positive behaviour change which is the aim of the intervention. The measure was used to examine the rating of an individual student or a cohort of students. Since validation of the measure, the revised Behaviour Rating Scale has been used.

5.4.8   Sessional Evaluation Measure and Daily Performance
Development

In consultation with the school staff I developed a strategy to measure student performance through participation, behaviour and task completion. A sessional reporting process for student achievement was developed, and the average performance level considered indicative of the success of students in each of the Baltara School campuses in particular the Baltara Integration Unit.

Differentiation between the measures is not always obvious, but in simple terms participation concerns the level of engagement of the student in the lesson or activity; behaviour is the way students act, for example quietly working, or being loud and abusive, disturbing other students; and the task completion is application to the lesson tasks. It should be noted that the major goals of programs within the schools are for individual, success-based learning; consequently, all tasks set for the students are within each student's capacity to complete.

Participation:

Students are rated at the end of each session on the percentage of time they participate in the session. Session times were approximately one and one quarter hours but would consist of a varying number of activities depending on the theme or subject area. This measurement is about their engagement in the program. Students are considered to be participating if they listen to instructions, ask questions, share opinions and information in discussions and actively engage in the activity.

Table 5-1 provides the rating numbers corresponding with the percentage of time students are actively participating in the lesson.

Table 5-1 Participation Rating Key

Rating	Participation -being actively part of the lesson
5	80%- All of the time
4	Up to 80% of the time
3	Up to 60% of the time
2	Up to 40 % of the time
1	20% or less of the time

After trying a number of different ways to assess participation and knowledge of students with behavioural difficulties, using percentage of the lesson time became the most appropriate and useful. Often students can work well for most of the lesson and in the latter stages lose their focus, and become tired or bored with the activity. There needs to be acknowledgement of the successful part of their engagement in the task. Other students may be reluctant to begin an activity at the start of a lesson but eventually join in and become absorbed in the task. Again, there needs to be acknowledgement for the successful part of the lesson.

It is not unusual for a mainstream teacher, when asked about the progress of a student who has been part of an intervention program, to comment that the student is "still getting thrown out of class!" Further questioning of the teacher often reveals that prior to intervention the student was excluded from the lesson in the first few minutes, whereas after intervention it is usually towards the end of the lesson. This is an improvement that is not being acknowledged in some cases by the teacher. Using the participation scale above alerts the user to be more strategic and insightful in their thinking about the student's participation.

Behaviour:

Student Behaviour can vary throughout a teaching session. Similar to the description of participation above, it is important to give each student maximum credit for appropriate behaviour so that the work in a session is not discounted by a short outburst in the last few minutes. The focus in this section is mainly on appropriate classroom behaviours. A student may not participate in an activity but may still be polite, sit quietly and allow other students to work. Table 5-2 indicates the rating for the behaviours.

Table 5-2 Student Behaviour Rating Key

Rating	Student Behaviour
5	Appropriate -all **the time**
4	Appropriate **-** most **of the time**
3	Difficult **but** manageable some **of the time**
2	Difficult - excluded some of the time
1	Uncooperative - excluded most of the time

Students who are excluded for some of the time are given the opportunity to negotiate their way back into the classroom. If the behaviour that caused the exclusion has settled, the student may be re-admitted to class with an expectation to control their behaviour as the basis for assessment at rating 2. Exclusion continues until the student is able to re-present in an appropriate manner.

Task Completion:

Students who are referred to the Baltara Integration Unit regularly have difficulty completing tasks and need constant assistance. This could be one of the difficulties the students are experiencing in their mainstream schools. Often, if

students need assistance they are reluctant to request help, and lack of engagement can provide the opportunity for inappropriate classroom behaviour. As students are supported in task completion they gain confidence in their abilities and the level of constant assistance decreases. Table 5-3 shows the gradation in the rating scores.

Table 5-3 Task Completion Rating Key

Rating	Task Completion
5	**All –** Independently
4	**All -** Semi Independently
3	**All -** with assistance
2	Partial Completion
1	Non Completion

The BIU has a high staff to student ratio, almost one to one in the academic sessions, which allows the students to have consistent assistance throughout the sessions. Students in the first weeks of their intervention need more constant supervision, but as student settle in the program and respond to the expectation they need less supervision and assistance. The ultimate goal is for students to complete their work independently. The students' ability to stay on task without constant support enhances their capacity to work successfully within a mainstream classroom.

Cumulative Individual Daily Performance Data Recording and Analysis

Recording the daily performance of students in participation, behaviour and task completion was detailed on each student's weekly program planning sheet. Teachers prepared a program of work activities related to each student's needs and goals for the week. The recording sheet was in the form of a daily timetable

with three sessions per day as show in Figure 5-1. Within the space allocated for each session, three separate boxes incorporate a rating in participation, behaviour, and task completion. The rating key was written on the bottom of the sheet as a reminder and to maintain consistency for teacher rating. Teachers complete ratings on the students at the conclusion of each completed session

Teachers are able to scan performance data on the student weekly program sheets and determine what patterns of performance have emerged during the week, and adjustments are made to accommodate them. One example would be whether the student had difficulty in task completion during the first session each day. Here the teacher firstly considers the work that was expected of the student during that session. If it is appropriate in content and volume, then the teacher considers the physical and emotional state of the student, for example the student may have been tired each morning. When fatigue is the case it is likely that participation and behaviour ratings are lower also. Alternatively, the teacher may consider whether the work was too difficult and / or more instruction / teaching is required for the student to complete the tasks.

Collating the data for periods longer than a week necessitates the information being transcribed onto a Microsoft Excel worksheet as shown in Categories of Aggressive Baltara behaviours, Figure 5-2. Raw data and weekly averages can also be inspected to determine patterns. The performance of each student may be graphed to show performance in each of the three areas, or together to show changes over time.

	Student Weekly Program				

Student Weekly Program

Student: **Weeks in Program**

Date Week Beginning Monday … … … … … …

	Monday	Tuesday	Wednesday	Thursday	Friday
Session 1			*Students attend their home school.*		
	P B T	P B T		P B T	P B T
Session 2			*Baltara Integration Unit teachers to visit home school of student on a 3-4 week cycle*		
	P B T	P B T		P B T	P B T
Session 3					
	P B T	P B T		P B T	P B T

Rating	Participation -actively part of the lesson	Rating	Student Behaviour	Rating	Task Completion
5	80% - All of the time	5	Appropriate - all the time	5	All - Independently
4	Up to 80% of the time	4	Appropriate - most of the time	4	All - Semi Independently
3	Up to 60% of the time	3	Difficult but manageable some of the time	3	All - with assistance
2	Up to 40 % of the time	2	Difficult - excluded some of the time	2	Partial Completion
1	20% or less of the time	1	Uncooperative - excluded most of the time	1	Non Completion

Figure 5-1 Student Weekly Program

181

Student weekly performance data

Student	Wk 1						Wk 2						Wk 3						
	M	T	W	T	F	Av	M	T	W	T	F	Av	M	T	W	T	F	Av	M
Participation																			
S1	4	4		4	4	**4**	4	4		4	3	**3.8**	3	4		4	4	**3.8**	
S2	3	3		3	3	**3**	3	3		3	2	**2.8**	3	4		4	4	**3.8**	
S3	2	2		2	2	**2**	3	2		3	3	**2.8**	3	1		3	3	**2.5**	
Average						**3**						**3.1**						**3.3**	
Student Behaviour																			
S1	3	3		3	3	**3**	3	3		3	2	**2.8**	3	3		4	4	**3.5**	
S2	2	3		2	3	**2.5**	3	3		3	2	**2.8**	3	3		3	4	**3.3**	
S3	4	1		4	3	**3**	4	1		4	3	**3**	4	1		4	4	**3.3**	
Average						**2.8**						**2.8**						**3.3**	
Task Completion																			
S1	2	3		3	3	**2.8**	3	3		3	2	**3**	2	3		3	3	**2.8**	
S2	2	3		3	3	**2.8**	2	2		3	3	**2.5**	2	3		3	3	**2.8**	
S3	3	1		3	3	**3**	3	1		3	3	**2.5**	4	1		3	3	**2.8**	
Average						**2.8**						**2.7**						**2.8**	

Figure 5-2 Data Chart for Student Performance

Teachers are able to observe if there is a particular session in the day that is difficult for a student. In the data above (Figure 5-2), week 1 participation scores are lower in session 3 which shows that the student has had difficulty in the last session of the day. This could be because the student is tired by the afternoon - or as the afternoon activities are all practical 'hands on' the student may have difficulty with activities involving manual dexterity. The participation increases in the third session of the following weeks which could be because the student is now comfortable in those sessions. Participation, Student Behaviour and Task Completion data show that the student has difficulty on Tuesday afternoon. This is the same subject area each week, cooking. Here, staff would examine if the student needs more assistance with cooking, or if there a problem with the student and teacher relationship. In both cases, staff would discuss Tuesday afternoon activities and develop strategies to make it more successful for the student.

Data Analysis

The daily performance data is valuable in examining the patterns and change of performance of each student. It also has a function to determine patterns of and changes in, performance of a cohort of students. The combined data from a number of students is collated and graphs generated.

Collating the weekly performance data of students is a considered process. There is no common starting date for groups of students, that is they do not all begin at the beginning of a term or a year. New students are enrolled continuously throughout the year, as one student completes their program a new student is enrolled. Consequently, students are not at the same stage of their intervention program at the same time. The group dynamics are continually evolving.

Student data are recorded so that the performance ratings for week one for each student, is aligned with week one of all other students, without regard to the date of the first week. Student A's first week may be in April and student B's first week may be in July, but their first days /weeks are collated together. This allows for observations of time in program patterns in the data. Performance of the students was graphed for the enrolment periods. All students have data recorded for the first week, but data for the 30th week involved fewer students as many leave the program prior to the maximum 30 weeks. The collected data will be discussed in detail in Chapter 8.

This chapter explored the history and development of the Baltara Integration Unit. It explored the philosophy and practices that had their origins in the Baltara School prior to the Children and Young Person's Act. The evolution of Baltara Integration Unit (BIU) led to clearer expectations of referring schools and the need for quantifiable assessment procedures which were developed as part of this research and which will be discussed in chapter 7.

Chapter 6 Identification and Intervention Processes

for Students Exhibiting Behavioural

Difficulties at Baltara Integration Unit

This chapter outlines research issues relating to the Special Education field including data continuity. It also provides a systematic approach to the research process in my study. It identifies Baltara Integration Unit (BIU) as the case study of my research. Anecdotal evidence gathered whilst working at the BIU indicated that that program was successful but quantifiable data was necessary for accountability and to report success collectively about the student cohort rather than as individuals.

The major concern raised in Chapter 3, Education for All: Relevant economic and social outcomes, is that many students do not complete secondary education. Some students passively leave, some are encouraged to leave, and others are actively excluded from education due to schools being unable to entice and engage the students, or provide the expertise, resources, facilities or at times commitment, to cater for their students' needs. Students with intellectual and physical disabilities have progressively and successfully been included in mainstream and specialist education facilities, whilst students with social, emotional and behavioural difficulties and needs still form an identifiable group of students excluded from schools, including from some schools that have excellent provision for students with other disabilities.

The retention concern leads to a major theme of this thesis - an examination of intervention activities at an off-site intervention facility, away from the students' regular schools to assist those with social, emotional and behavioural needs to maintain and improve their participation in education. In particular, this thesis examines data collected from one intervention unit, Baltara Integration Unit, which has now been operating and evolving for approximately fifteen years. The outcome of this examination is the development of a teacher led model of intervention for students with social, emotional and behavioural needs who are still connected with the Victorian education system.

The other major concern raised earlier is the lack of a quantifiable measuring tool to assess the effectiveness of intervention programs. Many intervention programs are very successful according to supporting anecdotal evidence, however such evidence is based on the outcomes for individuals, and is important to, and valued by both parents and teachers. However, the individual evidence is not readily converted to group outcomes and evaluation of programs required by government and other funding bodies. The previous chapter cited the USA Congress legislation which required the USA Department of Education to devise and gather quantifiable data about intervention programs funded under the No Child Left Behind (NCLB) Act (U.S. Congress, 2002), and is indicative of increasing accountability expectations globally. This accountability concern introduces the other major goal of this thesis, which is the development of an appropriate, quantifiable measuring instrument that to determine improved individual outcomes subsequent to an intervention program that is aimed towards successful participation in schools. The instrument could generate data, available to teachers

and parents for observing quantifiable as well as anecdotal changes in individual students. Further, data about individual students can be collated to provide group information and be used as a measure of effectiveness of the intervention program.

This research is based on a study of the Baltara Integration Unit which is one campus of Baltara School for students with social, emotional and behavioural difficulties. The Baltara Integration Unit is described in detail in Chapter 5, A Case Study of Intervention: History and Metamorphosis of the Baltara Integration Unit. The research includes both the qualitative and qualitative investigations as discussed below.

6.1   Research in Special Education Fields

Sabornie (2006) suggests that qualitative research in situations with students with high incidence disabilities, including those with emotional and behavioural disabilities, allows a researcher to present a broader picture and awareness of students who are 'exceptional'. He also considers that the role of participant observer (ethnographer) is appropriate to gain an understanding of the context of the research ("understanding the group from the inside" (p. 4)) and can provide greater "potency" to the findings. My participation within the Baltara Integration Unit clearly situates me as an ethnographer in the major aspects of this thesis.

Qualitative methods used included aspects of grounded theory and case study research which involve examining and categorising historical data. It includes

personal interviews (undertaken by a third person) with a limited number of parents and teachers coinciding with Sabornie's view that "researcher and participant observations, interviews of individuals involved with a phenomenon, and archival record examinations are all characteristics of the methodology of case study qualitative research" (2006, p. 6).

In Sabornie's examination of research surrounding Behavioural and Emotional Disabilities (BED), he has noted that "the available published studies have also not focused on successful school- or community-based interventions" (2006, p. 12). He recommends that additional research in successful interventions be undertaken, and that knowledge gained from the selected special education context be generalised into interventions in a larger population. Cole, Daniels and Visser (2003) suggest that "the vagueness and incompleteness of available national and local data" (p. 187) combined with inconsistent "definitions of EBD, disaffection, disruption, ADHD and other terms" (p. 195) contribute to limited research, tracking of trends and collecting data about program for students with EBD. The examination conducted in this thesis will contribute to school-based intervention research in the BED field, and provide guidance to interventions in other contexts.

Students within the special education field have a raft of individual needs, and in this context, teachers and researchers are concerned with individual outcomes of specific targeted interventions and according to Scruggs et al. (2006), the "development of practical procedures that can be applied in a variety of real-world contexts" (p. 34). They consider single subject research as appropriate in special

education, and that knowledge gained is applicable to broader student groupings. They discuss the usefulness of visual analysis of graphical data to depict one specific, or combination of behaviours over time, between and after phases of intervention. Positive results may support continuation of interventions being implemented, whilst negative results require detailed analysis before interventions are revised. Scruggs et al. raise concerns about relying solely on the visual data, and suggest where changes in data are small or the magnitude of change is important, that supplementation with statistical information may produce a more reliable basis for analysis and evaluation.

Concern is raised by Conroy and Stichter (2006), that since the No Child Left Behind (NCLB) Act mandated evidence-based practice, the Institute for Educational Science (IES) has been grading research resulting in the highest 'gold' standard is being given to "randomized clinical trials (RCT)" (p. 133) with large number of participants. A 'silver' standard is given for quasi – experimental studies, and 'bronze' standard for supplemental research including qualitative and single subject design. In a review of Peer Assisted Learning (PALS) research, the IES excluded a number of studies which did not meet its rating standards, and "the majority of the studies discarded were the single–subject or small group studies by the founders and initial researchers in this [PALS] area" (p. 133). This indicates that research in special education, which by its very nature has smaller numbers of participants, will have difficulty meeting the criteria for quality research according to the current IES definitions. This does not necessarily devalue the research but challenges the limitations of definitions of quality research. Conroy and Stichter contend that, as advocates for students with

behavioural difficulties (BD), researchers need to continue to explore research methodologies that assist in determining effective practices.

Conroy and Stichter (2006) explored two current approaches in behavioural intervention research. The first method "stresses precise measurement of the dependent variable and visual analysis to determine functional relationships" (p. 135) and focuses on individuals or small groups of children. It is a more clinical approach with "antecedent-based interventions" from an Applied Behavioural Analysis (ABA) perspective. This can be limited in terms of "external validity through replication and social validity" (p. 136).

The second approach has a broader perspective. It is most likely to examine "the classroom or school as the unit of analysis, using indirect measures (for example discipline referrals, behaviour rating scales) and group design methodology. One strength of these studies is their ability to demonstrate the potential impact of the interventions across a large number of participants in applied settings; thus emphasizing the social validity and potential for multiple replications of the intervention" (Conroy & Stichter, 2006, p. 136). Conroy and Stichter suggested that research in positive behaviour programs, social skills groups and anti-bullying interventions fits this second approach, which is consistent with this thesis.

6.1.1   Data Continuity

Enders et el (2006) raised the issue that special education researchers experience on-going difficulties with missing data caused by attrition rates, inconsistency in longitudinal data collection, mobility of students, and families. They reported that the dropout rate for special education students may be as high as double the general population. The mobility of families with students with social, emotional and behavioural difficulties make collecting data difficult.

Baltara Integration Unit, after approximately four years of operation, attempted to collect post intervention data on students who exited the program more than one year previously. Letters were sent by the principal to parents or guardians of former students requesting them to assist the school improve its program by completing a written questionnaire about the student since he/she had left the Baltara Integration Unit. The letter informed parents that a follow-up phone call would be made by an independent researcher (pre-service teacher completing a research project at RMIT university) who would complete the questionnaire with the parents by phone if they preferred. The phone call was an attempt to support some of the less literate parents who would have difficulty completing a written questionnaire, and to increase the amount of data collected. Forty five letters were distributed, two were returned (family unknown at that address), and forty-three phone calls were made (with follow ups if engaged). However, some phone numbers were no longer operational, and others no longer belonged to the former students' families. Contact was eventually made with a total of seven families and only one was prepared to answer the questionnaire. The low contact rate

191

illustrates the high mobility of the families and students, and the difficulty in completing long term research.

In all areas of quantitative and qualitative research there is the likelihood of missing values in data collection (Acock, 2005; De Leeuw, 2001; Dodeen, 2003; Molenberghs, 2007; Musil, Warner, Yobas, & Jones, 2002; Raaijmakers, 1999; Wainer, Bradlow, & Wang, 2007). There are various reasons why data are missing.

There are various factors which affect the accumulation of missing values including initial design of the survey or questionnaire, the mode of delivery of the survey and the assumed types of and reasons for missing data and finally the way of dealing with missing values in the data set.

The major ways of data collection include "the self-administered questionnaire, the face-to-face interview, and the telephone interview" (De Leeuw, 2001, p. 152). De Leeuw suggested that the mode of questionnaire delivery has an effect on the presence and type of missing values. There are fewer missing variables in telephone and face-to-face interviews than in mail questionnaires, as the interviewer has the option to immediately repeat or rephrase questions missed by mistake. However, questions which are sensitive have fewer missing values in mail surveys. Experienced interviewers tend to have fewer missing values than do new interviewers, and computer assisted questionnaires have better response rates than pen and paper options. In the present study, pen and paper and return by mail / email options were used for collecting data on the Behaviour Rating Scale.

De Leeuw determined that there are five tasks in answering questions: understanding the question; recalling relevant information; in behavioural questionnaires recalling specific instances; making a judgement and expressing the judgment within the format of the questionnaire; and giving or editing the responses. If there is a problem at any stage the respondent may not be able to answer and a missing response (value) occurs. This indicates that what may seem a simple question requiring a simple response may not be so simple.

Raaijmakers (1999) contends that Likert-type scales (such as the one used in this thesis) are particularly prone to missing values. These scales usually measure concepts that incorporate a set of similar or allied variables, which when totalled, give a score for the concept.

There are three recognised types of missing values: (a) Missing Completely At Random (MCAR) which is recognised as missing or skipped by mistake and is unrelated to the actual question; (b) Missing At Random (MAR) where the answer is missing because the responder cannot think of or remember an appropriate answer or has incomplete information, and (c) Missing Not At Random (MNAR) where the responder deliberately chooses not to answer a question (De Leeuw, 2001; Donders, van der Heijden, Stijnen, & Moons, 2006; Hair, Black, Babin, Anderson, & Tatham, 2006; Molenberghs, 2007; Musil, et al., 2002; van der Heijden, T. Donders, Stijnen, & Moons, 2006). MNAR values are often defined as Non-Ignorable missing values (NI) as they incorporate non-random and systematic factors which can bias determinations (Acock, 2005; Huisman, 2000; Musil, et al., 2002).

6.1.2 Resolving Continuity Issues and Maintaining Data Integrity

Missing data in individual questionnaires, particularly where there is a small sample size, can leave a researcher with the dilemma of excluding whole questionnaires or finding an acceptable way to impute missing values. There are two approaches to excluding data. The first is known as complete case approach or listwise method, in which all cases with missing data are excluded. Pairwise deletion is when cases are excluded only if they have missing data in a particular set of calculations. These methods are suitable for MAR and MCAR only. Excluding case data reduces the size of the sample and the degrees of freedom, loses statistical power, and omits valuable data particularly in small population surveys (Dodeen, 2003; Enders, et al., 2006; Hair, et al., 2006; Molenberghs, 2007; Raaijmakers, 1999).

Raaijmakers (1999) states that missing data needs to be replaced, as in Likert scales, the score on each variable is necessary to complete a scale. He further suggest that the differences between results, when various substitution options were used, decrease with "(a) larger sample size, (b) a smaller percentage of missing values, (c) fewer missing variables, and (d) a decrease in the level of the correlations between the variables" (p. 728)

Imputing data where estimates of the missing values are inserted into the data is an alternative way of dealing with the problem. There are three main approaches to imputation. Mean substitution, Single Imputation (SI) based on Expectation Maximisation (EM) and Multiple Imputation (MI) "allows pooling of the

parameter estimates to obtain an improved parameter estimate" (Acock, 2005, p. 1019).

Valid Mean Substitution (VMS) uses the mean of the responses in a scale or sub scale of a particular case to replace the missing values in that case. It can be used effectively in Likert–type data as each variable is part of a scale or sub scale measuring various aspects of an attitude or similar concept and each variable has approximately the same weighting (not increasing in complexity) (Dodeen, 2003). Mean substitution has two forms, the first where the mean of every case is included to produce the value, and the second in which the mean of the case is calculated.

Van der Heijden et al. (2006) evaluated a number of ways of examining the same set of clinical data. The outcomes and implications using the complete case approach – excluding all cases with missing data – were significantly different from approaches which used a form of missing value substitution. They consider that this finding had broader outcomes, and that studies published using complete case approach, if re-analysed using either Single Imputation (SI) or Multiple Imputation (MI), may produce different inferences.

Hair (2006) examined the advantages and disadvantages of imputation techniques for missing data, and the most suitable scenarios for their use. He suggests that for relatively low levels of missing data and where there are strong relationships among the variables, mean substitution is suitable - even though it can reduce the variance of the distribution and can depress observed correlations. Hair then suggests using his 'rule of thumb' in which if there is less than 10 % of the data

missing, any imputation method can be applied because of the low level of missing data, "although the complete case method has been shown to be least preferred" (p. 64). Consequently, in the data analysis in this thesis imputation is used to substitute for missing values in the appropriate sections of data.

6.1.3   Approaches to Research

This thesis is also in the style of summative research which is "rendering an overall judgment about the effectiveness of a program" (Patton, 1990, p. 155), or "conducting evaluations of applied procedures in natural settings" (Graziano & Raulin, 2000, p. 121). Further, the aim of the research in determining the effectiveness of intervention programs "has the potential of being generalizable to other situations" (Patton, 1990, p. 155). Therefore, determination of the methodology in this study also relied on the qualitative research work of Patton (1990) and Graziano and Raulin (2000). The data collected are qualitative in nature but the analysis quantifies the results.

A number of interconnected themes identified by Patton (1990, p. 40) run through the inquiry strategy. Much of the work can be viewed as naturalistic inquiry, as the aim of this thesis is to evaluate what exists - not to change it. However, the Baltara Integration Unit is a dynamic entity that makes its own adjustments as needs arise. The thesis includes inductive analysis, which is based upon the data collected, with outcomes open-ended "without being limited to stated, pre-determined goals" (Patton, 1987, p. 15). A qualitative-naturalistic approach is also

employed as data are collected through interviews of staff to compile a model of an effective program.

6.2 Research Hypothesis

The hypothesis for this research is that:

> Off-site intervention programs for students with social, emotional and behavioural needs are effective in maintaining the students' connection to the education system and increasing their levels of participation in schools.

This hypothesis implies that:

(a) The effectiveness of intervention programs <u>can be measured</u> in quantifiable terms;

(b) <u>Effectiveness</u> of a program is <u>based on the improved behavioural</u> performance of the students; and

(c) An <u>effective and reliable measure</u> of behaviour change in a school setting is available or can be developed.

6.3 Research Design

There are two discrete aspects of the research. Firstly, there is the case study investigation of the Baltara Integration Unit (Baltara Integration Unit). The second aspect is the development of a tool or instrument for the measurement of behaviour change in students.

6.4 Ethical Considerations and Issues

There are two aspects to ethical considerations in this thesis. Firstly, there are the regular safeguards for any research where people are asked to complete forms or be interviewed. Secondly, the position of authority I held within the Baltara Integration Unit necessitated further considerations when staff and parents of students were to be interviewed.

Applications were made to, and permission received from, the Arts, Education and Human Development Faculty Ethics Committee at Victoria University for "Approval of a Project Involving Human Participants" to collect historic data and invite teachers from other schools to participate in the validation of a Behaviour Rating Scale.

My position of authority was of concern to the ethics committee who put strict limitations on the data collected. The application and approval to conduct interviews with teachers at the Baltara Integration Unit and parents of students who had completed a program at the Baltara Integration Unit was conditional on the interviews being conducted by someone external to the school and the data transcribed anonymously so comments or criticism could not be attributed to a particular person. This maintained the anonymity of the staff and ensured I could not use my position to influence, harass or sanction staff or parents for their opinions. All logistics and negotiations in regard to interviews were the responsibility of the person enlisted to conduct the interviews. The interviewer needed to negotiate with the assistant principal of the Baltara School (and the Integration Unit) to locate suitable parents from a small range of eligible parents

who were willing and logistically able to participate in an interview. As indicated in the earlier anecdote, mobility of families and willingness to participate after the intervention combined with the small number of potential interviewees, severely limited the range of parents to be interviewed.

The selected interviewers' background was as a teacher and social worker. She was chosen for her understanding of the student group since she had knowledge of the Baltara Integration Unit through visiting the unit on a number of occasions to supervise a university student who was on placement at the unit. The base questions asked of the interviewees were prearranged and approved. However, the follow-up questions were at the discretion of the interviewer. The data were transcribed by a typist at the university, and original recordings held in care by the university. Despite the best efforts of the typist there were gaps in the transcripts, where passages of dialogue were not transcribed due to technical difficulties such as soft or inaudible voices and lack of familiarity with the subject matter. This restricted her guessing the missing words through the context of the dialogue. During the typist's absence two interview recordings were mislaid within the university prior to transcription, and therefore unable to be used in the data analysis. Two subsequent parent interviews were conducted by another interviewer who had previously taught at Baltara School.

Ethics approval was also sought and received from the Department of Education and Training, Victoria, to conduct research in the state education system. In the Northern Metropolitan Education Region, where most of the research was taking place, the Regional Manager was informed and was supportive of the project.

Finally, the Baltara School Council was informed and fully supported the project, granting permission to use the school data and school facilities for conducting interviews when convenient.

