



Australian Government
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Motivation & Engagement of Boys



Evidence-based Teaching Practices

A Report submitted to the Australian Government
Department of Education, Science and Training

APPENDICES



Motivation and engagement of boys: Evidence-based teaching practices

A report submitted to the Australian
Government Department of Education,
Science and Training

(Appendices)

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APPENDIX A: LITERATURE REVIEW

A.1 Introduction

This appendix is the complete version of the literature review from the research project *Motivation and Engagement of Boys: Evidence-based Teaching Practices*. This project was carried out by the University of Western Sydney on behalf of the Australian Government Department of Education, Science and Training (DEST) between December 2004 and June 2005. The project is a quality teacher initiative under the Australian Government Quality Teaching Programme (AGQTP) designed to strengthen the skills and understanding of the teaching profession.

The review of literature into the motivation and engagement of boys has three specific focal points. The first concentrates on definitions and issues surrounding motivation and engagement. The second identifies the key issues and factors in boys' academic and social outcomes and links these back to motivation and engagement. The third focuses on research about school and classroom strategies that have been shown to be effective in improving the academic and social outcomes of boys. The following sections in the report develop these focal points.

Section A.2 begins with a discussion of motivation and engagement before proposing the conceptual framework applied in this project. The proposed framework brings together research on motivation and engagement by drawing on theoretical ideas currently under development at the University of Western Sydney. It serves as an evaluative tool for the teaching strategies, both within the literature review and in the case study reports.

Section A.3 initially focuses on boys' education by summarising the most recent issues and factors impacting on their motivation and engagement and school outcomes. It then discusses motivation and engagement in relation to academic and social outcomes and antecedent school and classroom factors.

Section A.4 reviews school and classroom practices that have been designed to improve the motivation and engagement of boys and in turn enhance their academic and social outcomes. This section has a particular interest in research reports that show measurable improved outcomes, but also focuses on boys from low-socioeconomic sector (SES), Indigenous, rural and non-English speaking (NESB) backgrounds.

A.2 Motivation and engagement

A.2.1 Defining motivation and engagement

'Motivation' and 'engagement' involve specific responses to classes, schools and teachers and wider relationships with education, all of which are important for the

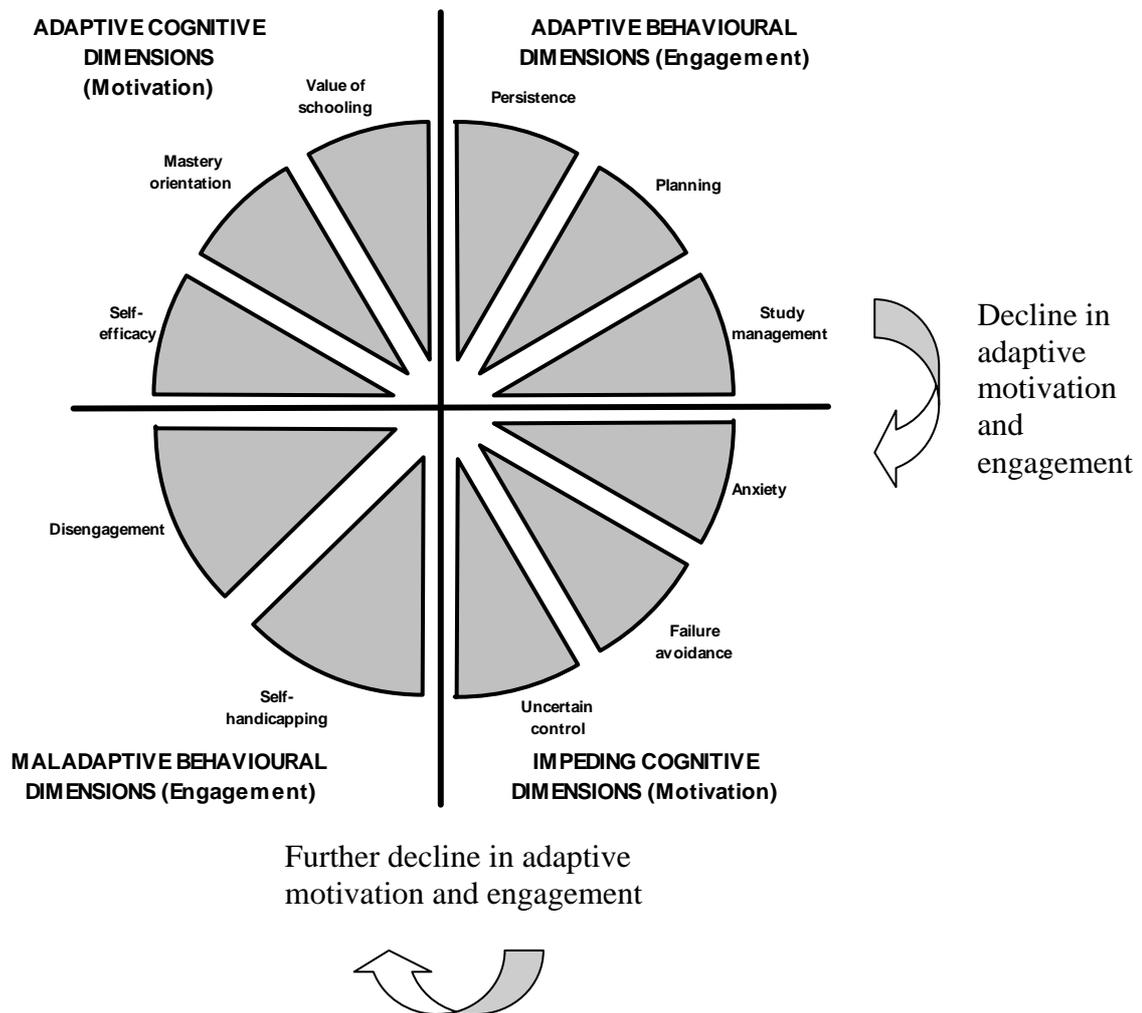
future success of any student. Positive motivation and engagement are associated with images of hard-working, cooperative and resilient students. For those students from backgrounds that historically underachieve at school, motivation and engagement can become critical educational outcomes in themselves. And, of course, they are determinants of good educational prospects. Given the persistence of low academic and social outcomes among certain students, it is not surprising that these concepts have been receiving increasing attention. Teachers, principals, parents and educational researchers are interested in finding ways to provide these students with opportunities for constructive relationships with school as a place and for the successful deployment of education as a resource for their life projects.

Definitions of motivation and engagement in the research literature cover a range of theoretical constructs. For that reason, this section of the literature review serves several purposes. First, it aims to contribute to efforts to resolve continuing tensions surrounding different conceptualisations of motivation and engagement. Second, it proposes a framework for the analysis and evaluation of educational interventions directed at increasing the positive interactions that boys have with all aspects of their schooling.

Motivation and engagement share a common theoretical and practical orientation. They exist in an interactive relationship that sees each as flowing from, dependent on, or as a crucial component of the other. Different theoretical perspectives on motivation and engagement are helpful in evaluating the educational focus and effects of teaching practices designed to encourage students to become more productively involved with their school on both short and long-term bases. Two current yet distinctive theoretical perspectives have been utilised in this review. The first is Martin's (2002a, 2002b, 2005) work on student motivation. The second is the meta-analysis of research into student engagement conducted by Fredricks, Blumenfeld and Paris (2004). Taken together, this research provides the most up-to-date review of over 50 years international scholarship on student engagement and motivation. Each of these perspectives is now discussed in turn. This is followed by an account of a framework that brings together these distinctive views.

Martin (2002b, 2005) sees motivation and engagement as integral parts of a positive orientation to education. However, he defines motivation as an 'individual energy', whereas he sees engagement as a flow-on from that energy. Thus 'motivation can be conceptualised as students' energy and drive to learn, work effectively, and achieve to their potential at school' (Martin 2002b, p.35). In contrast, Martin defines 'engagement' as the thoughts, emotions and behaviours that follow from this energy and drive. Martin (2005) has conceived of a wheel (see Figure A.1) that brings motivation and engagement together.

Figure A.1: Student Motivation and Engagement Wheel (with permission from Martin 2005)



The wheel identifies factors that enhance ('adaptive'), obstruct ('impeding') or reduce ('maladaptive') motivation and engagement. Adaptive thoughts and behaviours include self-efficacy, mastery orientation, the value of schooling, persistence, planning and study management. These are established by drawing on the following related theories.

The self-efficacy dimension of the wheel draws on a theory that conceptualises the development of students' belief and confidence in their ability to succeed at school, to overcome challenges and to perform at their best (Bandura 1997). Mastery orientation draws on goal theory. This proposes that a focus on learning, solving problems and developing skills has a more positive connection with student motivation (Elliot & Dweck 1988; Nicholls 1989). The value of the schooling component of the wheel harnesses expectancy-value theory or the proposition that a belief in school as useful, important and relevant interacts with students' expectations about their competence, which in turn impacts on their motivation and engagement (Eccles 1983; Wigfield 1994).

Choice theory focuses on the positive and negative choices students make in class situations. This underpins their sense of control in their academic lives (Glasser 1998) and is a key dimension informing the uncertain control component of the wheel. Attribution and control theories (Connell 1985; Weiner 1994) address the controllability of events and outcomes in students' academic lives. These directly inform the inclusion of uncertain control. Self-regulation theory focuses on the processes through which students plan and manage their schoolwork. It informs the planning, study management and persistence components of the wheel (Zimmerman 2001). The anxiety component of the wheel draws on research into the effects of feeling nervous when faced with performance and evaluative challenges. This may cause students to worry about not doing well in these situations (Spielberger 1985; Sarason & Sarason 1990). Finally, need achievement theory, goal theory and self-worth-motivation theory inform the processes by which students are oriented towards success and failure. Together, these drive students' propensity to be fearful of failure. This fear is manifested in the failure avoidance and self-handicapping dimensions of the wheel. Indeed, it is expressed in the acceptance of failure as manifested in the disengagement component of the Wheel (Atkinson 1957; McClelland 1965; Covington 1992).

The strength of the Student Motivation and Engagement Wheel is that it can be easily communicated by practitioners to students and, as a result, is readily understandable by students. The practitioner and student can easily separate the 'helpful' (adaptive dimensions) from the 'unhelpful' (impeding and maladaptive dimensions) and thus understand more easily their motivation. When students understand motivation and the dimensions that comprise it, intervention becomes more meaningful to them, and as a consequence, is likely to be more successful.

At a meta-level, intervention designed to enhance students' motivation and engagement involves improving: (a) their approach to their schoolwork; (b) their beliefs about themselves; (c) their attitudes towards learning, achievement and school; (d) their study skills; and (e) their reasons for learning. Also at a meta-level, intervention involves addressing: (a) educators' messages to students; (b) educators' expectations for their students; (c) how learning is structured and paced; (d) feedback to students on their work; and (e) classroom goals and assessment. At this point there is a very strong connection with the pedagogical relationships working at the engagement level. To enhance students' motivation and academic resilience, however, it is important to move beyond the meta-level to address the specific ways in which motivation and engagement are enacted in students' lives and in the classroom. This is where the wheel can assist educators and students alike. This model holds that educators are to do one or more of the following: keep high adaptive dimensions high, keep low impeding and maladaptive dimensions low, increase low adaptive dimensions and reduce high impeding and maladaptive dimensions.

This individually focused cognitive-behavioural approach is what psychology would articulate as the 'effective intervention' to enhance students' motivation and engagement. Nonetheless, there is a further perspective to be considered within the motivation and engagement domain: one that shows the wider social processes and connections in play that may be provided by a sociological framing.

Fredricks, Blumenfeld and Paris (2004) see motivation as a vital component of a wider engagement construct. They argue that engagement is multifaceted. It can be defined as *behavioural*, such as involvement in academic and social/extracurricular activities. This is similar to Martin's 'adaptive behavioural dimensions'. It is also emotional, being evident in positive and negative reactions to schools, classes, teachers and peers. It also has a cognitive dimension. This is expressed in thoughtfulness and willingness to comprehend complex ideas and master difficult skills. This has its parallel in Martin's 'adaptive cognitive dimensions'.

Research into behavioural engagement is underpinned by the following areas of enquiry. Research into student conduct explores the different levels of student adherence to classroom rules and teacher directions (Finn & Rock 1997). Research into involvement in learning and academic tasks differentiates behaviours associated with engagement – effort, concentration, attention, asking questions and contributing to class discussions (Birch & Ladd 1997). Involvement in school-related activities has shown how this correlates positively with engagement across all other areas of school life (Finn 1993). Emotional engagement has a number of research influences. Research into student attitudes examines the causes and effects of students' different feelings towards school (Epstein & McPartland 1976). Theory around students' affective reactions to classes considers factors impacting on positive and negative attitudes (Skinner & Belmont 1993). Work on student interest and values discusses different components that students may place on classwork – interest, attainment value, utility value and cost (Eccles, Midgley & Adler 1984). Theory shaping cognitive concepts of engagement is aligned to goal motivation and self-regulated learning (Pintrich, Wolters & Baxter 2000; Zimmerman 2001). There are similarities between the motivation literature and definitions of cognitive engagement (Fredricks, Blumenfeld & Paris, 2004). Together they emphasise 'psychological investment' and 'effort' in relation to learning (Wehlage et al. 1992). This justifies their position that motivation is a subset of the engagement construct, a position that is developed further below.

Fredricks, Blumenfeld and Paris (2004) argue against discrete behavioural, emotional and cognitive aspects of engagement. Their argument is similar to that of the conceptualisation of motivation advanced by Martin (2005). They contend that engagement can be thought of as a 'multidimensional construct' and that 'the term engagement should be reserved specifically for work where multiple components are present' (Fredricks, Blumenfeld & Paris 2004, p.60). For several reasons, this is an appealing empirical and pedagogical position. First, it calls for a more powerful research into the complexities of the interrelatedness between the thinking, feeling and doing dimensions of student learning. Second, it opens up possibilities for the development and evaluation of teaching strategies to cater for the dynamic interplay of cognition, emotion and behaviour at both individual and group levels (Guthrie & Wigfield 2000).

The Fredricks, Blumenfeld and Paris conceptualisation of engagement is important. However, their positioning of motivation as the thinking and energising aspect of the processes of engagement restricts the exploration of significant theoretical and research perspectives around the multidimensional nature of student engagement. With this in mind, a conceptual framework is now outlined that holds motivation and engagement in a dynamic tension. The framework incorporates Fredricks, Blumenfeld

and Paris' (2004) meta-engagement construct. At the same time it attaches complementary importance to Martin's (2005) insights about student motivation. The project reported here has tested and refined this framework as a means of improving our understanding of the complexity of relationships between boys and their schooling and education.

A.2.2 Motivation, 'e'ngagement, 'E'ngagement: The MeE framework

Psychological accounts of student learning and student relationships with schools and classrooms need the additional insights to be gained from research in the sociology of education. The framework developed in this section opens up the discussion of motivation and engagement to interdisciplinary considerations. To explain wider structural relationships for students' motivation and engagement, the framework encompasses theory derived from the sociology of education. This enables it to focus equally on both sides of the teacher–student relationship. This interdisciplinary framework provides space for reconsidering theories of pedagogy and curriculum. The key ideas that underpin this framework are elaborated upon below.

Engagement as a consciousness

Engagement can be seen as a consciousness and an educational identity influenced by the three message systems of formal education: curriculum, pedagogy and assessment practices (Bernstein 1996). Seeing engagement as a consciousness draws attention to what students are thinking rather than just what they are doing. 'Educational identity' refers to the way education is taken up as part of the way students view themselves in their relationships with schools and education. School and class messages are important influences shaping students' engagement with education. This approach sees engagement as more about the processes happening within students' thoughts and emotions than the tasks they are performing.

Realisation of messages

School and class messages are most powerful when they are realised at both a consciousness level and a practical level, in terms of students' social and academic outcomes. The term 'realisation' carries the meanings of 'understanding clearly' as well as 'creating' and 'making real' (Munns 2004). In other words, messages need to be realised at a conscious and practical level. For example, students should feel they are being successful and opportunities for success should be created for them through curricula and pedagogical processes.

Small 'e' engagement ('e'ngagement)

The idea of small 'e' and big 'E' engagement was developed in the *Fair Go Project*. This project involved researching student engagement among low-SES students in suburban Sydney (Munns 2004). Small 'e' engagement, or 'e'ngagement, refers to substantive engagement with the learning processes at hand, as distinct from a procedural level of engagement, or merely complying with teachers' wishes and instructions. When we think of 'e'ngagement, there is a high-level synthesis of behaviour, emotion and cognition (Fredricks, Blumenfeld & Paris 2004). This means that in-class behaviour is more than following rules, but actively participating. It means emotion is more than liking, but deep valuing. Further, it means that cognition is more than memorisation but 'the use of self-regulated learning strategies that

promote deep understanding and expertise' (Fredricks, Blumenfeld & Paris 2004, p.61). This level of classroom engagement implies a highly productive learning/teaching environment. When students are strongly 'e'ngaged they are actively involved in tasks of high intellectual quality and they have passionate, positive feelings about these tasks.

'School is for me': Big 'E' engagement ('E'ngagement)

Big 'E' engagement ('E'ngagement) denotes a longer and more enduring relationship with schooling and education. This is a level of student engagement that involves an emotional attachment and commitment to education. It is best captured in the belief that 'school is for me' (McFadden & Munns 2002). 'E'ngaged students have a strong sense that school as a 'place' and education as a 'thing' 'works' for them now and will continue to do so into the future.

'The future in the present': The link between 'e'ngagement and 'E'ngagement

The link between the two levels of engagement is such that 'e'ngagement is embedded within 'E'ngagement (Munns 2004). This view implies a temporal relationship, and it is useful to understand this embedding of the two levels of engagement as 'the future in the present'. This provides an important opportunity to examine classes as critical sites where immediate educational experiences build to a future-oriented consciousness that sees education as a resource to be employed profitably within students' life projects. This is a vital aspect of student engagement for educationally disadvantaged students. They need to see that education will provide a positive pathway for them as they negotiate their post-school options. Work done in Bernstein's tradition by McFadden and Munns (2002) has illustrated this critical idea. Students quickly come to understand when school is not working for them and when teachers' practices are of no use in their own lives or, more pointedly, when their use is illusory (McFadden & Munns 2002).

Discourses of power

At this point the framework can be positioned to consider the experiences of 'at risk' students, that is, those not historically advantaged through formal education. The connections between class practices and discourses with wider societal structures turn on the temporal concept of the future in the present. While students are processing and taking up positions within the powerful school and class message systems (curriculum, pedagogy and assessment), they are also negotiating with their teachers' 'discourse of power'. This discourse finds expression around five key issues, namely, knowledge, ability, control, place and voice.

- What counts as knowledge and who has access to really useful knowledge?
- Who has ability?
- Who controls the teaching space?
- Who is valued as an individual and a learner?
- Whose voice is given credence within that space?

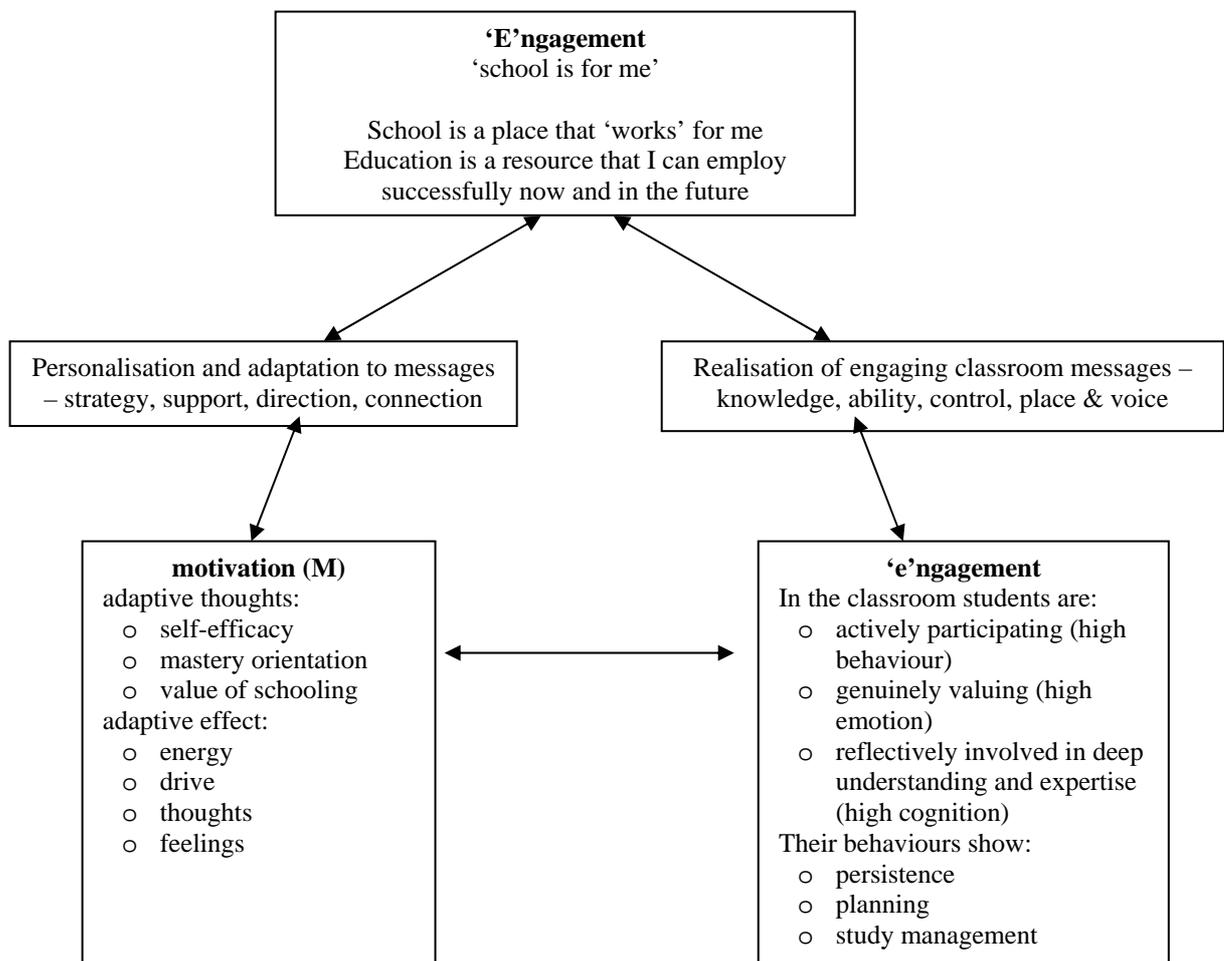
Together these factors influence the way teachers teach and how students both feel positioned and position themselves as learners. A common and recurring result of

these negotiations for at-risk and educationally disadvantaged students is that they receive disengaging messages.

Getting personal: The central role of motivation

Motivation plays a central role within the MeE framework. The framework situates motivation and engagement in a harmonised tension. Both are considered essential for the development of lifelong ‘E’ngagement in education and learning. With its focus on individual psychological processes, consideration of the dynamics of motivation helps educators to understand how students as individuals take up classroom messages. For students to develop a strong and enduring sense of ‘school is for me’ there needs to be, first of all, powerful engaging messages around their knowledge, their ability, their sense of control, their feeling of place and the acknowledgment of their voices. There also has to be a robust personal attachment to these messages. For this to happen, pedagogical and curricular strategies, support, direction and connections must be adapted through processes of personalisation. ‘School is for me’ has to work at the level of individual students, especially when dealing with those at risk or otherwise disadvantaged. Motivation’s support, energy and drive allow ‘e’ngagement to be embedded within ‘E’ngagement. The educational interventions made by teachers are pivotal in these processes. Martin’s (2002a) argument is that students attach as much importance to the messenger as they do to the message.

Figure A.2: The MeE framework of motivation and engagement (with permission from Munns & Martin 2005)



A.2.3 The MeE framework in action

The MeE framework serves a number of valuable purposes. The first, and principal, function is to provide a means through which the perceived tensions and shortfalls between the psychology and the sociology of education might be reconciled. These tensions were highlighted by Furlong (1991) in an appeal for the reconstruction of these theoretical perspectives around disaffected school pupils. In short, the argument is that psychology hardly ever gets to the dimensions of social power affecting students' responses. On the other hand, there is the view that sociology invariably suffers from a rejection of psychological insights. In particular, there is concern that it denies that there are important psychological questions to be posed and answered in any social exploration of the relationship between students and education, 'particularly at an emotional level' (Furlong 1991, p.295).

By considering the influence of motivation and 'e'ngagement on the more enduring relationships students can develop with schools and education, the framework has a dual focus. These are the psychological factors that impact on individual student responses and energies and the connections between class processes and discourses and the wider dimensions of social power. This dual focus is especially important when considering at-risk and historically underachieving students. Finding ways to encourage these students, some of whom are from the poorest communities, to embrace classes and a school system requires a concerted effort. Furlong reminds us that schools 'are highly complex and often contradictory places' (1991, p.305). While schools are said to promise achievement for all, the actual academic and social outcomes for boys from Indigenous, low-SES, rural and remote backgrounds point to the complexities and contradictions in such a promise. To cut through these complexities and contradictions, the MeE framework offers educators a vehicle for thinking creatively across paradigmatic divides.

The second purpose of the MeE framework is to inform and give direction to a review of the research literature, allow evidence-based research such as case studies, and provide a structure for conducting evaluations. The links between school and classroom processes and positive educational relationships for at-risk students are central to both this framing and the evaluation. The MeE framework is as theoretically informed as it is inherently practical. The motivation frame that draws on Martin's (2005) wheel directs attention to teaching practices designed to assist individual boys to maintain and to build on their motivational strengths and remedy impeding or maladaptive areas of motivation. It also points to teaching strategies that can develop academic resilience. The ability to overcome any obstacles and setbacks is a vital step in the path towards 'E'ngagement. Helping individual boys towards academic resilience is a crucial aspect of the teacher–student relationship. This is especially the case for at-risk and historically underachieving groups of students. Martin and Marsh (2003) identified four factors that are significant predictors of resilience. These are self-efficacy, persistence, control and low anxiety. A strategic individual focus on these factors can have valuable practical outcomes in terms of student motivation. The motivation frame also allows a consideration of the importance of teachers in the realisation of engaging messages for boys. Individual students attach themselves to the messenger as well as to the message.

The 'e'ngagement frame has elements of the wheel, as well as having a wider group focus on social processes and relationships. Of particular importance here is

reciprocity and mutual exchange between teachers and students. The 'e'ngagement frame provides a tool for diagnosing which teaching practices are likely to increase student engagement by concentrating on the interplay of higher-order levels of behaviour, emotion and cognition. Importantly, the 'e'ngagement frame works to integrate behaviour, feelings and learning. Engaging messages operate through discourses of power, namely knowledge, ability, control, place and voice. The 'e'ngagement frame enables evidence-based explorations of how these messages are taken up in different school and community contexts by Indigenous boys, low-SES boys, and boys living in rural areas.

The 'E'ngagement frame combines the impacts of motivation and 'e'ngagement in a consideration of academic and social outcomes. It offers a practical tool for diagnosing whole-school structures and processes that are designed to promote 'school is for me' as a whole-school construct. These structures include school ethos, curricular options, extra-curricular activities, mentoring, the use of role models and the design of productive post-school options.

Taken as a whole, the MeE framework attends to the importance of understanding how individual and group processes interplay. For boys at risk, school and classroom strategies that exploit this interplay in powerful and positive ways have the potential to develop their consciousness that 'school is for me'. This offers a way of overcoming disengagement that plays out in resignation and alienation and invariably results in poor academic and social outcomes.

A.2.4 Motivation and engagement: Student outcomes and school factors

A range of theoretical constructs informs the definitions of motivation and engagement. Not surprisingly, this makes for empirical complexity in establishing evidence-based connections between motivation and engagement, on the one hand, and students' academic and social outcomes on the other. Nonetheless, educational research has produced wide-ranging evidence that all three aspects of engagement have a strong positive correlation with student achievement. The research points to how higher levels of behavioural engagement impact on higher academic achievement (Marks 2000). Likewise, evidence indicates that emotional engagement, in the form of identifying with and valuing their school, has positive correlations with students' academic achievement (Voelkl 1997). Research into cognitive engagement shows that when students are substantively engaged there is a positive effect on achievement (Nystrand & Gamoran 1991). This is especially the case when students learn to employ meta-cognitive strategies for regulating attention and effort, linking new information to previous learnings and actively monitoring their own comprehension (Zimmerman 2001). Research also points to links between engagement and school retention (Connell, Spencer & Aber 1994); students with low behavioural engagement are less likely to remain at school, a link that has its genesis in the early years of schooling (Rumberger 1987). Research suggests that higher levels of emotional engagement can keep at-risk students at school (Wehlage et al. 1992).

School and class factors influence engagement. School-level factors include: positive student management; shared control; cooperation between teachers and students and the promotion of extracurricular activities (Finn & Voelkl 1993; Lee & Smith 1995).

These factors can be considered in the 'E'ngagement frame. Within classes it has been found that teacher support (Skinner & Belmont 1993), positive peer influences (Kindermann, McCollam & Gibson 1996), class climate (Fredricks et al. 2002) and task characteristics (Newmann, Wehlage & Lamborn 1992; Marks 2000; Fredricks et al. 2002) are all highly influential in encouraging student engagement. Teacher support in the form of academic or interpersonal assistance is important for improving levels of student engagement. Peer acceptance is associated with emotional and behavioural engagement (Wentzel 1994), while peer rejection is likely to lead to poor behaviour and reduced participation (Buhs & Ladd 2001). The negative influence of some peers on student engagement has been reported to have particular affects among minority youth (Ogbu 1987).

Students' understandings of work norms positively impact on behavioural, emotional and cognitive engagement (Fredricks et al. 2002). Research indicates that, when tasks are authentic, allow students ownership, involve cooperation and are fun, then engagement is enhanced (Newmann, Wehlage & Lamborn 1992). With the exception of peer influences, most of these factors fit inside the 'e'ngagement frame. The effects of peer influences can be seen across all sections of the MeE framework as group social influences impact on individual attachment to the messages and experiences of the school and classrooms. Across both the motivation and 'e'ngagement dimensions of the MeE framework are a number of individual needs that are important for the development of positive school and class relationships. First, there is the need for relatedness. Research has found that caring and supportive environments make students feel as though they belong and enhance their academic engagement (Furrer & Skinner 2003). Second, there is the need for autonomy. Students are more likely to be engaged when they have greater control over their own learning (Connell & Welborn 1991). Third, individuals need a sense of increasing competence. This is met when students believe that they can bring about their own success and can see clearly what they need to do to achieve in the classroom (Rudolph et al. 2001).

A.3 Boys' education

A.3.1 Issues and factors

The research into the antecedents and outcomes of motivation and engagement has resonance with developing understandings of boys' relationships with school and education. In Australia there has been increasing interest from the teaching profession, educational researchers and government departments in the academic outcomes and social achievement of boys from Indigenous, low-SES and rural and regional backgrounds. A number of government reports in Australia have highlighted the factors and issues affecting the education of boys and made recommendations about ways to improve their academic and social outcomes (Collins, Kenway & McLeod 2000; House of Representatives 2002; Trent & Slade 2001; Lingard et al. 2002; Martin 2002a). Other privately commissioned reports have supported their findings (see, for example Cresswell, Rowe & Withers 2002). There have been parallel reports in New Zealand (New Zealand Education Review Office 1999, 2000), the United Kingdom (Ofsted 2003a) and Canada (Quebec Ministry of Education 2004). These official reports have both reflected and informed public debates about boys and

schooling in these countries. These debates have centred on issues surrounding binary oppositions between boys and girls and masculinity and femininity. Generally, these debates have been played out within discourses of:

- ‘poor boys’ (victims of single families, female-dominated schooling and feminism)
- ‘failing schools, failing boys’ (ineffective schools in relation to measurable literacy and numeracy outcomes)
- ‘boys will be boys’ (stereotypical characteristics of boys at odds with the ways schools and classrooms operate) (Foster, Kimmel & Skelton 2001).

It is useful to synthesise here the main ideas informing these reports, so as to highlight what they see as critical factors impacting on boys’ education. It is important to recognise that Australian educational research has moved away from essentialised views of either boys or girls as single unified categories, winning or losing the educational race. Although this movement represented an important theoretical shift, it was certainly not uncontested in debates within media and by writers such as Biddulph (1997).

The focus is on generating and interrogating evidence about ‘which boys? which girls?’ are not achieving the hoped-for outcomes from schooling (Collins, Kenway & McLeod 2000). Within the teaching profession there is an appreciation that socioeconomic status, ethnicity, Aboriginality and regional location come together with gender to produce disjointed effects in terms of educational privileges and disadvantages. The disadvantages are evident in low retention rates and reduced levels of participation leading to resistance, disengagement and low academic performance among boys of certain backgrounds (Collins, Kenway & McLeod 2000). Literacy is a significant issue impacting on academic outcomes for at-risk boys.

As in Australia, overseas research points to a number of factors that impact on the social success and academic outcomes of boys from certain groups. In North America the research tends to focus on evidence concerning SES, attitudes to school, the effect of stereotypes and relationships with peers (Foster, Kimmel & Skelton 2001). A report by the Quebec Ministry of Education (2004) (‘the Quebec Report’) found that social background had a substantial impact on students. The data showed that the gap in academic performance between boys and girls widened the further down they were on the SES scale. It also reported evidence that girls from low-SES backgrounds attached more importance to school than boys from low-SES backgrounds, devoting more time to homework and studying. Evidence also indicated that girls had fewer difficulties in (English) language and literacy, thereby ensuring them substantial benefits in terms of school achievement. Different learning strategies were observed, with girls more likely to employ control (planning, organising, structuring) and personal learning assessment strategies. Evidence from the Quebec Report indicated that stereotypes around literacy as a feminine activity influenced boys’ negative attitudes to literacy-based school experiences. The Quebec Report also established that peer relationships often influenced and maintained negative attitudes to school and school success.

In the United Kingdom there has been a significant concentration of research on factors relating to schools and classes. The emphasis has been on school ethos,

pedagogy, student management, literacy strategies, alternative curricula and teacher support (Ofsted 2003a, 2003b). Ofsted's earlier report (2003a) noted that the quality of teaching was a significant factor. Pedagogically, boys benefited from professional teaching strategies governing the grouping of students, assessment techniques, the curriculum, role models, expectations and discipline. Boys tended to respond more negatively than girls to unsatisfactory or indifferent teaching. The report stated that boys were adversely affected by teachers' inadequate attention to language and literacy, and their own poor attitudes and behaviour, and irregular attendance. The evidence suggested that underachieving boys were withdrawing from positive class interactions very early in their school careers. Outside and peer influences had a considerable impact on boys' motivation and performance of boys. These influences were centred on future employment expectations, the relevance of education to future lives and a culture of rejecting schoolwork, especially homework.

Research in New Zealand has focused on how boys' learning strategies and behaviour interact with teachers' pedagogies and the school environment (New Zealand Education Review Office 2000). System-wide data indicated that girls were outperforming boys against many measures of in-school achievement. Similar results were found across all ethnic groups. An earlier report by the New Zealand Education Review Office (1999) argued that boys and girls learned differently, using different learning strategies when achieving their best results. Boys were reportedly less attentive and less willing to be involved in challenging, open-ended tasks. This report maintained that boys were presenting the majority of behavioural problems in schools and were over-represented in special education, truancy, suspension and expulsion statistics. The report also highlighted literacy concerns that indicated that boys in general had more negative attitudes to the types of reading and writing tasks offered by schools. It was argued that school values, teaching strategies and assessment processes were more suited to girls than boys.

Australian educational research has been active in generating findings concerning the gendered constructions of student identities, particularly issues concerning differing masculinities and how these impact on relationships with peers, teachers and the curriculum. Community and school environments are key sites where boys develop particular responses and stances towards these various masculinities. Some masculine identities have been found to work against enhancing boys' academic motivation and engagement.

Trent and Slade's (2001) report, *Declining Rates of Achievement and Retention*, gathered data from a selection of adolescent males, many of whom were considered to be at risk of not finishing secondary school. The views of these particular boys showed that they did not value school. School work was 'boring' and neither the content nor the pedagogies were seen as being suited to their needs and interests. The boys highlighted a number of interesting contradictions. These included: expecting adult behaviour in a non-adult environment; a rhetoric of fairness, respect and flexibility that played out differently in practice; and boys being prepared for a future work/life trajectory whose uncertainties exerted negative influences on their motivations for school achievement. These boys were mainly concerned about being taught using unsuitable curricula and pedagogies that either caused or aggravated their problems. In contrast, girls and boys who were able to conform to the demands of

schooling were reported as being better treated and able to experience better learning outcomes.

Gilbert and Gilbert (2001) explored evidence for the construction of boys at school as a new disadvantaged group. They noted the argument that boys, as a single group, still experienced economic and social advantages in their post-schooling years. This proposition, however, failed to address the evidence of differences within the category of 'boy'. There is a need to examine how particular groups of boys fare less well than other groups. The evidence demonstrates that those boys who are unprotected by economic and social privilege are those predominantly affected by narrow and stereotypical subject choice, unruly and risk-taking behaviours, poor literacy achievement and low school retention rates.

Stratification in education relates to social stratification, where patterns in education relate to students' background characteristics in more complex ways. Dekkers, Bosker and Driessen (2000) analysed a large-scale longitudinal database to establish the interactive effects of social class, ethnicity and gender on various indicators for school success. Results showed that school success was not always predicted by either the additive or multiplicative effects of the different background variables. For example, the situation of Indigenous boys from low-SES backgrounds is worse than that of similar boys from other ethnic minorities.

As indicated above, considerable attention has been given in recent years to problems of retention and early school leaving in Australian schools, and the factors influencing students to leave school early. There has been a particular concern for issues affecting the retention of boys, with a further consideration on the extent to which these issues are influenced by local cultures as this might create regional differences. Ball and Lamb (2001) found that boys who were more likely to be at risk of early school leaving demonstrated low school achievement, attended government schools, lived in low-SES rural or remote areas, were of Indigenous origin, and/or had parents who did not complete school and who were born in Australia or another English-speaking country.