6.5   *Case Study of Baltara Integration Unit*

The background for this thesis is a case study of Baltara Integration Unit (BIU) which is explored in Chapter 5. The chapter includes the rationale for developing the BIU, criteria for enrolment, overview of the program, and the operational guidelines which evolved in response to situations which contradicted the goals of the unit for the individual students, and improved the operations of the unit.

Archival research involves using existing data which is not collected specifically for the case study (Cozby, 2007; Graziano & Raulin, 2000). The analysis of student records and files available in the Baltara Integration Unit was archival research undertaken to determine range of demographics, student profiles, the length of individual student's intervention programs, objectives set, and recurring themes of significance.

Student files included referral letters to the Baltara Integration Unit written under the requested headings, additional supporting documentation of individual behaviour diaries, psychologists' reports (if available), and five-weekly written progress reports during student's enrolment at Baltara Integration Unit.

6.5.1   Characteristics / Behaviours of the Student Cohort

The students enrolled at Baltara Integration Unit are referred by their mainstream schools due to their social, emotional and behavioural needs not being met sufficiently to maintain proactive and productive participation in their schools. An analysis of student referral documents was undertaken to determine the range of exhibited behaviours that had reduced the students' capacities to effectively participate in mainstream education. The results of this archival research are documented in Wickman's categories Graph 2-4 (p.30 of this thesis) and contrasted with other researchers about student behaviours that cause concern to teachers. The cohort of students referred to and enrolled at the Baltara Integration Unit over an eight year period included 39 primary and 42 secondary school aged students. Students' ages were ten years (11 students); eleven years (21), twelve years (13) thirteen years (22), fourteen years (12), fifteen years (1) and sixteen years (1) at the beginning of their enrolment. All students were male. The Baltara Integration Unit accepts both male and female students, and prior to the period of records examination there were some female students who attended the Baltara Integration Unit. However, female student referrals to the Baltara Integration Unit are sparse – possibly only one per year, despite being advertised as a co-educational unit – and the Baltara Integration Unit policy of a minimum of two female students to provide some gender balance within the cohort of seven students at any one time was not achieved during the period of the records' search.

The student files were examined to determine the exhibited behaviours which caused concerns in schools. Behaviours were extracted from the section entitled

specific problems of students – reason for referral and also *brief school history* (Clarke, 2004). Inappropriate behaviours were often described in the school history but not reported in the 'reason for referral' section, which is why both criteria were used. Behaviours were recorded in the words teachers used in the referrals. Initially, 114 different behaviours were recorded. Some teachers listed behaviours which were similar, but the wording of the teachers held subtle nuances and differences. One example is the student whom the teacher described as "distractible" (easily distracted). However, this behaviour is different to the wording "distractible behaviours", which means that the student distracts other. The behaviour list was twice reduced until 36 behaviour groups evolved. Consultation with two Baltara Integration Unit colleagues (teacher and consulting psychologist) ensured that groupings incorporated the nuances as well as the wording of the listed behaviours. These behaviour groups were compared with the behaviour groupings of Wickman and Wheldall and Merrett and then categorised using Achenbach's (Achenbach & McConaughy, 1997) behavioural categories - as per the description in Chapter 2, Identification and Teacher Perceptions of Difficult Classroom Behaviour.

The records were further examined to determine the objectives set by the home schools in relation to the students' attendance at the Baltara Integration Unit. The objectives were also analysed and strategically aligned with Achenbach's behavioural categories. Details of this analysis are in Chapter 9.

6.5.2 Staff and Parent Interviews

Baltara School had and continues to have a stable staff. Three teachers from Baltara Integration Unit were interviewed. One of the teachers interviewed had been at the school approximately twenty years and twelve years at the Baltara Integration Unit; another teacher had approximately twelve years in the field with three at Baltara Integration Unit, and the third had approximately eight years in the field and four at the Baltara Integration Unit. Two parents of students who had attended the Baltara Integration Unit and completed the program were interviewed. Teacher interviews were conducted on the school site at times when I was not on-site. Parent interviews were conducted at convenient places and times for parents.

The goal of the interviews was to determine the strengths of the program in the perception of the teachers and parents and to offer areas for improvement.

Interview Questions - Teaching staff from the Intervention Unit

1. How would you describe the operation of this unit?
2. What do you consider to be major focus /objectives of the program?
3. What do you consider to be the strengths of the program and how do these relate to the overall program?
4. What factors inhibit the success of the individual students' progress in the unit?
5. What do you consider to be indicators of success for an individual student?
6. What do you consider to be the optimum program conditions for each student to achieve success?
7. What changes to the program or any aspect of the program would enhance the current level of success?
8. How does your unit currently measure the level of success of your program?

9. How has the program changed or been modified as a result of on-going evaluation?

10. What strategies, theories etcetera do you use in implementing your program and how do they relate to your daily program?

Interview Questions - Parents from the Intervention Unit

1. Did your child enjoy attending the intervention program? Can you give examples of what you noticed, for example easier to get up in the morning?

2. What changes if any have you noticed in your child's behaviors since they have been attending the unit? Give examples.

3. Have you noticed a difference in the way your child:
    a. Speaks with other children,
    b. Speaks with other adults.
    c. Develops relationships with other children,
    d. Develops relationships with adults.
    e. Interacts with the family.

4. Do you consider that this program has been beneficial to your child? Can you give examples to illustrate your opinion?

5. Do you think the program can be improved?

6. What do you consider to be the better aspects of the intervention program?

7. Are there any other comments you would like to make about the program and the child's involvement?

6.6   Student Performance and Measurement

6.6.1   Development of Behaviour Rating Scale

Student performance in relation to objectives set for participation in the Baltara Integration Unit program was reported to parents and to the home school approximately every five weeks. These reports were written in behavioural terms and included anecdotes of the students' performance. Factual information about

attendance was also reported. Reports were informative to the parents and teachers attending the meeting, but it became apparent that a more generic evaluation of students' behaviours in school settings was needed.

Chapter 7, Identification, Development and Validation of Behaviour Rating Scale, provides the details of the development, refinement, validity and reliability testing of a behaviour rating scale that can be used pre and post intervention to measure the effectiveness of the intervention program. A form is designed to be used by the students' referring teachers to provide an external assessment of the intervention effectiveness.

6.6.2   Sessional Evaluation Measure (SEM)

Student performance varies on a daily basis and throughout the day. Recording the daily and sessional performance is a way of tracking that performance. It can identify patterns either on a specific day or session during the week, and indicates student preference for particular curriculum activities or difficulties which may occur in a specific session depending on the mood of the student.

This measure was developed in the Baltara School to track the participation of all students who were enrolled for short periods from a few days to a maximum of fifteen days in the Secure Welfare Service campuses, and a maximum of 39 weeks in the Juvenile Justice campus. It was difficult for teachers to provide meaningful reports to social workers and probation officials about the educational progress of students whilst they were enrolled for short periods, living in a custodial environment away from home and possibly recovering from a crisis which was

the cause of the incarceration. Students' academic performance in these situations is unlikely to be at the actual level of their ability, so an alternative needed to be found.

Students in custody were encouraged to participate in the program, so teachers provided activities which reflected the individual student's interests, at a level within their capabilities in their current state of emotional and physical health, and which could be completed within one teaching session. Participation in an enjoyable activity provided distraction from inappropriate behaviours. Consequently, it was decided that measuring participation, appropriate behaviour and task completion would provide a tangible measure of student performance whilst attending the school campus.

Teaching staff from all four Baltara School campuses (approximately 10.8 equivalent full time teachers) met to discuss the proposal of measuring the performances of each student in participation, behaviour and task completion. Initially, a five point rating scale was proposed - but after significant discussion with the staff a three point scale was trialed for one year. The data were reviewed, and staff participated in a discussion which included time required to complete the forms, the scope of responses available, and usefulness of the measure. The staff consensus was to continue with using the SEM and increasing the scale range to five performance levels.

6.6.2.1 Data Analysis

Baltara Integration Unit teachers evaluated their students' performances and recorded evaluations on students' individual weekly work sheets. The key teacher for each student completed the evaluation. Sessional Evaluation Measure data for students at the Baltara Integration Unit were transcribed to a Microsoft Excel worksheet where ratings were calculated, and students were given weekly mean scores for participation, behaviour and task completion. All students' mean scores for week one were tabulated and collated; and the same was completed for each subsequent week of the students' participation at the Baltara Integration Unit. Graphs depicting the participation, behaviour, task completion and combined performance were developed for analysis.

6.7 Developing Effective Intervention

Developing a model of effective intervention is important so that future students may benefit from intervention that is soundly based, and more importantly, highly likely to produce successful outcomes for the students in future. Detailed analysis of the data produced at the Baltara Integration Unit indicates positive outcomes for the students as depicted in the positive changes between the pre and post intervention Behaviour Rating Scales. The SEM data also demonstrates the stages of performance change over the period of intervention. The combined data will signify student improvement as a result of intervention at the Baltara Integration Unit. The improvement noted is one indication of the effectiveness of the Baltara Integration.

This chapter set the scene for developing this thesis. The basic hypothesis that off-site intervention is effective instigated the detailed case study of one intervention unit and means of data gathering. Understanding differences in Special Education research due to smaller cohorts, as is exemplified in this case, is important as despite the small numbers, which does not lessen the quality of the research, the findings regularly have implications for mainstream application (Conroy & Stichter, 2006). The need for development of tools to quantify the effectiveness was highlighted in chapter 4 and this chapter pre-empts detailed discussion of the development of the tools in the next chapter.

Chapter 7   Identification, Development and Validation of Behaviour Rating Scale

In recent times, a small number of schools, or groups of schools, have determined a need for specific intervention to assist their students with difficulties to continue their education. The schools set up units to assist small numbers of students. Advice is gained by consulting with established units and their best practices considered in the development of the new units. In Victoria the Review of Ancillary / Alternative Settings Report (Department of Education, 1998c) classed the units into a range of categories. There are six Social Adjustment Centres (with average 6 students); eight Secondary Teaching Units (average 10 students); six Special Assistance Units (Language) (average of 10.5 students); thirteen Alternative settings established under the guidelines for the development of alternative settings (average 10 students); and seven other ancillary settings (average 10 students) (pp. 32-33). Anecdotally, most units are successful but currently there is no common measuring tool to quantify and support other evidence. This chapter details the background and considerations in developing a Behaviour Rating Scale that could be used by the above units. The chapter also discusses the analysis and validation of the tool with data collected from mainstream schools.

Intervention programs attempt to address the social, emotional and behavioural needs of students to improve their school performance. There are various levels of intervention depending on the range and depth of the students' needs and their

school setting. The first level intervention used by classroom teachers may include basic classroom management techniques including use of general class and specific student approaches to modify the behaviour of students in their classes. At the next level, school welfare teams may collaborate to understand and manage the behaviour of individual students with more complex issues. These interventions often involve the co-operation of teachers outside the welfare group and also have some degree of family involvement. The needs of another but smaller group of students may be beyond the resource and expertise capabilities available within the school. These students may be referred to education based intervention programs or clinical programs outside the school. The support and involvement of the families is essential to engage specialist intervention, facilitate access, and be part of the planning, goal setting and evaluation of the program for their child.

In all of the above cases there needs to be a selection from the types of intervention available, followed by an evaluation of the intervention to determine if the intervention strategies are effective in changing the inappropriate behaviour and that other positive outcomes are being achieved. The relevance for the Behaviour Rating Scale being developed as part of this research project is the need for a school related form of rating, re-rating and evaluation, which can be used by teachers who are implementing interventions and also provide external validity to off-site intervention programs. This is similar to the rationale behind the development of the empirical based assessment in psychopathology described by Achenbach and McConaughy (1997) who considered "those who deal with behavioural and emotional problems must maximize the efficacy of their efforts

while minimizing costs" (p. 1). They extended their work to assess typically developing children to develop norms of expected behaviours for each age group in the various categories. As the purpose of the Behaviour Rating Scale was to show individual improvement rather than compare students with others, the above extension was not necessary.

7.1 Behaviour Rating Scale - Identification of need and construction

7.1.1 Development Considerations

There are a range of Behaviour Rating Scales such as psychosocial scales, diagnostic and measurement tools that are readily available. See Figure 4-3 page 146 for a list of examples. Examination of a number of scales reveals that each was designed for a specific purpose and in different fields of health and welfare for use by different professionals – psychologists, teachers and nurses; and for use with different target groups such as school students, pre- school children, mental health and geriatric patients. The new Behaviour Rating Scale should also have specific intentions and considerations.

7.1.1.1 Relates to School Specific Expectations

The new Behaviour Rating Scale will relate specifically for school needs and school use. Individual items should relate to the skills expected of a student within a class and school situation. The skills will be those considered necessary by a

range of teachers for functional participation in most school activities. Students who are successful within the classroom function effectively in across many domains.

Further, the length of some current behaviour forms teachers complete may range from three to five pages of questions which do not all relate to functioning in a classroom and school situation - which can make answering beyond the knowledge of, or difficult for teachers to complete. McMahon (1984) recommended that rating scales need to have enough items to assess the areas of interest but are short enough not to demand too much of the informant.

7.1.1.2 Pre - and Post - intervention Capacity

Teachers want to determine if there are improvements in a student's behaviour as a result of a particular intervention. Generally, they would expect a measure with a pre and post intervention capacity. Currently, in Australia, many checklists and referral forms which teachers are required to complete to request assistance for students with the social, emotional and behavioural difficulties are diagnostic in nature. Examples of these include Achenbach Child Behaviour Checklist (2001), Burk's Behaviour Rating Scale (2000), Personality Inventory for Children (Lachar & Gruber, 2001) and Coopersmith Inventory (1967). Generally, diagnostic tests are meant to inform another professional, and as such are not meant for post intervention comparison.

A simple design in a new Behaviour Rating Scale is needed to make it suitable for use before and after an intervention. Teachers need before and after information to report student progress in social, behavioural and academic areas, and to evaluate their programs and the effectiveness of selected techniques and strategies for managing the behaviour of a particular student.

7.1.1.3 Versatile and Available to Teachers

Many student behaviour checklists and assessment forms that teachers are expected to complete require another professional such as a psychologist to interpret the results according to pre-determined scales - for example Classroom Vineland Adaptive Behavior Scale (Pearson Education, 2006). This takes the control and responsibility for the evaluation away from the teachers. Other useful forms and assessments are restricted to psychologists' use.

Teachers need a Behaviour Rating Scale that is not restricted in its use and interpretation. They need a Behaviours rating scale that can be used by (a) teachers who attempt an intervention within their classroom; (b) classroom teachers rating their students before and after attending an off-site intervention program; (c) teachers working at intervention settings; and in other intervention situations.

7.1.1.4 Relevant to the School Environment

Each school is a unique social community. The expectations and tolerance of student behaviours vary from school to school. Some schools may give detentions

to students for not wearing school uniforms, whereas other schools may be satisfied simply because the student attends. A behaviour rating scale which is subjective allows for different norms, where a student can be compared to his/her own performance, at two or more times within the same environment, by the same teacher.

7.1.1.5   Accommodating Teacher Needs

Teachers have many out of class duties to perform in addition to planning for their classroom programs. Adding further, time consuming expectations is not desirable. Therefore, a simple one-page format (Goodman, 1997) of the Behaviour Rating Scale is necessary to minimise the time required to complete thus allowing for full attention on all items which are designed to be interpreted in relation to the existing classroom circumstances. In this way teachers can determine if there has been a behavioural change by a simple inspection of completed pre and post intervention forms. If they wish they can use statistical analysis of the information to quantify the change and use it to support anecdotal student reports.

7.2   Behaviour Rating Scale – Development

The Behaviour Rating Scale at the Baltara School took about three years to devise and develop. It was a work in progress during that time. The Behaviour Rating Scale was developed in conjunction with teachers working in a behavioural intervention unit focused on changing behaviour and a gradual re-integration of

students into their home schools. It was designed to supplement and support anecdotal reports. The behaviours and social skills items used in the Behaviour Rating Scale are based on skills that teachers identified as being necessary to function in a supported mainstream environment. The items are also written in the language and discourse of teachers.

7.2.1   Participants – Development Phase:

The original version of the Behaviour Rating Scale was presented to, revised and accepted by the twelve teachers at Baltara School. The staff agreed to send the Behaviour Rating Scale to teachers referring students to the Baltara Integration Unit to supplement written referrals and give a quantifiable starting point for post intervention comparison of the students' behaviours, as well as qualitative assessments and reports about specific objectives. Version 1 of the Behaviour Rating Scale (Figure 7-1) was used for three years and as with minimal referrals (about ten to twelve per year) the feedback from referring teachers who completed the Behaviour Rating Scale was limited.

Primary school teachers did not indicate difficulties but secondary schools had difficulty with the academic section as forms were often returned with data missing. Secondary schools indicated that not all students were taught each of the curriculum areas each semester, consequently they could not complete some responses.

Teachers at the Baltara Integration Unit considered that the five point scale did not indicate enough variation in rating behaviour, and that a six point scale would encourage teachers to make definitive ratings rather than mid-scale ratings.

7.2.2   Behaviour Rating Scale Revisions as a Result of Initial Trialing

The first modification was to increase the rating scale for the behaviour and social skills section from a five point scale to a six point scale, allowing greater differentiation. The second modification required simplification of the academic section and changing responses to a rating scale similar to the behaviour and social skills sections.

The academic section in the original version required responses in each of seven curriculum areas as designated by the Victorian Department of Education. Teachers firstly recorded the students' achievement according to the Curriculum Standards Framework (CSF) levels (Victoria. Board of Studies., 1995). The levels were expressed as being the beginning, consolidating or established stage of a numerical level. For example a student at 2b in English is at the beginning stage of level 2.

Behaviour Rating Survey – Pre – Intervention

(To be filled in by referring school prior to student beginning intervention program)

Student Name:	Year Level	Date
Home School	**Teacher**	

Behaviour:	1	2	3	4	5
	Rarely				**Always**
1. Student's behaviour is appropriate in classroom					
2. Student's behaviour is appropriate in school yard					
3. Student participates effectively in class					
4. Student's behaviour allows others to work undisturbed					
5. Student speaks appropriately to teachers & other students in class					

Social Skills:	1	2	3	4	5
	Rarely			Always	
1. Student mixes effectively with other students in school ground.					
2. In class student can work appropriately in small group					
3. Student can play appropriately in a team activity					
4. Student can play games fairly – according to the rules					
5. Student responds appropriately to winning & losing					
6. Student can negotiate to fulfil own needs					
7. Student is aware of the consequences of own behaviour					
8. Student has appropriate anger management skills					

Academic	English	Maths	Science	SOSE	Arts	Techn-ology	Health & PE
Student is working at **CSF Level** →							
Student is:	**Yes /No Responses**						
1. Attempting work at expected level in							
2. Attempting modified work requirements							
3. Completing set tasks satisfactorily in							
4. Experiencing success in							
5. Requesting assistance when required in							

Attendance	Total Days	Maximum possible
1. In 4 weeks prior to survey		
2. In term prior to survey		

Suspensions	Number of times	Total days
1. In 4 weeks prior to survey		
2. In two terms prior to survey		

Figure 7-1 Original Behaviour Rating Scale

Further examination indicated CSF levels were expected to take six months to two years to complete, depending on the content and the learning progress of the students. The intervention program was from 10 - 30 weeks, consequently measuring achievement after the short-term intervention program may not indicate measurable progress. This clearly required modification.

Academic	English	Maths	Science	SOSE	Arts	Techn-ology	Health & PE
Student is working at **CSF Level** →							
Student is:	Yes /No Responses						
1. Attempting work at expected level in							
2. Attempting modified work requirements							
3. Completing set tasks satisfactorily in							
4. Experiencing success in							
5. Requesting assistance when required in							

Figure 7-2 Academic Section – Original Behaviour Rating Scale

The CSF were replaced by Curriculum Framework Standards 11 (Victoria. Board of Studies., 2000) and ultimately replaced by Victorian Essential Learning Standards (VELS) (Victorian Curriculum and Assessment Authority, 2005) in all subject areas from 2006.

The second aspect of rating the academic section required Yes / No responses for (a) work attempted at expected or modified levels, (b) task completion, (c) student success and (d) requests for assistance for each of the curriculum areas,. Questions one and two may have been interpreted as mutually exclusive so did not add much to the ratings of the students. As illustrated in Figure 7-2, a substantial amount of data was required, not all of which could be easily assembled unless the same teacher taught all classes. Further, due to the subject selections in secondary

schools, some students may not have been attempting all subjects in the rating semester or year.

One major consideration for the revision was that the Victorian Department of Education requested that all schools report grade level achievements in English and mathematics using CSF levels, later progressing to VELS for student reporting. Baltara School and the referring schools are all part of the state system; consequently in the simplification process seen in Figure 7-3, it was decided to limit the curriculum questions to literacy and numeracy (more generic and less specific term than mathematics). This was consistent with the Department of Education's expectations of all schools.

Academic	1	2	3	4	5	6
Student is	Rarely					Always
Attempting work at expected level in literacy						
Completing set tasks in literacy						
Attempting work at expected level in numeracy						
Completing set tasks in numeracy						
Experiencing success in academic activities						
Requesting assistance when required in class						

Figure 7-3 Academic Section - Final Behaviour Rating Scale

Further, English and Mathematics are the two major curriculum areas undertaken by all students in all Victorian schools up to and including year ten and embedded in other subject areas. Therefore, it was decided to exclude the use of fixed levels associated with specific standards of the various education authorities to allow the Behaviour Rating Scale to become more generic and with more universal application. The final version of the form allows for more flexible interpretation in the areas of student achievement levels, task completion, and experience of

success. It also allows direct comparisons between pre and post intervention performance.

7.2.3   Behaviour Rating Scale - Factor Development

The Behaviour Rating Scale is divided into four sections – behaviour, social skills, academic progress and attendance. Students who have good social skills, appropriate behaviour, combined with regular attendance and positive academic progress tend to enjoy school and maintain successful participation until at least the end of their secondary education. The final version (see Figure 7-4) requests teachers to rate students on a continuum from 1 (rarely) to 6 (always). A six point scale was used so that the rating of behaviour is seen on a longer continuum, unlike Likert Scales that… "ask people to indicate the extent of their agreement or disagreement with various statements …using five - or seven - point scales" (Harris, 1995, p. 385); and which allows a neutral point between positive and negative ratings whereby teacher respondents are less likely to make definitive evaluation.

7.2.3.1   Behaviour and Social Skills

There are five behaviour statements identifying base areas of functioning: student (a) can play appropriately in a team activity; (b) can play games fairly – according to the rules; (c) responds appropriately to winning and losing; (d) can negotiate to fulfill his/her own needs; (e) is aware of the consequences of own behaviour; and (f) has appropriate anger management skills.

Behaviour Rating Scale (Final Version)

(To be filled in by referring school prior to student beginning intervention program)

Student ID:		Year Level	Date
Home School		**Teacher CODE**	

Behaviour	1	2	3	4	5	6
	Rarely					**Always**
Student's behaviour is appropriate in classroom						
Student's behaviour is appropriate in school yard						
Student participates effectively in class						
Student's behaviour allows others to work undisturbed						
Student speaks appropriately to teachers & other students in class						

Social Skills:	1	2	3	4	5	6
	Rarely					**Always**
Student mixes effectively with other students in school ground.						
In class student can work appropriately in small group						
Student can play appropriately in a team activity						
Student can play games fairly – according to the rules						
Student responds appropriately to winning & losing						
Student can negotiate to fulfil own needs						
Student is aware of the consequences of own behaviour						
Student has appropriate anger management skills						

Academic	1	2	3	4	5	6
Student is	**Rarely**					**Always**
Attempting work at expected level in literacy						
Completing set tasks in literacy						
Attempting work at expected level in numeracy						
Completing set tasks in numeracy						
Experiencing success in academic activities						
Requesting assistance when required in class						

Attendance	Total Days	Maximum possible
In 4 weeks prior to rating		
In term prior to rating		

Suspensions	Total days	Number of times
In 4 weeks prior to rating		
In two terms prior to rating		

Figure 7-4 Final Behaviour Rating Scale

Eight statements cover working in different sized groups to understanding social and games rules' negotiations' and anger management: (a) student mixes effectively with other students in school ground; (b) in class student can work appropriately in small group; (c) student can play appropriately in a team activity; (d) student can play games fairly – according to the rules; (e) student responds appropriately to winning and losing; (f) student can negotiate to fulfil own needs; (g) student is aware of the consequences of own behaviour; and (h) student has appropriate anger management skills.

7.2.3.2 Academic Rating Variables

The Baltara Integration Unit is primarily for students whose usual, consistently inappropriate behaviour is making it difficult for them to be maintained in a mainstream school environment. However, although students' levels of academic achievement are not the reason for their referral, their level of application to tasks may be part of their behaviour and social skills difficulties.

As discussed earlier, the academic section underwent major refinement from the initial use until the final version. It incorporates expected levels and completion of work as well as requesting assistance as needed. Here the student is: (a) attempting work at expected level in literacy; (b) completing set tasks in literacy; (c) attempting work at expected level in numeracy; (d) completing set tasks in numeracy; (e) experiencing success in academic activities; and (f) requesting assistance when required in class.

7.2.3.3 Attendance and Suspensions

Student attendance is a crucial factor in their socialisation, and ultimately in student learning. Multiple absences and suspensions (exclusion from school for limited periods) are not conducive to productive learning. The Behaviour Rating Scale requests information about attendances: (a) in the immediately preceding four weeks and (b) the previous term (approximately ten weeks). These figures may allude to a change in behaviours noticed by an increase/decrease in attendance rates. Quantifying the level of absences with definitive numerical data allows for observation of what is usual and what constitutes a concern to the students' education.

Many students who have lower ratings in the earlier behavioural, social and academic sections may or may not have attendance and suspension concerns. The combination of high levels of absences and lower ratings in the behaviour, social skills and academic achievement sections indicates that students have other difficulties which may or may not have been identified and addressed.

Schools and funding bodies consider that attendance is important, so absences are monitored by schools and details reported annually to the government. Investigation of the regularity of absences may reveal patterns of school or class avoidance, fear of attending school due to bullying or other environmental factors, illness or other family circumstances which impact on students' attendance and which affect students' wellbeing and school progress. Until addressed, these absence factors have the same outcome for the students – lack of school tuition.

Suspensions are also recorded in the Behaviour Rating Scale for: (a) the four weeks prior to the rating; and (b) two terms prior to the rating. As in the attendance section an increase or decrease in the number of suspensions may indicate a change in behaviour. The teacher who is rating the student may not have been responsible for suspensions for disciplinary reasons. Consequently the suspensions may need further investigation if information beyond quantifiable data is important.

The Managed Individual Pathways (MIPS) Mapping Tool (Department of Education and Early Childhood Development, 2008c) produced by the Department of Education, Victoria, to identify 'students at risk' of not completing year twelve or its equivalent, collects school recorded data about attendance and suspensions to indicate problems at school including low literacy and numeracy achievement (Hull, 2006). This indicates that the areas selected for the BSR are consistent with current concerns of risk factors.

The Behaviour Rating Scale, once devised, required validation through analysing reliability. Validation analyses the scale measure to assess whether it actually measures what it purports to measure (Best & Kahn, 2006). Reliability is "the ability of a measuring instrument to measure the concept in a consistent manner" (Hinton, 2004, p. 301).

7.3 Behaviour Rating Scale – Validating and Reliability Methods

The following sections outline the validity and reliability analysis that were undertaken on the Behaviour Rating Scale.