Over the past decade, a great deal of research has been conducted into the area of boys' school retention and associated factors (Connell 1996; Teese et al. 1995; Dwyer 1996; Epstein, Elwood & Maw 1998; Gilbert & Gilbert 1998; Collins, Kenway & McLeod 2000; Ball & Lamb 2001). The apparent retention rate (ARR) to Year 12 in Australian schools indicates that in 2001, 23.25% of females and 35.2% of males left school before completing Year 12 (House of Representatives 2002). It is this gender disparity that has focused attention on the retention of boys. Lamb, Dwyer and Wyn (2000) point out that, due to social and economic changes over the past 20 years, students have been forced to rethink the value of pursuing an education as there are likely to be future disadvantages for students who do not maximise their educational opportunities. Research suggests that boys and girls who decide to leave school early form an 'exposed' category of young people and that non-completers are likely to become the most vulnerable to economic and social change (Gilbert & Gilbert 1998; Collins, Kenway & McLeod 2000; House of Representatives 2000; Lamb, Dwyer & Wyn 2000).

Roderick (2003) incorporated a regional focus in his investigation of how the larger issues of gender played out in local Australian contexts. He argued that the construction of masculinities and masculine identity depended on the specific local assumptions of gender and social practices in particular cultural contexts within a geographical location. He also found that many boys appeared to experience a sense of loss associated with a distinct lack of future direction and planning – a sense that their future would control them rather than them controlling their future. This sense of powerlessness was evident in all areas, but particularly in rural regions. Employment options in rural and remote areas are often ‘closed’ in that they are often dominated by mining or agriculture. Competition for employment is high, and the problem is compounded by the reality that working in these areas may not interest some boys. For those boys who aspire to engagement in different forms of work other than mining- or agriculture-based services, the future employment prospects in their geographical location may look decidedly narrow and uninviting.

The House of Representatives report, *Boys: Getting it Right* (2002), suggested that a number of factors affected the educational achievement of boys. Reportedly, some boys favoured tasks emphasising visual, logical and analytical approaches, but these were not being catered for by existing curricula and pedagogies. There were indications that developmental and behavioural factors were adversely affecting some boys’ achievements in literacy and numeracy. The report highlighted the importance of productive peer and teacher relationships. Boys needed to be given greater autonomy across all of their schooling, including taking responsibility for each other through acting as role models and peer mentors. The report also argued that gender equity strategies would benefit from a positive focus on educational approaches for boys and girls that were appropriate for their geographic, socioeconomic and cultural circumstances.

In their report, *Boys in School and Society* (2002), Cresswell, Rowe and Withers drew on international and Australian evidence to explore the reasons for lower literacy rates among certain groups of boys. The evidence indicated that these boys’ disengagement from their schooling was putting them at risk of becoming behaviour problems which would lead to disciplinary action. The early years were seen to be particularly risky for those boys who did not find positive experiences in their schooling.

Other research has explored the importance of teachers’ work, particularly their pedagogical activities. For example, Lingard et al. (2002) reported on those teacher–student relationships and pedagogies that were shown, empirically, to improve academic achievement. Martin’s (2002b) data show that teacher and class-level factors, embedded as they are within larger school and systemic configurations, do affect student achievement. This research has informed arguments for gender-inclusive strategies for improving the educational outcomes of boys who are disengaging from school and not motivated to achieve academic and social success. The report, *Addressing the Educational Needs of Boys* (Lingard et al. 2002), identified three factors affecting the academic achievements of certain boys. The first was the school environment and their peer group. For these boys their behaviour in class was invariably associated with anti-school behaviour and negative work attitudes. The second was the influence of teachers. Teachers who exhibited qualities aligned to the enhanced professionalism driving productive pedagogies were more likely to secure successful academic and social performance from boys. Productive pedagogies are

those that have intellectual demand; are relevant and connect to students' lives; are socially supportive; and recognise and value differences (Hayes, Lingard & Mills 2000). The third factor was the construction of masculinities. The formation of a particular sense of masculinity was shown to affect the subject choices made by boys and the ways they responded to their classes.

Martin's (2002a) report, *Improving the Educational Outcomes of Boys*, brought together evidence of strategies that address these three factors. Pedagogically, schools and teachers who address content and practices emphasising variety, content knowledge, mastery, relevance and diversity reported considerable benefits for boys. Likewise boys gained from pastoral care that worked towards positive relationships, motivation, resilience and autonomy. Such approaches recognise the strengths that boys bring to their schools and classes. The interface between the school, the class and the student was also found to be significant. Boys were helped considerably by literacy support; gaining explicit insights into the gendered construction of their identity; and productive relationships between teachers and students.

Taken together, international and Australian research have consistently drawn attention to factors associated with the different behaviours and attitudes displayed by boys at school. These behaviours and attitudes are influenced by peer relationships and the construction of stereotypical views of boys' masculine identity. This research also highlights the ways in which boys now learn and how this is affected by, and impacts on, the curriculum. Literacy is an area of great significance to boys' achievement, while the importance of quality teaching, as evidenced in productive student–teacher relationships, is a recurring theme throughout this research.

A.3.2 Boys' academic and social outcomes

Australia's national goals for schooling in the twenty-first century declare that 'students should have ... attained the skills of numeracy and English literacy; such that, every student should be numerate, able to read, write, spell and communicate at an appropriate level' (Ministerial Council on Education, Employment, Training and Youth Affairs [MCEETYA] 1999). The Australian Language and Literacy Policy provided an early elaboration on this definition, seeing literacy as:

the ability to read and use written information and to write appropriately in a range of contexts. It is used to develop knowledge and understanding, to achieve personal growth and to function effectively in our society. Literacy also includes the recognition of numbers and basic mathematical signs and symbols within texts. Literacy involves the integration of speaking, listening and critical thinking with reading and writing. Effective literacy is intrinsically purposeful, flexible and dynamic and continues to develop throughout an individual's lifetime.

(Department of Employment Education and Training 1991, p.9)

More recent research into literacy education in Australia has examined its 'skills' and 'cultural' dimensions (Wilkinson, Freebody & Elkins 2000). These approaches to literacy learning have been evident in a number of initiatives funded by the Australian Government and state and territory governments. For instance, the *Children's Language and Literacy* projects defined literacy as 'a set of cultural practices' (Jones

Diaz et al. 2001). The socio-cultural view which regards literacy as social practice has provided considerable impetus to recent educational interventions (Gee 1990; Hasan & Williams 1996; Christie & Misson 1998; Anstey & Bull 2004). Socio-cultural practices have focused on the way form, function and meanings in literacy events differ across cultures, communities, social groups and 'literacy domains', particularly in the context of work and school (Maybin & Mercer 1996; Mercer & Swann 1996; Schirato & Yell 1996; Street 1997; Kramsch 1998).

In recent years, curriculum policy-makers, teacher educators, school leaders and teachers have been testing the 'four resources' model of English literacy learning developed by Freebody and Luke (1990). In this model, skills and cultural approaches are drawn together in the four resources of decoding, participation in the meanings of text, functional use of text and critical analysis of text. Each of these resources ('roles' or 'practices') is necessary, but not sufficient for literate citizens in a dramatically changing world.

In the high-tech world of the early twenty-first century, definitions and practices of literacy must now attend to the notion of 'multiliteracies' (New London Group 1996; Jones Diaz & Makin 2002; Zammit & Downes 2002). As Cope and Kalantzis (2000) note, the term 'multiliteracies' highlights the influence of the ever-advancing ICTs in education and society:

Meaning is made in ways that are increasingly multimodal in which written linguistic modes of meaning are part and parcel of visual, audio, and spatial patterns of meaning. Take for instance the multimodal ways in which meanings are made on the World Wide Web, or in video captioning, or in interactive multimedia (e.g. mobile phones), or in desktop publishing, or in the use of written texts in a shopping mall. To find our way around this emerging world of meaning requires a new, multimodal literacy.
(Cope & Kalantzis 2000, pp.5–6)

Changing literacies mean that electronic and digital texts, texts of popular culture and environmental print are now part of the social worlds of most children (Lankshear et al. 1997; Hill & Broadhurst 2002). Many children's family and community literacy experiences and their knowledge networks involve popular media culture (Marsh & Millard 2000; Marsh 2003). Research indicates that boys' interest in these new technologies and popular media culture means they are disadvantaged by pre-ICT curricula and pedagogies, which privilege book-based narratives to the exclusion of new literacies and the work/life trajectories they promise (Millard 1997). Research into multiliteracies has revealed the importance of teaching understandings of language and literacy codes; multimodal reading and writing practices; multimedia authoring skills; multimedia critical analysis and internet exploration strategies (Alloway & Gilbert 2002a). Students benefit from knowledge-producing pedagogies that engage them in the design and control of texts in a range of genres and modes (Lo Bianco & Freebody 1997). The mass distribution of ICTs has made literacy and literacy education more complex and multifaceted than ever. In responding to the impact of ICTs on society and education and engaging with them, the definition of literacy as a social practice has had to expand:

Literacy can be defined narrowly, as the ability to understand and create written language. It is, however, frequently defined in two broader senses ... Firstly, the scope can be expanded so that written language becomes written language and graphical or pictorial representation. Secondly, the skill can be treated as social, rather than psychological; in this view, literacy is the ability to operate a series of social or cultural representations. (Andrews et al. 2002, p.7)

The terms ‘literacies’ and ‘multiliteracies’ (Cope & Kalantzis 2000) suggest the enhancement of teacher professionalism to ensure that they are able to offer a twenty-first-century curriculum using commensurate pedagogies to equip today’s students – the rising generation of transnational workers and global/local citizens – with the breadth of knowledge and skills necessary for their work/life projects. Curricula, pedagogies and assessment practices that take a narrow, pre-ICT view of literacy reduce boys’ literacy education to a few simple, mechanistic skills that fail to do justice to the actual literacy practices now required. Comber (2000), Freiberg (2001) and Graff (2001) all point out that narrow, pre-ICT literacy practices are used to measure all students’ achievement in schools, but largely benefit English-speaking, Anglo-ethnic middle-class students. Moreover, the relatively poor academic performance of boys reflects this use of narrow, pre-ICT literacy measures. Literacy learning is regularly tested using pre-ICT decoding and encoding competencies that do not account for boys’ experiential learning of multiliteracies (Alloway et al. 2002; Rowan et al. 2002). Broadening the definition of academic achievement to articulate and reflect contemporary social changes suggests possibilities for reworking early and middle school curricula, pedagogies and assessment strategies in order to engage students’ experiential learning and knowledge networks. Curricula and pedagogies that connect more directly to boys’ lives embrace new ways of assessing achievement that are not driven by a focus on pre-ICT skills (Rowan et al. 2002). Stronger links to boys’ everyday knowledge networks provide opportunities for all students to display their existing expertise of the changing world and to build on their understandings of what others know (Alloway et al. 2002; Marsh 2003).

A focus on pre-ICT literacy skills constructs boys’ underperformance as a deficit, and fails to identify possible points of motivation and engagement that teachers could mobilise to enhance boys’ academic and social success. This marginalises boys (and girls) from Indigenous, rural and regional, bilingual and low-SES backgrounds. Carrington (2001) found that in this way literacy instruction ‘serves to narrow the set of possible cultural practices’ (2001, p.276). The privileging of pre-ICT literacy practices marginalises boys for whom book-based literacy learning is not a source of motivation and engagement, resulting in the ‘social stigmatisation, reinforcement of inequality and school failure among the young, and not so young’ (Graff 2001, p.15). Of the many possibilities suggested by this research, four are especially worth considering here. Efforts to improve the social and academic outcomes for boys of Indigenous, low-SES, rural and regional backgrounds might usefully address programmes:

- in which these boys are achieving outstanding outcomes in areas of multiliteracies
- in which a broad view of multiliteracies is integral to the curriculum

- that deliberately engage the socio-cultural literacy practices within the students' community knowledge networks, both for their own sake and as a 'way into' enhancing their multiliteracy practices
- that investigate whether assessment practices reflect, and give expression to the multiliteracies perspective taken within the programme.

Social and personal relations are of considerable importance to improving boys' academic learning and enhancing their life choices. Boys who have difficulty expressing emotions and trouble regulating their feelings are prone to poor personal relationships that impact negatively on their learning (Soorin 2004). Negative social outcomes such as violence, bullying and sexual harassment can result when boys have not learnt to express their feelings in socially acceptable ways. This leads Foster, Kimmel and Skelton (2001) to suggest that, rather than poor academic achievement, the real crisis is one of violence.

A concentration on academic outcomes can only benefit from opportunities to address the personal and social issues confronting boys and reduce undesirable social outcomes (Landy 2002; Lingard et al. 2002). Social and academic outcomes intersect; for example, when boys feel valued and respected, their feelings of competence and self-efficacy are increased and they are encouraged to take the risks inherent in solving educationally significant problems (Landy 2002; Arthur et al. 2005). Furthermore, when boys and their teachers build productive relationships, there are enhanced opportunities for boys' learning through differing knowledge networks (Reid 2002). To interact successfully with peers and adults, however, boys need to become socially competent (Reichert 2001). Some boys may require assistance from their teachers and other role models to develop effective interaction strategies. They may need guidance on how to initiate and sustain relationships with their peers, how to interact cooperatively and how to function as part of a group. Teachers develop boys' social competence by providing them with appropriate challenges, by discussing their emotions and social interactions, and by making their own teacher expectations clear and appropriate (Landy 2002).

Gardner's (1983) seminal research on multiple intelligences has informed educational efforts to develop boys' ability to understand the feelings and intentions of others (interpersonal intelligence) as well as their ability to understand their own feelings and motivations (intrapersonal intelligence). Emotional intelligence or emotional literacy is now also recognised as an important educational outcome. The development of the emotional literacy of boys focuses on enhancing their ability to recognise and understand their own and others' emotions, along with the ability to regulate their own feelings in order to interact effectively with others (Antidote 2003). Boys' social outcomes benefit from learning to express their feelings, to give voice to issues of culture, race and sexuality, and to analyse and challenge illegitimate forms of power and privilege (Reichert 2001).

Chen and her colleagues (Chen, Krechevsky & Viens 1998) suggest that recognising students' interpersonal and intrapersonal intelligences in class can strengthen the academic learning of underachieving students. Students' increased confidence leads to the risk-taking necessary for engaging in new areas of academic endeavour, the use of existing strengths to relate to these new areas, and the linking of students' strengths and interests, evidenced in their knowledge networks, to academic learning.

The formation of masculine identities plays an important role for boys as they learn to negotiate their relationships with others and achieve academic success (Connell 1996; 2000; Alloway et al. 2002). For some boys, their construction of a particular masculine identity, their particular masculine ways of relating to others and their reluctance to display emotions creates tensions with expected class behaviours. In this way, boys' developing sense of possible masculinities impacts on their level of engagement with academic and social learning (Connell 1995). There are boys who learn ways of being masculine – through their interactions within their families, peers and school – that lead to resistance to teacher authority and disengagement from expected and desirable academic behaviours (Alloway et al. 2002). In order to gain and maintain social status, these boys constantly seek to prove their particular version of masculinity through bullying, violence and the need to dominate others. This occurs at a cost to their emotional wellbeing (Mills 2001). These boys prioritise achieving status through anti-social forms of masculinity rather than academic achievement and positive social success. Teachers who engage these boys in the analysis and critique of competing forms of masculinity provide them with alternative behavioural options to bullying and violence. Possible options to achieve this engagement would include conflict resolution skills, negotiation and teamwork. In the absence of such teacher intervention, these boys are left to reinforce inappropriate, anti-social forms of masculine behaviour (Mills 2001).

Research suggests that some boys may have 'restricted relationship repertoires' (Alloway et al. 2002, p.145), causing them to enact rigid social relations. Boys who experience difficulties in constructing effective and positive relationships with teachers and peers have few skills for working collaboratively (Reichert 2001). This limits both the relationship roles these boys take up in the classroom and their engagement with academic learning. Success-oriented education programmes for boys result in the development of productive social relationships, thus broadening their patterns of interaction.

The social dynamics of classrooms and the provision of curriculum that connects to students' lived knowledge networks are vitally important for improving academic outcomes for all students (Education Queensland 1999; Alloway et al. 2002). Teachers who encourage discussions, negotiation and collaboration share their power with their students (Education Queensland 1999). A curriculum that connects to boys' out-of-school experiential learning and the knowledge networks they find personally meaningful will result in increased emotional engagement in learning, along with positive academic and social outcomes (Mills 2001; Alloway et al. 2002). Educational research into the social outcomes of schooling suggests a number of areas for making interventions likely to enhance the success of boys' education. These include, but are not limited to, programmes that:

- develop the emotional literacy of boys
- demonstrate strong respect for boys through increasing their competency and feelings of self-efficacy
- focus on interpersonal and intrapersonal intelligences
- analyse, critique and challenge forms of masculinity that lead to anti-social outcomes.

A.4 Strategies for improving the motivation, engagement, academic success and social outcomes of boys

This section focuses on evidence-based investigations into school and classroom strategies for improving the motivation, engagement, academic success and social outcomes for boys. Driven by a search for evidence of strategies that have resulted in improved outcomes for boys from low-SES, Indigenous, rural and regional backgrounds, this review is informed by research relating to boys as a generic group, as well as research into the broader gendering of education. As the research in this area does not always fall easily into such categories, this review has both uncovered additional areas that have been the focus of considerable research and identified areas that invite closer empirical investigation. In particular, there is a need for much more evidence-based research about the motivation, engagement, social performance and academic success of boys from low-SES, Indigenous, rural and regional backgrounds. Pedagogical and curriculum innovations that benefit boys designated as ‘at risk’ may also offer advantages to other students who may not be benefiting from their schooling (Demie 200; Lingard et al. 2002; Martin 2002a).

The strategies for improving the motivation, engagement, academic success and social outcomes for boys from low-SES, Indigenous, rural and regional backgrounds are discussed in four sub-sections. First, consideration is given to research evidence about home, community and school connections. Much of this research has given particular attention to family involvement and support for student learning, as well as the connections between students’ classes and the local and wider community. Second, research about whole-school strategies is discussed. These strategies have been put into place to develop stronger student relationships with schooling and education and so open up opportunities for future success in life. The research reviewed here highlights issues of school climate, structure and organisation. Third, research about classroom strategies is covered, with evidence relating to pedagogy, curriculum and relationships. Fourth, research about English language and literacy strategies is given specific attention, as the evidence suggests these are areas of major concern in boys’ education. The research in this area is critical, given the importance of proficiency in English language and literacy for boys’ motivation, engagement, social performance and academic outcomes.

A.4.1 Home, community and school connections

Research points to the advantages of family involvement in boys’ education. Boys of all ages and backgrounds benefit from partnerships between families and educational institutions. This section analyses and synthesises research on family involvement, family support for students’ learning and links to community experiences. The connections between home, schools and communities are broader than just parental involvement. These extend to students’ out-of-school interests and experiential learning, and the knowledge networks within their homes and communities. Epstein and associates (2003) report that these intersecting influences enhance student success when the three spheres of school, community and family are closely linked (Epstein et al. 2003). Schools and early childhood settings that have implemented strategies to bring all three spheres closer together see enhanced student success. However,

families' decisions about their capacities to participate are formed and informed by their work/life circumstances and their prior educational experiences as much as the attitudes of the educational setting.