7.3.1 Design Validity Behaviour Rating Scale

Face Validity – requires that the Behaviour Rating Scale looks as though it measures what it is supposed to measure (Cozby, 2007), which in this case is typical classroom and school behaviour. The Behaviour Rating Scale was examined by the three teachers working at the Baltara Integration Unit; teachers at three other intervention units, the principal of a mainstream primary school, and three mainstream teachers. They concurred that the Behaviour Rating Scale consists of typical behaviours that teachers expect in a classroom.

Content Validity - means that a group of experts consider this Behaviour Rating Scale as examining attributes that are representative of positive classroom behaviour and performance. Teachers from three intervention programs in the Northern Metropolitan Educational Region in Melbourne, Victoria, who are working with groups of students experiencing difficulty in maintaining their school connection, were requested to determine if they considered that the Behaviour Rating Scale had selected the key behaviours necessary to function productively in a classroom. Comments from the experts were utilised in finalising the Behaviour Rating Scale for testing.

7.3.2 Factor analysis

Factor Analysis is used for reducing the number of variables to a few factors which incorporate many of the variables (Breakwell, 2006; Heppner, Kivlighan, & Wampold, 2008). It also analyses the interrelationships of the individual items. Using the sample of 210 mainstream teachers' ratings, the items have been analysed using Data Reduction – factor analysis in the SPSS package. This analysis indicates the interrelationship of the items and if there are identifiable groups of behaviours.

7.3.3 Reliability of Behaviour Rating Scale

Internal consistency reliability is when several items measure the same concept or behaviour (Colosi, 1997; Graziano & Raulin, 2000). Reliability is high if there is correlation between the items. The Behaviour Rating Scale has been divided into five sections, three of which used the six point rating scale. These three sections – behaviour, social skills and academic - attempted to group items which have similar attributes. The data were tested using Cronbach's Alpha. Scores above r = .7 indicate reliability (Nunnally, 1978).

Test / Retest Reliability: This measure of reliability requires that there should be minimal or no differences between scores of an individual given the same test on two occasions, with a time lapse separating the administration of tests (Best & Kahn, 2006; Breakwell, 2006). Neurobehavioral re-tests are often conducted after brief intervals of hours to a week. Farahat et al. (2003) tested the reliability of computer tests over time with paid subjects and found that the time intervals

provided stability of responses. Marx (2004) suggests two weeks is an appropriate time for health status instruments, but concedes that there is "no evidence available to aid in the selection of the time interval between questionnaire administrations for a study of test retest reliability" (p. 730). In the Marx study two days and two week intervals were used. He concluded that there was "no clinically or statistically significant difference between the measurement of test-retest reliability" (p. 734).

Woodward et al. (1975) used the Wide Range Achievement Test (WRAT) in a special education setting for 106 students who were "emotionally disturbed or slow learning". The students were re-tested two weeks and twenty weeks later. The later test included a summer holiday break of approximately three months, with reliability testing on all subtests being "highly significant" both at two-week and twenty-two-week intervals.

A meta analysis was conducted by Jiang and Cillessen (2005) to examine the stability of sociometric status. They concluded that stability tends to be greater over shorter time intervals. They considered short term intervals to be less than three months or approximately 84 days. The time lapse period should be short enough such that no other influencing factors would occur to affect the results' That is, the same conditions need to still exist in order to rate the students. The foregoing comments and references to intervals were taken into consideration when determining repeat interval for testing of the Behaviour Rating Scale.

7.4 Behaviour Rating Scale – Method of Mainstream Schools Validation

Approval was gained from the Department of Education to contact state school principals in order to seek co-operation from their staff to complete the Behaviour Rating Scale. The principals of primary and secondary schools in the Northern and Western Educational Regions of Melbourne were contacted, and requested permission to speak at staff meetings to recruit volunteers to use the Behaviour Rating Scale (BRS) to rate the behaviours of one of their students. Teachers were requested to complete the BRS and return in the forms in reply paid envelopes attached to their forms. They were also advised that on the back of the forms was a request for teachers who were prepared to repeat the exercise with the same student to write their email address in order for me to forward a second form for completion within 14 days after the first rating.

Initially only a small number of schools were contacted, as only 200 responses were needed. The response rate was very poor. One secondary college with approximately 90 teachers returned 25 responses, whilst another secondary college with 60+ teachers returned one response. The primary schools gave a much better response rate, but as most had six to fourteen teachers the total number of responses was not large. At some primary schools teachers requested time to complete the forms at the time of the meeting and forms were returned immediately.

Once it was realised there would be insufficient responses for meaningful data analyses, another set of schools was contacted. The total data collection took two years as the window of opportunity to collect meaningful data was the first part of term two and the latter part of term three. Teachers needed term one to become familiar with their students. School commitments – examinations, reporting, parent teacher interviews and end of year events, took precedence at other times.

An initial 250 BRS forms were produced and distributed to schools, but as the low level of response became apparent, the number of forms produced and distributed was over 600. Initially two secondary colleges and seven primary schools were contacted and subsequent contacts to a further group of schools meant that data were collected from a total of five secondary schools and eleven primary schools.

7.4.1   Students (Subjects) Rated by Teachers:

The Behaviour Rating Scale (BRS) was completed by 210 teachers for one student in their class. Details are in Table 7-1 below:

Table 7-1 Summary of Grade Level and Sector Responses

				Primary School					
Grade	Prep	1	2	3	4	5	6	Unknown	Total
Students	12	15	19	10	9	14	19	6	**104**

				Secondary School				
Grade	7	8	9	10	11	12	Unknown	
Students	24	23	31	8	4	7	6	**103**

Unknown School	
Unknown Sector & grade	**3**
Total Students	**210**

There was an even distribution of BRS forms between primary (104 students) and secondary schools (103 students), with the sector of three responses unknown.

7.4.2   Missing Values

There were a number of missing values in the data set which is not uncommon. The data were subjected to SPSS missing values analysis to determine the number and pattern (if any) of the missing values. Table 7-2 shows statistics about the missing values in the data. The missing values tended to be small, which would indicate Missing Completely at Random (MCAR). However, two of the academic variables had fifteen and seventeen missing values which are an anomaly in the pattern of the data, two variables in the social skills variable had eight and five missing values respectively and the attendance and suspension variables have four to six missing values. These variables were further investigated to determine type/s of missing value.

The variables with the most missing values were about student performance in mathematics. In primary schools in Victoria, class teachers teach most core subjects including mathematics so have no difficulty completing that section of the form. However, in secondary schools teachers teach single or related subjects, for example English and history or mathematics and science. Consequently, if they specialised in humanities for example, they may not know about students' performance in mathematics, unless they conferred with the students' mathematics teachers. Completing the form was a voluntary task out of 'goodwill'; consequently it is unlikely a respondent sought information beyond

their current knowledge. Further, students in upper levels of secondary education (years 11 and 12) may elect to exclude mathematics in their course so that information may not exist.

Table 7-2 Missing Values – Behaviour Rating Scale Validation Data

	Variables	N	Mean	Std. Dev	Missing Count	Percent
Behaviour	1. Student's behaviour is appropriate in classroom	210	5.54	0.70	0	0
	2. Student's behaviour is appropriate in school yard	205	5.60	0.70	5	2.38
	3. Student participates effectively in class	209	5.44	0.77	1	0.48
	4. Student's behaviour allows others to work undisturbed	210	5.43	0.80	0	0
	5. Student speaks appropriately to teachers & ... in class	209	5.67	0.63	1	0.48
Social Skills	1. Student mixes effectively ...in school ground.	202	5.25	0.87	8	3.81
	2. In class student can work appropriately in small group	210	5.43	0.82	0	0
	3. Student can play appropriately in a team activity	205	5.45	0.76	5	2.38
	4. Student can play games fairly – according to the rules	207	5.58	0.72	3	1.43
	5. Student responds appropriately to winning & losing	207	5.54	0.78	3	1.43
	6. Student can negotiate to fulfil own needs	208	5.27	0.84	2	0.95
	7. Student is aware of the consequences of own behaviour	208	5.60	0.72	2	0.95
	8. Student has appropriate anger management skills	207	5.59	0.72	3	1.43
Academic	1. Attempting work at expected level in literacy	207	5.43	0.93	3	1.43
	2. Completing set tasks in literacy	208	5.48	0.85	2	0.95
	3. Attempting work at expected level in numeracy	195	5.47	0.85	15	7.14
	4. Completing set tasks in numeracy	193	5.45	0.89	17	8.10
	5. Experiencing success in academic activities	207	5.43	0.82	3	1.43
	6. Requesting assistance when required in class	209	5.20	1.17	1	0.48
Attend	1. Attendance in 4 weeks prior to survey	205	-0.59	1.12	5	2.38
	2. Attendance in term prior to survey	204	-1.36	2.21	6	2.86
Suspend	1. Suspension in 4 weeks prior survey	206	0.00	0.00	4	1.90
	2. Suspension in two terms prior to survey	206	0.00	0.00	4	1.90

The missing values data were separated into primary and secondary sectors to determine if they were sector based and were actually Missing at Random (MAR) due to lack of knowledge. In Table 7-3, variables with four or more missing values are identified in grey. In variables where the missing values sector total was approximately equal to the total missing values, these too were identified in grey. Academic variable 4 showed that 16 of the 17 missing values were in the secondary sector.

Table 7-3 Missing Values Behaviour Rating Scale Validation by Sector

	Variables	All Data N	All Data Count	Secondary N	Secondary Count	Primary N	Primary Count
Behaviour	1. Student's behaviour is appropriate in classroom	210	0	109	0	98	0
	2. Student's behaviour is appropriate in school yard	205	5	104	5	98	0
	3. Student participates effectively in class	209	1	108	1	98	0
	4. Student's behaviour allows others to work undisturbed	210	0	109	0	98	0
	5. Student speaks appropriately to teachers & ... in class	209	1	108	1	98	0
Social Skills	1. Student mixes effectively ...in school ground.	202	8	101	8	98	0
	2. In class student can work appropriately in small group	210	0	109	0	98	0
	3. Student can play appropriately in a team activity	205	5	104	5	98	0
	4. Student can play games fairly – according to the rules	207	3	106	3	98	0
	5. Student responds appropriately to winning & losing	207	3	106	3	98	0
	6. Student can negotiate to fulfil own needs	208	2	108	1	97	1
	7. Student is aware of the consequences of own behaviour	208	2	107	2	98	0
	8. Student has appropriate anger management skills	207	3	107	2	97	1
Academic	1. Attempting work at expected level in literacy	207	3	106	3	98	0
	2. Completing set tasks in literacy	208	2	107	2	98	0
	3. Attempting work at expected level in numeracy	195	15	94	15	98	0
	4. Completing set tasks in numeracy	193	17	93	16	97	1
	5. Experiencing success in academic activities	207	3	106	3	98	0
	6. Requesting assistance when required in class	209	1	108	1	98	0
Attend	1. Attendance in 4 weeks prior to survey	205	5	108	1	94	4
	2. Attendance in term prior to survey	204	6	107	2	94	4
Suspen	1. Suspension in 4 weeks prior survey	206	4	106	3	98	0
	2. Suspension in two terms prior to survey	206	4	106	3	98	0

* 3 responses did not have grade level and were not included in Primary / Secondary count but were in N (Total)

The variables with the highest missing values were in the secondary sector. This is not surprising as primary teachers are with their students constantly throughout the day and are aware of their students in all aspects of school life. Behaviour variable 2 and social skills variable 1 are both about students' activities in the playground. Secondary schools tend to be much larger than primary schools so that a secondary teacher on duty in the playground may not be allocated the particular area the student frequents and would be unable to comment on those variables unless supplementary evidence is supplied. Social skills variable 3 is about playing appropriately in a team activity and this may be beyond the knowledge of secondary teachers. These missing values can be described as missing at random (MAR).

The missing values in attendance variables were mainly in the primary sector. At some schools the teachers requested to fill out the forms as part of the staff meetings at which the request for participation was made. In the expedience of completing the forms, teachers may have omitted the attendance section either because their students generally attend or because they did not have attendance rolls with them. Again, these missing variables have been classified as MAR.

Suspension variables had missing values mainly from the secondary sector. In a large secondary school suspension information is not distributed beyond those who need to know for the sake of student privacy. Teachers may not have known the answer and the responses are missing at random.

7.4.3   Treatment of Missing Values

A range of methods for treating missing data were discussed in Chapter 7. In analyses that require all variables a total of 29 (13.8%), cases would be excluded if listwise treatment was undertaken.

Substituting the series mean for the missing data does not change the overall mean and has minimal effects on the standard deviation as can be seen in second last column of Table 7-4. The three larger differences (.03) in standard deviations are in bold.

Table 7-4 Standard Deviation with Series Mean Imputation

	Variables	Missing Data		Impute series mean	
		N	Std. Dev	Std. Dev	N
Behaviour	1. Student's behaviour is appropriate in classroom	210	0.70	0.70	210
	2. Student's behaviour is appropriate in school yard	205	0.70	0.70	210
	3. Student participates effectively in class	209	0.77	0.76	210
	4. Student's behaviour allows others to work undisturbed	210	0.80	0.80	210
	5. Student speaks appropriately to teachers & ... in class	209	0.63	0.63	210
Social Skills	1. Student mixes effectively ...in school ground.	202	0.87	0.85	210
	2. In class student can work appropriately in small group	210	0.82	0.82	210
	3. Student can play appropriately in a team activity	205	0.76	0.75	210
	4. Student can play games fairly – according to the rules	207	0.72	0.72	210
	5. Student responds appropriately to winning & losing	207	0.78	0.77	210
	6. Student can negotiate to fulfil own needs	208	0.84	0.84	210
	7. Student is aware of the consequences of own behaviour	208	0.72	0.71	210
	8. Student has appropriate anger management skills	207	0.72	0.72	210
Academic	1. Attempting work at expected level in literacy	207	0.93	0.92	210
	2. Completing set tasks in literacy	208	0.85	0.85	210
	3. Attempting work at expected level in numeracy	195	**0.85**	**0.82**	210
	4. Completing set tasks in numeracy	193	**0.89**	**0.86**	210
	5. Experiencing success in academic activities	207	0.82	0.81	210
	6. Requesting assistance when required in class	209	1.17	1.16	210
Attend	1. Attendance in 4 weeks prior to survey	205	1.12	1.11	210
	2. Attendance in term prior to survey	204	**2.21**	**2.18**	210
Suspen	1. Suspension in 4 weeks prior survey	206	0.00	0.00	210
	2. Suspension in two terms prior to survey	206	0.00	0.00	210

In subsequent data analyses, a data listwise method of excluding cases is used where there is missing data. However, some analyses have also repeated the calculations with imputed series means values in the behaviour, social skills and academic areas. The change in data is not large enough to warrant their use in these scenarios.

7.4.4 Analysis of Data

A summary of the responses of the 210 teachers who rated various aspects of behaviour of one student within their class who did not present with behavioural

difficulties is shown in Table 7-5. The range of ratings covered all of the options in one question; five of the options in fourteen questions, and four of the options in four questions. The means, however, ranged from 5.20 to 5.67. This indicates that the mean ratings of students were at the higher end of the scale, despite some being rated at the lower extreme value.

Table 7-5 Behaviour Rating Scale – Variable Means

Variables - behaviours	N	Min	Max	Mean	Std. Dev
1. Student's behaviour is appropriate in classroom	210	3	6	5.54	0.70
2. Student's behaviour is appropriate in school yard	205	2	6	5.60	0.70
3. Student participates effectively in class	209	2	6	5.44	0.77
4. Student's behaviour allows others to work undisturbed	210	3	6	5.43	0.80
5. Student speaks appropriately to teachers & ... in class	209	3	6	5.67	0.63
Behaviour Sub Scale Total				**27.69**	
Variables - social skills					
1. Student mixes effectively ...in school ground.	201	3	6	5.25	0.87
2. In class student can work appropriately in small group	209	2	6	5.43	0.82
3. Student can play appropriately in a team activity	204	2	6	5.45	0.76
4. Student can play games fairly – according to the rules	206	2	6	5.58	0.72
5. Student responds appropriately to winning & losing	206	2	6	5.53	0.78
6. Student can negotiate to fulfil own needs	207	2	6	5.27	0.84
7. Student is aware of the consequences of own behaviour	207	2	6	5.60	0.72
8. Student has appropriate anger management skills	207	2	6	5.59	0.72
Social Skills Sub Scale Total				**43.70**	
Variables - academic					
1. Attempting work at expected level in literacy	207	2	6	5.43	0.93
2. Completing set tasks in literacy	208	2	6	5.48	0.85
3. Attempting work at expected level in numeracy	195	2	6	5.47	0.85
4. Completing set tasks in numeracy	193	2	6	5.45	0.89
5. Experiencing success in academic activities	207	2	6	5.43	0.82
6. Requesting assistance when required in class	209	1	6	5.20	1.17
Academic Sub Scale Total				**32.45**	
Variables - attendance					
1. Attendance in 4 weeks prior to survey (days absent)	205	0	6	0.59	1.13
2. Attendance in term prior to survey (days absent)	204	0	12	1.37	2.21
Variables - suspensions					
1. Suspension in 4 weeks prior survey	206	0	0	0	0
2. Suspension in two terms prior to survey	206	0	0	0	0

Attendance data indicates, that some students had full attendance (0 minimum) and some a maximum of six absences in the four weeks prior to the Behaviour Rating Scale. In the previous term (approximately ten weeks) again, some

students had full attendance (0 absences) and some students had twelve absences. The mean absence from school was .59 in the four weeks prior to survey and 1.36 in the previous term. This indicates that most students had close to full attendance at school.

The students that teachers selected for the Behaviour Rating Scale were identified as functioning effectively in the classroom and not presenting with behaviour problems. Consequently it is not surprising to find that none of 210 students were suspended from school in the allocated timeframe.

The initial analysis of the nineteen items together indicated that from the 210 cases 29 (13.8%) were excluded as there was one or more missing variables in the case data. The sub groups (scales) were then analysed, and in each group fewer cases were eliminated due to missing data. As the earlier analyses indicated, teachers in secondary situations have most missing values which are attributable to their lesser contact with and knowledge of individual students, rather than other scenarios.

7.4.5   Internal Consistency

Internal consistency is a reliability measure whereby the individual items, which together are expected to measure attributes such as social skills, are tested for their contribution to the attribute. Cronbach's alpha (α) examines "the average inter-item correlation of the items in the questionnaire" (Hinton, 2004, p. 302).

Table 7-6 Internal Reliability of Behaviour Rating Scale Items

	Cronbach's Alpha	Cronbach's ά Based on Standardised Items	No of Items	Excluded Cases N= 210	% Excluded	Cronbachs Alpha Imputed Values
All items	0.95	0.95	19	29	13.80%	0.95
Behaviour	0.90	0.90	5	7	3.33%	0.90
Social Skills	0.91	0.91	8	12	5.71%	0.91
Academic	0.93	0.94	6	21	10.00%	0.92

Table 7-6 illustrates values of Cronbach's alpha of the interval rating items in the Behavioural Rating Scale, both for the whole scale and sub scales in which they were written. It also details the number of cases excluded from the total data of 210 cases. Listwise deletion of 29 cases was made when the whole scale was considered. Fewer cases (seven behaviours, twelve social skills and 21 academic) were deleted listwise when items in the sub scale were considered.

The alpha score for the total scale (all variables) is .95. The sub-scale ranges are: .90 for the behavioural sub scale; .91 for social skills sub scale; and .93 for the academic sub scale. All scales are above .70 which indicates strong internal consistency between the Behaviour Rating Scale items in each sub scale and within the total scale.

Further examination of the Behaviour Rating Scale indicated in Table 7-7 shows that when individual items are deleted from the total scale, the Cronbach alpha for the scale in each case is .95. This is equal with the total scale alpha score of .95 as shown in Table 7-6. The deletion of each of the items does not change the Cronbach's alpha score. This confirms that the individual items

each contribute to the strength of the overall Behaviour Rating Scale, and that eliminating the items reduces Behaviour Rating Scale as a measuring instrument.

Table 7-7 Cronbach's Alpha with Item Deletions from BRS

All Behaviour Rating Scale (BRS) Items	Scale Mean if Item Deleted	Cronbach's Alpha if Item Deleted
1. Student's behaviour is appropriate in classroom	98.52	0.95
2. Student's behaviour is appropriate in school yard	98.46	0.95
3. Student participates effectively in class	98.59	0.95
4. Student's behaviour allows others to work undisturbed	98.64	0.95
5. Student speaks appropriately to teachers & ... in class	98.38	0.95
1. Student mixes effectively ...in school ground.	98.77	0.95
2. In class student can work appropriately in small group	98.58	0.95
3. Student can play appropriately in a team activity	98.57	0.95
4. Student can play games fairly – according to the rules	98.45	0.95
5. Student responds appropriately to winning & losing	98.51	0.95
6. Student can negotiate to fulfil own needs	98.75	0.95
7. Student is aware of the consequences of own behaviour	98.43	0.95
8. Student has appropriate anger management skills	98.46	0.95
1. Attempting work at expected level in literacy	98.62	0.95
2. Completing set tasks in literacy	98.58	0.95
3. Attempting work at expected level in numeracy	98.57	0.95
4. Completing set tasks in numeracy	98.56	0.95
5. Experiencing success in academic activities	98.62	0.95
6. Requesting assistance when required in class	98.78	0.95

The behaviour sub scale has a collective alpha reliability of .90 (see Table 7-6). Table 7-8 and Table 7-10 illustrate the effect of deleting the individual behavioural items from within the behaviour sub scale grouping. The deletion of individual items in the sub scale produces a reliability range from .87 to .90.

Table 7-8 BRS Behaviour Sub scale Items Deletion Scores

	Scale Mean if Item Deleted	Cronbach's Alpha if Item Deleted
Behaviour		
1. Student's behaviour is appropriate in classroom	22.15	0.87
2. Student's behaviour is appropriate in school yard	22.08	0.87
3. Student participates effectively in class	22.24	0.90
4. Student's behaviour allows others to work undisturbed	22.25	0.88
5. Student speaks appropriately to teachers & ...in class	22.00	0.88

Table 7-9 records the Cronbach alpha scores which range from .89 to .91. The social skills scale has two items (1 and 6) which if deleted do not lower the group alpha score of .91. The total social skills sub scale alpha was 0.91 (from Table 7-6).

Table 7-9 BRS Social Skills Sub scale Items Deletion Scores

Social skills	Scale Mean if Item Deleted	Cronbach's α if Item Deleted
1. Student mixes effectively … in school ground.	38.50	0.91
2. In class student can work appropriately in small group	38.31	0.90
3. Student can play appropriately in a team activity	38.29	0.89
4. Student can play games fairly – according to the rules	38.16	0.89
5. Student responds appropriately to winning & losing	38.22	0.90
6. Student can negotiate to fulfil own needs	38.48	0.90
7. Student is aware of the consequences of own behaviour	38.14	0.89
8. Student has appropriate anger management skills	38.18	0.90

The academic scale illustrated in Table 7-10 had the highest alpha score of .93 (see Table 7-6), and individual item scores of .91 to .95. One variable - requesting assistance when required in class - stood out with the highest alpha score of .95.

Table 7-10 BRS Academic Sub scale Items Deletion Scores

Academic	Scale Mean if Item Deleted	Cronbach's Alpha if Item Deleted
1. Attempting work at expected level in literacy	27.13	0.91
2. Completing set tasks in literacy	27.10	0.91
3. Attempting work at expected level in numeracy	27.09	0.91
4. Completing set tasks in numeracy	27.08	0.91
5. Experiencing success in academic activities	27.13	0.91
6. Requesting assistance when required in class	27.30	0.95

Overall Cronbach alpha calculations indicate substantial cross item correlation and reliability.

7.4.6 Test-retest Reliability

All the teachers who volunteered to complete the Behavioural Rating Scale for one of their students were asked if they would be prepared to repeat the BRS on the same student approximately two weeks later. Studies using test re-test methods vary in their interval periods depending on the purpose. The two week time frame was selected as it is in keeping with the recommendations of Marx (2004) and Jiang and Cillessen (2005), as discussed earlier in this chapter. In the two week timeframe, a student's behaviour and performance would not be expected to change, nor would a teacher's opinion of a student. This also ensured that there was minimal chance of a major event occurring that would affect the students' performances or that of their teachers. The re-test would then be checking the reliability of teachers' repeat assessment and if the Behaviour Rating Scale elicited similar responses from a teacher over time. A total of 52 teachers

(out of the original 210) completed the Behavioural Rating Scale for the second time.

7.4.7 Test-Re-test Interval Analysis

The response time of teachers in the completion of the second BRS was longer than anticipated, so the time interval between both initial and repeat was, in most cases, longer than the planned fourteen days. The research was reliant on the goodwill of teachers from a number of schools, and whilst where possible timely copies of the repeat Behaviour Rating Scale were made available, the complexities of school life: not opening emails; term holidays; school camps; absences; special events; and report writing etc., - overtook the planned interval.

Table 7-11 Interval between Test and Re-test

Days	9	10	13	22	24	25	26	27	29	30	31	35	36	37	38	40	42	43	48	52	55	64
f	1	2	2	1	1	1	1	2	1	3	1	6	8	2	1	1	1	4	1	9	1	2

The range of time intervals between the completion of the Behaviour Rating Scale the first and second times are indicated in Table 7-11 above. The interval varied from 9 to 64 days, with the mean and median being 36.9 and 36 days, respectively.

The interval range between the test and re-test was larger than anticipated but within standard realms (Charter, 2003; Jiang & Cillessen, 2005). The re-test

values still give a reasonable basis for the reliability of the Behaviour Rating Scale and consistency of teachers' responses and interpretation over time.

7.4.8 Missing Values in Retest

An analysis of the missing values in the re-test data is illustrated in Table 7-12 . There are no missing values in the behaviour and social skills sub scales, two missing values in academic item 3, and one missing in each of academic items 2 and 4.

Table 7-12 Missing Values in Repeat Behaviour Rating Scale Data

	N	Mean	Std. Deviation	Missing Count	Percent
rbehav1	52	5.40	0.91	0	0
rbehav2	52	5.52	0.80	0	0
rbehav3	52	5.38	0.95	0	0
rbehav4	52	5.27	0.93	0	0
rbehav5	52	5.44	0.85	0	0
rsocial1	52	5.25	0.88	0	0
rsocial2	52	5.44	0.89	0	0
rsocial3	52	5.40	0.98	0	0
rsocial4	52	5.54	0.85	0	0
rsocial5	52	5.44	0.89	0	0
rsocial6	52	5.35	0.90	0	0
rsocial7	52	5.46	0.96	0	0
rsocial8	52	5.44	1.16	0	0
racad1	52	5.33	1.06	0	0
racad2	51	5.41	0.92	1	1.92
racad3	50	5.36	0.96	2	3.85
racad4	51	5.35	0.98	1	1.92
racad5	52	5.33	0.98	0	0
racad6	52	5.21	1.07	0	0
ratt4pri	52	-0.98	1.54	0	0
ratttmpr	49	-1.45	2.20	3	5.77
rsustmpr	52	0	0	0	0
rsus4pri	51	0	0	1	1.92

Three cases of attendance data and one case in suspension data are also missing. The incidence of missing data was low, so listwise exclusion was used for individual items but imputing the series means was used to enable sub scale scores to be calculated. There were four imputations made across the three opinion scales.