Benefits of family involvement

Overseas research has demonstrated a positive relationship between family involvement in their child's education and the child's academic improvement. Such family involvement is especially significant for students from historically disadvantaged backgrounds. For example, in their review of 30 years of research on family involvement in schooling in Canada, Deslandes and Cloutier (2002) found that students of all ages and from all socioeconomic backgrounds benefited when family members were involved in their schooling. The benefits of family involvement included improved grades and higher academic aspirations. James, Jurich and Estes (2001) undertook a meta-analysis of research into early childhood education in the United States. They found that 40% of the school and youth programmes that demonstrated academic gains for ethnic-minority students focused on improving communication with students' families or increasing family involvement in the programmes.

Community involvement takes many forms and can include bringing forward cultural traditions, work-based learning and links to local community organisations such as museums. One example of a successful programme was the Advancement Via Individual Determination (AVID) programme implemented in middle and secondary schools in California (James, Jurich & Estes 2001). It was discovered that 43% of Latino students who participated in this programme for at least three years continued on to college. This was compared with the national average for Latino students of 29%. Contributing factors to the programme's success were parent participation and the collaboration of parents, universities and local businesses in motivating students. Other successful programmes included the Alaskan Onward to Excellence and Rural Systemic Initiative (James, Jurich & Estes 2001). These two programmes involved collaboration between the local Indigenous communities and schools to integrate Indigenous culture, knowledge and language into the curriculum. Evaluation of the implementation of these initiatives in the southwest region of Alaska found significant improvements in literacy and numeracy and an increase from 10% to 50% in students going on to college.

Analysis of research into schools in England that have been successful in raising the academic achievement of ethnic-minority students found that one of the contributing factors was family involvement (Demie 2001). In New Zealand, Berryman and Atvars (1999) reported evidence showing the benefits for Maori students from effective and collaborative partnership between schools, parents, caregivers and extended family members. These benefits included improvements in learning, behaviour, attendance, self-esteem and cultural affirmation.

Family involvement has produced an educational benefit across both primary (Quebec Ministry of Education 2004) and secondary years of schooling (Frater 1998). These benefits included a greater likelihood of students enjoying school; a higher work orientation (Deslandes & Cloutier 2002), and improved literacy outcomes (Frater 1998). The research also shows, however, that parental involvement decreases as

students get older (Quebec Ministry of Education 2004). Secondary schools and their students have to look for different ways to involve parents. For example, Deslandes and Cloutier (2002) found that secondary students wanted their families to be involved in their education through interactions about school at home, rather than through having family members visiting their classes. The types of parent involvement adolescents benefited from included: discussing ideas for projects; showing their parents what they had learned or achieved; parents helping them to study for a test; and parents reading school newsletters and discussing current events with them.

Research in Australia reports similar gains in social and academic outcomes among educationally disadvantaged students when there is an increased level of parental involvement. In particular, comparable research findings have been reported in relation to low-SES students. Lingard and his colleagues (2002) established that in families where a high priority is placed on education, students performed well. Parental support enhanced the impact of any advantages that came with the families' socioeconomic background. They found that students from socioeconomically disadvantaged areas performed just as well as students from more advantaged backgrounds when parents valued education and assisted their children's learning. The Organisation for Economic Co-operation and Development (OECD) Programme for International Assessment (PISA) reported that 15-year-old Australians whose parents were employed in low-status jobs but spent time reading, achieved better results in written comprehension than students whose parents had medium- or high-status jobs but spent little or no time reading (Cresswell & Underwood 2004).

Partnerships between families, communities and educational settings

The evidence-based connection between family involvement and social and academic outcomes has been complemented by research into effective school, family and community partnerships. This research has focused on connections between the knowledge networks among teachers, students, families and communities, as well as the connections to children's past and current experiential learning. These studies have explored the importance of congruence between students' family knowledge networks and educational contexts (Hill et al. 1998, 2002; Makin et al. 1999; Jones Diaz et al. 2001). It has been found that in some cases the 'language, social and textual practices of the home and the school were similar, creating an easy connection between home and school values and attitudes' (Hill et al. 2002, p.7). These connections were not present for other children, making it difficult for them to engage with school literacies. To overcome this, the research reported on the benefits of teachers establishing partnerships with families. This included finding out about students' families and community funds of knowledge, information which could then be incorporated into the curriculum and pedagogies of schooling in ways that enabled students to make connections with school curriculum and extend their existing understandings (Jones Diaz et al. 2001). The result of these partnerships is enhanced teacher professionalism through a greater socio-cultural awareness of their students' knowledge networks. This extended professional knowledge also contributed to improved student ability in school literacy.

Teachers recognised that all students came to school with considerable experiential learning, but that not all of this was valued cultural capital within the school context

(Hill et al. 2002). Those teachers who acknowledged this did so by including the literacy knowledge that students brought from home in day-to-day school life. They deliberately planned opportunities for students to bring home literacy artefacts to school for display and to demonstrate their competence in out-of-school literacies in their classes (Lingard et al. 2002). By valuing family and community literacies these teachers enabled all students to build on their existing understandings and to extend their literacy knowledge through school learning. The evidence suggests that those schools succeeding in promoting academic achievement among students at risk engage in respectful two-way communication with families (Hill et al. 2002). These schools find out about family and community knowledge and develop local responses to the differences between home and school. Effective early-years teachers were able to build on and extend the knowledge and skills children acquired through their out-of-school literacy experiences, interests and concerns. They were able to move beyond limiting 'deficit' views to develop positive partnerships with families. These teachers were respectfully aware of the diversity of family knowledge and understood the importance of the quality of the relationship between families and children. The rejection:

... of a deficit model that negatively characterises all families from low-SES backgrounds can help to reduce the barriers between schools in low-SES areas and their communities, as well as challenging the damaging stereotypes of poor families. (Lingard et al. 2002, p.27)

The importance of early intervention

The research indicates significant long-term educational benefits for Indigenous and ethnic minority students when there is family participation in early childhood programmes. For example, in their meta-analysis of successful programmes in the United States of America, James, Jurich and Estes (2001) found that compared with control groups, children from ethnic-minority backgrounds who attended early childhood programmes were more likely to remain in school for longer and require less special education support. Participation in early-intervention programmes in the preschool years increased the chances for low-income children, including those of ethnic-minority backgrounds, to do well in school (James, Jurich & Estes 2001). Evaluation of the *Head Start* programme, for example, established that there was a nearly 50% reduction in the likelihood that students who participated in it would need to repeat a year at school. In New Zealand, the Whanau Toko i te Ora parenting programme for Maori families with medium-to-high support needs encouraged their participation in early childhood programmes. The evaluation of this programme reported that there were improved interactions between family members, stronger identification with Maori heritage and significant gains in child health and development (New Zealand Ministry of Education 2003).

Benefits for boys of family involvement

Australian and international research has investigated the relationships between family involvement and the school achievement of boys. Martin's (2002b) research found that families had a 'significant influence on educational outcomes' for boys in literacy, and that effective schools made productive links with families (2002b, p.56). Ofsted (2003a) investigated schools in the United Kingdom where boys were achieving and demonstrating significant improvements. Communication with families

and parental support were found to be important for the improved academic achievement. Furthermore, system-wide data showed that pupils' and families' attitudes to education were the important factors in schools where boys were achieving academically (Ofsted 2003a). Schools that produced effective writing outcomes for boys had strong links with their pupils' families. These links were made possible by home-school reading diaries, parental involvement in classes and information for families about the school's approach to literacy. Connections between family involvement and improved outcomes for ethnic-minority students were also found. Related studies found that effective communication between city schools and English families of Caribbean backgrounds impacted positively on attendance and the academic achievement of boys (Ofsted 2000, 2002). The parents of girls tended to be more involved in their children's education than the parents of boys, but girls also supported parental involvement to a greater extent than did boys.

The role of fathers in supporting their sons' education has been highlighted in recent research (Alloway & Gilbert 2002b; Green 2003). Educators in Canada encouraged fathers to provide a positive role model by reading themselves and reading to their children (Quebec Ministry of Education 2004). In the United Kingdom, the National Reading Campaign has challenged masculine stereotypes by identifying reading with male role models who love reading (National Literacy Trust 2005). To date, there is no evaluation of the outcomes of this strategy.

School links to community

School-community links shown to be effective in motivating boys' learning include workplace learning, vocational education, school-industry links and community-based learning (Martin 2002a). Research reports that effective schools link students to the world outside (Martin 2002b), by working towards 'bringing the outside in' or vice versa (Alloway & Gilbert 2002b, p.204). The evidence suggests that making these both-ways links is important for the motivation, engagement, social success and academic achievement of boys from educationally disadvantaged groups.

The community can be a source of mentors and role models for students, for example, through partnerships between schools and local businesses or visits to the school by community members. A New Zealand community mentoring programme that used the tutoring procedures of 'pause, prompt, praise' worked successfully with the local Maori community in improving the reading achievement of Maori boys (Berryman & Atvars 1999). In 1997, 227 low-achieving Maori students from Years 3-10 took part in the programme and in 1998, 332 students were tutored by Maori women in reading in English. For both cohorts, 98% of the students made measurable gains in reading accuracy and comprehension. The tutoring program also produced benefits for the adult tutors: 37% of the tutors embarked on further learning; 17% found employment; 13% enrolled in either teacher education or other higher education courses; 2% went back to school and 5% enrolled in community courses (including training to be Teacher's aides). The establishment and nurturing of relationships between schools, students and Maori communities, the use of culturally responsive processes and the identification of points of engagement were key elements in the success of this Maori tutoring programme. Berryman and Atvars (1999) maintain that it is essential that the aspirations of the school consistently complement the aspirations of the local families and communities.

Lints (1999) reported the benefits of a programme which included community elders in supporting secondary boys' education. This programme involved members of the local Indigenous community working alongside teachers in classrooms and taking on one-to-one relationships with boys who were disruptive or needed additional support. These community members also liaised between families and teachers. Evaluations of the programme's implementation in Hawaii and New Zealand found that it reduced boys' rates of truancy, substance abuse and school suspensions and built productive partnerships between schools and families (Lints 1999).

Where teaching/learning links between schools and their communities have been established outside the school, there have been positive gains in academic achievement for boys from minority groups. In the United Kingdom it was found that the use of community-based sports clubs as a venue for after-school learning centres provided motivation for boys' learning and resulted in positive academic outcomes in literacy and mathematics (Sharp et al. 2003). One such example was the 'Playing for Success' centres. Run by experienced teachers, the centres targeted students in Years 6–9 who were underachieving in literacy and numeracy. Fifty-four per cent of the students attending these centres were boys, and a quarter of these were from ethnic minority backgrounds. Students who attended the centres for two hours a week for six weeks significantly improved their performance in arithmetic tests compared with a control group who did not attend the centres (Sharp et al. 2003). Primary pupils in the programme improved their numeracy scores by an average of 17 months, while those in secondary improved by an average of 24 months. Secondary students' reading comprehension results also showed an average improvement of eight months, and ICT skills improved across all age groups. Parents and teachers also reported improvements in students' attitudes towards school, an increase in self-esteem and positive changes in their study habits.

After-school care programmes in the United States have also been found to be effective in improving the academic outcomes of ethnic minority students (James, Jurich & Estes 2001). Two examples are the Boys and Girls Clubs of America (B&GCA) and Sacramento START. The B&GCA provides an academically enriching programme for children living in public housing estates. Children who participated nearly doubled their attendance rates at school and increased their grades by an average of 3 to 6 points while the control group showed a decline on both measures (James, Jurich & Estes 2001). *Sacramento START* is an after-school programme in low-income communities. Those students with the lowest grades who joined the programme also demonstrated significant improvements in test scores (James, Jurich & Estes 2001).

Summary: Home, community and school connections and links to boys' learning

The research suggests that that the complex relationships between families, communities and schools have a special significance for the academic achievement and social success of students from educationally disadvantaged groups. The evidence indicates that boys from all backgrounds benefit from family and community involvement. More research is required, however, into strategies for improving the motivation, engagement, social performance and academic outcomes for Australian

boys from low-SES, rural, Indigenous, and regional backgrounds (Lingard et al. 2002). Table A.1 summarises the evidence on these matters.

Table A.1: Summary of research into home, community and school connections and links to boys' learning

Boys' motivation, engagement and school outcomes	Research
Positive correlation between family involvement and academic improvement for all students	Deslandes & Cloutier 2002
Positive correlation between family involvement and academic improvement for students from educationally disadvantaged backgrounds	Berryman & Atvars 1999; James, Jurich & Estes 2001; Lingard et al. 2002; Cresswell & Underwood 2004
Different needs of family involvement for students in primary and secondary school and impact on academic improvement	Deslandes & Cloutier 2002; (Frater 1998; Quebec Ministry of Education 2004
Establishing effective partnerships between educational settings, students, families and communities respectful of diversity and foster congruence between home and school	Breen et al. 1994; Hill et al. 1998; Makin et al. 1999; Jones Diaz et al. 2001; Hill et al. 2002; Lingard et al. 2002
The importance of early intervention, especially for Indigenous and minority students	James et al. 2001; New Zealand Ministry of Education 2003
The benefits for boys of family involvement	Martin 2002a; Ofsted 2000, 2002, 2003b
Encouraging fathers and adult males to be involved in boys' education	West 2001; Alloway et al. 2002; Green 2003; Quebec Ministry of Education 2004
Linking students to the world outside the school	Alloway et al. 2002; Martin 2002a;
The use of mentors and role models to improve social and academic outcomes	Berryman & Atvars 1999; Lints 1999
Community-based learning programmes and improved social and academic outcomes	James, Jurich & Estes 2001; Sharp et al. 2003

A.4.2 Whole-school strategies

This section reviews the research evidence concerning strategies used at a whole-school level that have been designed to enhance boys' motivation, engagement, academic performance and social outcomes. The main focus is on the 'E'ngagement frame of the MeE framework and the connections this has to 'e'ngagement as a result of changes to teachers' pedagogies.

Whole-school professional change

In the United Kingdom and Australia there has been significant research into the changes that schools make to enhance school achievement for boys. Critical aspects of these change processes have been the relationship between professional development and the school leadership provided by teachers and principals. In-school professional development and the sharing of theories-in-practices during team-teaching, lead lessons and lesson observations have resulted in positive academic and social outcomes for male students (Bleach 1998a). Central to this process has been the enhancement of teacher professionalism through evidence-based knowledge of boys' academic potential, teachers revising their expectations about student levels of achievement, and considering whether student assessments are a fair and true reflection of their capabilities (Davison & Edwards 1998). These teachers used more

than their 'gut feelings', ascertaining diagnostic evidence of various kinds to inform the implementation of strategies for improving boys' education (Lingard et al. 2002). When professional development was embedded in a strong school gender equity policy and supported by informed teacher professional judgements, the educational outcomes for boys improved. A vital component in raising boys' achievement is a breadth of school leadership, with a shared commitment to educational improvement and a school ethos that values students (Younger & Warrington 2003). Strategies were found to be implemented successfully when all staff – including the school management – were committed to them. This research (Younger & Warrington 2003) found that it was important to create a learning environment where both staff and students felt valued, where there was a focus on pupils as learners, and where teachers had high expectations of students and set clear boundaries. A whole-school approach to the enhancement of teacher professionalism was found to be particularly important for underachieving and disruptive boys in secondary schools. A study of the Kirklees project in the United Kingdom found that the outcomes for boys improved when change processes targeted their underachievement rather than the poor attitude and behaviour that stemmed from it (Noble 1998). Noble also found that the professional development of teachers was critical to these changes and the ensuing success of the boys.

Challenging anti-social masculinities

One of the vital areas of whole-school change involving the enhancement of teacher professionalism has been the development of school cultures that challenge anti-social masculinities. The evaluation of the *Raising Boys' Achievement* project in the United Kingdom found that a school culture that celebrated achievement in a range of areas was important in breaking down anti-social stereotypes and encouraging boys' achievement in literacy (Younger & Warrington 2003). Whole-school socio-cultural strategies that challenged anti-social masculinities were an 'integral and foundational aspect of other successful strategies' (Younger & Warrington 2003, p.12). Discussions with boys and class observations found that strategies which critiqued anti-social masculinities and related gender constructions were also effective in addressing boys' underachievement (Francis 2000).

Ofsted (2003b) found that effective schools promoted boys' intellectual, cultural and aesthetic experiences and achievements. Typically, schools did this through extra-curricular activities such as drama, debating and music. Schools successfully used drama as a way to encourage boys' engagement with literacy learning (Younger & Warrington 2003). Experiences such as lunch-time spelling competitions, debating, Scrabble®, drama and homework clubs were also found to increase boys' motivation to engage in literacy activities (Frater 1998).

Assessment and early intervention

Along with enhanced teacher professional development and changes to schools' ethos, research has highlighted the importance of focused assessment processes operating across all levels of schooling. The transition periods of beginning school and moving from primary to secondary education were particularly significant in this regard.

Literacy teaching that made a difference for children in the early years of schooling involved gathering data about what children knew and needed to know, and

responding to this information (Hill et al. 2002). This reflects an important feature of enhanced teacher professionalism, namely ‘data driven diagnostic and responsive teaching’ (Hill et al. 2002, p.8). Effective early intervention prior to school, in the first year of primary school and again in the first year of secondary school, is important in identifying and addressing literacy difficulties (Hill et al. 1998). A second, ‘safety net’ intervention, in primary schools has been found to be important for 8 to 9-year-olds who do not have the independent literacy strategies needed to reach their potential (Hill et al. 2002). Grouping boys by ability rather than age has been found to have some success in improving their academic outcomes (Noble 1998). Likewise the withdrawal from ‘mainstream’ classes of those boys experiencing difficulties in the first year of secondary schooling also had benefits (Frater 1998). Schools in England that withdrew small groups of 8–12 boys did so in order to provide them with additional assistance targeted at their specific needs. On average, by the end of the year, the students in these groups had made a gain of two years in reading age. Canadian research has shown that reducing class size, along with intensive professional development for teachers, resulted in significant gains in literacy test scores for Indigenous and Asian boys from low-SES and highly transient backgrounds (Haughey, Snart & Da Costa 2001). In some cases students went from being 77% below the fiftieth percentile to being 45% above.

A study into schools in the United Kingdom found that assessment, along with the ethos of the school, were the two key contributors to boys’ academic success (Ofsted 2003b). School-based, school-wide assessment systems were effective in providing the evidence teachers required to make early interventions with those students needing additional support. The evaluation of the *Raising Boys’ Achievement* project also highlighted the importance of detailed monitoring of boys’ performance in order to facilitate target-setting and mentoring of boys at risk of failure (Younger & Warrington 2003).

Single-sex and co-educational schools

There are ongoing public debates around whether single-sex or co-educational schools or classes offer increased educational benefits for boys (and girls). Although single-sex schools and classes are often suggested as a strategy for improving educational outcomes for boys, the research evidence on this question is not conclusive.

At a whole-school level there is some evidence from the United Kingdom that single-sex classes may provide a learning environment that allows both boys and girls to learn with less distraction and disruption, thus increasing student confidence (Sukhnandan, Lee & Kelleher 2000; Younger & Warrington 2003). In New Zealand, data from a longitudinal study suggest a tendency for boys and girls attending single-sex schools to perform better across social and academic outcomes (Woodward, Fergusson & Horwood 1999). On the other hand, research in Australia (Godhino & Shrimpton 2002; House of Representatives 2002; Yates 2003), the United Kingdom (Spielhofer et al. 2002) and Canada (Quebec Ministry of Education 2004) indicates that single-sex classes do not necessarily result in greater academic success or positive social outcomes for boys. Canada experimented with single-sex schooling in Quebec. Some school principals reported improvements in boys’ behaviour, while others found that the single-sex classes exacerbated both boys’ and girls’ negative attitudes towards their peers (Quebec Ministry of Education 2004). No improvements in academic

results were reported. However, the evidence suggested that single-sex classes possibly reinforced anti-social masculinities and reduced teachers' expectations of boys (Quebec Ministry of Education 2004).