Table 7-13 Test -re-test Variations

Scale Items	Test Mean (210)	Test Mean (52)	Re-Test Mean (52)	Difference RT(52)-T(52)	Difference RT(52)-T(210)
1. Student's behaviour is appropriate in classroom	5.54	5.40	5.40	**0.00**	-0.14
2. Student's behaviour is appropriate in school yard	5.60	5.54	5.52	-0.02	-0.08
3. Student participates effectively in class	5.44	5.27	5.38	0.12	-0.06
4. Student's behaviour allows others to work undisturbed	5.43	5.31	5.27	-0.04	-0.16
5. Student speaks appropriately to teachers & ... in class	5.67	5.67	5.44	-0.23	**-0.23**
1. Student mixes effectively ...in school ground.	5.25	5.38	5.25	-0.13	**0.00**
2. In class student can work appropriately in small group	5.43	5.40	5.44	0.04	0.01
3. Student can play appropriately in a team activity	5.45	5.44	5.40	-0.04	-0.05
4. Student can play games fairly – according to the rules	5.58	5.48	5.54	0.06	-0.05
5. Student responds appropriately to winning & losing	5.54	5.42	5.44	0.02	-0.09
6. Student can negotiate to fulfil own needs	5.27	5.15	5.35	0.19	0.08
7. Student is aware of the consequences of own behaviour	5.60	5.54	5.46	-0.08	-0.14
8. Student has appropriate anger management skills	5.59	5.39	5.44	0.05	-0.14
1. Attempting work at expected level in literacy	5.43	5.37	5.33	-0.04	-0.10
2. Completing set tasks in literacy	5.48	5.37	5.41	0.05	-0.06
3. Attempting work at expected level in numeracy	5.47	5.33	5.36	0.03	-0.11
4. Completing set tasks in numeracy	5.45	5.28	5.35	0.07	-0.10
5. Experiencing success in academic activities	5.43	5.31	5.33	0.02	-0.11
6. Requesting assistance when required in class	5.20	4.94	5.21	**0.27**	0.02
				0.33	-1.51
Total Difference of all items				0.66	-3.02
Average difference in each item				0.02	-0.08
Total Magnitude Difference of all items				1.48	1.71
Average Magnitude Difference in each item				0.08	0.09

7.4.9   Re-test Analysis

Table 7-13 details variations between the original test and the re-test showing: (a) the mean of each item using the total number of cases (210); (b) mean of each item using the cases where a re-test score was available (52); (c) mean of each

item in the repeated Behaviour Rating Scale (52); (d) difference between test and re-test means using the 52 selected cases; (e) difference between test cases (210) and re-test (52) means; and (f) maximum and minimum difference magnitudes (ignoring signs) in bold.

The data show that the average magnitude of difference between e test and re-test items in the 52 cases is .08. In percentage terms, the difference is 1.33% giving a consistency rating of 98.67%. Comparing this to the magnitude of difference when the test of 210 cases was used with the re-test of 52 cases, the average magnitude is .09 which is 1.50% of the possible score. The percentage consistency is 98.5%.

Individual items where there were the largest differences between the test and re-test scores were:

- .27 (4.50%) variation (52 cases) - *Requesting assistance when required in class (academic)*
- .23 (3.80%) variation (52 cases) and (210 cases) - *Student speaks appropriately to teachers and other students in class (behaviour)*
- .19 (3.17%) variation (52 cases) - *Student can negotiate to fulfil own needs (social skills)*

It is interesting to note that the mean scores of the group of 52 teachers who elected to complete a repeat rating were lower than the whole validating group of 210. This could indicate a more thoughtful assessment of the student in the initial rating activity.

7.4.10 Pearson's Product-Moment (r) and Significance

Pearson's product moment *(r)* "measures the relationship between two interval or ratio level variables." (Harris, 1995, p. 163) Scores invariably range between 1 and -1, so as the relationship scores move positively or negatively away from zero the strength of the relationship increases.   The significance of the relationship depends on the degrees of freedom within the data. In this situation, with 52 cases the degrees of freedom are 50. The critical value for significance of Pearson's product moment correlation at alpha (α) = .01 with 50 degrees of freedom is .35 and for alpha (α) – .001 is .44 (Harris, 1995, p. 413).

An analysis using Pearson's product moment was undertaken using the sample of 52 forms where the Behaviour Rating Scale was repeated. Individual variables were correlated with the matching repeat variable, as can be seen in Table 7-14 below.

Table 7-14 Test-re-test Pearson Correlations – Individual Items

Behaviour Items		Repeat Item 1	Repeat Item 2.	Repeat Item 3.	Repeat Item 4.	Repeat Item 5.
1. Student's behaviour is appropriate in classroom	Pearson Corre	0.66				
	Sig. (2-tailed)	0.00				
	N	52				
2. Student's behaviour is appropriate in school yard	Pearson Correlation		0.51			
	Sig. (2-tailed)		0.00			
	N		52			
3. Student participates effectively in class	Pearson Correlation			0.54		
	Sig. (2-tailed)			0.00		
	N			52		
4. Student's behaviour allows others to work undisturbed	Pearson Correlation				0.53	
	Sig. (2-tailed)				0.00	
	N				52	
5. Student speaks appropriately to teachers & other students in class	Pearson Correlation					0.57
	Sig. (2-tailed)					0.00
	N					52

Social Skills Items		Repeat Item 1	Repeat Item 2.	Repeat Item 3.	Repeat Item 4.	Repeat Item 5.	Repeat Item 6.	Repeat Item 7.	Repeat Item 8.
1. Student mixes effectively with other students in school ground.	Pearson Corre	0.62							
	Sig. (2-tailed)	0.00							
	N	52							
2. In class student can work appropriately in small group	Pearson Correlation		0.64						
	Sig. (2-tailed)		0.00						
	N		52						
3. Student can play appropriately in a team activity	Pearson Correlation			0.63					
	Sig. (2-tailed)			0.00					
	N			52					
4. Student can play games fairly – according to the rules	Pearson Correlation				0.53				
	Sig. (2-tailed)				0.00				
	N				52				
5. Student responds appropriately to winning & losing	Pearson Correlation					0.67			
	Sig. (2-tailed)					0.00			
	N					52			
6. Student can negotiate to fulfil own needs	Pearson Correlation						0.44		
	Sig. (2-tailed)						0.00		
	N						52		
7. Student is aware of the consequences of own behaviour	Pearson Correlation							0.50	
	Sig. (2-tailed)							0.00	
	N							52	
8. Student has appropriate anger management skills	Pearson Correlation								0.47
	Sig. (2-tailed)								0.00
	N								51

academic Irems		Repeat Item 1	Repeat Item 2.	Repeat Item 3.	Repeat Item 4.	Repeat Item 5.	Repeat Item 6.
1. Attempting work at expected level in literacy	Pearson Corre	0.90					
	Sig. (2-tailed)	0.00					
	N	52					
2. Completing set tasks in literacy	Pearson Correlation		0.81				
	Sig. (2-tailed)		0.00				
	N		51				
3. Attempting work at expected level in numeracy	Pearson Correlation			0.70			
	Sig. (2-tailed)			0.00			
	N			50			
4. Completing set tasks in numeracy	Pearson Correlation				0.77		
	Sig. (2-tailed)				0.00		
	N				50		
5. Experiencing success in academic activities	Pearson Correlation					0.78	
	Sig. (2-tailed)					0.00	
	N					52	
6. Requesting assistance when required in class	Pearson Correlation						0.79
	Sig. (2-tailed)						0.00
	N						52

The correlation of the rating on the behaviour variables and the re-rating of the same variables range from .51 to .66, which are all above the critical values for significance at alpha (α) = .001 (that is the probability that these correlations happen randomly is less than 1%). The social skills sub scale consists of eight variables, and the range of correlations is from .44 to .67, which is in the range for significance at alpha (α) = .001. The academic sub scale correlations range from .70 to .90, which are also significant at alpha (α) = .001 level.

Sub scale correlations and full scale correlations were analysed and are reported in Table 7-15 below.

Table 7-15 Sub scales and Total Test-retest Correlations

Sub Scales & Total		Repeat Behaviour	Repeat Social Skills	Repeat Academic	Total Retest
Behaviour Sub Scale	Pearson Correlation Sig. (2-tailed) N	0.68 0.00 52			
Social Skills Sub Scale	Pearson Correlation Sig. (2-tailed) N		0.71 0.00 52		
Academic Subscale	Pearson Correlation Sig. (2-tailed) N			0.87 0.00 52	
Total Test Scale	Pearson Correlation Sig. (2-tailed) N				0.78 0.00 52

Sub scale correlations ranged from .68 to .87, and the full scale correlation was .78.

7.4.11 Factor Analysis

In the development of the Behaviour Rating Scale instrument, the various items were allocated into sub scales of behaviour, social skills and academic. Factor analysis determined common underlying groupings or factors. Further, a comparison of any factors identified within the sub scales devised will determine if they measured the same aspect of performance and if their grouping is appropriate.

The data were analysed using the Principal Components Analysis in which factors are identified by having an Eigenvalue greater than 1.0. In this analysis, there are three factors with values greater than 1, and these account for 71.73% of the variances.

Table 7-16 Eigenvalues

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	10.48	55.14	55.14	10.48	55.14	55.14
2	2.04	10.75	65.90	2.04	10.75	65.90
3	1.11	5.84	71.73	1.11	5.84	71.73
4	0.84	4.43	76.17			
5	0.73	3.82	79.99			
6	0.54	2.86	82.85			
7	0.46	2.42	85.27			
8	0.45	2.39	87.66			
9	0.39	2.07	89.73			
10	0.35	1.82	91.55			
11	0.33	1.76	93.31			
12	0.22	1.18	94.49			
13	0.21	1.10	95.59			
14	0.18	0.96	96.55			
15	0.18	0.93	97.48			
16	0.16	0.82	98.30			
17	0.14	0.75	99.05			
18	0.13	0.67	99.73			
19	0.05	0.27	100			

The factors were then rotated to simplify their structure. An oblique rotation method (Oblimin with Kaiser Normalization) was used as the goal of the analysis was to gain meaningful factors, not simply to reduce the number of factors. In terms of level of significance, with a sample size of 200, a factor loading of .40 is significant at the alpha (α) = .05 significance level (Hair, et al., 2006; Hair Jr, Anderson, Tatham, & Black, 1995)

Table 7-17 below shows the initial factor analysis and subsequent rotation. Three factors were clearly identified as well as one variable in which the highest correlation was .35 which is below the cutoff of ±.40 or greater, which is required for significance.

Table 7-17 Factor Analysis and Pattern Matrix

Items	Component			Pattern Matrix(a)		
	1	2	3	1	2	3
1. Student's behaviour is appropriate in classroom	0.78	0.25	-0.31	**0.84**	-0.09	-0.02
2. Student's behaviour is appropriate in school yard	0.74	0.31	-0.40	**0.94**	-0.03	-0.12
3. Student participates effectively in class	0.76	0.01	-0.17	**0.54**	-0.33	0.05
4. Student's behaviour allows ... work undisturbed	0.78	0.19	-0.24	**0.73**	-0.15	0.05
5. Student speaks appropriately... in class	0.72	0.39	-0.14	**0.73**	0.11	0.21
1. Student mixes effectively … in school ground.	0.62	0.26	-0.16	**0.62**	0.01	0.12
2. In class student can work appropriately ... group	0.75	0.17	-0.08	**0.54**	-0.13	0.22
3. Student can play appropriately in a team activity	0.77	0.25	0.18	0.36	-0.01	**0.56**
4. Student can play games fairly – … to the rules	0.79	0.19	0.39	0.12	-0.05	**0.80**
5. Student responds ... to winning & losing	0.71	0.29	0.42	0.12	0.10	**0.85**
6. Student can negotiate to fulfil own needs	0.70	0.09	0.04	0.35	-0.17	0.32
7. Student is aware of consequences ... behaviour	0.84	0.15	0.02	**0.48**	-0.17	0.36
8. Student has appropriate anger management skills	0.72	0.20	0.40	0.09	0.00	**0.78**
1. Attempting work at expected level in literacy	0.76	-0.48	-0.12	0.15	**-0.85**	-0.06
2. Completing set tasks in literacy	0.80	-0.43	-0.10	0.19	**-0.81**	-0.01
3. Attempting work at expected level in numeracy	0.69	-0.60	-0.01	-0.06	**-0.94**	-0.01
4. Completing set tasks in numeracy	0.72	-0.57	0.01	-0.05	**-0.92**	0.04
5. Experiencing success in academic activities	0.80	-0.43	-0.07	0.17	**-0.81**	0.03
6. Requesting assistance when required in class	0.65	-0.25	0.40	-0.25	-0.47	**0.60**

a Rotation converged in 9 iterations.

The first factor identified five variables that were grouped into a behaviour sub scale, plus two other variables which had been included in the social skills sub

scale. The second factor indicated that all six variables in the academic sub scale were aligned in that factor. Five of the variables have values ranging from -.81 to -.94. The sixth academic variable had a value of -.47 for the second factor but had a higher value of .60 with the third factor which mainly included the social skills variables. The third factor includes four of the eight variables in the social skills sub scale, plus one variable from the academic section.

The Behaviour Rating Scale (BRS) grouped variables into behaviour, social skills and academic sub scales. Social skills and behaviours are related to each other and a particular inappropriate behaviour may be considered a behavioural issue when underlying that behaviour could be lack of an appropriate social skill. Placing a variable in a social skills or behavioural sub scale is arguably dependent on one's perspective.

7.5   Behaviour Rating Scale - Discussion on Development of and Suggestions for Further Research

The Behaviour Rating Scale was designed for teachers to rate the performance level of students in behaviour, social skills and academic areas. It also required factual information about attendance and school suspensions which complement the subjective information.

7.5.1 Variables (items) Revision

The missing values analysis of the Behaviour Rating Scale showed three variables which could be modified for clarity and consistence of understanding across school sectors. Variables (behaviour 2 and social skills 1) which mentioned school yard/ground were missing values only in the secondary sector. The concept of the variable was to rate the student in an unstructured context outside the regular classroom. These variables can be re-phrased as "outside the classroom". This clarifies the variable so that secondary teachers who do see students in unstructured situations such as mingling in corridors between classes, before and after school, can use this knowledge to complete the form rather than be bound to the playground scenario.

The third variable that can be rephrased to give a broader interpretation is social skills 3 – students can play appropriately in a team activity. It is similar to the previous two variables in that 'play' could be interpreted as in the playground whereas using the word 'participate' has a broader meaning beyond a sporting team activity.

7.5.1.1 Sub scale revision

The factor analysis of the data indicated that there were three clear factors which were roughly aligned to the three areas designated on the Behaviour Rating Scale. The academic section had five strongly correlated variables (-.81 to -.94) and one with a correlation of -.47. This was significant enough to be included, but had a higher correlation of .6 with the social skills factor. At the data input level this

variable was not consistent with the other five variables in the section. On reflection, the five strongly related variables were about achievement or performance measures whereas the sixth variable – Requesting assistance when required in class – is more a social skill reflecting students' levels of self-confidence rather than academic performance. Therefore, realignment of the sixth academic variable into the social skills sub scale was considered appropriate.

A revised version of the academic section would include the following variables: Student is:

(a) attempting work at expected level in literacy;

(b) completing set tasks in literacy;

(c) attempting work at expected level in numeracy;

(d) completing set tasks in numeracy; and

(e) experiencing success in academic activities.

Five variables in the behaviour sub scale of the Behaviour Rating Scale were closely related to the factor, with correlations from .54 to .95. However, three other variables in the social skills sub scale - student mixes effectively with other students in school ground; in class student can work appropriately in small group; and student is aware of the consequences of own behaviour - have correlations with this behavioural factor of .62, .54 and .48, respectively. Two correlations are stronger than the lowest scoring variable in the behaviour sub scale. These items could be considered behaviours that can be observed as a result of the underlying social skills of the student. Social skills variable 7 - student is aware of the consequences of own behaviour – fits better with the behaviour factor. However,

in practice it is a skill and awareness that needs to develop so have chosen to leave it in the social skills area.

A revision of the behaviour sub scale now includes seven variables, namely:

(a) student's behaviour is appropriate in classroom;

(b) student's behaviour is appropriate outside the classroom;

(c) student participates effectively in class;

(d) student's behaviour allows others to work undisturbed;

(e) student speaks appropriately to teachers and other students in class;

(f) student mixes effectively with other students outside the classroom;

(g) in class, student can work appropriately in small group.

The social skills section had four of the eight variables closely correlated from .56 to .85, and one variable - student can negotiate to fulfil own needs - which was not clearly factored into any group. Variable 8 of the social skills section - student has appropriate anger management skills - had mean scores of 5.46 for primary students and 5.72 for secondary students. This may suggest that secondary students have more highly developed anger management skills. Anger management is demonstrated when students curb their desire for immediate gratification of their wants. Negotiation on the other hand implies an understanding that to gain a concession something has to be tendered in exchange, such as "if I want to play in the football team today I need to behave appropriately in this class". This is a higher and later developing skill. The negotiation variable was not at a level significant to be part of any of the pattern matrices. Again, the mean in primary age students of 5.17 was lower than the mean of 5.35 for

secondary students. This supports the later developing skill concept meaning that the low matrix score indicates that the variable is a more sophisticated concept than the other variables. Despite the lower score, it is still an important predictor of a student's successful performance in a classroom.

Revisions of the Behaviour Rating Scale reduce the social skills section to six variables which include:

(a) student responds appropriately to winning and losing;

(b) student can negotiate to fulfill own needs;

(c) student has appropriate anger management skills;

(d) student is aware of the consequences of own behaviour; and

(e) requesting assistance when required in class.

In essence, the grouping of behaviour and social skills could be argued in a number of ways with valid reasons for inclusion or exclusion from either group. The close relationship and interdependence between social skills and their application in behaviour is difficult to differentiate. Variables included in the revised social skills sub scale are those which are the foundation for, or underpin, the behaviour variables in the behaviour sub scale.

In the attendance section the label 'Total Days' was amended to 'Days Absent' and 'Maximum possible', amended to 'Maximum possible attendance' to improve clarity.

The data collection of post–intervention Behaviour Rating Scale information in practice had some issues which will be discussed in the next chapter. The issues relate to the attendance and suspension data collection. Whilst collecting longer term data is desirable, the co-operation and willingness of teachers diminishes over time. Teachers may also relocate and no longer have contact with specific students. The time frame of one term (ten weeks) is more manageable than two terms and the difference between four weeks and one term is unlikely to produce noteworthy differences. Hence the simplification of this section to ten school week periods

The following Figure 7-5 is a revision of the Behaviour Rating Scale to include recommendations suggested earlier in this chapter. Words which have been revised are ==highlighted==, and variables which have been relocated from one sub group to another, based on the validation and reliability findings, are written in *italics.*

Student:	D of B:	Date
Teacher		

Teacher Instructions: rate the student in the following areas.

Behaviour	1	2	3	4	5	6
	Rarely					**Always**
1. Student's behaviour is appropriate in classroom						
2. Student's behaviour is appropriate outside the classroom						
3. Student participates effectively in class						
4. Student's behaviour allows others to work undisturbed						
5. Student speaks appropriately to teachers & other students in class						
6. *Student mixes effectively with students outside the classroom*						
7. *In class student can work appropriately in small group*						

Social Skills	1	2	3	4	5	6
	Rarely					**Always**
1. Student can participate appropriately in a team activity						
2. Student can play games fairly – according to the rules						
3. Student responds appropriately to winning & losing						
4. Student can negotiate to fulfil own needs						
5. Student is aware of the consequences of own behaviour						
6. Student has appropriate anger management skills						
7. *Requesting assistance when required in class*						

Academic	1	2	3	4	5	6
Student is:	**Rarely**					**Always**
1. Attempting work at expected level in literacy						
2. Completing set tasks in literacy						
3. Attempting work at expected level in numeracy						
4. Completing set tasks in numeracy						
5. Experiencing success in academic activities						

Attendance	Days absent	Max possible attendance
1. In 10 school weeks prior to rating		

Suspensions	Number of times	Total number of days
1. In 10 school weeks prior to rating		

Figure 7-5 Behaviour Rating Scale (Revised)

7.5.2   Reliability Testing

Interrater reliability was not undertaken in this project. However, the reliability of the Behaviour Rating Scale (BRS) may have been enhanced if there had been a test of interrater reliability. In secondary schools students have a range of teachers with whom they interact. For this reason the quality and experience of each teacher, the students' interest in the subject material and the relationships students have with each teacher varies, and the consequent BRS may reflect the diversity of the students' performances within their schools. BRS forms completed by a range of teachers may provide an overall picture of a student's functioning. However, a summary picture may average out maximum and minimum values and not indicate specific needs of the student. It could also highlight where there are large discrepancies between the teacher ratings of students, the competencies of the teachers and their needs for support in their teaching role, or their relationship with the particular student.

In primary schools, students usually have the same teacher for most of their school day. Class teachers tend to know their students very well and their perception and rating of a student's behaviour is across a number of subject areas and learning situations. Therefore, rating by another teacher is unlikely to add more useful information than is presented by the class teacher.

7.5.3   Administration Refinement

There were a number of difficulties in recruitment of volunteers to complete the Behaviour Rating Scale form. Principals were contacted to negotiate speaking

about the Behaviour Rating Scale at staff meetings to request staff assistance. At the staff meetings there appeared to be a clear feeling of support. However, the low level of response particularly at some large schools, indicated otherwise. This could be interpreted that although teachers were willing to assist, completing the task was simply one more thing expected of staff or even the teachers who were prepared to complete the form simply forgot about it.

The schools where staff requested to complete the Behaviour Rating Scale at the meeting had the largest percentage of responses. If I repeated the exercise I would request additional time at the staff meeting to allow teachers who volunteered to complete the Behaviour Rating Scale to do so at the time. Teachers may not be able to complete the absence and suspension data without checking the records, but with permission of the Principal, I would complete those sections in conjunction with the records kept in the office.

This chapter outlined the thinking behind and considerations for the potential users (teachers) when the Behaviour Rating Scale was developed. The validation process and statistical analysis determined that the tool was reliable. Individual items (variables) were analysed as a result some items were relocated into a different subscale. The missing values in secondary school responses prompted variations to the language used in some of the items to improve clarity in both primary and secondary schools.

Chapter 8   Evaluation of Baltara Integration Unit Data

Previous chapters identified the need for quantifiable measurement of changes in students' performance as a result of intervention; and the development and validation analysis of the Behaviour Rating Scale (BRS). This chapter explores the analysis of the BRS data and the Sessional Evaluation Measure (SEM) data collected at the Baltara integration Unit.

The Baltara Integration Unit as described earlier in chapter 5 is an offsite intervention facility for students displaying social and emotional difficulties in mainstream schools. It is staffed by teachers and with a low student to teacher ratio (7 students to 3 teachers plus a teacher aide) it is expensive to maintain, and consequently it is desirable to provide evidence that there are positive and measurable outcomes for the students. The Behaviour Rating Scale for pre and post intervention assessment, and the Sessional Evaluation Measure (SEM) for daily performance monitoring, were developed to provide quantifiable and collectively reportable measures to supplement the existing qualitative and anecdotal reports which evaluate progress towards achieving the goals developed for individual students.

8.1 Behaviour Rating Scale

The Behaviour Rating Scale (BRS) as described and validated in chapter 7 was eventually incorporated into the referral process for the Baltara Integration Unit. The referring teachers assessed their own students using the BRS prior to intervention. Teachers were also requested to repeat the BRS after the intervention. This process provided external verification of the effect of the intervention. The pre-intervention Behaviour Rating Scale was mostly completed with diligence, as the referring teachers were keen to engage support for their students. The post intervention Behaviour Rating Scale may not have received the same considered treatment as the post intervention information which was more important to intervention teachers for their records than it was for the referring teachers who still had to manage the returned students.

8.1.1 Inconsistencies in Data Collection

Baltara Integration Unit used the Behaviour Rating Scale since its initial development as part of the referral procedure to the Baltara Integration Unit. It was revised based on feedback from schools until it reached its final form which was validated as part of the research reported in this thesis.

All schools in the Northern Metropolitan region were supplied with copies of the Baltara Integration Unit flyer with the original Behaviour Rating Scale attached. Later once the Behaviour Rating Scale had been validated the Baltara Integration Unit supplied the validated forms to schools that requested support for their

students. Availability of the superseded Behaviour Rating Scale in many schools caused inconsistencies in the data collected.

The Behaviour Rating Scale was used as an evaluation tool for assessment and research purposes rather than as part of goal setting and program development for the students. Here, teachers at the Baltara Integration Unit examine the new written referrals, discuss the relevant information and file the referrals and the Behaviour Rating Scales for later reference. However, a number of referrals were made using the original Behaviour Rating Scale and the use of the superseded form was not identified until the forms were being compared after the intervention program was completed.

In most cases the post intervention forms had been sent to the referring teachers ensuring the correct version was being used. The pre-intervention data on many students was presented on the original version, and their post intervention data was on the final version. This limited the number of students who were rated on the same pre and post intervention Behaviour Rating Scale.

The collection of another set of data on new students was impractical due to the small number of student places (seven maximum) and limited turnover of students over the length of the program (30 weeks). Furthermore, the waiting period until the entry and enrolment of new students was dependent on a student leaving or completing their program time. The data that were available were examined and recalculated as detailed in this chapter.

8.1.2 Statistical Adjustments for Inconsistent Data – Behaviour and Social Skills

The Behaviour Rating Scale for behaviour and social skills in the original version had a scale of five, whereas the final version has a six point scale. The five point scale scores were adjusted to the six point scale by arithmetically increasing scores on the original form by 20% or 1.2. This marginally increased the pre-intervention scores of the student thereby reducing the magnitude of any improvement that occurred. There were 23 pre-intervention Behaviour Rating Scale's forms covering over three years of new student enrolments. Eighteen of the forms had used the original Behaviour Rating Scale and needed adjustment.

Table 8-1 Baltara Pre -intervention Data – Adjusted Behaviour and Social Skills Sub scales

Variables - behaviours	N	Min	Max	Mean	Std. Dev
1. Student's behaviour is appropriate in classroom	23	1.00	4.00	2.17	0.90
2. Student's behaviour is appropriate in school yard	23	1.00	4.80	2.02	1.17
3. Student participates effectively in class	23	1.00	3.60	1.88	0.87
4. Student's behaviour allows others to work undisturbed	22	1.00	3.60	1.85	0.87
5. Student speaks appropriately to teachers & ... in class	22	1.00	4.00	2.05	0.96
Behaviour Sub scale Total				**9.95**	
Variables - social skills					
1. Student mixes effectively ...in school ground.	23	1.00	4.80	1.97	1.14
2. In class student can work appropriately in small group	23	1.00	4.00	1.71	0.93
3. Student can play appropriately in a team activity	22	1.00	4.00	1.90	1.02
4. Student can play games fairly – according to the rules	23	1.00	4.80	2.18	1.18
5. Student responds appropriately to winning & losing	22	1.00	4.80	1.95	1.25
6. Student can negotiate to fulfil own needs	23	1.00	5.00	2.06	1.30
7. Student is aware of the consequences of own behaviour	22	1.00	6.00	2.87	1.78
8. Student has appropriate anger management skills	22	1.00	4.80	1.92	1.22
Social Skills Sub scale Total				**16.57**	

The behaviour and social skills sub scales descriptive data are in Table 8-1 above. Behaviour scores range from 1.00 to 4.80 (possible 6.00), but the means range from 1.85 to 2.17. This gives a total mean score for the behaviour sub scale of 9.95 out of a possible 30. The social skills scores range from 1.00 to 6.00 with means ranging from 1.71 to 2.87 giving a total mean social skills sub scale score of 16.57 from a possible 48. These scores indicate that the students had significant needs in the areas of behaviour and social skills development. The fractional scores are the product of the calculation to equate a 5 point rating to a 6 point rating.

Table 8-2 represents the small group of students whose pre intervention rating was completed on the correct form. The results are included to indicate the results are similar to those calculated in Table 8-1. The data were compared to the previous table with the adjusted data. The behaviour sub scale item scores range is from 1.00 to 4.00 and the item means from 1.40 to 2.40 and the behaviour sub scale mean of 10.20 which is .25 higher or .8% of the possible score, higher. The social skills sub scale items range from 1.00 to 5.00; means are from 1.25 to 2.40 and the sub scale total mean score is 15.65 which is .62 lower than the adjusted sub scale score but is still only 1.30% of the score possible. These differences are marginal and do not substantially affect the data analysis. The results are included to indicate they are similar to those calculated in Table 8-2

Table 8-2 Baltara Pre-intervention Data — Non-adjusted Behaviour and Social Skills Sub scales

Variables - Behaviour	N	Min	Max	Mean	Std. Dev
1. Student's behaviour is appropriate in classroom	5.00	1.00	4.00	2.20	1.10
2. Student's behaviour is appropriate in school yard	5.00	1.00	4.00	2.40	1.34
3. Student participates effectively in class	5.00	1.00	2.00	1.40	0.55
4. Student's behaviour allows others to work undisturbed	5.00	1.00	2.00	1.80	0.45
5. Student speaks appropriately to teachers & ... in class	5.00	1.00	4.00	2.40	1.14
Behaviour Sub scale Total				**10.20**	
Variables - Social Skills					
1. Student mixes effectively ...in school ground.	5.00	1.00	4.00	2.40	1.14
2. In class student can work appropriately in small group	5.00	1.00	4.00	1.80	1.30
3. Student can play appropriately in a team activity	5.00	1.00	4.00	1.80	1.30
4. Student can play games fairly – according to the rules	5.00	1.00	4.00	2.20	1.64
5. Student responds appropriately to winning & losing	5.00	1.00	4.00	2.20	1.64
6. Student can negotiate to fulfil own needs	5.00	1.00	5.00	2.20	1.64
7. Student is aware of the consequences of own behaviour	5.00	1.00	3.00	1.80	0.84
8. Student has appropriate anger management skills	4.00	1.00	2.00	1.25	0.50
Social Skills Sub scale Total				**15.65**	

8.1.3   Behaviour and Social Skills Sub Scales Post-Intervention

The post intervention data of all the students are listed in Table 8-3 below. There was no adjustment to these ratings as the correct Behaviour Rating Scale form was distributed by the Baltara Integration Unit to the schools, after the students had completed the intervention these ratings used in all cases.

The data reveals that 11 of the 23 students rated in pre-intervention were re-rated post-intervention. The most common reason for lack of post intervention data was because the home school did not complete and return the post intervention form as requested. Some students may not have completed the program because parents could not maintain the transport commitment or there was a family relocation, or a serious incident had occurred and the welfare of other students was in jeopardy

and the student was excluded from the Baltara Integration Unit. This latter scenario would be an unusual event.

Table 8-3 Baltara Referred Students Post intervention Behaviour Rating

Variables - behaviours	N	Min	Max	Mean	Std. Dev
Rpt 1. Student's behaviour is appropriate in classroom	11	2.00	6.00	4.27	1.27
Rpt 2. Student's behaviour is appropriate in school yard	10	2.00	6.00	3.60	1.35
Rpt 3. Student participates effectively in class	11	1.00	6.00	3.82	1.40
Rpt 4. Student's behaviour allows others to work undisturbed	11	2.00	5.00	3.91	1.22
Rpt 5. Student speaks appropriately to teachers & other Student's	10	2.00	5.00	3.90	1.20
Behaviour Sub scale Total				**19.50**	
Variables - social skills					
Rpt 1. Student mixes effectively with other Student's in school gr	11	1.00	6.00	3.73	1.35
Rpt 2. In class student can work appropriately in small group	11	1.00	6.00	4.00	1.34
Rpt 3. Student can play appropriately in a team activity	10	1.00	6.00	3.60	1.43
Rpt 4. Student can play games fairly – according to the rules	10	1.00	6.00	3.80	1.40
Rpt 5. Student responds appropriately to winning & losing	10	2.00	5.00	3.80	0.92
Rpt 6. Student can negotiate to fulfil own needs	11	2.00	6.00	4.27	1.49
Rpt 7. Student is aware of the consequences of own behaviour	11	2.00	6.00	4.09	1.30
Rpt 8. Student has appropriate anger management skills	11	2.00	6.00	3.64	1.21
Social Skills Sub scale Total				**30.93**	

The post intervention behaviours sub scale item scores ranged from 1.00 to 6.00 with the item means varying from 3.60 to 4.27, with a total sub scale mean score of 19.50. The social skills sub scale items scores ranged from 1.00 to 6.00 with the item means ranging from 3.60 to 4.27, and the total sub scale score was 30.93.

8.1.4   Comparison Pre and Post-Intervention Behaviour and Social Skills

Pre and post intervention data were compared, firstly using paired individual variables and then by paired group sub scales. Behaviour sub scale item 1 was compared with repeated behaviour sub scale item 1 and so forth until each of the pre-intervention behaviour and social skills sub scale items were compared with their corresponding post intervention variables using t-test analysis. Paired

samples tests are based on the assumption that the two tests follow a similar distribution pattern. All individual item pairs for the behaviour and the social skills sub scales had t scores which were significant at the .05 level or better.

Table 8-4 shows an individual sub scale difference scores that range from 1.58 to 2.13 with a mean behaviour sub scale difference score of 1.83. The negative means indicates that the post-intervention scores (repeat) were subtracted from the pre-intervention scores, indicating a higher score or improvement at post-intervention. Probabilities range from .02 for item 2 to .001 for the overall sub scale.

Table 8-4 Paired Items Test - Behaviour Sub scale

| Paired Items Behaviour Subscale | Paired Differences | | t | df | Sig. (2-tailed) |
	Mean	Std. Deviation			
Pair 1 1. Student's behaviour is appropriate in classroom - Repeat 1.	-2.13	1.77	-3.99	10	0.00
Pair 2 2. Student's behaviour is appropriate in school yard - Repeat 2.	-1.58	1.74	-2.87	9	0.02
Pair 3 3. Student participates effectively in class - Repeat 3.	-1.84	1.59	-3.82	10	0.00
Pair 4 4. Student's behaviour allows others to work undisturbed - Repeat 4.	-1.73	1.41	-4.07	10	0.00
Pair 5 5. Student speaks appropriately to teachers & other students in class - Repeat 5.	-1.82	1.59	-3.44	8	0.01
Sub Scale mean pair Behaviour subscale mean - Repeat behaviour subscale mean	-1.83	1.37	-4.43	10	0.00

* Series means substitution was used to replace missing values in behaviour sub scale scores.

Desired significance values range from .05 (95% probability that difference was due to intervention rather than chance) to a more stringent .01 (99% probability), so all the differences between the paired items are acceptable (Best & Kahn, 2006; Hair, et al., 2006).

The results for the repeated measures t-test for the social skills items are shown in Table 8-5 with mean differences ranging from 1.49 to 2.13, and probabilities ranging from .03 for item 7 to .00 for the sub scale pair. These results indicate substantial differences in all items as well as the overall sub scale scores.

Table 8-5 Paired Samples Test - Social Skills Sub scale

| | Paired Items Social Skills Subscale | Paired Differences | | t | df | Sig. (2-tailed) |
		Mean	Std. Deviation			
Pair 1	1. Student mixes effectively with other students in school ground. - Repeat 1	-1.65	1.39	-3.94	10	0.00
Pair 2	2. In class student can work appropriately in small group - Repeat 2.	-2.04	1.75	-3.87	10	0.00
Pair 3	3. Student can play appropriately in a team activity - Repeat 3.	-1.53	1.79	-2.56	8	0.03
Pair 4	4. Student can play games fairly – according to the rules - Repeat 4.	-1.64	1.55	-3.35	9	0.01
Pair 5	5. Student responds appropriately to winning & losing - Repeat 5.	-2.12	1.36	-4.93	9	0.00
Pair 6	6. Student can negotiate to fulfil own needs - Repeat 6.	-2.13	1.86	-3.79	10	0.00
Pair 7	7. Student is aware of the consequences of own behaviour - Repeat 7.	-1.49	2.02	-2.45	10	0.03
Pair 8	8. Student has appropriate anger management skills - Repeat 8.	-1.85	1.31	-4.69	10	0.00
Sub Scale mean pair	Social Skills subscale mean - Repeat Social skills subscale mean	-1.88	1.33	-4.71	10	0.00

* Series means substitution was used to replace missing values in social skills sub scale scores.

Table 8-6 above shows sub scale means, change scores, and percentage change values for the behaviour and social skills sub scales.

Table 8-6 Comparison of Pre and Post intervention Sub scale Means

Sub Scale Means	Adjusted Pre Intervention	Post Intervention	Change	% Change from Pre int
Behaviour Total	9.95	19.50	9.55	**95.98**
Social Skills Total	16.67	30.93	14.26	**85.54**
Total	**26.62**	**50.43**	**23.81**	**89.44**

The students' behaviour sub scale rating total increased from 9.95 total mean to 19.50 total mean which is a difference of 95.98%. This is a dramatic result for

these students. The social skills sub scales moved from 16.67 to 30.93 which is 85.54% difference. Overall, the pre and post intervention Behaviour Rating Scale indicated approximately 89.44% change in student performance.

8.1.5 Academic Sub Scale Scores

The academic sub scale data presented a challenge for analysis. Pre-intervention data were mainly collected on the original form (see Figure 7-1, page 217) which requested levels from the Victorian Curriculum and Standards Framework (CSF). The final form (see Figure 7-4 page 221) was simplified to focus on the more generic literacy and numeracy skills excluding specific standards tied to the Victorian education system.

The data collected on the original form were compared to the final form of the Behaviour Rating Scale. The data needed to be adjusted to a similar scoring system so that comparisons could be made. In the final version definitive ratings on a six point scale were available, whereas yes/no answers on the original form could not give the same options for scoring.

Table 8-7 below shows the process for equating academic scores from the original versions to the final version, and presents rating equivalents applied in the academic section for each item.

Table 8-7 Procedures for Equating Academic Scores from Original Version to the Final Version

Final Version Academic sub scale (1-6 rating)	Equating/scoring	Original Version (Yes / no rating)
1. Attempting work at expected level in literacy	If (A) is Yes score is 6 (A) is No + (B) is Yes = 3 (A) is No + (B) is No = 1	(A) Attempting work at expected level in ….English (B) Attempting Modified work requirements in English
2. Completing set tasks in literacy	Yes = 6 No =1	Completing set tasks satisfactorily in …English
3. Attempting work at expected level in numeracy	If (A) is Yes = 6 (A) is No +(B) is Yes = 3 (A) is No + (B) is No = 1	(A) Attempting work at expected level in …Maths (B) Attempting Modified work requirements in Maths
4. Completing set tasks in numeracy	Yes = 6 No =1	Completing set tasks in Maths
5. Experiencing success in academic activities	Sum of Yes x 6 / 7 (equating to 6 point scale)	Experiencing success in ….:
6. Requesting assistance when required in class	Sum of Yes x 6 / 7 (equating to 6 point scale)	Requesting assistance when required in ……

Overall, the equivalent ratings generated gave students a higher rating, particularly in academic items 1 – 4, than you would expect had the revised form been used. Students rated on the 1 - 6 scale would be rated mainly at the lower values as recorded in the previous two sub scales. However, when there is a choice of two values, 1 or 6 the student may receive a '6' whereas if the full scale was used it would most likely be a lower value. An example is item 2 *Completing set tasks in literacy,* in which the student was rated either as 1 or 6, whereas if the revised form had been used the student would be rated between 1 and 6.

Frequency of Academic Scores

Legend:
- 1. Attempting work at expected level in literacy:
- 2. Completing set tasks in literacy:
- 3. Attempting work at expected level in numeracy:
- 4. Completing set tasks in numeracy:

X-axis: Rating
Y-axis: Frequencies
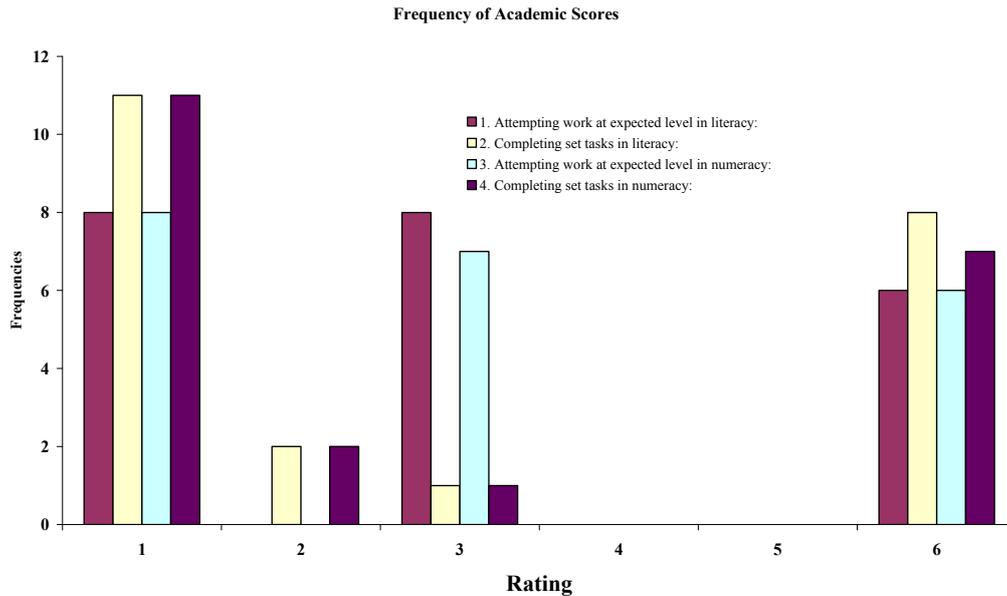
Graph 8-1 Frequency of Pre- Intervention Academic Rating (Items 1 - 4)

In Graph 8-1 the polarising of ratings demonstrates a non normal distribution of the ratings on each individual academic item made using the equated rating formula where scores could be 1, 3 or 6 rather than a full six point scale. The values at rating two were students who were rated on the revised form with the full scale. (N in graph 8-1 is 22 as per the data detailed in Table 8-8 Baltara Academic Pre-Intervention Data).

The following Graph 8-2 shows the pattern of distribution for behaviour and social skills sub scales (sum of individual items) and the irregularity of distribution for the academic sub scale caused by the equated ratings, which increase the pre-intervention mean data for the academic sub scale. N is 22 students however as the graph shows the total of scores for each subscale rather than individual items the frequencies are higher. As the three subscales had

270

different number of items (behaviour 5, social skills 8 and academic 6) the totals
were averaged to give equivalence to the subscale scores.

The focus of Graphs 8-1 and 8-2 is to show the non-parametric distribution of the
individual academic items (graph 8-1) and the comparison of the total subscales
(graph 8-2) where behavioural and social skills follow a parametric distribution
but even as a combined subscale the academic items are clearly non parametric.
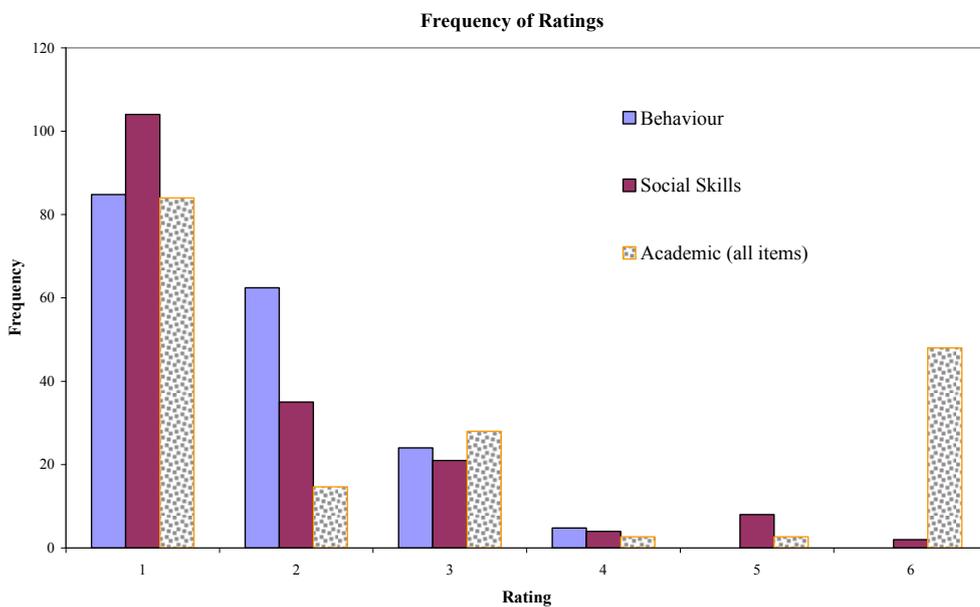
**Graph 8-2 Distribution of Sub scale Ratings (adjusted for difference in sub
scale variables)**

Parametric statistics were used for the behaviour and social skills sub scales in the
above graph demonstrating the scores as randomly distributed and scales as
interval or ratio (Breakwell, 2006). Parametric statistics were not appropriate for
the amended academic sub scale as the scores were not normally distributed as in
the previous graphs; consequently non parametric statistics were required for
analysis of the academic data.

In the behaviour and social skills analysis, the mean was calculated for each item. However, the pre-intervention academic sub scale meant that data was higher than expected for the cohort of students due to the non-normal distribution mentioned above. The median, which is the middle score when all scores are ranked from lowest to highest, is a more appropriate measure of central tendency with these data (Hinton, 2004).

An analysis of all Baltara pre-intervention academic data is shown in Table 8-8 below. The median score for each item is less than the mean. Median scores ranged from 1.00 to 3.00 with a total sub scale median of 13.00. The individual median scores ranged from 2.50 to 3.10 which were lower than the mean scores for the same items. The total sub scale median of 13.00 is lower than the total mean scores of 17.50, but it and the individual item median scores are more representative of the central tendency of the data collected, than the mean scores.

Table 8-8 Baltara Academic Pre-Intervention Data

	N	Min	Max	Mean	Median	Std. Dev
Items - Academic						
1. Attempting work at expected level in literacy	22	1.00	6.00	3.09	3.00	2.02
2. Completing set tasks in literacy	22	1.00	6.00	3.00	1.50	2.37
3. Attempting work at expected level in numeracy	21	1.00	6.00	3.10	3.00	2.07
4. Completing set tasks in numeracy	21	1.00	6.00	2.86	1.00	2.33
5. Experiencing success in academic activities	22	1.00	6.00	3.00	2.50	2.14
6. Requesting assistance when required in class	22	1.00	6.00	2.50	2.00	1.92
Academic Sub Scale				17.54	**13.00**	

The Baltara academic post intervention (or repeated measure) data is shown in Table 8-9 below. Results indicate that the median scores of each item rose, with the minimum being 3.00 and the maximum 4.00. The academic sub scale total median increased to 20.00.

Table 8-9 Baltara Academic Post Intervention Data

Items - Repeat Academic	N Valid	Min	Max	Mean	Median	Std. Dev
Repeat 1. Attempting work at expected lin literacy	11	2.00	6.00	4.18	4.00	1.25
Repeat 2. Completing set tasks in literacy	11	2.00	6.00	3.45	3.00	1.04
Repeat 3 Attempting work at expected in numeracy	11	1.00	6.00	3.64	3.00	1.75
Repeat 4. Completing set tasks in numeracy	11	2.00	6.00	3.36	3.00	1.29
Repeat 5. Experiencing success in academic activities	11	2.00	6.00	3.91	3.00	1.30
Repeat 6. Requesting assistance when in class	11	1.00	6.00	3.82	4.00	1.60
Repeat Academic Sub Scale Total				**22.36**	**20.00**	

These measures of central tendency indicate that the post intervention scores are higher than the pre-intervention scores. The student numbers assessed pre and post intervention were not equal due to attrition and other factors discussed earlier.

In the behaviour and social skills scales, t tests were used for evaluating significance of changes between the pre and post tests. This was not suitable for the academic data which were ranked. The pairs of ranking were compared using the Wilcoxon Signed Ranks Test and shown in the Table 8-10.

Each pair of items was analysed and the rank difference between the samples was calculated. Academic item 1 *Attempting work at expected level in literacy* data shows that one of the students had a negative ranking compared to the pre-intervention ranking but seven students had positive ranks in comparison to the pre-invention ranking. Three students were tied meaning their ranking was equivalent in each sample. The magnitude difference in the sum of ranks in Academic item 1 is 32.5 – 3.5 = 29.

The other items results are interpreted in the same way. Academic item:

- 2 had a *negative* result with a total magnitude of   3;

- 3 had a *positive* result with a total magnitude of   11;

- 4 had a *positive* result with a total magnitude of   20;

- 5 had a *positive* result with a total magnitude of   15; and

- 6 had a *positive* result with a total magnitude of   25.

The sub scale total had a *positive* result with a total magnitude of   38.

Table 8-10 Academic Sub scale Wilcoxon Signed Ranks Test

Paired Items		N	Mean Rank	Sum of Ranks
Academic Repeat 1. Attempting work at expected level in literacy	Negative Ranks	1	3.50	3.50
	Positive Ranks	7	4.64	32.50
	Ties	3		
	Total	11		
Academic Repeat 2. Completing set tasks in literacy	Negative Ranks	4	6.00	24.00
	Positive Ranks	5	4.20	21.00
	Ties	2		
	Total	11		
Academic Repeat 3. Attempting work at expected level in numeracy	Negative Ranks	1	2.00	2.00
	Positive Ranks	4	3.25	13.00
	Ties	6		
	Total	11		
Academic Repeat 4. Completing set tasks in numeracy	Negative Ranks	2	3.25	6.50
	Positive Ranks	6	4.92	29.50
	Ties	3		
	Total	11		
Academic Repeat 5. Experiencing success in Academicemic activities	Negative Ranks	1	3.00	3.00
	Positive Ranks	5	3.60	18.00
	Ties	5		
	Total	11		
Academic Repeat 6. Requesting assistance when required in class	Negative Ranks	3	3.33	10.00
	Positive Ranks	6	5.83	35.00
	Ties	2		
	Total	11		
Academic subscale repeat - Academic subscale	Negative Ranks	1	8.50	8.50
	Positive Ranks	9	5.17	46.50
	Ties	1		
	Total	11		

The Wilcoxon Signed Rank tests show positive gains in five of the six items and a positive total sub scale result. Item 2 – *completing set tasks in literacy* – had the only negative results. The Z-scores and significance of the results are detailed in the following Table 8-11.

Table 8-11 Z Scores and Significance Values for the Academic Sub scale

Academic Items	Z		Asymp. Sig. (2-tailed)
1. Attempting work at expected level in literacy	-2.13	a	0.03
2. Completing set tasks in literacy	-0.18	b	0.86
3. Attempting work at expected level in numeracy	-1.51	a	0.13
4. Completing set tasks in numeracy	-1.65	a	0.10
5. Experiencing success in academic activities	-1.59	a	0.11
6. Requesting assistance when required in class	-1.49	a	0.14
Academic sub scale total	-1.94	b	0.05

a Based on negative ranks.　　b Based on positive ranks.

Academic item 1 is significant at the .03 level. The total sub scale score was significant at the .05 level. Differences in the other academic items were not significant.

8.1.6　Attendance and Suspension

The attendance data means have been calculated using all data and then listwise exclusion, in which cases missing data are excluded. The data Table 8-12 Attendance and Suspension Data (whole sample) represent the pre and post intervention of all students where data were available. In some cases where there were no absences or suspensions recorded, it is highly likely that teachers left the space blank rather than writing zero.

Student absences in four weeks prior to the first survey ranged from 0 to 16 days with a mean of 3.06 days and a standard deviation of 4.28. The repeat survey scores showed the range reduced to 11 days, the mean reduced to 2.33 days and the standard deviation reduced to 3.54 indicating that the spread of scores had reduced.

Table 8-12 Attendance and Suspension Data (whole sample)

Attendance and Suspensions	N	Min	Max	Mean	Std. Dev
1 Attendance in 4 weeks prior to referral	16	0	16	3.06	4.28
Repeat 1. Attendance in 4 weeks prior to rating	9	0	11	2.33	3.54
2. Attendance in term prior to referral	17	0	23	6.94	7.03
Repeat 2. Attendance in term prior to rating	9	0	15	3.89	4.96
1. Suspension in 4 weeks prior to referral (times)	17	0	10	1.71	2.52
Repeat 1. Suspension in 4 weeks prior to rating (times)	9	0	2	0.33	0.71
2. Suspension in two terms prior to referral (times)	16	0	7	2.19	1.87
Repeat 2. Suspension in two terms prior to rating (times)	9	0	6	0.89	2.03

* Initial form completed at time referral is made; repeat form after intervention completed

In the data for the term prior to the survey the range reduced from 23 to 15 days, the mean from 6.94 to 3.89 days and the standard deviation reduced from 7.03 to 4.96. The post intervention data indicated a reduction in absences.

The suspension data also indicated a reduction in the suspensions from 10 to 2 days in the four weeks prior to the surveys, the mean reducing from 1.71 to .33 days with the standard deviation reducing from 2.52 to .71. Suspensions in the term prior to the surveys show a reduction from 7 to 6 days, and the mean score reduced from 2.19 to .89 days. The standard deviation increased, which indicates there is one or more scores outlying the normal distribution.

The individual attendance and suspension sections were reduced listwise so that data were analysed only using surveys with matching pairs of variables - Table 8-13 below are indicative of improved attendance and reduction of suspensions.

Table 8-13 Attendances and Suspensions Paired Means

		Mean	N	Std. Dev
Pair 1	1. Attendance In 4 weeks prior to survey	2.2	5	2.28
	Repeat Attendance In 4 weeks prior to survey	3.0	5	4.80
Pair 2	2. Attendance In term prior to survey	8.2	5	4.92
	Repeat Attendance in term prior to survey	4.2	5	6.38
Pair 3	1. Suspension in 4 weeks prior survey (times)	1.8	5	2.17
	Repeat Suspens in 4 weeks prior survey (times)	0.0	5	0.00
Pair 4	2. Suspension In two terms survey (times)	3.2	5	2.59
	Repeat Suspension in two terms survey (times)	0.0	5	0.00

The following Table 8-14 illustrates that changes in attendance in pre and post intervention periods are not significant at .05 level, and reduction in suspension of students in the two terms prior to the survey is significant at .05 level.

Table 8-14 Paired Samples t test Attendance and Suspension

	Attendance and Suspension	Mean	Std. Dev	t	df	Sig. (2-tailed)
Pr 1	Attendance in 4 weeks prior to survey	-0.8	6.38	-0.28	4	0.79
Pr 2	Attendance in term prior to survey	3.33	9.79	0.83	5	0.44
Pr 3	Suspension in 4 weeks prior survey	1.67	1.97	2.08	5	0.09
Pr 4	Suspension in two terms survey	2.83	2.48	2.79	5	0.04

The sample size for attendance and suspension data was not very large. The statistics indicate that no significant findings can be attributed to the student cohort. In the other three sub scales scoring option ranges from 1 to 6. Here there is no defined or maximum range for the attendance and suspension data. The attendance and suspension data, based on the statistics above, provides more

277

information about an individual student basis rather than on a cohort basis. However, in this case the paired data means in Table 8-13 provide a positive trend in the data, albeit not statistically significant.

8.2 *Daily Performance using Sessional Evaluation Measure*

Students are rated on their performance during each of the three sessions of the day using the Sessional Evaluation Measure which rates performance on a five point scale in participation, behaviour and task completion as described and discussed in Chapter 5 and Chapter 6.

All students have individual weekly work plans devised by the teacher when ratings are recorded. Visual analysis of the daily data allows teachers to determine if a particular lesson or activity, time period or day is more difficult, for the student and allows them to develop appropriate strategies. This is in keeping with the following form illustrated in Figure 8-1. The template is for teachers to record assessment of participation (P); behaviour (B); and task completion (T) as well as record of the curriculum area and specific activity completed by the student during each session.