Evidence from educational settings echoes the uncertainties about the impact of single-sex learning environments on boys' literacy improvement. Martino and Meyenn (2002) found that single-sex English language classes in an Australian co-educational secondary school resulted in improvements in students' learning environments and their self-esteem as a result of modifications of pedagogy and curriculum content. Boys' participation in class was found to increase in single-sex English classes. Teachers reported that it was easier to deconstruct issues of masculinity in boy-only discussions, as the boys felt freer to talk about these issues. Boys in single-sex English language classes in the United Kingdom reported that they felt able to work without worrying about stereotypical expectations and were able to express their opinions about literature freely (Younger & Warrington 2003). However, a 12-month case study in Australia involving three schools and 120 students found that the extent to which boys and girls engage in class-based discussions depended more on their socio-cultural positioning than on their gender (Godhino & Shrimpton 2002).

Despite the arguments, evidence in relation to single-sex classes improving boys' achievement has not been conclusive. Indeed, systemic evaluations of the use of single-sex classes for English language and literacy across the United Kingdom found no uniform increase in boys' achievement (Younger & Warrington 2003). An analysis of a scheme where students were segregated into single-sex classes for mathematics found that this enhanced the performance of girls but may have exacerbated the gender divide for boys (Jackson 2002). The boys-only classes were found to be more competitive, resulting in the boys being more easily distracted. Furthermore, there is the risk that separating boys and girls intensifies gender stereotypes (Sukhnandan, Lee & Kelleher 2000; Martino & Meyenn 2002; Younger & Warrington 2003). There is evidence suggesting that it may lead to a deterioration in boys' motivation and engagement (Jackson 2002). Single-sex classes may also increase homophobia by reinforcing boys' adherence to anti-social masculinities and not allowing the formation of less aggressive masculine identities (Martino & Meyenn, 2002).

The public debate over single-sex schooling has reinforced views about whether or not to change the structure of classes. It has not seriously addressed other important issues, including the social construction of gender identities, nor the curriculum choices, pedagogies and assessment practices that will lead to the improvement of academic and social outcomes for boys. The Quebec Ministry of Education (2004) noted that changing the way that classes are organised without implementing new educational approaches that are more meaningful for students and without increasing teachers' awareness of the effects of the construction of young people's sexual identity, may result in maintaining and even reinforcing learning-related stereotypes for boys and girls.

Research in the United Kingdom supports this position (Younger & Warrington 2003). Any advantages of single-sex classes might be realised if and when different pedagogies and assessment practices are explored, implemented and evaluated.

Mentoring

Some examples of the success of mentoring were discussed above in relation to community links and particular effectiveness of mentoring in minority and Indigenous communities. This section reviews research into mentoring as a whole-school strategy.

Research into mentoring programmes (reviewed in Sipe 2002) has found that these resulted in improved social relationships and academic achievements. The evaluation of the *Big Brothers Big Sisters* (BBBS) programme showed that mentoring resulted in positive outcomes, ranging from a reduction in alcohol and drug abuse, to positive relationships, feelings of competence and higher grades. Evaluations of other more academically oriented programmes, such as Career Beginnings and Sponsor a Scholar (SAS), found that mentees were more likely to attend college than those in a control group. The SAS mentees improved their grades in Grades 10 and 11, although not in Grade 12.

Successful school-based interventions in England found that mentoring raised the academic achievement of students from bilingual backgrounds (Demie 2001). An evaluation of an out-of-school-hours learning programme reported that it resulted in personal, academic, social, school, skills and psychological benefits for at-risk students (Reid, 2003). The academic benefits of participation in the programme included improved results in external examinations in literacy, numeracy and ICT skills. Students reported that their confidence had increased, that they had learnt new skills and had made new friends through their involvement in the programme. The alternative curriculum of the school worked to extend students' goals and aspirations.

Mentoring has been also found to be a successful classroom strategy for supporting students' learning, as Berryman and Atvars (1999) found in the case of peer tutoring with Maori students. Morrison, Everton and Rudduck (2000) conducted a study in the United Kingdom of cross-age mentoring in reading by boys and girls across infants, primary and secondary years. They found that there were significant changes in students' attitudes towards reading, enhanced motivation to read, increased reading fluency and improved confidence among the secondary students. A positive and supportive relationship between the mentor and the mentee was reported to increase the potential for improvements in learning. Mentoring has also been found to improve the academic achievement of underachieving boys (Younger & Warrington 2003). Strategies to encourage boys' engagement with reading used by schools in the *Raising Boys' Achievement* project included a 'buddy' system where older boys worked with younger boys to mentor their reading. A peer reading scheme was also used, which involved boys in Years 3 and 5 working together to improve their self-image as readers. The evaluation of these strategies found them to be 'highly effective in raising boys' achievements and changing their attitudes towards reading and writing' (Younger & Warrington 2003, p.4). Other research from the United Kingdom found that when senior boys peer tutored younger boys for reading both groups developed a more positive attitude to literacy and improvements in the reading levels of both groups were produced (Bleach 1998a; Frater 1998).

The evidence from this research has established that mentoring is an important strategy with benefits for at-risk boys. Different types of mentoring produced different

outcomes. To have long-term success, however, mentoring requires organisation at the whole-school level and there are some caveats in the research literature. Sipe (2002) found that not all mentoring programmes are equally effective. Successful mentoring requires the development of trusting relationships where mentors respect the mentees' points of view. Success also comes through collaborative decision-making and providing mentors with orientation, training and support. Moderate levels of support and structure, along with high levels of activity have been found to provide beneficial mentoring relationships (Langhout, Rhodes & Osborne 2004).

Whole-school strategies for ethnic-minority and Indigenous students

Research from the United States of America, New Zealand and Australia into whole-school strategies has found them to be effective for ethnic-minority and Indigenous students.

A study of 20 schools in New Zealand whose boys were achieving academically found that critical factors included curriculum management and delivery, social support and the quality of education for Maori students (New Zealand Education Review Office 1999). In the United States of America, James, Jurich and Estes (2001) conducted a meta-analysis of effective programmes for raising the academic achievement of ethnic-minority students. They found that successful schools implemented and regularly generated data for decision-making purposes through evaluating a comprehensive set of strategies. Those schools that were successful in raising the academic achievement of ethnic-minority students used: strategies related to programme quality; an academically demanding curriculum; professional development; family involvement; reduced student–teacher ratios; individualised student support; extended learning time; community involvement; long-term, supportive relationships; and financial support. Programme quality, including leadership and accountability, was an important strategy in the provision of successful programmes for ethnic-minority boys. James, Jurich and Estes (2001) also found that strategies to reduce student–teacher ratios included smaller classes, tutoring, mentoring and team-teaching. These successful programmes provided individualised support for students through involving community members as tutors and mentors.

Research has been conducted throughout Australia into whole-school factors that work for Indigenous students. A study of a federally funded intervention programme for schools serving Indigenous communities identified strategies for the effective education of Indigenous students across 83 contexts (McRae et al. 2000). These strategies included parent and community involvement, respect and awareness for Indigenous learners and their culture, and effective teaching. Research into Indigenous education has also identified a number of whole-school strategies impacting on the achievement of Indigenous students (Mellor & Corrigan 2004). These strategies included early health intervention; learning readiness; teachers who used culturally appropriate pedagogies; positive community relationships; productive learning environments and pathways to employment. A professional development programme that enabled teachers to use motivational pedagogies grounded in an understanding of local Indigenous issues and cultures was found to bring improved student outcomes (Callingham & Griffin 2001). Interestingly, these improvements in academic outcomes were more noticeable for girls than for boys. From a motivational perspective, research has also pointed to the multidimensionality of self-identity and

the importance of schools developing in Indigenous students their identity, as both an Indigenous person and a successful school student (Purdie 2003). The research on Indigenous students in Australia is extensive, but in most cases they are discussed as one group, with issues of Indigeneity overriding issues of gender (see Munns, Lawson & Mootz 2003, for an overview of this research). However, as in Canada, the United States of America and New Zealand, Australian Indigenous boys suffer the lowest rates of attendance and retention (Simpson, McFadden & Munns 2001). There is a need for further research to investigate why, even in this most educationally disadvantaged and vulnerable of groups, girls are coming to school and remaining at school in greater numbers than boys.

Summary: Whole-school strategies

Research into whole-school strategies has reported on a number of ways in which schools are working to improve boys' social and academic outcomes. The importance of teacher professional development and its effect on whole-school awareness of and commitment to addressing factors which impact on the relationship between boys and education is a recurring theme. The research points to the value of mentoring for boys' education and of continuing the debates around single-sex schools and classes. Key strategies and their sources of evidence are summarised in Table A.2.

Table A.2: Summary of research into whole-school strategies

Boys' motivation, engagement and school outcomes	Research
Professional development in relation to pedagogy, understanding and valuing boys resulting in improved social and academic outcomes	Bleach 1998a; Davison & Edwards 1998; Noble 1998; Lingard et al. 2002; Younger & Warrington 2003
Challenging dominant masculinities resulting in improved social and academic outcomes	Frater 1998; Younger & Warrington 2003; Ofsted 2003b
Assessment processes across all school stages to improve outcomes	Frater 1998; Hill et al. 2002; Ofsted 2003b; Younger & Warrington 2003
Improved achievement from single-sex schools	Woodward, Fergusson & Horwood 1999; Sukhnandan, Lee & Kelleher 2000; Younger & Warrington 2003
Little or no evidence of improvement from single-sex schools	House of Representatives 2002; Spielhofer et al. 2002; Yates 2003; Quebec Ministry of Education 2004
Dangers of single-sex classes	Sukhnandan, Lee & Kelleher 2000; Jackson 2002; Martino & Meyenn 2002; Younger & Warrington 2003; Quebec Ministry of Education 2004
Improvements in classroom climate in boys-only classes	Martino & Meyenn 2001; Martino & Meyenn 2002; Younger & Warrington 2003
Mentoring and improved social and academic outcomes	Bleach 1998a; Frater 1998; Berryman & Atvars 1999; Morrison, Everton & Ruddock 2000; Reid 2002; Sipe 2002; Younger & Warrington 2003
Whole-school strategies for minority and Indigenous students	McRae et al. 2000; Callingham & Griffin 2001; James, Jurich & Estes 2001; Purdie 2003; Mellor & Corrigan 2004

A.4.3 Classroom-based strategies

The following two sections focus on research into classroom strategies for boys that impact positively on their motivation and engagement, thus leading to improvements in their social performance and academic outcomes. The first section summarises key findings from the research about the strategies used in effective classes for boys. The second section builds on this discussion to synthesise evidence from the research about English literacy and language strategies. Taken together, these two sections present a coherent picture of classroom-based strategies that the research evidence suggests will bring about improved social and academic outcomes for boys from low-SES, Indigenous, rural and regional backgrounds

In classroom-based strategies the motivation and ‘e’ngagement components of the MeE framework come into play. The motivation component provides an evaluative frame for examining evidence of the impact of classroom-based strategies aimed at helping individual boys to build and maintain their motivational strengths and remedy impeding or maladaptive areas of motivation. It is useful also in evaluating research into pedagogies intended to develop boys’ academic resilience. The ‘e’ngagement component provides an evaluative frame for examining evidence of teaching practices intended to increase student engagement, concentrating on the classroom-based interplay of behaviour, emotion and cognition at high levels. It is useful also in evaluating research into equity issues facing different groups of boys regarding their engagement or otherwise with the messages mediated through classroom-based curriculum, pedagogy and assessment systems. The motivation and ‘e’ngagement components highlight the important work of teachers in constructing and maintaining boys’ classroom-based relationships.

Classes that work for boys

Research into boys’ education has established that there are significant numbers of classroom-based elements that result in advancements in the social and academic achievement of boys. These include an ethos that encourages improved classroom-based relationships and productive classroom-based activities.

In successful classes, teachers believe that, no matter how difficult they are, boys are capable of improving their academic and social outcomes (Lingard et al. 2002). Positive classes for boys celebrate success and provide a climate in which boys can achieve. This leads to a change in attitude and benefits for in-class behaviour management (Bleach 1998a 1998b). Furthermore, the research indicates that in classes where boys are encouraged to examine masculine stereotypes and act outside ways that cause disruptions, their academic and social outcomes improve (Lingard et al. 2002). While challenging anti-social masculinities is a positive whole-school strategy, research evidence shows that classroom-based strategies that engage this issue are also beneficial. Hatchell (2001) found that teachers who understood the dichotomisation of gender constructed roles could challenge negative social constructions of masculinity in their classes. Teachers did this by introducing a range of literature to their classes that facilitated debates around anti-social stereotypes of masculinity.

Research indicates that developing an ethos that values pro-social masculinities by involving boys in complex and meaningful learning experiences contributes to improvements in their academic performance (Lingard et al. 2002). The literature reports that effective classrooms are ones in which teachers encourage boys to develop their self-efficacy by allowing them to have some control over their knowledge acquisition and production (Wilhelm, Baker & Dube 2000). In these classes, boys' opinions are valued and they are expected to work cooperatively (Lingard et al. 2002). The research reports that boys' self-efficacy and sense of democracy are enhanced when classrooms develop a 'repertoire for relating' (Alloway et al. 2003, p.3). This occurs by allowing and encouraging boys to interact positively with peers in their engagement with academic learning. Responsive, supportive relationships among male students, and between students and teachers provide the contexts that encourage learning (Pianta 1999). It was found that teachers who scaffolded boys' participation in democratic classroom discussions through modelling and the structuring of small groups facilitated student cooperation and negotiation that led to increases in the boys' engagement with classroom-based literacy events (Alloway et al. 2002).

The research literature reports that boys' motivation and engagement is improved and maintained when teachers actively involve them in different but challenging learning experiences and then offer support throughout these experiences. For instance, Martin (2002b) found that effective teaching for boys includes using a variety of strategies where classroom-based activities have clear objectives and the material engages the boys' interests, leading them to deeper understandings of the issues. Other investigations have found that classroom-based activities benefit boys when they promote active and purposeful learning within a variety of 'hands on' tasks that provide choice, challenges and opportunities for success (Alloway & Gilbert 2002b; Lingard et al. 2002). While challenging, such activities and tasks are also scaffolded to encourage boys to achieve a sense of competence and control over their learning (Wilhelm & Smith 2002). Differential content, resourcing and support is important within these processes as these lead to positive outcomes for boys (Terry & Terry 1998). Research has shown that where boys were given the opportunity to engage in inquiry-based learning in real-life contexts and were offered choices that accommodated their interests, their academic outcomes improved (Wilhelm & Smith 2002). In schools participating in the Quebec Government's experimental education programme it was found that boys provided with opportunities to be active learners demonstrated increased levels of motivation. Teachers in these schools engaged boys in action learning projects that involved real-life problems and meaningful situations (Quebec Ministry of Education 2004). The use of such innovative teaching strategies have been reported as successfully engaging boys' interests and maintaining their motivation during literacy tasks (Alloway & Gilbert 1997; Beavis 1999).

There has been a range of research undertaken to identify successful learning/teaching strategies for boys identified as 'low achievers'. The evidence from these studies is consistent with the above research into successful learning/teaching experiences for boys. For instance, it has been established that low-achieving boys obtain higher academic outcomes when active learning approaches (including physically active learning modes) are incorporated into classes (Alloway et al. 2002). This research also found that, when students had an opportunity to reflect upon their own learning strategies, the insights they gained empowered them and led to greater motivation.

The usefulness of classroom-based rewards for motivating boys has been challenged by the research evidence. Vallance (2002), for example, found that this strategy led low-achieving boys to focus on immediate rewards and extrinsic motivational factors rather than long-term goals and benefits. Even though the low achievers appeared to desire external rewards, the giving of these by teachers does not correlate positively with high achievement. Conversely, high-achieving boys highly valued intrinsic rewards and were focused more on long-term outcomes, particularly as they related to their work/life futures. In both low- and high-achieving groups, however, boys were found to enjoy practical aspects of their education, particularly valuing learning through doing (Vallance 2002). Boys, it seems, are better served by rewards that are 'real', meaningful and valuable.

The classroom-based curriculum

The research evidence indicates that boys have a preference for topics and activities that are contextually embedded in real-life examples and issues. A key principle informing strategies for improving both the social and academic outcomes for boys was found to be making classroom-based activities interesting and worthwhile (Graham 1999; Wilhelm & Smith 2002). Boys responded well to teaching/learning activities that focused on their needs, questions and opinions (Ofsted 2003a). Similarly, Lingard and his colleagues (2002) found that where boys are able to take an active role in their learning, link tasks to past experiences and use the strengths of their learning strategies, they are more likely to be engaged in learning. Martin (2002a) reported that linking the classroom-based curriculum with the outside world increased the relevance and meaning of schooling for boys and resulted in higher levels of learning engagement and academic achievement. In particular, at-risk students were found to be more willing to stay at school when they were involved in vocational education. Furthermore, mobilising teaching/learning around boys' interest in sport has been found to be a useful means of engaging with the curriculum (Quebec Ministry of Education 2004). School principals have indicated that linking boys' extramural activities to the curriculum increases boys' sense of belonging to the school and results in improved behaviour, motivation and self-esteem (Quebec Ministry of Education 2004).

Student-teacher relationships

In terms of motivation, boys attach as much to the messenger as to the message. The motivation and engagement of boys is shaped by and gives shape to the relationship that develop with their teachers (Munns & Martin 2005). The previous two sub-sections have drawn on research to highlight the nature of classroom ethos and the classroom practices that have positive influences on boys' social and academic outcomes. This sub-section brings forward an important body of evidence about teachers' strategies for responding positively to boys. Teachers who exhibit interest in and know their male (and female) students, who have high expectations and 'demand' work in a friendly way, and who develop interesting teaching/learning experiences are the messengers who have greater success in motivating and engaging boys. Wilhelm and Smith's (2002) investigation of teacher-student relationships revealed that boys attached considerable importance to their teachers responding personally to them by showing genuine interest. Similarly, Budden (2004) reported that boys liked teachers who approached them with warmth and 'demandingness'. Lingard and his colleagues also found that boys 'liked teachers who were firm, but friendly, made learning fun,

related well to students, made work interesting, and had a sound knowledge of their subject’ (Lingard et al. 2002, p.215). Keddie and Churchill (2003), like Ofsted, found that boys particularly valued individual attention where ‘close individual monitoring of the boy’s progress gave them an excuse to succeed’ (Ofsted 2003a, p.5). Teacher–student relationships built on respect, knowledge and understanding of the student, active listening, humour and flexibility were found to have positive outcomes for boys (Martin 2002a).

Teachers who are able to develop productive relationships with boys are particularly effective in their work with Indigenous students. Teachers who have developed and used good relationship strategies have been found to improve the academic engagement of Indigenous students (Edith Cowan University & Education Department of Western Australia 1999; McRae et al. 2000). Good relationship strategies are characterised by humour, trust and a concern for individual boys and manifested in the teachers investing time to interact with students both inside and outside of the classroom (Munns 1998).