Teachers rate the student's performance in each aspect of the lesson, and record the numerical rating based on the criteria as soon as practical after the lesson. The data are then transcribed onto an MS Excel worksheet.

	Student Weekly Program													

Student Weekly Program

Student:
Date

Weeks in Program

	Monday			Tuesday			Wednesday	Thursday			Friday		
Session 1							*Students attend their home school.*						
	P	B	T	P	B	T		P	B	T	P	B	T
Session 2													
	P	B	T	P	B	T		P	B	T	P	B	T
Session 3													
	P	B	T	P	B	T		P	B	T	P	B	T

Rating	**P**articipation -being actively part of the lesson	Student **B**ehaviour	**T**ask Completion	
5	80%- All of the time	5. Appropriate -all **the time**	**5. All -** Independently	
4	Up to 80% of the time	4. Appropriate **-** most **of the time**	**4. All -** Semi Independently	
3	Up to 60% of the time	**3. Difficult but** manageable some **of the time**	**3. All -** with assistance	
2	Up to 40 % of the time	**2. Difficult -** excluded some **of the time**	2. Partial **Completion**	
1	20% or less of the time	**1. Uncooperative -** excluded most **of the time**	1. Non **Completion**	

**Figure 8-1 Student's Weekly Work Schedule and Performance Form**

There is no common starting date for all students and new students are enrolled continuously throughout the year as other students complete their programs and create vacancies.

Student data are recorded so that each student's first week performance is recorded for comparison with the first week's performance of other students. The pattern of performance has been recorded for students who attended the Baltara Integration Unit for periods from 1 to 30 weeks.

There are some critical Baltara program factors which impact on these data. For example, students begin returning to their home schools for an extra day (total two days per week) from approximately the eleventh week. Five weeks later they begin a third day at their home school. There is some flexibility in implementing the additional days at the home school depending on the needs of the student, but wherever possible the regular timetable of additional days is enforced. Further, the thirty weeks of involvement in the program is the maximum - should a student need that amount of time. Some secondary students are ready to return full time to their home school earlier than thirty weeks, but this is unusual for a primary age student unless it is a logical marker such as the end of a school term.

The following four graphs show the collective data of up to 35 students who participated in the Baltara Integration Unit program over a five year period. Each performance category has three graphs which illustrate: (a) number of students in the data set which reduces over time; (b) linear representation of weekly data; and (c) a polynomial (poly) trend graph with turning points in the data.

Student participation in an activity is detailed in Graph 8-3 . This is determined by the proportion of the lesson time that the student is actively engaged with the lesson. Non participation for the whole lesson is rare, as at some stage the teachers are usually able to gain students' interest in the lesson. Students may be reluctant to begin an activity or ready to stop when they have had enough. They may also be reluctant if they are not being as successful as they would like.
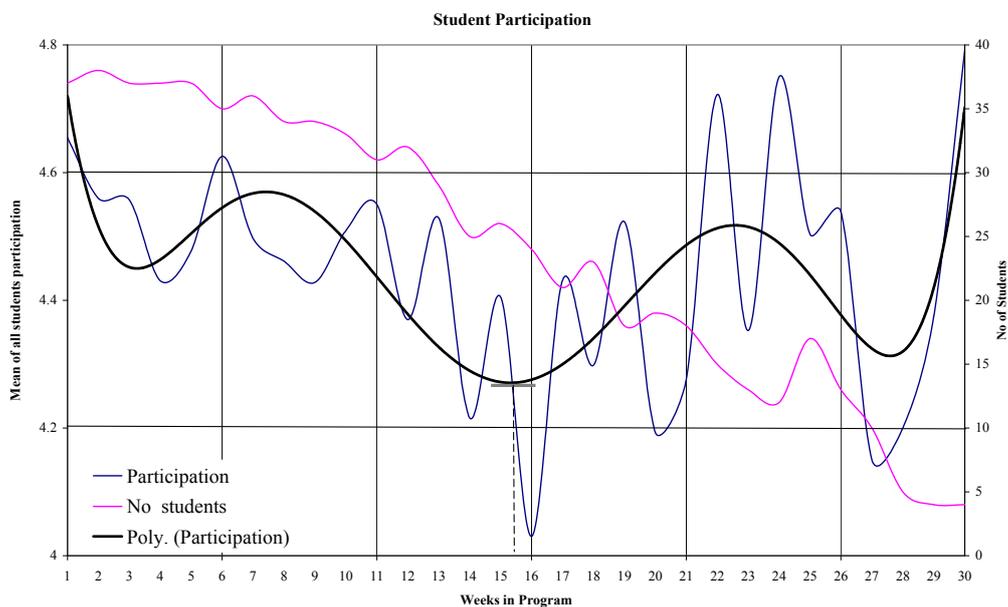
Graph 8-3 Student Participation at Baltara Integration Unit

The pattern of student participation varied over the 30 weeks of the program. The polynomial (Poly) trend line shows different stages of participation over the length of the program. There is a definite turning point in the program at three weeks, when participation becomes positive. However, after about seven weeks a long period of deterioration occurs until about week 16 when participation begins to improve. The participation graph only has one week of dropping a mean score well below 4.2.

Student Behaviour patterns displayed in Graph 8-4 show a relatively stable period on the trend line between the third and eighth weeks, followed by a downward trend until about 15 weeks.
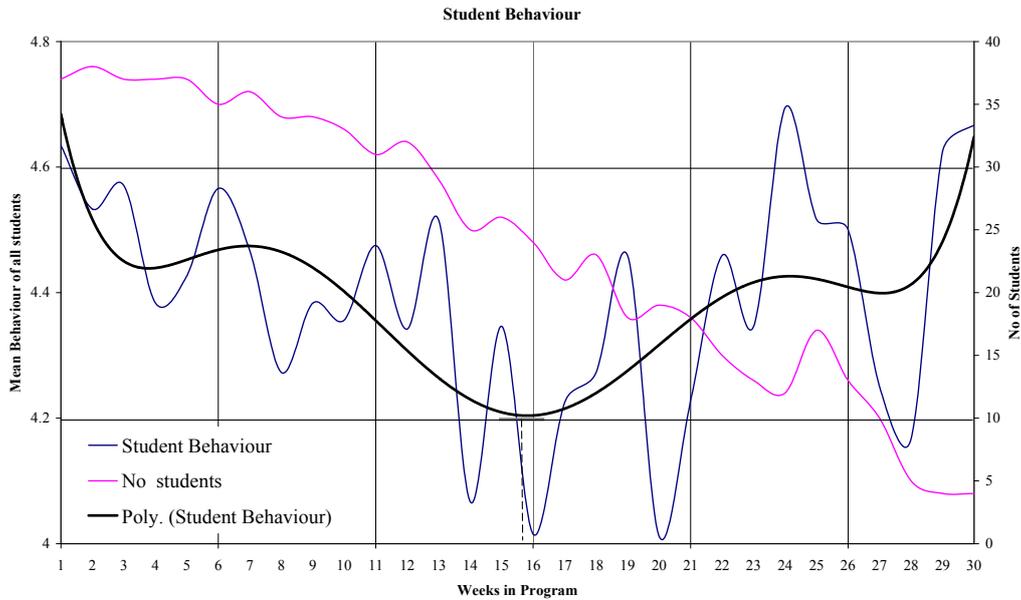

Graph 8-4 Student Behaviour at Baltara Integration Unit

Student behaviour then continues to improve until the end of the program. The lowest turning point on the behaviour graph (approx 4.2) is lower than the lowest point on the participation and task completion trend lines which are closer to 4.3. The behaviour trend rises from the low point until it stabilises at approximately 4.4. There are three sharp dips in the Student Behaviour graph which are below the 4.2 line. The poly trend line of student behaviour shows that maximum turning points are lower than the turning points on the other performance elements.

Task completion results displayed in Graph 8-5 show a similar trend of reducing performance until the turning point about weeks 15 and 16, and increases

positively from then onwards. Task completion data show a more consistent

performance over the program duration than the other categories of performance.

Towards the end of the program the task completion graph has some higher

spikes, indicating that students are completing more tasks with less supervision

and / or assistance.
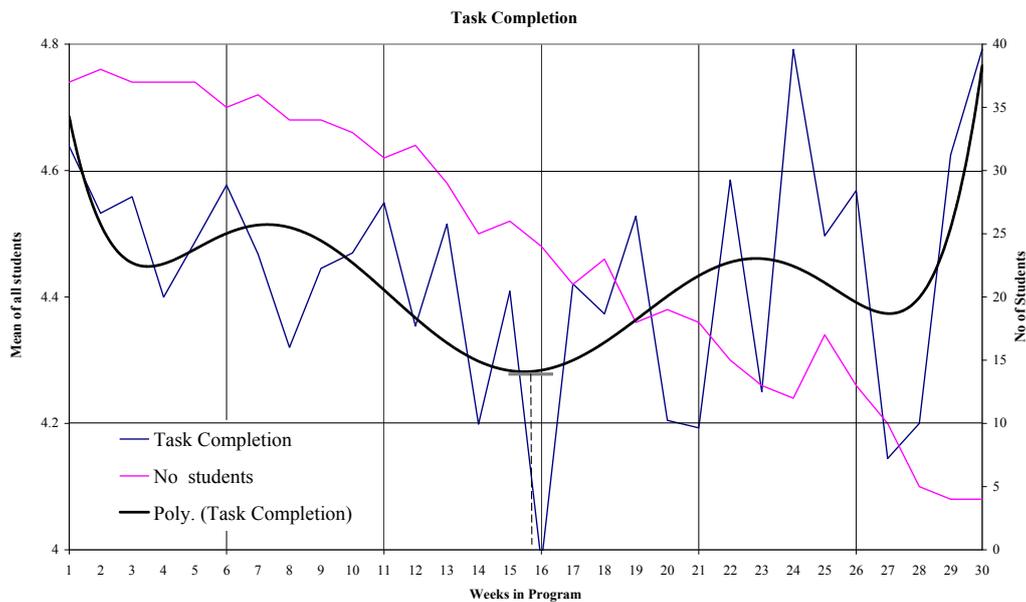
Graph 8-5 Student Task Completion at Baltara Integration Unit

The combined performance displayed in Graph 8-6 is of participation, behaviour

and task completion data to determine an overall pattern of performance in the

Baltara Integration Unit program. The combined poly trend pattern is similar to

the earlier graphs, appearing with a turning point from weeks fifteen and sixteen.
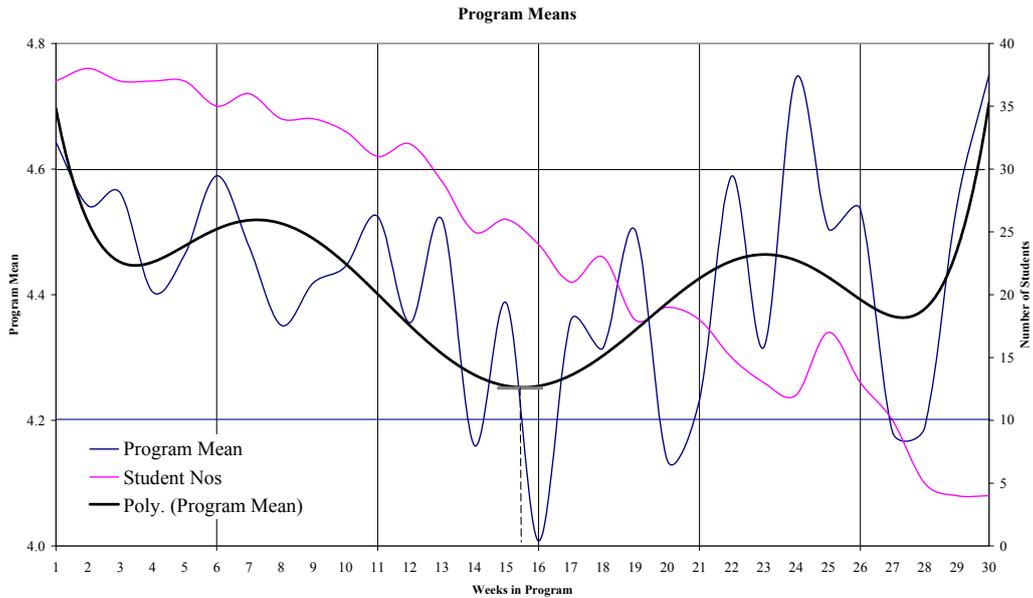
Graph 8-6 Students Combined Performance at Baltara Integration Unit

There are a few performance dips in the combined performance data after the lowest turning point, but in the poly trend graph these still contribute to a positive trend.

8.3   *Effectiveness of Baltara Integration Unit*

Students who are referred and admitted to the Baltara Integration Unit have a set of individual goals or objectives, (discussed in detail in the next chapter) as the focus of their program. Reporting of students' progress each five weeks is related to these specific objectives. Intervention to achieve the desired objective is in the context of the regular school curriculum. The explicit objective of completing a task as part of a mathematics lesson is more likely to provide an avenue of success for the student to improve self-esteem. The improvement in the student's mathematical achievement is embedded in the activity, but is not the prime goal.

Subjective reports that are presented and discussed with the parents and the home school representatives provide specific information on the students' improvement in the BIU environment, relevant to the students' specific goals. Referrals are limited to up to five achievable goals for the time-frame of the intervention, so there are many generic aspects of school life which are not covered by the specific goals.

The effectiveness of the Baltara Integration Unit is determined by a combination of qualitative and quantitative factors which include: progress towards intervention goals or objectives; improvement in performance (participation, classroom behaviour and task completion); parents' anecdotal comments on changes in their children's' behaviours; and the data presented earlier in this chapter.

8.3.1   Behaviour Rating Scale Measure of Effectiveness

Evaluating effectiveness relies on data that were prepared by teachers who referred students to the Baltara Integration Unit. They completed the Behaviour Rating Scale for their student at the time of making the referral. The post information data is generally completed by the referring teachers at the end of the students' enrolment at the Baltara Integration Unit. This is an external quantitative measure of the students' performance before and after the intervention.

8.3.1.1 Pre-Intervention Student Characteristics

The preceding Behaviour Rating Scale data completed by referring teachers indicates that the students referred to the Baltara Integration Unit experience extreme difficulties in expected school behaviours, social skills and academic performance. The total average behaviour sub scale rating of Baltara students is 9.95, whilst the mainstream validating group is 27.69. The Baltara students average social skills rating is 16.57 compared with the mainstream rating of 43.7, and the total academic sub scale for Baltara students is 17.50 compared with the 32.45 scored by the mainstream group. Data show that Baltara Integration Unit students present with greater needs than most other students. These students have more absences – 7 days average per term (10 weeks) compared with 1.4 days in mainstream, and more school suspensions 1.7 times in a term compared with no suspensions for the validating student group. Overall, students referred to Baltara Integration Unit are neither experiencing success in their classroom nor in their school environment. They are absent from school more often than their classmates, and they are suspended more often. Therefore, it is reasonable to deduce that there is a relationship between inadequacies in behaviour, social skills and academic performance with absenteeism and school suspensions (Lomotey, 2008; McCluskey, Bynum, & Patchin, 2004; Mueller, Giacomazzi, & Stoddard, 2006; Roby, 2004).

8.3.1.2 Post Intervention Student Performance

The post intervention data collection is completed by the referring teachers (external to the Baltara Integration Unit) and shows improvement in each of the

areas discussed above (see Table 8-6 Comparison of Pre and Post intervention Sub scale Means). The behaviour sub-scale means total scores moved from 9.95 to 19.50 (possible 30) which is a 95.98% improvement in the students' behaviour. The social skills sub scale means total scores are from 16.57 to 30.95 (possible 48), and academic performance from 17.50 to 22.36 (possible 36).

Table 8-15 Academic Pre and Post intervention Comparisons

Academic Sub Scale	Pre-Intervention	Post Intervention	Change	% Change from Pre int
Mean	17.50	22.36	4.86	**27.77**
Median	13.00	20.00	7.00	**53.85**

The mean of the academic sub scale as shown in Table 8-15 shows the smallest increase as 27.77 %. This can be attributed to the pre intervention mean being higher due to the adjustments which had to be made. The median which was discussed as being a more appropriate measure in this case shows an improvement of 53.85%.

In each of the measurable sub scales, improvement was recorded. This is an indication that the Baltara Integration Unit is effective in improving the behaviour, social skills and academic achievement of students. The results discussed here are important and confirm that improvements in student performance can be quantified.

Results gained from the pre and post intervention data are very encouraging for the intervention unit and also for the teachers who referred the students. However,

as the following Table 8-16 shows post intervention mean scores noted in Baltara students are still below the performance of mainstream students.

Table 8-16 Baltara Student Data Compared with Mainstream Data Set

Sub Scale	Mainstream mean	Post Intervention mean	Post intervention % of mainstream
Behaviour (Max 30)	27.69	19.50	**70.42**
Social Skills (Max 48)	43.71	30.93	**70.76**
Academic (Max 36)	32.45	22.36	**68.91**
Total	**103.85**	**72.79**	**70.09**

Mainstream students had a behavioural sub scale total mean of 27.69 compared with the Baltara students post intervention mean of 19.50, which is 70.42 % of the average score of the mainstream group. For the social skills sub scale mean the difference was 43.71 to 30.93, which is 70.76% of the mainstream score. The academic post intervention mainstream score was 32.34 compared with 22.36, which is 68.91% of the mainstream score. Overall, whilst Baltara students are performing better than their pre-intervention scores in general, their performance is still about 30 % lower than mainstream students.

Teachers of students returning from Baltara and any other intervention program who are cognisant of the improvement of the individual child but put it in the context of mainstream students' performances, will be aware that continued support will be necessary for the returning student. This is clearly illustrated in the following graph.
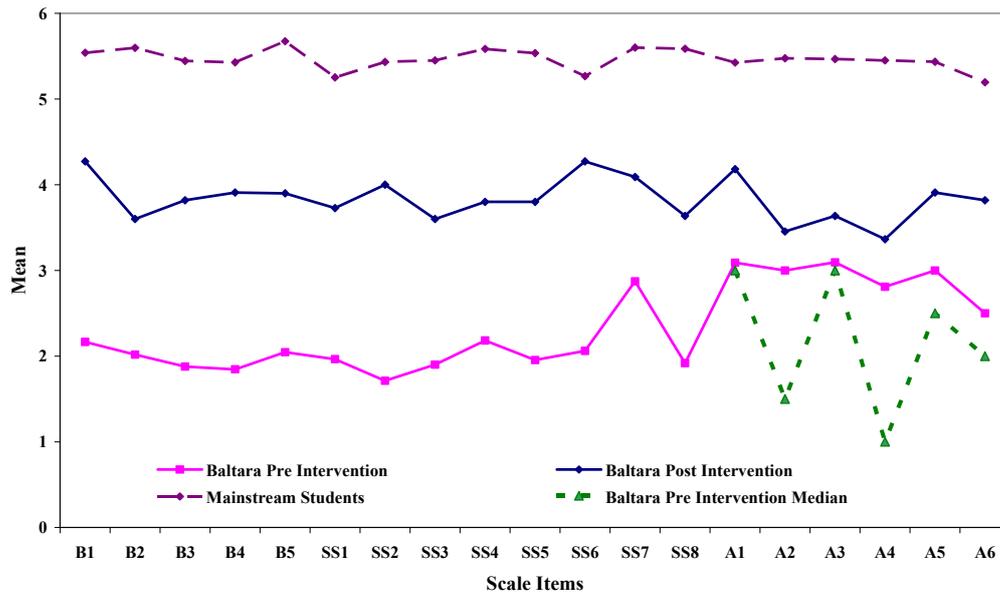
Graph 8-7 BRS Mainstream and Baltara Students' comparison

The mean rating of Baltara students prior to intervention is the lowest solid line on the graph. The median rating of Baltara students' academic sub scale pre intervention is the lower broken line. The substantial improvements the students have made can be seen in the middle line. The academic items have the least improvement, but using the pre intervention median score items A2 and A4 *student completes set tasks in literacy* and *numeracy,* respectively, show a dramatic improvement in the work students complete.

The broken upper line which is the mean rating of mainstream students shows a higher performance level. The graph illustrates that Baltara students improved in all areas but are still not performing at the same level as mainstream students. The Baltara Integration Unit program has improved students' behaviour, social skills and academic skills, but further support is needed to maintain the improvement and continue developing in these areas.

Student attendance data improvement is also an indicator of success. According to Roby (2004) "attendance was considered important for adaptive functioning in the cognitive and behavioral realms" ("National dialog on student retention," 2008, p. 4). If students are not at school they do not have the opportunity to develop and practise appropriate school behaviours and curriculum specific skills. The rate of absences of students who attended Baltara dropped from 7 days per term to 4 days, and the suspension rate dropped from 2.19 times to .89 times over two terms.

Improved attendance indicates that students have more desire to attend. This could be for a range of factors including being more comfortable in the school environment; better relationships with teachers and peers; and higher achievement levels than before the intervention.

Overall the data indicated that as an outcome of the intervention, students were rated higher in their school behaviour, social skills development, and academic achievement. This supports the proposition that off-site intervention is effective and produces positive outcomes for students.

Not all of the post intervention Behaviour Rating Scale respondents saw value in the Baltara Integration Unit program. Some teachers expected the returning student to be functioning on the same level as other students in the class. The following anecdote illustrates one such example.

Adrian was referred to the Baltara Integration Unit for a range of difficulties including isolation in the playground, disruptive behaviours in the classroom and poor work habits. At the end of the intervention program Adrian's mother was pleased with his improved behaviour, and teachers at the Baltara Integration Unit could see the changes as could the home school principal. Adrian's class teacher used the repeat Behaviour Rating Scale. However, comparison between the before and after Behaviour Rating Scales indicated that in each item Adrian had either stayed the same or was rated at a lower level than the first Behaviour Rating Scale. This was surprising, so at a final meeting the referring teacher who completed both forms was asked about Adrian.

"Has Adrian improved at all?"

"No he hasn't. Adrian is still being thrown out of class" he said.

"Does he stay in class any longer that before?"

"Yes. He used to get thrown out early in the morning, now he lasts until nearly recess time!"

"So that is an improvement."

"Yes, I suppose so. But he still doesn't do the same amount of work as the other students in the class."

"Does Adrian complete any more work than before he attended the program?"

"Yes. He does most of the work I give him now."

"So that is an improvement."

"Yes. It is better.

Similar specific questioning about improvement in areas where rating scores had not changed, elicited other positive responses about changes in Adrian's behaviours and school participation which had not been indicated on the Behaviour Rating Scale.

This scenario was one where it took strategic probing to assist the referring teacher to acknowledge positive changes in the student. Data collection from external sources can be problematic however, despite the example illustrated above. The post intervention data indicated that the program delivered by the Baltara Integration Unit achieved improved performance by the students as assessed by the teachers who referred the students for intervention.

8.3.2   Parental Evidence of Success

Parents' opinions of the success of the program are very important. As a regional facility, most students who attend need to use public transport or have parents transport them to the school. Consequently, if the parents do not value the programs or do not see positive changes in their children, they will be reluctant to drive their children to the facility. Only two parents were interviewed; as the ethical considerations and logistics of interviewing more parents proved too difficult.

Parent 1 noticed that after attending the Baltara Integration Unit her son was less argumentative. He could now hold a conversation with her and see other people's point of view. He was not as domineering as he used to be and could compromise. In discussing the Baltara Integration Unit she said:

> "*He loved it. He wanted to go to school - it was a change. He had a lot of problems in school with teachers and things like that and fitting in and this really changed his whole attitude towards school. There were no arguments, he really wanted to go. ...He would get up early and he would go to bed at a reasonable time which was amazing because he would never do that before, he would stay up as long as he could so he would be exhausted and so he could argue not to go to school. He didn't get sick as often as he did before.*"

> "*I think it [Baltara] has been very beneficial. It's enabled him to still have an education he has learnt different strategies so he has gone on with his schooling - he has developed strategies to deal with his anger and making better friendships and not being so judgmental that's been really good, it has changed his whole behaviour. He is much happier in himself*"

Parent 1 also discussed the relationships developed with her son by the staff.

> "*They made him feel like he was a person again. [Previously] he was the naughty boy he was not Billy, they gave him that back, the labeling disappeared*".

Parent 2 was very pleased with the Baltara Integration Unit. Talking about her son she said:

"He had actually been out of school for about four weeks [before he started in the program] while I had been trying to home school him but it was a bit of a joke. 'Cause I couldn't get him out of bed. He was expelled from his previous school so I think it [attending Baltara Integration Unit] was an opportunity for him to be positively engaged back in education"

"It was sad to see a 10 year old child who has basically ... has finally given up, finally on life and education so I think that it was good that he kinda swung his attitude around that education might have something positive for him."

"He preferred to be there [Baltara] than the days he went to go to his home school which obviously was a sign that he enjoyed being there [Baltara]. He liked the different activities on different days".

"The changes that I noticed whilst he was at the unit were things like being far more interested in learning, being more motivated towards learning and activity in school, not necessarily his home school but just towards attending, more confident... a lot more pleased with himself for things he achieved, pleased that he has made a couple of friends there. Yeah, Baltara was great because it gave him an opportunity re engage back with education." (Transcript from Parent 2's interview)

Parent 2 also discussed the relationships her son made with the BIU teachers.

> *"The previous school said he had an incapacity to attach to people, to engage … so it was really good to see that here was these people who were actually making the effort to engage Jordon in what he was interested in doing and what made him tick so he could start to learn that way".*

The Baltara Integration Unit received unsolicited positive comments from time to time. One parent sent the school an email from interstate after the family had transferred for a better employment opportunity. He thanked the Baltara Integration Unit for the work they had done with his son as "without your input we would never have been able to make the move".

Another example of a parent who was appreciative of the Baltara Integration Unit and the staff involves a ten-year old boy Sam who was due to exit the Baltara Integration Unit. The teachers were reflecting about what they had done to increase Sam's capacity to function effectively in a mainstream classroom. They knew that his tantrums were less frequent, at a lower volume and of shorter duration; and he could read better than when he arrived. However everyone was conscious that he still needed on-going support to stay focused in class to manage his frustrations and control his anger. On Sam's last day his mother and his grandmother arrived at school with two bunches of flowers for the staff. They were very thankful to the staff for the positive changes that they had noticed in Sam.

"Before Sam came here I could not let Sam out to play in the street with the other children. If I did he would end up fighting with them and it would end badly. Now I can let him play with the others and I don't have to worry" said Sam's grateful mother.

In this example, the teachers had focused on what they had not yet achieved with Sam, but the mother focused on Sam's behaviours in a broader context than the goals set for his program.

8.3.3   Sessional Evaluation Measure

Teachers at the Baltara Integration Unit prepared reports every five weeks that discuss student progress against their specific goals. On a daily basis teachers are looking for development in general school performance which they measure in classroom behaviour, participation in activities, and task completion.

The Sessional Evaluation Measure (SEM) was developed to track the performance of students in the three areas over the period of their attendance at Baltara Integration Unit. Walker, Hoyt and Long (2006) wrote about the nine stages on this reclaiming journey, based on a longitudinal study of the Rose School described as "a therapeutic day facility in Washington, DC" (p. 52) for troubled children. They identified the stages as: the honeymoon; limit testing; active resistance; beginning trust and achievement; program acceptance and progress; negative personal demands and jealousy; clear academic goals and progress; separation and regression; and attachment and sadness. They contend that a

simple linear upward trend should not be expected and that there is "a predictable spiraling as a youth works in partnership with mentors toward the goal of transformation" (Walker, et al., 2006, p. 52).