Summary: Classroom-based strategies

The research into classroom-based strategies has reported that teachers implement a number of approaches to improve the motivation and engagement of boys. There is evidence that elements of these approaches will work for low-achieving boys and those from Indigenous backgrounds. Discussion for this section is summarised in Table A.3.

Table A.3: Summary of research into classroom-based strategies

Boys’ motivation, engagement and school outcomes	Research
A classroom ethos that improves outcomes for boys	Bleach 1998a, 1998b; Hatchell 2001; Lingard et al. 2002; Wilhelm & Smith 2002
Classroom activities that increase motivation and engagement	Alloway & Gilbert 1997; Terry & Terry 1998; Beavis 1999; Alloway & Gilbert 2002b; Lingard et al. 2002; Martin 2002a; Wilhelm & Smith 2002; Quebec Ministry of Education 2004
Classroom strategies for low-achieving boys	Alloway et al. 2002; Vallance 2002
Specific curriculum approaches that increase motivation and engagement	Graham 1999; Lingard et al. 2002; Martin 2002a; Wilhelm & Smith 2002; Ofsted 2003a, 2003b; Quebec Ministry of Education 2004
The kinds of teachers who develop positive classroom relationships with boys and help improve motivation and engagement	Lingard et al. 2002; Martin 2002a; Wilhelm & Smith 2002; Keddie & Churchill 2003; Ofsted 2003a; Budden 2004
The kinds of teachers who develop positive classroom relationships with Indigenous students and help improve motivation and engagement	Munns 1998; Edith Cowan University & Education Department of Western Australia 1999; McRae et al. 2000

A.4.4 Language and literacy strategies

The review of research evidence suggests that there are no simple solutions to increasing boys’ language and literacy achievements. Teachers are, however, using a variety of strategies. They frequently report involving a range of contextually relevant, situationally grounded strategies (Younger & Warrington 2003). Rowe’s

(2003) review of evidence-based research into boys' academic outcomes found that teachers could have considerable beneficial effects on boys' education. Quality teaching and learning made possible by enhanced teacher professionalism was found to emphasise the development of the boys' literacy, verbal reasoning and written communication skills, and result in positive influences on their cognitive, affective and behavioural outcomes from schooling.

Evidence relating to these issues is reviewed in the following discussion of research into strategies for improving boys' language and literacy outcomes. It covers research into issues of pedagogy, curriculum content and the integrated uses of ICTs.

An integrated approach to literacy

The research indicates that teachers whose approaches to the literacy education for boys have been successful first considered the limitations and strengths of the traditional classroom learning environments and then developed integrating strategies for teaching reading, writing, listening and speaking.

Research suggests that creating a classroom-based reading and writing culture has important benefits for boys (Frater 1998; Graham 1999; Younger & Warrington 2003). A key principle guiding strategies for effective literacy learning for boys is to take an integrated approach across the curriculum. Successful teachers used literacy as a means of connecting reading, writing, viewing, speaking, listening and creating multimodal texts (Alloway et al. 2002; Ofsted 2003b). Related research has found that the availability of a wide range of interesting material and provision for reading publicly and privately, in pairs, silently and in voluntary situations effectively increased boys' engagement and promoted positive attitudes towards literacy (Bleach 1998a; Frater 1998; Penny 1998). Elsewhere it has been found that there are strong links between boys' reading and writing competencies, encouraging boys to read a range of texts including fiction, and improvements in boys' writing. The conclusion must be that 'one of the main routes to better writing by boys lies in improving the range and quality of their reading' (Ofsted 2003b, p.12).

Educational researchers, school leaders and teachers have studied boys' writing experiences. Ofsted (2003b) found that boys achieve at writing when there is an equal focus on the development of their skills in handwriting and spelling and on the work of making meaning. Younger and Warrington (2003) found that effective strategies involved ensuring that boys understood the technical skills of writing and focused on their becoming writers who understood the meaning and purposes of writing. It is important for boys to feel that there is a purpose for writing, especially forms of writing that have a real audience. Penny (1998), a teacher-researcher, found that boys' confidence in their writing improved with a focus on active learning opportunities in which they had increased control over their words and ideas. In turn, this led to greater independence, especially when the boys were supplied with 'real' audiences for their work. The presentation of written work has also been identified as an issue for boys. Ofsted (2003b) found that a persistent requirement for boys' work to be presented neatly and excessive negative comments about 'messy' work caused boys to feel frustrated and undervalued. The boys felt that the constant comparison between their work and girls' work created unrealistic expectations about the purposes of writing. Assessment activities that focused on the quality of the thought behind the

writing rather than the artistic features of the handwriting have been found to promote more positive attitudes among boys (Ofsted 2003b).

The research highlights the importance of teachers structuring cooperative learning experiences. Noble (1998) found that boys were bored by worksheets and that many boys found 'group work' to be a group of students sitting together, each doing their own specific task. Teachers had better results with boys when they focused on the interactions between the group members as well as the product of the group's work. Barrs (2001) reported that reading was more valued when the teaching strategies used made reading a socially constructed activity – by giving the students the opportunity to discuss between themselves the relevance of the text to other texts and to their lives.

Improving boys' oral language proficiency has also been identified as important in assisting them to make improvements in their writing. Research into the Raising Boys' Achievement project in the United Kingdom found that teachers used discussion to assist boys' narrative writing. Evidence from interviews with boys involved in this project found that there had been a 'genuine shift in interest and understanding' (Younger & Warrington 2003, p.4). Boys who initially stated that they disliked writing and saw it as a technical skill, moved to expressing satisfaction with their writing and gained an ability to talk about the decisions that they made as writers. Teacher assessments indicated real improvements in boys' writing. Ofsted (2003b) also found that boys benefited from whole-class and small-group discussions prior to their writing task. Other effective strategies included drama and hot-seating, where boys enacted the characters before they wrote about them.

Explicit teaching of reading and writing

A number of large longitudinal studies in Australia and the United Kingdom have suggested that effective literacy education for boys requires explicit teaching (Hill et al. 1998, 2002; Ofsted 2003b; Comber 2004). This is particularly so for boys whose cultural and linguistic capital is different from that of the school (Younger & Warrington 2003). As noted above, Rowe (2003) reported that teachers who develop boys' literacy, reasoning and communication skills also improve their social and academic outcomes.

Ofsted (2003b) found that effective teachers of literacy for boys provide clear objectives, a variety of text types, content that engages the interest of boys and questions that promote understanding. To facilitate boys' learning, teachers used short-term tasks that were structured, with clear goals and deadlines, process-oriented and provided immediate but worthwhile rewards (Frater 1998). Teachers assisted boys' literacy learning by breaking writing tasks down into manageable steps (Ofsted 2003b). In schools where boys wrote well, teachers made use of planning grids and writing frames to assist the students in their writing. Effective teachers of boys at risk of literacy failure were found to teach explicitly the distinctive features of school literacies (Hill et al. 2002; Comber 2004).

The explicit teaching of literacy for boys is a significant factor in their engagement across both primary and secondary settings and in different curriculum areas. In a secondary science class, a teacher engaged her students by encouraging them to

explain their understanding of scientific concepts verbally, prior to writing anything (Gregson 2003). The teaching strategy used in this study was to expose students to answer-modelling activities. The students were given the opportunity to compare different answers by discussing their respective value in terms of scientific correctness and completeness. Once the students had developed an understanding of what was required by way of an appropriate and comprehensive answer, there was a change in the attitude of these underperforming boys towards the study of science. Moreover, as they were then able to provide detailed answers containing the appropriate use of scientific terms, their assessment marks improved markedly.

It is important for boys to receive explicit teaching about different text types. Likewise, it is important that they are able to make choices about the content of their writing (Ofsted 2003b). Good teachers of writing have been found to provide boys with a clear structure for their writing and choices about topics. Boys who progressed to advanced levels of proficiency and interest in writing identified 'choice' as a key factor in their motivation and engagement in writing. Their teachers worked to balance structure and choice: they provided the boys with enough guidance on issues concerning the structuring of their writing at various levels (from sentence through paragraph to complete essay) to give them confidence to start writing, while encouraging and enabling them to make choices that developed their engagement as writers.

Specific feedback

Effective assessment and feedback was a key strategy in effective language and literacy education for boys (Comber 2004). In schools where boys wrote well, the teachers provided 'high-quality and responsive marking of written work' (Ofsted 2003b, p.12). They provided feedback on content as well as skills, indicated what the boys had done well and offered specific advice on where and how to make improvements. Penny (1998) found that immediate and constructive teacher feedback on boys' work improved their writing. Likewise, other researchers found that responsive diagnostic teaching that included specific feedback and instructions made a difference for boys not engaging with school literacies (Hill et al. 1998, 2002; Comber 2004).

High, but realistic expectations

The importance of teachers maintaining high expectations and assisting boys to reach these expectations was documented in the research evidence. This has been found to be especially important for Indigenous boys. Ofsted (2003b) found that boys responded well in writing tasks where the expectations were high but achievable; where the goal of the task was made clear through repeated explanations of purpose; and they were supported by a 'rich diet of reading' (2003b, p.5). The New Zealand Early Childhood Primary Links project focused on areas where up to 90% of students were Maori and Pacific Islanders. The project focused on children aged 5 and 6 who needed support in reading and writing. This research found that when teachers had high, but realistic expectations and provided a specially tailored programme, the level of literacy achievement for these at-risk students was raised (New Zealand Ministry of Education 2003).

Integration of ICTs

The research evidence strongly endorses the importance of integrating ICTs into classes. This strategy has been found to be significant in the motivation and engagement of all students, but particularly of boys. In a meta-analysis of technology and literacy, Kamil, Intrator and Kim (2000) reported that working on computers increased students' motivation, interest and involvement in school literacies. Lankshear and Knobel (2003) found that using computers increased interaction between and collaboration among students, particularly in writing experiences.

Studies into boys' achievement in schools suggest that ICTs may be useful in enhancing their motivation for learning (Frater 1998; West 2001, Alloway et al. 2002; Martin 2002a, 2002b; Ofsted 2003). Newmarch, Taylor-Steele and Cumpston (2000) found that boys were more likely than girls to have access to technologies in their homes and communities. Rowan et al. (2002) found that boys were interested in computer games and often engaged with multimodal literacies. Alloway and her colleagues found that teachers in their study found that the use of ICTs enhanced boys' 'sense of self as literacy learners' (Alloway et al. 2002, p.163). ICTs were found to provide a context of success for boys, thus motivating them to engage in further literacy experiences. The use of ICTs in classes has been found to improve the motivation, confidence and self-esteem of disaffected students (British Educational Communications and Technology Agency 2004). In particular, the use of laptops to write and redraft texts increased the motivation of boys across a range of abilities. For those boys who found the physical task of writing difficult, access to computers for word processing helped to increase their motivation to write (Alloway et al. 2002; Ofsted 2003b). Beavis (1999) found that the integration of computer games into the English curriculum of Year 8 and Year 10 classes resulted in 'higher levels of interest, involvement and collaboration from less strong, less attentive or less school-oriented boys' (1999, p.5). Jones (2005) reported several motivational practices that were effective with boys aged 9–18, one of which was having the boys assist their teachers to prepare Powerpoint® presentations for younger learners. This led to positive literacy learning outcomes for both groups of boys.

One of the educational values of ICTs is their use in making connections between classrooms, boys' interests and the funds of knowledge that exist in the communities that develop and sustain those interests. The evidence indicates that boys use computers in their homes and communities to create multimodal texts. These allow them to interact with communities of peers and so use various literacy practices in these knowledge networks (Lankshear & Knobel 2003). Teachers working to enhance the social and academic outcomes of boys use these interests, competencies and community-based knowledge networks in and through their classes. It has also been found that multimedia can successfully support the literacy learning of boys who are second-language learners and at-risk students (Kamil, Intrator & Kim 2000). Teachers in the *Boys, Literacy and Schooling* study used multimedia and multimodalities to motivate boys to engage in literacy learning (Alloway et al. 2002). Boys were encouraged to use a range of media, including models, posters, photographs, diagrams, maps and graphs, to represent their understandings. The boys' experiences utilised in these teachers' interventions reflected 'the idea that real world literacy events increasingly entail working across multiple technologies and in different communication modes' (Alloway et al. 2002, p.167). Rowan and her colleagues (2002) found that, when teachers integrated the topic of motorcycles – of great

interest to a group of boys – with digital technologies, the requirements specified in the curriculum were given new meaning. This strategy positioned the boys as having a degree of knowledge and self-belief in their competence, enabling them to make successful improvements in their literacy and technological proficiencies. It also provided opportunities to challenge hegemonic, anti-social discourses governing masculinity. In a related study, Rowan and her colleagues (2002) also found that when ‘boys’ books’, oral modes of communication and ICTs were included in the Year 9 classes, there was a 4% increase in boys’ literacy achievement. A Canadian study found that the integration of ICTs into a real-world context enabled boys to investigate both traditional and non-traditional gender identities and explore possibilities for making subtle shifts in gender awareness (Upitis 2001).

While ICTs are an important motivating and engaging factor for all students and especially boys, the research evidence offers some notes of caution. Ofsted (2003) found that the inclusion of ICTs and ‘boy-friendly’ texts as a means of improving boys’ literacy achievements can be ‘over-generalised’ (2003a, p.21). It may be that it is not the selection of texts nor the inclusion of technologies in themselves that is important, but rather how teachers enable these texts and technologies to be used (Martino & Meyenn 2002; Rowan et al. 2002). As Alloway et al. (2002) reported, the use of everyday texts and technologies without relevant knowledge-producing pedagogies does not necessarily result in engagement or learning, as underachieving boys ‘may be engaged but not necessarily learning anything new about literacy’ (Alloway et al. 2002, p.169). There are instances where the introduction of ICTs into classes merely reproduces dated pedagogies and educational philosophies. This has been found among those teachers who seem ‘to be looking for technological applications that resonated with their pedagogical styles’ (Lankshear & Bigum 1999, p.456). The research also recognised the problems faced by students in rural and remote areas, Indigenous communities and low-SES areas who have less access to technology than students in the relatively affluent suburbs of metropolitan Australia (Meredyth et al. 2000). The deprivation associated with such inaccessibility means that these boys do not achieve as well as other boys when ICTs are strongly integrated into classes and their community lives (Rowan et al. 2002).

Linking school curriculum to boys’ interests and experiences

Research has established that, when classrooms make connections between boys’ interests and the curriculum, there is a positive impact on their educational motivation and engagement. These connections include drawing on familiar knowledge networks in their community and popular (consumer) culture and exploring a variety of multimodal texts. However, these studies also indicate the dangers in promoting certain texts that reinforce anti-social stereotypes and so might have a negative effect on boys’ approaches to and facility with literacy.

There is evidence that teachers who make pedagogical links between boys’ social worlds and the classroom world motivate and extend their engagement in traditional and contemporary literacy practices (Alloway et al. 2002). It has also been found that boys are more likely to engage with class-based literacy practices that are meaningful to them (Rowan et al. 2002). This research reported on the value of the work undertaken by teachers to connect school literacies to boys’ lived experiences, including texts of popular culture and technologies. Similarly, it has been found that

teachers who use ‘literacy lessons which engage children make use of familiar language, processes, genres, concepts, information and media, whilst introducing new practices’ (Hill et al. 2002, p.104). Teachers who understand literacy as being more than reading and writing and incorporate a range of digital and popular media texts throughout the curriculum, can enhance the social and academic performance of boys from NESB or low-SES backgrounds (Marsh & Millard 2000). The inclusion of artefacts from popular culture in their classes provides educationally driven opportunities for boys to connect to their experiential learning and real-world knowledge networks. Teachers involved in Phase 2 of the *Boys, Literacy and Schooling* study (Alloway 2002) found that when they invited boys to write on a topic of their own choice, such as dirt bikes or football, they were less reliant on ideas from the teacher. One teacher commented that this focus on students’ interests and their knowledge networks ‘was instrumental in inspiring all of the children in her class to not only work productively on writing activities but also attack work with eagerness and enthusiasm’ (Alloway et al. 2002: p.161). Popular culture has particular appeal to at-risk boys at risk (Millard 1997; Marsh & Millard 2000). Used pedagogically, it provides opportunities for boys to deepen and extend their expert knowledge in ways that traditional curriculum resources generally do not. Teachers are increasingly aware of the motivating effects of connecting to students’ everyday learning experiences and the knowledge networks available through their families and communities. This enables teachers to explore what it means for classes to resemble, and engage more with, the outside world and its funds of knowledge (Alloway et al. 2002, p.160). The channelling of boys’ passions into projects that include meaningful experiences positions the boys as experts rather than failures and trouble-makers. Teachers who have engaged in this work recognise the positioning of boys and the stances they adopt on masculinity and schooling. Their work/life trajectories are not fixed, but can be ‘challenged, disrupted and rejected’ (Rowan et al. 2002, p.151). Teachers play a key role in helping boys to reconceptualise themselves in terms of pro-social masculinities, as motivated and engaged learners with interesting and promising work/life projects in the making.

There is a caveat in the research, however, with regard to teachers’ use of popular culture. Good teachers have found it necessary to enable and empower their students to examine critically the ways that hegemonic, anti-social discourses are perpetuated in texts of popular culture. These teachers engage their students in higher-order critical reading and creative writing so as to produce counter-hegemonic texts (Marsh & Millard 2000). For example, Budden (2004) found that the use of popular songs combined with the development of critical literacy skills contributed to the successful development of the boys’ understanding of their own fears and concerns about their masculinity.

‘Boy-friendly’ literature, the use of a range of communication modes, including oral and visual, multimedia, popular culture, technologies and everyday texts such as catalogues and food packaging, have often been used by teachers as means of promoting boys’ motivation, engagement and academic success in and through literacy (Millard 1997; West 2001; Alloway et al. 2002). Researchers report, however, that teachers are also concerned about the lack of congruence between the multimodal nature of students’ learning experiences with literacy outside school and the types of texts present in their classes (Martino 2001). Their concern is that lack of congruence contributes to the alienation of particular groups of boys from the curriculum as they

progress through school (Millard, 2003). However, Alloway and her colleagues (2002b) have found that effective schools and teachers have developed 'a repertoire for engaging with and negotiating culture' (Alloway et al. 2002b, p.3). They deliberately connect school literacy to everyday family and community literacies, thus creating many opportunities for students to become engaged in literacy learning. Rowan and her colleagues (2002) sound a note of warning, however, having found that some schools make links to students' funds of community knowledge in ways that are 'limiting, stereotypical and tokenistic' (Rowan et al. 2002, p.163). The difference is that effective schools and their teachers acknowledge and value the diversity of boys' family and community experiential learning and knowledge networks.

The research indicates that effective literacy strategies now include making thoughtful and tactful pedagogical connections to 'real' texts and every-day-and-night knowledge networks. In schools which link to family and community literacies, students can see ways in which literacy is integrated into everyday social practices (Rowan et al. 2002). The inclusion of everyday texts, such as magazines and popular culture 'texts' such as television programmes, in the school literacy programme 'enabled a transference of home literacies into the classroom' (Alloway et al. 2002, p.159). The inclusion of a range of literacy practices and artefacts in school curricula has been found to enable all students, not just those from families whose literacy practices match those of the school, to connect to their out-of-school literacies and to extend their repertoire of literacy practices. Schools' ability to 'interface with and draw productively on' the ways of being and interacting, and on the literacy experiences and expertise that students bring from home have been found to be important in increasing all students' engagement with school literacies (Alloway et al. 2002, p.158).