The Baltara Sessional Evaluation Measure data when graphed (see pages 281 - 284) compare fluctuations in student performance. There are peaks and troughs throughout the duration of the intervention. The trend lines show a honeymoon period similar to the findings of Walker, Hoyt and Long (2006) during which students settle into Baltara and are generally compliant, complete their work and behave appropriately. This honeymoon period, lasts for two to three weeks although it has been known to be as short as half an hour and has been as long as two months.

The next phase at Baltara is when students test the limits of the teachers' expectations and consistency in dealing with the students and their behaviours. This period covers the stages of limit setting, active resistance and beginning trust and achievement described by Walker, Hoyt and Long (2006). It also includes periods of active sabotage by the students, similar to negative personal demands and jealousy; which Walker et al. include later in their stages - but observed by Baltara staff prior to the major turning point. Here, teachers are attempting to change the students' perception of themselves through successful completion of activities, non-judgmental interactions with staff and support for positive behaviours. This tests the students' self image which identifies them in their home school environment. Students react negatively to or rebel against changing this self image.

After the turning point which is at approximately 15 – 16 weeks, students' performances begin to improve. Peaks and troughs continue to occur but the trend line is positive. More is expected of students in terms of work output, social interactions and behavioural expectations. However the students' performances can vary throughout the day and throughout the week. This period continues the stage of beginning trust and achievement, and coinciding with Walker et al.'s program acceptance and progress, and clear academic goals and progress.

Towards the end of the program there is another dip and turning point in performance. The intervention program is limited to thirty weeks so as the students get closer to the conclusion of their program separation anxiety begins to occur and the students regress until they deal with their emotions. This replicates Walker's last two stages of separation and regression; and attachment and sadness. The Baltara Integration Unit prepares for these stages. In the later part of the intervention program students gradually increase their attendance time at their home school. There is also the symbolic changing of the venue for the five-weekly report meetings (at which the students are expected to attend) from Baltara to their home schools. This is to reinforce attachment and relationship with the on-going school.

Finally, the Baltara Integration Unit has a simple graduation ceremony. The departing student is given a certificate of program completion by the Principal; photos are taken, and there is a party with the students and staff. This symbolises to the student that he has changed and his time at Baltara is over, and for the other

students it reminds them that their time at Baltara is limited and that they will be expected to move on.

The foregoing description depicts the macro view of the SEM, however, a micro view on an individual student basis provides information about sessional performance which is useful to teachers in planning their students' programs. This weekly SEM data allows teachers to review student performance to determine if there are any patterns occurring. Patterns may identify students needing more support to cope with less structured lessons, and students needing more structured activities after a break from school, for example after a week-end; or students who do not like particular subject areas or lessons. The teachers' planning of activities for the students will affect performance. Work which is too difficult for or unfamiliar to the student is not likely to be completed, the student is less likely to participate and more likely to use challenging behaviours in the classroom. Teachers' awareness of these patterns can assist them to adjust their teaching to support the student.

The performance patterns may also identify productive session times which may be utilised for more difficult tasks. This information is invaluable to adapting the program at Baltara, and can also be used to inform the home schools so adjustments can be made there to support the students in maintaining their positive changes. Consistency in the task completion data is an indication that teachers at the Baltara Integration Unit were able to plan effectively to assist the students.

In summary, the data collected at the Baltara Integration Unit demonstrate positive improvements in the students through a combination of pre and post intervention data supplied by referring teachers using the Behaviour Rating Scale, Sessional Evaluation Measure data completed by teachers at the Baltara Integration Unit, and anecdotal evidence of positive support from parents. Effectiveness of the program as perceived by the regional educational community was also demonstrated in repeat referrals from schools whose students had accessed the program, and by the waiting list generated from referrals.

Chapter 9   Intervention in Practice: An Analysis of

Objectives and a Model for Intervention

This thesis so far has identified behaviours that are problematic for both students (becoming alienated from the school) and their schools (managing the behaviours effectively). This chapter focuses on the expectations of an intervention unit. The objectives devised by homeschool staff for the intervention program underpin the teachers' perception or belief about the needs of their students rather than simply addressing the aberrant behaviours. This is demonstrated when the objectives are grouped in the same categories as the behaviours and comparison of the two lists made.

The second part of this chapter draws on the best practices discussed in chapter 3 as the basis for a model of intervention. No 'magic wands' are available simply best practice - consistently applied; effective and interested teachers; and an environment that encourages, guides and supports students to make better choices.

9.1   Section A: An Analysis of Objectives

Earlier discussion revolved around the behaviours exhibited by students who were referred to the Baltara Integration Unit. Students referred to an intensive intervention program have specific needs which are not being addressed effectively, and behaviours which are not being effectively managed within their current school programs. Reflections about the patterns, frequency and intensity

of inappropriate and unacceptable behaviours of students can also illustrate some student developmental needs that have not been addressed earlier. Teachers' perceptions of students' needs are the focus of behaviour intervention programs. This section examines the objectives set for the students by their mainstream teachers for the period of the intervention. These objectives as well as being the basis for developing a program, also inform considerations for a model for intervention.

Teachers, when referring students to an intervention program, are expected to devise three to five realistic expectations of what can be achieved in a limited period of intervention. A criterion for referral to the program is that schools have exhausted their options to intervene within their school environments; consequently students who are referred have been exhibiting the difficult to manage behaviours for long periods, and at the time of referral the behaviours are firmly entrenched. Therefore, it is unrealistic to expect all the unacceptable and inappropriate behaviours be modified, particularly in a short term program; so it is imperative that the referring teachers determine objectives that are achievable and will have most impact in increasing their student's ability to re-integrate and participate in the mainstream program upon return. As such, their objectives are the basis for the intervention unit's reporting processes to the parents and the home school.

The perceived success of the intervention program is also reliant on the determination of achievable objectives. This ensures that the referring teachers focus on areas of expected behavioural change and assess the improvement, rather

than having a blanket expectation that the returning students will function as effectively as other students. If this is the case, teachers' expectations fall short of the reality and consequently will not consider the intervention as having been effective or successful. Teachers at the home schools have the responsibility for setting the most appropriate objectives, as they know their students' needs better than the intervention teachers at the point of referral.

Home school teacher Mary had set behavioural objectives and a literacy objective for Joshua's intervention program. At the fifteen week reporting meeting with the parents and teacher, Mary, the Baltara Integration Unit teacher, outlined the improvement Joshua had made in relation to the objectives set. The parents and Mary acknowledged the progress as they had seen changes at home and at the mainstream school. Mary then stated, "that's all good but his maths hasn't improved!" Mary was obviously expecting more universal changes and in areas in which she had not set an objective.

An examination of the student referrals to the Baltara Integration Unit collated the objectives requested by the referring teachers. The data were collected from the records of a cohort of 81 students and are listed alphabetically in Table 9-1 below. Following this, Graph 9-1 displays the frequency of objectives which were written in the language of the referring teachers (similar to the student behaviours list) and do not represent selection of objectives from a standard list. Consequently, many objectives are similar, albeit there are subtleties in the differences.

Table 9-1 Frequency of Objectives Requested for Intervention Program

Objectives Devised by Teachers	(N=81)
• Accept responsibility for actions	11
• Accept responsibility for own learning, commitment to learning, develop interest in learning	7
• Anger management	26
• Attendance	10
• Awareness of appropriate school behaviour; understand classroom routine; respect rights of others, allow others to work without interruption, develop positive behaviour patterns.	7
• Communication; express self	10
• Concentration -improve & time on task ;task completion; attention in class ; stay on task; good work habits	28
• Conflict Resolution	11
• consequences - understand effects on self &others	9
• Co-operation - improve	10
• Decision-making skills; visions for self ;goal setting	3
• Fulfil needs - alternative strategies	10
• Functional participation; improved participation	7
• Improve social relations & trust with students & staff	15
• Learn socially acceptable behaviours	8
• Literacy & numeracy, improved academic levels	37
• Modify behaviour - attention seeking	3
• Negotiate	26
• Other - PE skills; Sex Edn; frustration reduction	3
• Re-integrate to main school, prepare for year 7	14
• Risk reduction	3
• Self esteem improve; self confidence; confidence development	42
• Small group participation	27
• Social skills - develop; interaction skills	21
• Success based activities; experience success	8

The most frequently requested objective, and listed for more than half of the student cohort, was to improve self-esteem. Teachers had recognised at the time of the referral that despite all the presenting behaviours, bravado and poor attitude, the students were lacking in self esteem and self confidence.

Graph 9-1 Frequency of Objectives

The horizontal axis is labelled "No of Objectives (Max 81)" and the vertical axis is labelled "Objectives". The bars from top to bottom are:

- Self esteem improve
- Literacy & Numeracy
- Attention & task completion
- Small group participation
- Negotiate
- Anger management
- Social skills
- Social relations
- Re-integrate
- Conflict Resolution
- Responsible actions
- Fulfil needs
- Co-operation
- Communication
- Attendance
- Understand consequences
- Experience success
- Acceptable behaviours
- Participation
- School Expectations
- Responsible learning
- Risk reduction
- Other
- Modify Behaviour
- Decision-making

Many of the objectives clearly relate to regular curriculum activities such as numeracy and literacy. The objective to improve literacy and numeracy was recorded 37 out of a possible 81 times. Other objectives, such as to improve self-esteem and self-confidence, are less specific and require a broader range of strategies to be employed in the program. However, for analysis and program development purposes it is useful to group the objectives.

The objectives were grouped and aligned with the modified version of Achenbach's Child Behaviour Checklist categories to describe the Baltara behaviours, and develop a consistent approach to the intervention program. Objectives in Achenbach's three major scales were collated and the percentages for each area determined.

The following Figure 9-1 modifies Achenbach's behavioural scales to align the categories and frequencies of objectives which were the basis of the intervention program, with the categories of behaviours. There were no objectives related to the clinical difficulties or to thought problems categories.

	Achenbach's Categories	Modified Achenbach's Categories	Baltara Objectives	f	Group Total & %
Internalizing Scales	Social withdrawal	Social withdrawal	Small group participation	27	
	Somatic Complaints – those with a physiological origin; - non-neurological	Diagnosed Clinical Difficulties		0	112 (31.5%)
	Anxiety Depression	Anxiety Depression	Consequences Improve social relations Responsibility for actions Self esteem improve Success based activities	85	
Neither Internalizing nor Externalizing	Social Problems	Social Problems	Awareness of behaviour Communication Functional Participation Learn behaviours Re-integration; Social skills	67	
	Thought Problems	Thought Problems		0	145 (40.7%)
	Attention Problems	Attention Problems - Self-management	Responsibility learning Decision-making skills	10	
		Attention Problems – learning	Concentration -improve Literacy & Numeracy	68	
Externalizing Scales	Delinquent Behaviour – also called Rule-breaking Behaviour	Rule-breaking Behaviour	Attendance ; Co-operation - improve Risk reduction	23	
	Aggressive Behaviour	Aggressive Behaviour General	Anger management Fulfil needs appropriately Negotiate	62	99 (27.8%)
		Aggressive Behaviour Targeted.	Conflict Resolution Modify Behaviour	14	

Figure 9-1 Baltara Objectives in Modified Achenbach's Behavioural Scales

Approximately 41% of the objectives requested were in the 'neither internalizing nor externalizing' areas where the development of skills - literacy and numeracy, communication and social skills - appears to be the key area for development. This indicates the opportunity for structured learning programs to be devised based on needs of the individual students, and reinforces the interaction between learning, behaviour and social skills development.

Graph 9-2 compares the incidence of each category of behaviour with the frequency of the objectives devised for each behavioural category, using modified Achenbach categories. The comparison illustrates the relationship (if any) between the objectives requested for an intervention program and the behaviours for which the students were referred. In some categories the behaviours and objectives frequencies match, so it would seem that the objectives directly address those behaviours. However, in other cases behaviours and objectives were not equivalent.
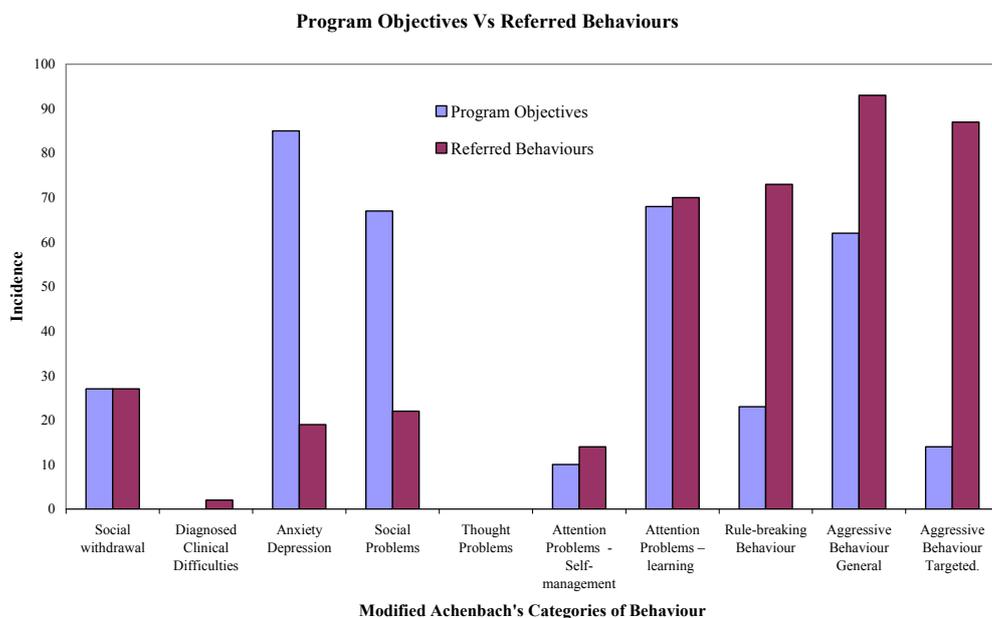
Graph 9-2 Baltara Objectives and Referred Behaviours in Modified Achenbach Categories

The objectives requested in the areas of social withdrawal and attention problems, learning and attention problems self-management were closely matched, with frequency differences from 0 to 4. However, in the other categories, frequency differences range from 31 to 73. In three areas – aggressive behaviours targeted, aggressive behaviours general, and rule breaking behaviours, the objectives

requested were considerably less than the number of behaviours recorded. In two areas - anxiety depression and social problems – the objectives outweighed recorded behaviours.

The objective with the highest frequency was to improve self-esteem. This initially seemed contrary to the highest of the referred behaviours which was physical aggression and bullying. However, many teachers consider that bullies use aggressive behaviour to cover their self perceived inadequacies or poor self image, consequently an objective which improves the self-esteem of a bully may contribute to a reduction in aggressive behaviour.

The data seems to indicate that teachers have overlooked some of the aberrant behaviour. Alternatively, it is more likely that teachers consciously or unconsciously identified the needs of students, the underlying causes of the problem behaviour, and treated the exhibited behaviours of students as symptoms. Consequently, the objectives address the needs of the students, and not necessarily the symptomatic behaviour. This interpretation is consistent with the writings of Carr and Durand (p. 3) who consider that abnormal behaviour is a form of communication. Their studies showed that teaching children ways of communicating their needs has reduced and in some cases eliminated severe behaviour problems. Two of the Baltara objectives which aim for students to "fulfil their needs" using alternate strategies (10 students) and "negotiate" (26 students) are examples of improving communication skills.

Wacker and Reichle (1993) acknowledge that "effective intervention is based on our knowledge about the function of the behaviour" (p. 3). It is therefore not surprising that teachers requested objectives for their students based on knowledge of the individual students, rather than simply the aberrant behaviour displayed. Understanding the nature of the objectives set for the students is paramount to developing an effective intervention program for the students.

9.2   Section B: Building a Model for Effective intervention

This thesis is about understanding and providing for students with social, emotional and behavioural difficulties which, when exhibited in the school setting, reduce their capacity to participate in the whole school program. These students obviously have significant needs, and best practice dictates that addressing these needs is a major consideration in each student's individual educational program.

Best practice is demonstrated in a general education which is genuinely inclusive and caters for all diversities, and ideally does not include long term segregated intervention. In mainstream schools, students with special learning needs of any description are catered for with individual education or learning plans (IEP / ILP) and as the current trend indicates, all students benefit from personalised learning (Keamy, Nicholas, Mahar, & Herrick, 2007, p. 283). This is a utopian expectation, so whilst all schools develop their capacities to include all students, it is appropriate to examine a best practice model for off-site intervention. The best practice exhibited at short term off-site intervention programs can also be

transported and applied in mainstream schools, to enhance and enrich current practice for all students, not just those with identified special needs.

For many years many schools have developed and implemented school-wide programs to develop social skills and resilience in students. Programs such as Protective Behaviours (West, 1984), Framework for Student Support (Department of Education, 1999), It's not OK to be Away (Department of Education and Training, 2006a), and anti-bullying programs which culminated in Safe Schools are Effective Schools (Department of Education and Training, 2006b), are primary prevention strategies which increase students' capacities to deal with situations and manage their lives when difficulties arise. These prevention strategies are effective for most students, but may be insufficient for students with major social, emotional and behavioural difficulties.

Often schools have tried to address the needs of these students, but are limited in their resources and require additional support to assist them. The support required may include consultation with educational and other professionals including psychologists, and as a further step, student referral to short term behavioural intervention units which assist them in developing skills and strategies to return to mainstream education. The case study of Baltara Integration Unit in this thesis is an examination of aspects of successful targeted intervention.

9.3 Key Components of an Effective Off-site Intervention Model

Intervention programs are needed to ensure all students have the opportunity to stay at school and complete their secondary education and not leave or drop-out of school prematurely. Janosz et al. (2008) contend that dropping out of school "represents a confluence of individual, social family, cultural, socioeconomic, and institutional factors" (p. 22). The design and implementation of intervention will vary, but some underpinning influences need to be considered.

The main focus of intervention is to assist students to change behaviours which are impeding their capacity to participate and thrive in their learning process and ability to socialise in an appropriate manner. The learning, development and performance of more appropriate behaviour and skills enable students to continue participation in education. The second and intrinsically linked focus is the re-integration of the students back to their mainstream homeschools.

Students who are referred for intervention generally exhibit ego-centric behaviours. 'Mucking up', 'throwing a wobbly' and other similar avoidance behaviours may achieve the students' goals of getting out of class or a situation they don't like, but they are not acceptable behaviours to teachers, schools, parents and the wider public. The students may have little regard to the effects or consequences of their behaviour on others. An example of this is that a student who disturbs a class or makes a fuss to get out of doing work is generally unaware of the loss of learning time to other students, or the fear of other students who cringe and hope that they do not get hurt in the disturbance.

Students need motivation and encouragement to change their modes of behaviour which have been effective for them. They need to see that other forms of behaviour will achieve the same outcomes, hopefully with less effort on their part; do not alienate others around them; and are considered to be appropriate and acceptable in the school environment.

In the first week of his time at Baltara, Jason was in the Baltara principal's office to discuss a problem he was having. The phone rang, and as the principal was distracted Jason climbed out the window. Jason then went round to the front door of the school to regain entry but found the door had been locked from inside. Jason tried yelling at staff and kicking the door to gain entry.

The principal (using another exit) observed Jason's efforts to get back into the school building. Jason was asked why he wanted to get inside because by climbing out the window he obviously wanted to get outside. Jason replied "I didn't know that you wouldn't let me back in!" Jason kept yelling and kicking the door to no avail. He was told that kicking the door would not get him in but Jason persevered. He was asked what he thought he needed to do to get inside but he kept kicking. He continued intermittently for about 45 minutes until it was home time and his mother picked him up. His school bag was handed to him from outside the building.

In the rest of his time at Baltara Jason never attempted to climb out a window again as he knew he would be locked out. He didn't try to kick in a door again as that behaviour would not get him back into the school. Jason was a quick learner but other students needed repeated incidents before they employed other strategies.

9.3.1   Effective, Knowledgeable and Committed Teachers

Teachers are the most important element of all education programs and especially those for students who have additional needs and are at risk of leaving or being asked to leave school. Solidarity and consistency of staff are in their working together, giving students the same message, and supporting each other to assist the students choose to make better choices. Well trained teachers who believe that students can change and have a strong desire to assist and empower the students are necessary.

Teachers who believe in the student's ability to improve and teachers possessing Spiritual Capital (Caldwell & Spinks, 2008) are a crucial component for successful intervention programs. Teachers who consider the students with whom they are working have the capacity to change their behaviours, to develop appropriate social skills and are worth the effort of persevering, will be more successful than teachers who do not. Spiritual Capital is an inner strength of belief in the student which can be nurtured by visionary leaders who exemplify their rhetoric in their daily interactions with students and staff.

Spiritual Capital is demonstrated in the willingness of home school staff to invest energy in adjusting the organisational structure of the home school to allow students the most appropriate access to classes that will re-engage them in the school programs, and provide maximum opportunities for success and increased self - esteem. It is their acknowledgment that the needs of each child are important, and that a personalised approach to learning can be achieved that further illustrates the Spiritual Capital.

Teachers' beliefs about the causes of aberrant behaviour directly affect their effectiveness in working to address such behaviours. According to Markopoulos and Padeliadu (2002), teachers who believe that the locus of student control is internal are unlikely to consider that they can affect the behaviour, so efforts to assist the student are reduced. In a similar vein, if teachers perceive the problems to be external to the student they are more likely to elicit support for the student. The teachers' belief about the cause of the behaviour impacts on the type of intervention they select and effort to which they try to intervene.

9.3.2   Establish Achievable Objectives

Teachers who want to support students to stay connected to school, by referring them to an intervention program, demonstrate this support by setting achievable objectives for the students' intervention programs. The objectives set for each student determine the components of their learning program, so supportive teachers consider what social and behavioural development is needed to increase the students' potential to remain in school and education. Teachers prioritise

objectives, which if achieved will have most effect on the student's capacity to remain connected with education and lead to success. A clear focus for these goals is important for such success.

The two most requested objectives were for improvement in students' self-esteem and the development and improvement in literacy and numeracy skills. It is not unexpected that students who have poor or low literacy skills, which are necessary in all facets of life, need to improve their self-esteem. The next group of requested objectives includes learning to negotiate, work in small groups and improve anger management.

Some of the objectives need specific skill development such as literacy and numeracy; negotiation and anger management techniques. Other objectives are the outcome of specific skill training, for example improvement in self-esteem accompanies the successful completion of a task or project. Achievement of the objectives is dependent on the students becoming engaged in the intervention program and the strategies used to achieve objectives.

9.3.3   Engagement of Students

Effective intervention begins with engagement of the student with appropriate curriculum which is student centred involving students interests (Prensky, 2005; Vartuli & Rohs, 2006), is based on personalised learning / curriculum (Hopkins, 2006; Järvelä, 2006), and is success-based (Lawrence, 2006). Student

performance times (biorhythms) are optimised (Antrop, et al., 2005; Callan, 1999; Holloway, 1999; Klein, 2001, 2004) for success.

Active engagement of students in an intervention program is the first step in addressing their needs. Generally, engagement in the school program is when students sub-consciously or consciously acknowledge that the activities are relevant to them (Harper, 2007). When they perceive such activities as a worthwhile use of their time, they actively participate in activities provided. Willms (2003, p. 186) extends the notion of engagement beyond the physical participation in school activities (behavioural component) to add a sense of (psychological) belonging as well. This challenging concept contends that if students do not feel welcomed nor included in the school community and are not provided some positive reinforcement from a teacher or peer, there is a limit to their on-going active engagement no matter how relevant, pleasurable or enjoyable the activity. Positive social interaction and sharing the participation or the outcome of an activity with someone who is interested or cares increases the pleasure of an activity. In summary, effective engagement is not simply a monolithic concept, but occurs at social, emotional, behavioural and physical levels.

9.3.3.1   Curriculum – Personalised, focused on students interests and success based

The focus on individual students leads effectively into personalised learning which "can be seen as an approach in educational policy and practice whereby

every student matters" (Järvelä, 2006, p. 9). In the context of intervention the students are marginalised and / or are on the fringe of becoming disenfranchised from education. It is imperative that their educational program is designed to engage them.

Reluctant and disengaged students need to be 'enticed to taste' the curriculum. If the content material is related to their interest then the chances of success are increased. A student may be given a sheet of paper with 10 addition sums. This is not very interesting, but if there is an outline of one his favourite things such as a motorbike and the answers relate to colouring or completing the bike, there is more incentive for the student to try.

Student centred learning and programs have been discussed in a range of teaching philosophies including inquiry-based learning, project curricula, constructivist approaches, and developmentally appropriate practice. Johnson and Johnson (Johnson & Johnson, 2007) contended that students who used co-operative learning approaches improved their pro-social behaviour, which was a key in building relations with classmates.

Teachers who are cognisant of the learning styles of students and consider the needs of students together with their interests, are able to provide an engaging curriculum for them. Therefore, the needs of students are considered together with their interests to provide an engaging curriculum.

Children assert their independence (making their own choices) from the time they attempt to feed themselves. Teachers can effectively harness and guide their growing independence by allowing students choices within limited ranges.

9.3.3.2 Student empowerment

Students who perceive genuine opportunities for their input and choice feel valued, even if input is only in small areas (Harper, 2007). Student choice or decision making skills develop incrementally over time. At Baltara the outdoor education program is used not only for the physical development of the students, but as a vehicle for the students to have input and responsibility in the program. Students are canvassed for their choice of activity for a three week period, from a range of choices. Developing consensus amongst the students usually takes much discussion and negotiation. Dissidents are encouraged to participate in a less favourable choice, so that they will have an opportunity to select a more favoured option later.

Most students who are referred to intervention programs, in addition to their challenging behaviours, have experienced failure in the classroom and / or within the school. Some of the challenging behaviours are exhibited to distract from imminent or perceived failure. Teachers often observe students who make a mistake in their work and then rip out the page and screw it up into a ball and throw it into a rubbish bin or act out a tantrum. The student perceives that the mistake is irreversible, confirming that they are worthless, and if enough fuss is made – where he is in total control - the teacher and others will be unaware of the

failure. "If we continue to fail in areas which are valued by significant people in our lives then our overall self-esteem is affected. It is worth reflecting on how children cannot escape school subjects which is why failure in school so easily generalizes to global self-esteem" (Lawrence, 2006, p. 13).

Intervention programs actively provide activities in which students are successful and where opportunities for mistakes are minimised to improve their self-esteem. The Baltara Integration Unit provides a range of activities which are new to the students (and in which they have not experienced failure), and which are structured for success only. These are mainly in the practical parts of the curriculum such as art, woodwork, physical education and home economics (cooking). In the areas of the curriculum where failure has been experienced, such as literacy and numeracy, individual activities are prepared which begin at a level where a student is assured of success. This is done with close monitoring by staff to ensure success is achieved. Once fear of failure is minimised and the students trust that staff will not give them tasks they cannot complete, then students can develop and progress in these subject areas.

Students can be managed by authoritarian teachers in schools with rigid behavioural guidelines and rules. However, although students will comply with the rules they will regularly attempt to stretch the interpretation to allow more flexibility, or eventually rebel in some way. In the long run, authoritarianism is not a useful approach as students want to have some control over their environment and teachers want to train students to make choices which are suited to exercising appropriate self-behavioural control in school and community

settings. Students grow up into adults, and increasingly throughout their development they need to be allowed to take responsibility for various aspects of their lives where decision-making can be supported and guided. Benson et al. (2006) hypothesise that "when youth themselves take action to improve their contexts, their efforts are empowering and also improve the contexts for themselves and their peers" (p. 4).

The Baltara Integration Unit begins the intervention program with student choice to attend the unit. It promotes a positive start to the intervention program even if the students perceive they do not really have any other options. The choice to attend also gives students permission to change their behaviour. Throughout the Baltara program students are allowed to choose from structured choices offered by the teachers. Such choices not only give the students responsibility for aspects of their learning, but also involve expectations of task completion and managing the consequences of their choices. In choosing outdoor education activities, students are expected to complete a three week rotation of the activity they choose.