The research has shown that there are some common content areas that appear to have a general appeal to boys. There are also continuing evidence-driven discussions concerned with the dangers of seeing all boys' interests as the same. Not only can this cut off certain boys from critical aspects of their curriculum, it may also reinforce unproductive responses to the literacy curriculum. A survey of boys' reading preferences found that different groups of boys preferred different types of texts (Martino 2001). Boys variously expressed a preference for reading stereotypical 'boys' texts' such as non-fiction, sporting and surfing magazines and comics, as well as certain types of fiction – action, fantasy, science fiction, horror and humour. Boys taken as a general category have interests and reading preferences that are more different than alike. Wilhelm's (2001) observations and interviews with boys found that they preferred factual information to be located in stories rather than text books and that they used literacy to 'share and socialise' (p.61).

However, Martino (2001) linked boys' preferences for certain genres to the ways in which hegemonic masculinities operated in their lives. Many boys reject reading as they see it as challenging prevailing versions of masculinity in their social lives. In a time-scarce lifestyle, reading stands in opposition to activities where certain forms of masculinity are privileges, such as participation in sport. It is in this way that the dominating forms of heterosexual masculinity impact on the reading choices of adolescent boys. To counter this, Barrs (2001) reported that teachers who worked with selected reading texts that were not wholly 'boys only' texts used variety to promote

greater social and academic outcomes for boys. This strategy acknowledges that boys may have interests that differ from girls, but that there is no single or essential way of being a boy in word or in the world. Reinforcing stereotypes that reproduce such a homogenising construction of masculinity may jeopardise the enhancements of boys' social outcomes. Binary oppositional constructions of what it means for a boy to be 'masculine' sanction particular types of social and academic performance, not all of which can be accepted by schools. Rowan and her colleagues report that teachers who adopt a 'partial and pragmatic essentialism', incorporate boys' interests and preferences in their work towards the long-term goal of a transformative curriculum that encourages the interrogation of dominating anti-social discourses (Rowan et al. 2002, p.100).

Engaging students in higher-order critical thinking and literacy

The previous sub-section has discussed the body of research that points to the characteristics of classroom-based curriculum and pedagogies that have been found to have a positive impact on the motivation, engagement, social performance and academic success of boys. There is also counter-evidence in the research literature, however, that suggests possible dangers in the use of texts that give the appearance of connecting with boys' interests. These texts can work to homogenise boys, reinforce dominating anti-social masculinities and deny boys access to a wider repertoire of literacies (Martino 2001; Alloway et al. 2002; Martino & Meyenn 2002; Rowan et al. 2002). Wilhelm (2001) found that mistaken assumptions about boys' reading preferences often perpetuated stereotypes, and that boys' desires to read in new and challenging areas have been underestimated. Martino and Meyenn (2002) found that, in single-sex English classes, teachers modified their pedagogies and the curriculum to motivate and engage boys' learning through active, hands-on experiences, but reinforced stereotypes through an uncritical use of texts on topics such as sport, surfing and war. Using texts that connect to boys' interests, assessment using oral language and greater use of ICTs may also reinforce popular but mistaken beliefs that boys are not good at school-based literacies (Rowan et al. 2002). There is also the danger of further marginalisation of certain groups of boys, especially those from Indigenous, low-SES and rural and remote backgrounds, through the inclusion of interests, home cultures and languages that privilege the already advantaged boys from more affluent backgrounds.

To address this curricular dilemma, teachers are exploring possibilities presented by transformative curriculum, pedagogies and assessment practices in an effort to fuse boys' interests with the socioeconomic requirements desired of and by schools (Alloway et al. 2002). Teachers have found that boys' interests and passions can be 'productive in allowing new meanings to be created' (Millard 2003, p.7) even while working with them to help transform what they know into literacies that are valued in the wider world, and to critique a range of texts. Teachers are working with boys, technology and literacy to combine them through transformative literacy practices that involve 'the use of texts of popular culture and everyday literacy ... to negotiate the complexities associated with their use' (Rowan et al. 2002, p.184). Hatchell (2001) found that the introduction of specific texts that focused on issues of masculinities and whiteness enabled students to relate to their own identities and to discuss how they represented themselves and were represented within the school culture. However, hegemonic and anti-social discourses on masculinity still predominate, although both

Martino (2001) and Hatchell (2001) found that schools were having success with introducing texts and implementing strategies that encouraged boys to analyse critically, and reflect on, dominating masculinities and the negative social and academic impact they had on their lives.

The research on higher-order critical and creative thinking and literacy itself now needs to be assessed against, as much as integrated into, the new social practices associated with Australian multiculturalism and the rise of ever-advancing digital technologies. This would complement a transformative approach to curriculum that interrogates gender norms, opens up new possibilities for ways of being literate, and enhances the possibilities of literacy success for all students (Rowan et al. 2002; Millard 2003).

Summary: language and literacy strategies

The research into language and literacy approaches with boys has highlighted a number of pedagogical and curricular interventions that might be considered by educators concerned with the motivation and engagement of boys from Indigenous, low-SES, rural and remote backgrounds. The evidence suggests that, through responsive and supportive pedagogies, these boys might benefit from thoughtful and tactful integration of their experiential knowledge of language and literacy into class-based teaching/learning activities. Studies have also pointed to a number of curricular approaches using ICTs likely to have positive impacts on such boys. There are some concerns, however, about imposing a single, unified approach to addressing the educational needs of these boys. These concerns reinforce the importance of enhancing teacher professionalism in order to generate effective evaluative data and make informed professional judgements. The range of language and literacy strategies reviewed in this section are summarised in Table A.4.

Table A.4: Summary of language and literacy strategies

Boys' motivation, engagement and school outcomes	Research
The positive impact of an integrated culture of literacy	Bleach 1998a; Frater 1998; Penny 1998; Graham 1999; Alloway et al. 2002; Ofsted 2003b; Younger & Warrington 2003
Effective writing strategies	Penny 1998; Ofsted 2003b; Younger & Warrington 2003
Effective cooperative experiences	Noble 1998; Barrs 2001
The importance of oral language	Ofsted 2003b; Younger & Warrington 2003
The value of explicit teaching of reading and writing	Frater 1998; Hill et al. 1998, 2002; Gregson 2003; Ofsted 2003b; Comber 2004
The value of teacher feedback	Hill et al. 1998, 2002; Ofsted 2003b; Comber 2004
The need for high but realistic expectations	New Zealand Ministry of Education 2003; Ofsted 2003b
The positive impact of the integration of ICTs	Frater 1998; Beavis 1999; Lankshear & Bigum 1999; Kamil, Intrator & Kim 2000; Meredyth et al. 2000; West 2001; Alloway et al. 2002; Martin 2002a, 2002b; Martino & Meyenn 2002; Rowan et al. 2002; Lankshear & Knobel 2003; Ofsted 2003a; British Educational Communications and Technology Agency 2004; Jones 2005
Linking literacy to boys' experiences and popular culture	Millard 1997; Marsh 2000; Alloway et al. 2002; Hill et al. 2002; Rowan et al. 2002; Budden 2004
Multimodal texts and boys' interests	Millard 1997; Martino 2001; West 2001; Alloway et al. 2002; Hill et al. 2002; Rowan et al. 2002
The dangers of generalising content for boys	Barrs 2001; Martino 2001; Wilhelm 2001; Rowan et al. 2002; Budden 2004
Boys and critical literacy	Hatchell 2001; Martino 2001; Wilhelm 2001; Alloway et al. 2002; Martino & Meyenn 2002; Rowan et al. 2002; Millard 2003

A.5 Coding and interpretation matrix

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
Alloway et al. 2002	Australia Queensland, Tasmania & New South Wales Primary: Years 2/3 and 6/7 Range of SES, inner- suburban, fringe- suburban and rural, varying levels of NESB Boys Literacy	Phase 1: Survey of teachers and parents, electronic discussion list, interviews with classroom teachers and principals in 24 schools. Phase 2: Intervention. 12 schools, 24 teachers implemented over 10–16 weeks. Teachers completed progress and final reports on classroom projects and student performance. Interviews with teachers and principals.	Phase 1: Boys not engaged with conventional school literacies but interested in multimodal literacies. Phase 2: Improvements in boys' vocabulary, overall quality of literacy work, attitude and ability as text user and text analyst resulted when teachers broadened the repertoires of practice for (re)presenting the self relating to others and engaging with and negotiating culture.	Large study across 3 states that includes perspectives of parents and teachers. Trials and evaluates interventions. Links theory of new literacies and masculinities to practice.	Boys demonstrate increased 'e'ngagement in literacy learning when: the learning environment is active and purposeful; all opinions are valued; authority and agency are shared; students are encouraged to work cooperatively; and the curriculum includes texts of everyday life, popular media culture and multimodal texts. Boys see that school is meaningful and relevant to their lives when curriculum, pedagogies and assessment are expanded to reflect broad definitions of literacy.
Barrs 2001	United Kingdom Boys Literacy	Discussion paper	Reports on two studies in the UK that found it is important to build a reading culture in classrooms and ensure that reading is a social activity.	Reports on others' research. No links to theory.	Focus on 'e'ngagement and the fact that learning is a social activity.

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
Beavis 1999	Australia Victoria Secondary Boys Literacy and ICTs	Researcher worked with teachers. Observation in classrooms and discussion with teachers.	Teachers noted a higher level of interest, involvement and collaboration from the lower-ability boys when computer games were integrated but those boys who usually participated were less involved.	Case study of one class. Links to theories of new literacies.	The use of computer games in schools connects with many boys' out-of-school experiences and interests and provides resources that encourage critical literacy. Need to be careful not to disenfranchise some students.
Berryman & Atvars 1999	New Zealand Primary and secondary Maori students Literacy Boys and girls Peer and community tutoring	Peer tutoring and tutoring by Maori women in reading. Audio-taped reading samples used in all studies to assess reading.	Tutees increased their reading accuracy and comprehension. Maori women tutors empowered.	Longitudinal research involving a number of different research projects.	An essential ingredient of 'E'ngagement is sensitivity to Maori cultural values and history, and collaborative partnerships between educational settings and the Maori community.
Bleach 1998b	United Kingdom Secondary (Year 8) Underachieving white working-class boys	Teacher research where data were collected from 18 out of 247 students through group semi-structured interviews of pupils and their pastoral and subject teachers, and reports/grades.	Boys respond to physical or hands-on activities that allow them to draw on real world experiences.	A small-scale study but useful in that it reports teacher research.	Focuses on 'e'ngagement and the importance of the quality of the teaching and learning and positive pupil-teacher relationships.
British Educational Comm's and Technology Agency 2004	United Kingdom Primary school ICT classrooms with high percentage of students with special needs; focuses on low-achieving disaffected students ICTs	12-month pilot study using case study with interviews with teachers, head teachers and students and the development of support units.	Use of ICTs led to increased commitment to learning, enhanced sense of achievement, greater self-esteem, improved behaviour and the development of self-directed study.	Rich triangulated data focusing on low-achieving disaffected students.	Examines research findings related to motivational effects of ICTs on students' commitment to and 'e'ngagement in learning.

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
Budden 2004	Australia Secondary (Year 10) Boys Literacy, popular culture and masculinities	Teacher–researcher reflection on 12-month study of one class of Year 10 boys.	Introduction of critical literacy skill development combined with use of popular song text contributed to noticeable success and development of the boys’ understanding of their own fears and concerns about their masculinity in an English classroom.	Limited description of data collection but powerful example of what teachers are doing in their classrooms.	Focuses on ‘e’ngagement with literacy activities for individual boys. Teacher’s approach (warmth) to boys is critical to developing relationships that foster a positive classroom and success for boys.
Callingham & Griffin 2001	Australia Tasmania Secondary Indigenous boys and girls Numeracy (and literacy)	Professional development of teachers in 36 schools. Videotaped classroom data and student outcome data using performance and multiple choice tests involving 3000 students and 750 in a control group	Improved outcomes for Indigenous students in performance assessment tasks, particularly for girls when interesting and motivating mathematics and understanding local Aboriginal issues and culture integrated into curriculum.	Longitudinal study with large sample size. Student outcomes measured by performance tasks and conventional multiple choice tests.	Mainly linked to ‘e’ngagement through teachers’ pedagogy but some connections with ‘E’ngagement in relation to cultural understandings.
Comber 2004	Australia South Australia & Western Australia Primary Low- and mid-SES, regional and urban areas Indigenous & Anglo- Australian boys Literacy	Subset of 3 case studies From large longitudinal study of 100 children. Interviews with parents and teachers, observations and literacy assessments.	What makes a difference for students not engaging with school literacies is responsive diagnostic teaching that includes small groups, explicit modelling and scaffolding, and specific feedback and instructions.	Rich ethnographic data. Links theory and practice.	Focus on ‘e’ and ‘E’ engagement. Boys’ engagement in school literacies requires teachers to look at each student as an active agent in his own learning, make ‘room to move’ for students by including their out-of-school strengths and interests in the curriculum and broaden models of assessment.

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
Cresswell & Underwood 2004	Australia Secondary Major cities, inner regional areas, outer regional areas, remote and very remote regions Boys and girls Literacy	Program for International Student Assessment (PISA) that involved 5477 15-year-olds from 231 Australian schools. Two-hour test included a questionnaire relating to participation and attitudes.	Correlation analysis revealed positive correlation between reading engagement and reading achievement. Associations were found between positive attitudes to homework and academic self-concept and reading literacy performance. Access to and attendance at cultural activities were linked to improved performance in reading.	Large-scale study that includes data on students' attitudes as well as academic achievement. No links to theory.	While socioeconomic factors were relevant, findings showed that the most significant factor influencing performance in reading was engagement.
Demie 2001	England London Inner city Primary and secondary Bilingual boys and girls Academic achievement	Statistical analysis of results for students of different ethnic origin and gender. Identified schools that were successful in raising the achievements of under-performing groups of students.	Successful school-based interventions for raising the achievements of students from ethnic minorities were: setting targets, innovative pedagogies, family involvement, role modelling and mentoring, professional development, language support for bilingual students and literacy and numeracy initiatives.	Large study but mostly focused on factors. Little focus on intervention strategies.	Focuses on 'e'ngagement. Effective strategies include family involvement and language support for bilingual students.
Deslandes & Cloutier 2002	Canada Quebec Secondary Urban, suburban and rural Low-SES boys and girls Family involvement	872 students completed Psychosocial Maturity Inventory to measure self-reliance, work orientation and identity and survey of their views of parental involvement in school.	Found most students welcomed parental involvement except for visits to the classroom and attendance on class trips; girls' support for parent involvement is higher than that of boys; and boys who are highly work-oriented are more open to parental involvement.	Research that gives students a voice.	Schools need to consider gender-appropriate and maturity-appropriate forms of family-school partnerships.

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
McRae et al. 2000	Australia All states Early childhood to adult education Indigenous students Educational outcomes, employment in education, enrolments, community involvement	1-year federally funded intervention programme with 83 settings submitting for projects to improve Indigenous student learning outcomes	Performance data from 60 of 83 projects showed that 68% achieved all targets with a further 18% achieving some targets.	A variety of projects across all educational settings from pre- school to adult education. Detailed summaries of each project allowing for individual evaluation.	Focus mainly on school and classroom-based interventions with no specific links to motivation or engagement.
Francis 2000	United Kingdom Primary Boys' behaviour and understandings of masculinity	Discussions with students and classroom observations of teacher and student behaviour. Relates findings to other literature in the field.	Concludes that only strategies that involve critiquing dominant masculinities and gender construction will address boys' underachievement.	Links theory and practice.	Highlights the importance of addressing issues of masculinities.
Frater 1998	England Comprehensive secondary schools Urban, suburban and rural Students across range of abilities Literacy	Visits to 14 secondary schools.	Effective whole-school practices include baseline testing and targeting of students needing support in small withdrawal groups; mentoring; raising teachers' awareness of boys' issues and involving parents. Classroom strategies involve a multilayered approach that includes literacy software programs; buddies; and short, structured tasks.	Includes examples of practices from a range of schools. Not clear how data were collected. No links to theory.	Emphasises that there is no magic bullet. Highlights the importance of identifying and targeting underachievers.

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
Godhino & Shrimpton 2002	Australia Melbourne Primary Co-educational classes Range of socioeconomic backgrounds	12-month case study with 3 schools and 120 students, including teacher interviews, student focus groups and videotaped small group discussions.	How much boys and girls engage in discussion depends more on their socio-cultural positioning than their gender. Those with cultural capital (an understanding of cultural background, prior knowledge, disposition to learning, language skills and value of learning) have enhanced school experiences	A project in progress that incorporates multiple methodologies and triangulation of data.	Focuses on improving student 'e'ngagement by monitoring and developing classroom discussions as a means of motivating student learning
Graham 1999	United Kingdom Primary Boys Literacy	Action research project: 39 teachers, 975 children aged 7–11. Analysis of teaching practices in 9 classrooms where boys made significant progress in reading.	Found that successful practices focused on reading as a social activity in the classroom, performance reading, encouragement of students networking around texts and discussion of affective responses to texts.	Classroom-based action research but no links to theory.	Boys are more likely to be engaged with literacy when they see the social purposes of a range of texts.
Green 2003	United States Texas Early childhood Involvement of fathers	8 month study. Surveys of 213 early childhood educators attempting to understand what was being done to involve fathers and what led to greater involvement.	Showed the factors most likely to encourage greater involvement of fathers in children's pre-school: written communication, gathering information about fathers at enrolment, written invitation to educational activities.	Surveys were analysed statistically but no direct links made to outcomes for boys.	If any link it would be at the 'E'ngagement level: relies on research showing correlations between parent involvement and improved outcomes.

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
Gregson 2003	Australian New South Wales Secondary school science classrooms Underachieving boys Literacy	18-month teacher research that used surveys, student artefacts, numerical data and staff and student interviews.	Interventions where students were empowered with an understanding of how to write answers for assessment tasks led some boys to significantly improve their academic outcomes and brought about a subsequent change in attitudes to the study of science.	Research for a doctoral thesis that initially provided rich data on a small group of Year 8 students later expanded to years 9–12. Triangulation of data and extensive analysis of those data are a feature.	Innovations used in this study led to many students in the class engaging positively with science and scientific literacy to the extent that most of the boys experienced success in this subject for the first time.
Hatchell 2001	Australia Western Australia Secondary (Year 10) Indigenous, Italian- Australian Middle-class Masculinities	Case study in one class with 2 teachers. Participant observations, interviews with students and teachers. Focuses on interviews with 3 boys: one Indigenous Australian, one Italian-Australian and one Anglo-Australian	Found that the introduction of specific texts that focused on issues of masculinities and whiteness enabled students to relate to their own identities and to discuss how they represented themselves and were represented within the school culture but that hegemonic masculinity discourses still predominated.	Includes rich data from one setting. Links theory and practice.	It is important for schools to implement strategies that encourage boys to analyse critically and reflect on dominant masculinities and their impact on their lives.
Haughey et al. 2001	Canada Early primary Highly transient and poor boys and girls from Indigenous and Asian backgrounds Literacy acquisition	6-month study with interventions of reduced class sizes and intensive professional development in 10 schools. Data included standardised test results and individual and group interviews with teachers.	Significant gains were made by students in test scores (e.g. from 77% below 50 th percentile to 45% above) with reduced class sizes.	Short-term study showing strong results across test data but did not distinguish between factors in analysis.	Dual focus on 'e'ngagement in teachers' practices and 'E'ngagement in class size factors.