9.3.3.3   Maximising Student Performance Periods

Earlier sections have discussed the needs for teenagers to have more sleep and later starting times that are advocated for this group. In addition, student attention and biorhythms wavers throughout the day. Teachers are aware of the most alert and productive times of the day for students and utilise the knowledge to balance the school program and maximise the success and engagement of students.

The Baltara Intervention Unit acknowledges differences in students' performance during the day, so the program is divided into a three part day. After the initial socialisation session (games on a billiard table) which allows time for an increase in alertness and performance, there is a strong individually programmed literacy and numeracy work period with teachers and aides providing significant support and monitoring. This is consistent with the findings of Antrop et al. (2005).

The second session provides for more group oriented work with group discussion about social and health topics related to the students, group science activities, and group physical education activities. This is the most challenging session for students who have difficulty relating appropriately to others and taking their turn. The scheduling in the middle of the day caters for the students who are most productive in the morning (morning people) and can engage the afternoon students who are starting to become productive (Callan, 1999). Many of the students at Baltara may have been diagnosed with (or suspected of having) attention deficit and hyperactive disorder (ADHD). Studies have found (Antrop, et al., 2005) that hyperactive behaviour reduces after a morning break, so scheduling group discussion and activities at this time is productive.

The third Baltara session (after lunch) is always a practical session such as art, woodwork, outdoor education and cooking activities. This practice is supported by Klein (2004) who suggests planning "courses involving a lot of activity, such as technology and sports, during the hours of decreased alertness" (p. 448). Most students enjoy these sessions, which contribute incentives for students to complete

their morning activities in a timely and acceptable manner. Suggestions that "you can complete the work this afternoon before you go to cooking" usually has the positive outcome of morning work being completed in the morning.

Intervention program planners and mainstream teachers supporting students with behavioural difficulties need to consider their capacity to present subject area lessons at the most optimal time for student success, and also where anticipation of the desired subject or activity is scheduled to encourage successful completion of earlier tasks. Student reinforcement of desired behaviour needs to be soon enough after the appropriate behaviour for it to be meaningful. In the early days of intervention reinforcement may need to come at the end of each small task, followed by extending the expectation to a whole activity, a lesson, half day, and then whole day. Cumulative rewards beyond a day, for example "after 'x' successful days you will get a free voucher for a video hire", tend not to be offered until towards the end of an intervention program when students can stay focused for longer periods for an appropriate reward.

Antrop et al. (2005) were also concerned that students need prompting for successful transition into the next activity. Baltara staff practice is to give prompts that activities are finishing, both to alert students that they will have to move from pleasurable activities as well as finish more taxing activities. Teachers regularly announce "five minutes to finish your work before recess[13]", "recess in two minutes". In the playground, staff interact and help structure student games.

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[13] Recess - Students have a twenty minute break from structured lessons about 10.40 a.m. to eat a mid-morning snack and have some recreational time. As students at Baltara have a range of social difficulties teachers guide the chosen sporting and recreational activities sometimes as the umpire, other times as a participant.

Towards the end of recess, staff prompt "recess finishes in five minutes", "one more over (cricket term for series of 6 bowls) before we go inside", "last ball", "pack-up, recess is over".

9.3.4   School Relationships

Webster and Knotek (2007) consider that using the attachment perspective is an important aspect of intervention with high-risk students as it "allows the teachers and the psychologist to use the relationship as a vehicle and focus on parent/teacher, teacher/child, parent/child dyads or even peer interactions for change" (p. 260) in addition to the structure of behavioural interventions employed. Libbey (2004) undertook an analysis of a range of studies to measure school relationships. She identified nine elements of connectedness some of which were academic engagement, belonging, peer relations, teacher support and student voice. These are key aspects in a pro-active learning environment and essential for effective intervention.

The importance of teacher-student relationships cannot be underestimated in the positive outcomes of schooling for all students. Earlier, it was stated that students with insecure relationships from home found it more difficult to make positive relationships with teachers. However, in these cases teachers need to invest more time and effort into developing relations with these students as they need to replace their current understanding of relationships with a more secure model of attachment that will impact on their education and general development (Venet, et al., 2007).

Students referred to intervention programs usually exhibit behaviours that alienate their peer groups so much that most of them have few friends. They rarely have the skills to work in small groups or the skills to make and keep friends. Some students may have a small following because their followers are fearful of being bullied by their leader. Other students may become isolates.

> *Teacher Robyn visited a potential new student for the Baltara Integration Unit. Adrian was pointed out so Robyn stood and watched him on the school oval during lunch recess. Groups of students were playing a variety of games but Adrian just kept wandering on the fringe of each game. No-one invited him to join in and he didn't approach any group. He just spent his lunch time wandering aimlessly and without any communication with any other student.*

Students without friendship groups find it difficult to develop a sense of belonging no matter how much they want it. Johnson and Johnson (2007) suggest "the more positive the relationships among students (and the fewer the isolated and alienated students) and the more frequently students engage in prosocial behaviors the less likely bullying and victimization will …take place" (p. 2). Students who are on the periphery of the student group like Adrian above are easy targets for bullies as they are already singled out, isolate and with no other student support.

Johnson and Johnson (2007) advocate co-operative learning, and whilst it can effectively improve peer relationships, is not the starting point for students referred for intervention but a higher stage of their relationship training.

Relationship development begins with one to one co-operation with a teacher, leading to structured, teacher-led, and later supported one to one peer interactions, one to two, and one to many peer interactions. Skills of sharing and turn taking listening to others and valuing their input are steps in the development of co-operative learning.

9.3.5   Parental Input and Interest

Parental involvement in the intervention program has positive effects in terms of their relationships with the schools and their own children. The active participation of parents in meetings and acknowledgment of their children's assets and achievements increases the value of the program to students (Clegg & Sheard, 2002; Pogoloff, 2004; Venet, et al., 2007).

Prior to their children attending an intervention program, parents will have attended many meetings at the home school to discuss the difficult behaviour of their child. Often the parent teacher relationships have become strained or parents have lost confidence in the school to provide adequate education and supervision for their children. Engaging parental support in a three way consortium with the home school and intervention unit can be a challenging but worthwhile exercise. Parents do not want to hear more negatives about their children. The typical initial response when a phone call is made to parents from the intervention unit is "what has he done this time?" This fearful response has to be negated and the real purpose of the call revealed. The above parental reaction can highlight the status of the parent-student relationship. Pogoloff (2004) suggests that to lessen the

apprehension of parents, every conversation needs to start with a positive statement about their children. This does not mean that staff are not honest with parents, but sensitivity is needed when providing information to them.

Students at Baltara are encouraged to show examples of their work to parents and home school at these meetings. Most parents are generally supportive of, and some are genuinely surprised at the work their child produced, and supply appropriate praise and reinforcement for their achievement. The support parents display for their child's achievements has longer term benefits of valuing the work of their children which encourages the children to value their own work and apply themselves to task completion. Parents who consider their children are being successful are more willing to co-operate with the schools.

The Baltara Integration Unit meets with parents and home school representatives on a 5-weekly basis to report on the student. The initial reports focus on the goals for the students, what they can do or have demonstrated. This is a step in engaging their support for the intervention program, the home school and their own child. Parents' views are actively sought at each meeting. For example they are asked "do you have any comments to make about the report from each of the schools; have you seen any changes at home since he began this program; what are these changes (if any); do you think the program is working"? Parents are a part of the consideration and decision-making about change or modification to the students' programs at either the intervention or home school. The above practice is supported by Pogoloff (2004) in her recommendations to facilitate parent teacher relationships.

Genuine consultation with parents that is extended to the home school is an important foundation in building on-going supports for the student. A parent who has positive relationships with their child's home school and consciously discusses schooling in a positive manner at home further reinforces the worthwhile aspects of continuing at school and exhibiting behaviour which allows the students to maintain and continue attendance at the school.

Students generally want to please their parents who are the most important people in their lives. From the time they are babies, children react to attention and praise of parents. Parents react positively at the first utterance from babies, giving them reinforcement to continue and improve until they can say "da da" which is usually their first word, and then on they learn to talk.

Parents are unconsciously role models for their children, and student attitudes and behaviours are a reflection of their parents' attitudes and behaviours. Students choosing to change their behaviours, need to develop different responses to situations. They need the support of parents (role models) to reinforce new responses at home to support the responses being reinforced in the school by teachers. Encouraging the involvement of parents in their child's education in a positive, respectful and supportive way acknowledges their roles and influence in the school life of their children, and facilitates the progress of the child. Working together in a partnership for their children improves parents' relationships with the schools as well as having a positive influence on students' behaviours.

9.3.6   School Environment – Physical and Climate

In an offsite intervention program students have the opportunity to develop and practice skills in an environment where they have no previous history. Time students spend away from the home school environment provides the school and its teachers with reflection and planning time to prepare for their return. This planning may incorporate specific informal and formal professional development. Time also assists changing or rebuilding more positive relationships between staff and students (Benson, et al., 2006).

During the period of the intervention program the referring school has respite (or 'time-out') from daily management of the student's inappropriate behaviour. The student will be returning so the hiatus provides the metaphoric space for the school to evaluate previous school interventions, and implement and extend previously successful strategies on the days the student attends. There is time to plan alternative strategies to support the student on full time return. Teachers from the intervention program can be proactive in advising strategies that are successful in the intervention environment and suggest supports to be enacted for students in the home school. These supports may include restructuring of the student's time-table to ensure they have more time with teachers whom they have positive relationships with, or in classes where they experience success; allowing staff to seek or safe places for the student to go if frustrated or angry. At times small group instruction may be needed to support a student in a subject where the student has continually felt frustrated.

I have presented a number of workshops on behaviour management for mainstream teachers. The workshops are a combination of theory, and self-reflection of practice, and include a range of strategies. Feedback from the workshops usually rated specific intervention strategies ('bag of tricks') more highly than the more self-challenging aspects of behaviour and self preparation. In many ways this is disappointing. Similarly, Mc Nally (2005) considered that whilst new teachers do need a "survival toolkit" to begin teaching, it is not sufficient in itself. Strategies may be immediately useful tools for teachers, but in the long run teachers who develop a broader view of understanding and engaging students and are able to adjust their behaviour and responses, will be more able utilise consistent strategies that are sustaining for developing productive learning environments.

9.3.7   Understanding of Theories and Methods of Intervention

Intervention as discussed in this thesis is school focused. The program, whilst being off-site from the students' home schools, is still within a school environment and staffed by teachers who are supported by weekly consultations with a psychologist. The setting and professional training of the staff dictate the range of methods and interventions available. This means that clinical counseling and chemical intervention (unless the student is independently under the care of a psychologist, pediatrician or psychiatrist) is not part of the repertoire.

In an education setting teachers are intervening to change the currently observed inappropriate and unacceptable behaviour to behaviour that is socially acceptable,

generalised to other contexts and sustained. To do this, students need to develop or learn a new repertoire of responses that will achieve the outcomes they want without impinging on the rights of others or embarrassing themselves and their self-esteem.

Behaviour continues until it is no longer effective. Behaviour that does not get rewarded ceases, as demonstrated in historical models such as Skinner's (consequences of behaviour) and Pavlov's Classical (Operant) Conditioning experiments (salivating dogs) (Slavin, 1997). Teachers regularly use positive reinforcers such as praise or lollies to reward or reinforce appropriate behaviour. However, negative reinforcers such as withdrawal of privileges and detention tend to have less effect than the positive reinforcers as they are not as instantaneous and not clearly identified with the inappropriate behaviour. The attention required to deal with the difficult behaviour may act as a positive reinforcer, outweighing negative reinforcement so in fact the student is experiencing a positive reward for the behaviour. Teachers with clear goals and understandings of the consequences of their behaviour (such as the mixed messages above) can adjust their responses to ensure that only appropriate behaviour is reinforced.

Cognitive learning theories "emphasize unobservable mental processes that people use to learn and remember new information or skills" (Slavin, 1997, p. 150). Cognitive learning includes "learning to think, solve problems, form concepts, master skills like reading and writing … and learn motor skills" (Langford, 1989, p. 3). "The cognitive model assumes that people try and *make sense* out of their environment rather than react unthinkingly to it…. They solve

problems and make decisions" (Biggs & Telfer, 1987, p. 19). In a school or off-site intervention facility environment, some but not all of those factors can be addressed. Teachers tend to consider their knowledge of theory to select the most appropriate strategy to deal with incidents and support students.

9.3.7.1 Strategies

Students attending intervention programs leave their reputations (but rarely their behaviours) at their referring schools. At Baltara they have a fresh start in which they have the opportunity to change their own self-perceptions. Successive approximations of the desired behaviour are rewarded with expectations risings as the program develops. Sometimes a student who has had an inappropriate behavioural outburst is given re-enforcement for the calming down stage of the episode. For example the teacher may say "I liked the way you stopped and came to me when I called you. That was a good response". This does not mean that the outburst is neglected but that there is a positive response to a small sign of appropriate behaviour.

Students returning to mainstream schools need ongoing support to maintain appropriate behaviour. Under stress, even elite athletes can forget their coached and planned responses to a situation and revert to previous, but well entrenched, unsuccessful strokes and tactics. The same applies for intervention students returning to schools. They have been coached to learn new strategies for managing situations but under pressure of too many demands and lack of support, they can revert to the behaviours which necessitated their referral to intervention. Just as elite athletes need a full time coach and mentor - so do students with

special needs. Students returning to a school environment which produces the same stressors as prior to the intervention will not be successful in re-integration of the student. Schools need to make adjustments which will support the student to successfully return.

Goldstein and Brooks (2001) set ten guideposts for Parents raising resilient children. These signposts are equally effective in a classroom:

1. Be empathetic;

2. Communicate effectively and listening actively;

3. Change "negatives scripts";

4. Love our children in ways to help them feel special and appreciated;

5. Accept; our children for who they are and helping them to set realistic expectations and goals;

6. Help our children experience success by identifying and reinforcing their 'islands of competence';

7. Help children recognise that mistakes are learning experiences; and

8. Develop responsibility, compassion, and a social conscience.

The period of intervention provides students the opportunity to develop and practise skills in an environment where their reputation is not common-knowledge and exhibiting different behaviour will not be a source of amusement to on-lookers. It provides an environment for a new start with new teachers and students. Intervention programs maintaining contact with the home school through student attendance one day per week, for example, provide opportunities to guide the students' regular teachers to focus towards the positive aspects of their

attendance. Strategic requests by the integration teachers for class teachers to actively monitor the students' time on task, can assist the home school teacher to accumulate data that demonstrates student on-task improvement. Home school teachers finding (albeit directed) positive improvements or attributes of students may re-appraise their views about the student, and this may assist in the healing of battered teacher-student relationships.

Mainstream schools may need to undergo some more formal professional development to prepare for the returning student. Professional development needs to be organised to inform teachers so they can gain better understandings of students' conditions and needs, particularly in such cases where a student has a diagnosed condition such as obsessive-compulsive disorder (OCD). Teachers need to gain an understanding of the students' difficulties and develop strategies to assist them in coping within the school environment.

> *An OCD student packed up all of his school belongings daily to take home rather than leave at school as did the other students. This meant he was always last to unpack his lesson requisites at the beginning of the day, and last to pack up at the end. Allowing the student to enter the room prior to the other students gave him time to unpack and be ready for the first lesson. He was also told to pack up before the other students for the same reason. His difficulty was managed in the school environment, and in time he could learn the strategy to self-mange and apply in other situations. This simple strategy saved frustration on the student by still unpacking at*

the start of the lesson and frustration of the teacher who had to wait to

start the lesson.

One of the roles of the intervention program is to provide direct or oblique professional development to the home schools to assist them make better provision for the returning students. After a successful intervention program, the student may have made positive improvements in a secure environment. However, if the environment at the home school has stayed the same - that is there have been no concessions or adjustments in teacher attitudes or school provision for the student - the chances of reverting to previous expectations and behaviours are high.

This model was not designed to produce detailed strategies which are readily available in publications, but to address the mindset of facilitating intervention. There is no shroud of intrigue or mystery in gaining success. Success comes simply through effective teachers being able to engage and develop productive relationships with their students and parents, who have commitment and patience, and who are supported by their colleagues, with sound operational guidelines to support the students' development.

Chapter 10   Reflections on Successful Intervention

The Australian community expects all students to be retained at school and complete their secondary education (Lamb, et al., 2004; Ministerial Council on Education Employment Training and Youth Affairs, 2008a). Schools which embrace the diversity of their students are more likely to provide engaging programs which assist in the retention of most students.

A major part of student retention is inclusion of all students. There is an awareness from the literature review that many schools have embraced inclusion of students with disabilities and have provided appropriate programs within the mainstream schools (Clark, et al., 1999). There have been however, limitations to inclusion and even exclusion of students with social, emotional and behavioural difficulties (Visser & Stokes, 2003).

Retention and inclusion of all students is important and has consequences for the whole community. There are long terms costs of early leaving to the individuals in the form of lower lifetime earnings ("High school dropouts cost country billions," 2006); and costs to the community through costs to the health and welfare systems (Vinson, et al., 2007). The benefits of continued education include better lifestyles from higher incomes (Junankar & Liu, 2003; Leigh & Ryan, 2008) and better citizenship (Cohn & Geske, 1990; The Allen Consulting Group, 2001). School policies which maintain optimum conditions for students learning and student retention increase access to the benefits of education for all students.

Teachers and schools have major roles in delivering stimulating and engaging curriculum to assist in the engagement of students, and developing of strategies for management of behaviours in classrooms and in the school environment. They are supported by school, classroom and playground rules; and codes of conduct in School Charters or Strategic Plans (in which ideally student input is encouraged) to provide orderly and consistent means of expressing expectations of students, and to establish cultures of appropriate behaviours.

School discipline procedures are developed to try to ensure that students are treated fairly and equitably, when unacceptable behaviour occurs, and those which mesh with the student welfare policies ensure the needs of students are considered simultaneously with their (mis) deeds. However there is always a small percentage of students, mainly those with social, emotional and behavioural difficulties, who exhaust the normal procedures and interventions and require additional support to maintain their involvement in a school program. It is the needs of these students which have been the focus of this thesis.

Schools can no longer be isolated institutions. They are part of the wider community who are stake holders in the successful operation of each school, and who are represented on School Councils or School Boards. The culture, values and expectations of the school communities influence the operations of the schools. Communities vary in their interpretations of what is acceptable in both educational and social norms, and these variations impact on the learning environment of the schools. However, they may not unilaterally exclude some students because of ability and behaviour.

The policies, procedures and ethos of every school need to be supportive of all students. As mentioned above many school welfare policies consider the needs of students. Other schools simply employ their discipline policies - the outcome of which is that students are regularly suspended from school for their inappropriate behaviours rather than implementing supporting mechanisms to engage the student. This approach appears to be less productive in maintaining students in the schools system and reduces students' attachments to their schools.

There are many views on the appropriate way to manage a classroom, however in line with current effective practice, the authoritarian approach where the teacher has the ultimate power, authority and knowledge and rules with an 'iron fist' (or in many cases in the past corporal punishment), has generally given way to more effective and empowering approaches.

Schools are expected to deliver quality education with a focus on high academic achievement in an orderly and disciplined environment. This includes students' successful completion of secondary education to year 12, clear discipline policies and expectations of exemplary social behaviour, and involvement in multi extracurricular activities. At some schools there is an implied expectation that students who do not support the ethos of the school in behaviour will be encouraged to find a more suitable educational environment. Unfortunately, this does not promote an inclusive culture. Hopefully, schools in this category may be encouraged to develop strategies so they can become supportive of every student.

In general, all government schools have a mandate to provide engaging education for all students without discrimination. In cases where the abilities and needs of students are such that additional external supports such as short term intervention facilities are necessary, the previous chapter provides a template for intervention practice.

10.1 Achievement of thesis goals

The goal of this thesis was to investigate the effectiveness of off-site intervention programs for students exhibiting behavioural difficulties in mainstream schools. The off-site intervention unit studied had a clear focus of returning students to their home schools with better skills than when they began the program. There was also the expectation that the homeschools modified their environment and provided additional supports to ensure the students' opportunities for success were increased.

The investigation began with a detailed examination of the behaviours of students who are likely to require intervention. The analysis of the student referrals allowed a definite picture of the behaviours that were making it difficult for students to effectively participate and be successful in schools. The data was analysed in terms of previously documented problem behaviours. The current data illustrated more extreme, and dangerous behaviours than previously recorded. The data when analysed with the Achenbach clinical model showed that aggressive behaviour was the most reported, followed (a long way) behind by attention and delinquent behaviours.

The literature review outlined the humanitarian and economic rationale behind the provision of appropriate education for students who are at risk of becoming alienated from schools and not completing secondary education. It discussed the policies and reality of including students with social, emotional and behavioural difficulties. Good practice for all students is examined as a starting point for inclusion.

The second part of the literature observed welfare processes in place to support students, approaches to intervention in the community and in juvenile justice which is the extreme end of unaddressed problem behaviours. Intervention programs cost more than regular program so the concern for accountability arose highlighting the lack of a suitable measure to determine effectiveness of an off-site intervention program. Some writers have suggested a systems (or community) theory of intervention which works in the proactive stages and is more long term rather than short term intervention. Short term interventions can be interpreted as limited systems which involve the students, their families, their home schools and their intervention facility. These are better described as targeted interventions.

In this thesis a detailed examination has been made of one short term intervention unit – Baltara – and how it arose from a school that was initially attached to a social welfare institution. The thesis also examined the effect of the Children and Young Persons' Act on the transformation of the Baltara School.

In determining the effectiveness of an intervention program, a number of questions needed to be resolved. Firstly, how does one measure effectiveness?

Can it be expressed quantifiable terms? Is there an appropriate tool for measuring behavioural change in a quantifiable way? Can a measure of behaviour change be devised? These questions led to the major part of this thesis as the development, trialing and validation of a Behaviour Rating Scale used to measure pre and post intervention behaviour of individual students at Baltara Integration Unit.

The data collected from the Baltara Integration Unit were analysed and the results indicated positive behavioural changes in the students. This indicated that the Baltara Integration Unit has been effective, based on the results of the Behaviour Rating Scale respondents who were all external to the school, and anecdotal information from parents.

A Sessional Evaluation Measure was also developed as part of this thesis. This is a device which tracks daily performance (participation, behaviour and task completion) of students over time and provides insight in regard to time periods and days when individuals are productively engaged or have trouble engaging in an activity. In practice, this information was made available to adjust programs and activities and or provide more effective strategies for the students to improve their performance. The combined results revealed a pattern of behaviour change and the positive results that followed a turning point in resistance to behavioural change.

Positive results from the Behaviour Rating Scale indicated that the Baltara Integration Unit caters effectively for its students. Chapter 9 described a model for

intervention based on the philosophy and practice of Baltara Integration Unit and available literature.

The main contributions to knowledge made by this thesis are:

1. The Behaviour Rating Scale - a tool which is available for use and interpretation by all teachers who wish to measure behaviour change over time or simply want a snap shot of a student's performance at any one time. This tool, with an additional section on communication, is currently being trialed at the Northern School for Autism to measure change during the school year as an adjunct to its other assessment and reporting processes.

2. The Sessional Evaluation Measure which is also a measure easily adaptable for classroom use. At the request of the school psychologist this is being used to track the daily and weekly behaviour of a few students with additional needs at the Northern School for Autism.

3. A model for behavioural intervention which is not specifically about strategies but developing the mindsets and considerations needed for effective intervention.

4. A detailed understanding of the behaviours which contribute to the alienation of students from their peers and their schools.

10.2 Suggestions for Further Research

The Behaviour Rating Scale data collection from Baltara had some difficulties which have now been addressed. Analysis of data collected by Baltara since

completion of the original data collection would extend and provide corroborating evidence that there was substantial improvement in the students' post intervention ratings.

A continuation of the above data collection using the Behaviour Rating Scale at similar off-site intervention programs, would however, be a lengthy process as most units have limited numbers. Programs which have shorter flexible or fixed term placements such as 10 to 20 weeks may provide more timely data - but as the intervention time is shorter the results are unlikely to show the same magnitude of improvement. This is because the turning point in performance change is at approximately 15 weeks after the program begun - as shown in the Sessional Evaluation Measure.

The Behaviour Rating Scale and Sessional Evaluation Measure could be used in other school environments to track changes where targeted behaviour and social skills programs have been devised. Interest has been shown by other special education environments in trialing the Behaviour Rating Scale to measure specific behavioural interventions with individual students with mild intellectual disabilities and Autism Spectrum Disorder. The use of the Behaviour Rating Scale in these environments would determine if there is a wider application of the scale than was originally intended.

10.3 Further Considerations

10.3.1 Baltara Integration Unit (BIU):

The turning point for students appears to be about the 15 week mark in their program at Baltara. Students begin a second day per week at their home school just after the tenth week. Data analysis would recommend that the additional day should not commence until after the fifteenth week. The notion was discussed with the current Principal and staff after showing them the data. After consideration, they acknowledged the turning point but were concerned about other reasons for continuing the practice of an additional day after 10 weeks and not later. Firstly, the BIU program is short term and the re-integration process needs as much time as possible so that BIU staff can influence the home school in making changes to accommodate the student better. Secondly, from the students' welfare perspective, the staff wanted continuity and maintenance of the students' relationships at the home school and these tend to reduce due to long absences. Students also get comfortable in the small school environment and need to practice their developing skills and strategies with a larger group of students and staff.

10.3.2 Re-naming Behaviour Rating Scale:

The Behaviour Rating Scale title needs revising to **School Behaviour Rating Scale** to identify it as a school and teacher based tool which rates typical school behaviours. There are many behaviour rating scales available and each has its own purpose. Consequently not all items are related to the classroom and school.

Teachers are generally not looking for a diagnostic tool as they have already identified that there are problems in their classrooms. They want a tool that can measure that the intervention efforts, either at an offsite facility or within their own classroom, are producing quantifiable results. Teachers generally know if there are changes in student behaviour, but being able to compare before and after ratings of the students provides tangible evidence. This can provide reinforcement and satisfaction to both the teacher and student, as well as provide evidence to parents of changes their children have made.

10.4 Timely Intervention - Before It's Too Hard

There will always be young people at risk in schools and the wider community. All people have a responsibility to assist these young people regardless of their circumstances and reasons for difficulties. The Department of Human Services is concerned with the risk factors related to early school leaving as these can lead to "problematic adolescent behaviour"; and as suggested earlier, there are individual and social costs to early school leaving, including offending behaviour. Consequently, society should be concerned if the needs of young people are not met.

School systems aim to keep students productively and meaningfully engaged in school activities. There are three main levels of achieving this goal:

- Systemic education provision;
- Policies and procedures to support all students; and

- Specific and targeted intervention for those at risk socially, emotionally, behaviourally and academically.

This investigation has been specifically concerned with the third level of targeted intervention for students with social, emotional and behavioural difficulties. It has identified behaviours of students who are at risk, and has looked at objectives which address both symptoms of the behaviours and their causes.

A case study of one intervention facility – Baltara Integration Unit – detailed the model of a program, which according to the data was successful. The value of the support of parents, the home schools, and re-integration of the students back into their own hopefully improved environment, has been discussed. This has shown that intervention can be successful when teachers believe in the capacity of their students to choose more appropriate behaviours and develop social skills that enable them to develop positive relationships with both students and staff.

Behaviours and attitudes which alienate students from their peers, schools and communities do not simply disappear. The alienation becomes more entrenched as time progresses. Some intervention either by a teacher, school, social worker, friend, relative or simply a 'good Samaritan' needs to occur to break the cycle of poor behaviour. Intervention is never too late, but what is needed is timely intervention – before it's too hard.

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367

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