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
Hill et al. 1998	Australia Western Australia, South Australia & Victoria Prior to school and first year of school Low- and mid-SES, Aboriginal and bilingual, urban, regional, rural and remote communities Literacy	Collection of literacy assessment data for 100 children. Case studies of 20 children involving observations of literacy events in children's homes. Collection of work samples and literacy assessments in first year of school.	Highlighted the importance of home-school connections and building on the funds of knowledge that children bring from home through a culturally inclusive curriculum so that children can engage in school literacies and so expand their repertoires of practice.	Large longitudinal quantitative study that also provides rich qualitative data in the case studies. Links theory and practice.	'E'ngagement and 'e'ngagement. Students need their existing expertise to be valued and included in the classroom if they are to connect to school literacies.
Hill et al. 2002	Australia Western Australia, South Australia & Victoria Primary Low- and mid-SES, Aboriginal and bilingual, urban, regional, rural and remote communities Literacy	Collection of literacy assessment data for 100 children. Case studies of 20 children involving classroom observations and collection of work samples and literacy assessments.	Found that schools need to find out about family and community literacies and develop local responses to the differences between home and school. Teachers need to use diagnostic data to identify and support students falling behind in literacy.	Large longitudinal quantitative study that also provides rich qualitative data in the case studies. Links theory and practice.	'E'ngagement and 'e'ngagement. Literacy experiences that engage children make use of familiar language, concepts and media, while introducing new practices.
Jackson 2002	United Kingdom Single sex classes Mathematics	An analysis of a scheme where students were separated into single-sex classes for mathematics. 79 students were surveyed at the end of Year 7 about their perceptions of single sex maths classes.	Separating the classes enhanced the performance of girls but may have exacerbated the divide for boys. In the boys-only classes the classroom climate was more competitive and more aggressive and there was evidence of distraction and bad behaviour.	Small-scale research report that was part of a larger research project assessing social aspects of schooling.	No specific links

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
James et al. 2001	United States Minority groups Academic achievement	A meta-analysis of reports of programmes resulting in academic achievement for minority groups in the US.	Found the need for the implementation and evaluation of a comprehensive set of strategies including: high-quality programmes; an academically demanding curriculum; professional development; family and community involvement; small class sizes; individualised student support; extended learning time; long-term relationships and financial support.	Focuses on empirical evidence documenting programmes that have demonstrated positive academic outcomes for young people from minority backgrounds. Authors critical of the extent to which testing of a narrow range of skills is used to evaluate many programmes.	Emphasises the importance of a challenging curriculum and family and community involvement.
Jones 2005	United Kingdom Secondary Boys in Years 9–11 Learning of modern foreign languages	Research report	Analysis of motivational practices, including cross-age curriculum development, active participation, use of ICTs, goal-setting.	Narrow curriculum focus though findings correlate with other research into boys and motivation and literacy development.	Motivation section of framework
Kamil et al. 2000	International Primary Literacy and ICTs	Meta-analysis	Found that there is very little research on use of computers in literacy learning.	Meta-analysis that provides critical review of research.	No specific links
Keddie & Churchill 2003	Australia Queensland Rural Diverse range of socioeconomic backgrounds Boys Academic and social outcomes	Case study based on a teacher survey and student survey about beliefs about boys.	Boys liked teachers who were interested in their lives and were willing to help them. Recommend offering more school PD so that role of masculine identities in shaping teacher behaviour can be discussed.	Framework extends from work already done on boys and their relationships with teachers.	This study adds to the arguments about the importance of positive teacher-student relationships in improving academic and social outcomes.

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
Langhout et al. 2004	United States of America Students aged 10–16 62% boys, 56.8% members of minority groups and 80% low-SES Mentoring	Data are part of a national evaluation of the Big Brothers/Big Sisters (BBBS) programme involving 8 BBBS agencies. 571 in mentoring groups, 567 in control group. The average length of the relationship was 11.4 months with dyads meeting on average 3 times a month for 4 hours. Evaluated using structured interviews with mentees using scales.	Concluded that moderate levels of support and structure and high levels of activity provided the most beneficial mentoring relationship. Compared with the controls, the youth in mentoring groups missed fewer days of school, had higher levels of academic achievement and more positive behaviour.	Strong quantitative study but no qualitative data.	Mentoring can result in higher academic achievement and more positive social interactions.
Lankshear & Knobel 2003	International Early childhood Boys and girls Literacy and ICTs	Meta-analysis of the role of technologies in literacy learning in early childhood.	Found that most research focuses on narrow view of literacy as encoding and decoding and that there is little research looking at the use of networked computers to enhance discursive prowess.	Meta-analysis that provides critical review of research and a framework for categorising research into the role of technology in literacy learning. Links pedagogies to theories of new literacies.	Schools need to make better use of the potential of computers to engage students in new literacies.

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
Lingard et al. 2002	Australia All states Primary and secondary boys Urban, rural, high- and low-SES	1-year study. Case studies of 19 schools involving document analysis, observations, interviews with teachers, parents and students. Survey of teachers and students in case study schools.	Identified factors of teacher– student relationships, quality pedagogy, school culture working against negative peer effects. Promoted professional learning communities increasing understandings about impacts on boys’ and girls’ attitudes and engagement with schooling.	Extensive study by experienced team with in-depth case studies using multiple data. Based on thorough review of literature. Influenced by work on productive pedagogies.	Conclusions in relationships and pedagogy target ‘e’ngagement though the factors on school culture have an ‘E’ngagement focus.
Lints 1999	New Zealand Secondary Pakeha (68%) and Maori (23%) boys Comparing school, home and school factors of achieving and non-achieving boys	1-year action research. Survey of 660 students.	Factors correlating with underachievement were grouped into personal, school, homework, life outside school and learning styles. Main correlated factors were lunch habits, school choice (student ownership), perception of teaching quality, homework completion, book ownership and issues around work, cars and girl friends.	Intensive case study of 1 school and interesting comparative data between achievers and non-achievers. Data are at a correlational level and needs further data to get to reasons.	Wide-ranging factors across the MeE framework.
Marsh 2000	England London Prior to school Low-SES, bilingual, inner city Literacy	Field notes, photographs, collection of writing samples and interviews with teachers in 2 nursery schools where popular culture materials were added to the literacy nursery school setting.	Found that children who had not previously taken part in literacy experiences, mostly working- class boys from bilingual backgrounds, were very enthusiastic when the literacy materials linked to popular media culture.	Includes rich data relating to one setting’s experiences. Links to theory of cultural capital.	Popular media culture can be effective in engaging boys in literacy experiences.

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
Martin 2002a	Australian Australian Capital Territory Secondary Boys and girls Factors affecting motivation	1-year report. Literature review, survey of 1930 Year 7 and Year 9 students using Student Motivation Scale, interviews and discussion groups with 97 Year 8 and Year 10 students and staff consultations with staff from 2 schools.	Survey data showed differences in motivation with respect to age, gender, literacy and numeracy, ethnicity & SES status. Interview data highlighted difficulties and positive school factors affecting motivation. The data also showed out-of-school factors (family, peers) were important.	Extensive report combining thorough literature review with quantitative and qualitative data. Report by recognised leader in motivation research.	Main focus on psychological aspects of motivation though recommendations also encompass 'e'ngagement and 'E'ngagement.
Martino 2001	Australia Western Australia Secondary (Year 10) Middle-class boys Literacy	Interviews with 20 boys and surveys with 42 boys.	Found boys' reading is tied to the ways that they police and enact hegemonic masculinities and is focused on practices and interests such as TV, sport and computers and action/adventure/ science fiction genres.	Includes students' voices. Links to theories of masculinity.	Need to explore texts that relate to students' everyday lives and that provide opportunities to interrogate dominant masculinities.
Martino & Meyenn 2002	Australia Western Australia Urban Secondary (year 8) Single-sex classes Literacy	Semi-structured interviews with 7 teachers discussing their perceptions of single-sex classes.	Through a modification of pedagogy and the use of more 'male' content, the teachers thought that the boys were more 'comfortable' and thus providing an improved learning environment and increased self- esteem.	No quantitative evidence to support claims of improvement so claims are made on teachers' perceptions.	This study explores the use of single-sex classes to provide a classroom culture and atmosphere that will enhance boys' engagement in the study of English.

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
McRae et al. 2000	Australia All states Early childhood to adult education Indigenous students Educational outcomes, employment in education, enrolments, community involvement	1 year federally funded intervention programme with 83 settings submitting for projects to improve Indigenous student learning outcomes	Performance data from 60 of 83 projects showed that 68% achieved all targets with a further 18% achieving some targets.	A variety of projects across all educational settings from pre- school to adult education. Detailed summaries of each project allowing for individual evaluation.	Focus mainly on school and classroom-based interventions with no specific links to motivation or engagement.
Mellor & Corrigan 2004	Australia All states Preschool to adult education Indigenous students	Review of current government policy and research in Indigenous education.	Data make comparisons between Indigenous students and non- Indigenous students and bring forward non-school factors (health, life expectancy, poverty, incarceration, lower employment) and school factors (early health intervention, readiness, good teachers and culturally appropriate pedagogy, community relationships, positive learning environments, pathways to employment).	Comprehensive review of large body of policy and research. No specific data on issues significant for Indigenous boys.	Wide focus across all aspects of the MeE frame though most significance within 'e'ngagement.
Millard 1997	England Primary and secondary Boys Literacy	Book that includes data from large-scale surveys of boys' reading interests, as well as writing samples, surveys and interviews with boys collected by the author in English schools.	Found that many boys' experience of narrative was through film, television and computer technology but that this was unacknowledged in many classrooms. Advocates the use of diverse texts to engage boys in literacy.	Provides detailed quantitative data.	Teachers need to be aware of the reading habits of the boys in the class and provide a range of texts that encourage textual engagement and the development of critical literacy.

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
Millard 2003	England Primary Literacy	Review of literature and discussion paper drawing on own work with Year 5 class.	Found boys' genre knowledge comes from computer, film and adventure genres and girls' from folk and fairy tales; students adapt out-of-school knowledge to meaningful school tasks; and students engage in multimodal literacies when encouraged.	Includes some descriptive data but mostly discussion. Data collection methods not clear. Links theories of new literacy and transformative curriculum to practice.	A transformative pedagogy of literacy fusion amalgamates aspects of school curriculum with children's interests to provide a curriculum that provides opportunities for deep and meaningful learning where students can transform existing knowledge into knowledge that will give them agency in the wider world and allow them to critique meanings.
Morrison et al. 2000	United Kingdom Primary and secondary Boys and girls Literacy Mentoring	First year of school paired with Year 4; Year 7 with Year 9. Interviews with teachers and with children in mentoring pairs and reading tests.	Found that social relationships between young and older pupils improved but there were no measurable improvements in literacy achievement. However, students developed more positive attitudes towards reading (both cohorts), enhanced motivation to read and increased fluency and confidence in reading (secondary).	Includes interview data but no quantitative data.	Focus on motivation. Found that mentoring can enhance social relationships and increase motivation to read.
New Zealand Education Review Office 1999	New Zealand Secondary Boys and girls School certificate results	Government report into achievement of boys using observation by review officers and documentary material supplied by schools.	Analysis of 20 schools where boys achieve showed critical factors of curriculum management and delivery, social support and quality of education for Maori students.	Identification of successful schools is valuable though findings not rigorously explored.	Motivation focus and some 'E'ngagement in the form of mentoring and school environment. Not a strong classroom focus.

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
New Zealand Ministry of Education 2003	New Zealand Preschool to adult education Indigenous students (Maori)	Government review covering the 2001–02 period. Review has a wide focus, including data on learning, descriptions of successful initiatives (case studies), results from programmes.	The review uses a wide range of data to re-establish future directions, including Maori participation in early childhood, improving schools to better meet Maori needs, lifting participation and achievement in tertiary education, culturally appropriate materials for teaching and learning, greater autonomy.	Case studies give positive examples of successful programs, data are extensive and systematic. Comparisons may be made with Australian Indigenous students.	Inclusive focus though emphasis is on 'e'ngagement and 'E'ngagement rather than individual motivation.
Noble 1998	United Kingdom Primary Boys	Methodology of this three-part study is not outlined in this book chapter.	Recommendations are: a focus on language skills; encourage the use of the school library; prepare students for secondary schooling; shared reading; use positive role models; grouping students by ability rather than age; positive classroom arrangements that facilitate good behaviour; group work and short-term tasks	A small-scale study of a teacher in a classroom setting but does not provide information on methodology or links to theory.	This study focuses on positive motivation and engagement by encouraging self-efficacy, goal-setting and self-regulation and minimising negative behaviours of avoidance and self-handicapping through fear of failure.
Noble & Bradford 2000	England Primary and secondary Boys	Book that provides review of research and includes some data collected by the authors, including a survey of schools and students in the Kirklees area and a case study of one school.	Outlines a range of whole-school (mentoring, peer mentoring, industry links, role models, target-setting, feedback) and classroom (discourse, cooperative learning, planning, feedback) strategies.	Provides practical strategies supported by research findings and links to theory.	Targets 'E'ngagement and 'e'ngagement

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
Ofsted 2003a	United Kingdom Primary and secondary Achievement across all subjects and levels	Government review of boys' achievement over an 8-year period. Data from surveys, school inspections, review of student outcomes, and research reviews.	Identified factors that include school ethos, pedagogy and management, literacy focus, curricula, tracking and support	Stronger focus on factors than actual examples of achievement but complements the parallel report on achieving schools.	Little focus on individual motivation factors – wider emphasis on pedagogy and school structures.
Ofsted 2003b	United Kingdom Primary and secondary schools where boys write well and where boys had made substantial improvements in writing Predominantly middle- SES and English- speaking backgrounds with some low-SES and bilingual students	Observations of lessons and extracurricular activities, writing samples, discussions with boys, interviews with teachers, collection of policies in 7 primary and 8 secondary schools.	The main findings were that schools in which boys write well: value intellectual, cultural and aesthetic accomplishment; respect diversity; link oral and written language; encourage independence; provide choices; make writing purposeful; break writing down into stages; provide detailed and informed assessment; and support a culture that enables boys to take pride in their writing.	Synthesis of findings from a large number of schools that includes excerpts from interviews.	Considers whole-school and classroom issues that impact on boys' engagement with writing.
Penny 1998	United Kingdom Secondary (Year 9) Boys Literacy	This study included a baseline questionnaire, interviews with a small sample of students and an evaluation of the included strategies.	This study found that boys valued oral work, active approaches to the study of literature and group work and that boys need more support and encouragement when choosing their reading material. The introduction of pupil reading journals, independent reading for 30 minutes and shared discussion led to improvements in boys reading.	This hands-on 'teacher as the researcher' study investigated a number of strategies and describes their use in depth and provides an extensive analysis of the data.	There are significant links to motivation and engagement in this study as the focus is to provide strategies that will engage boys in developing a deeper understanding of English literature.

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
Purdie 2003	Australia All States Primary and secondary Indigenous boys and girls Self-identity and educational outcomes	Individual and focus group interviews with 623 students, 240 Indigenous and non-Indigenous staff and 75 parents. Issues focused on relationship between positive self- identity and improved educational outcomes	Findings support research into self-identity as multidimensional and the importance of developing both identity as an Indigenous person and as a successful school student.	Important insights into self-identity and school achievement from Indigenous students, teachers and parents.	Self-identity has a strong link with motivational literature though study also focuses on teachers' culturally appropriate pedagogy.
Quebec Ministry of Education 2004	Canada Quebec Primary and secondary Effective pedagogies for boys' education	Outlines and evaluates current intervention strategies utilised in Quebec.	Found that pedagogies that recognise individual differences combined with complex and meaningful learning experiences, positive teacher–student relationships, and ongoing teacher reflection and professional development result in greater academic success for boys.	Reviews a number of intervention strategies currently being implemented.	Argues that pedagogical differentiation that recognises individual differences and that uses projects that enable students to draw on past experiences and learn in the style that suits them best are the most significant in engaging boys in academic learning.
Reid 2003	United Kingdom 10 to 16-year-olds Comprehensive school Low-SES Students who suffered from low aspirations, low self-esteem and experienced difficulty in relationships	600 pupils involved over 3 years in out-of-school activities. 66 students (33 boys) were sampled for inclusion in semi- structured interviews. 35 professionals including teachers, assistants, learning mentors also interviewed.	Reid concluded that the programme resulted in personal, academic, social, school, skills and psychological benefits. Alternative curriculum can significantly improve disadvantaged students' attitudes towards school.	Evaluation conducted from the perspective of students.	Worked on 'E'ngagement with positive results flowing back through to motivation 'e'ngagement and school achievements

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
Rowan et al. 2002	Australia Queensland Urban and rural Secondary (Year 9) Low-achieving boys Literacy and ICTs	Book that draws on a number of research projects implemented by the authors. Includes a case study of the use of digital technologies in literacy education that included observations of 4 boys over 14 weeks.	The use of the boys' interest in motorbikes and the integration of digital technologies provided a meaningful curriculum, positioned the boys as experts who believed they could succeed as competent literacy and technology users, and provided opportunities to challenge hegemonic discourses of masculinity.	Includes primary data from a number of different research projects. Links theories of new literacies, masculinities and transformative curriculum to practice.	The combination of a new literacies approach with transformative curriculum that interrogates gender stereotypes enhances the possibilities of literacy success for all students.
Rowe 2003	Australia All states Primary and secondary Outcomes for boys with particular emphasis on literacy	Review of evidence-based research into boys' academic outcomes	Class/teacher effects are much more significant than differential gender effects. Quality of teaching and learning provision with emphasis on literacy, verbal reasoning and written communication skills are most salient influences on cognitive, affective and behavioural outcomes from schooling.	Meticulously developed argument drawing on a wide range of literature across different paradigms	Strong focus on teacher quality aligns with 'e'ngagement
Sharp et al. 2003	United Kingdom Years 6–9 after-school centres Ethnic minorities Low achievers Literacy and numeracy	Comparisons of literacy and numeracy assessments between intervention and control groups and surveys of parents and teachers.	Community-based Playing for Success after-school learning centres provided motivation for students' learning and resulted in positive outcomes in the areas of literacy and mathematics.	Large study that provides clear evaluation of intervention.	Community links are important in motivating students' learning.

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
Sipe 2002	United States Secondary mentoring	Meta-analysis	Concludes that effective mentoring programmes provide orientation, training and support for mentors to develop positive relationships with mentees.	Draws on a range of evaluations of mentoring programmes although arguments for the need for orientation, support and training are not well supported by empirical evidence.	Highlights the importance of relationships for learning.
Spielhofer et al. 2002	United Kingdom Primary and secondary Boys and girls Impact of school size and single-sex education on performance	Analysis of national performance data using multilevel modelling techniques applied to secondary (1996–2001) and primary (1997–2001) national value-added data sets.	No significant differences in overall boys' attainment in single-sex or comprehensive schools but boys with lower prior attainment achieved higher in single-sex schools.	Data relied on validity of national tests and value-added calculations. Did not explore social outcomes.	Not possible from these data to connect with relationship boys have with their schools or education.
Sukhnandan et al. 2000	United Kingdom Boys Literacy Mentoring Single-sex classes	Phase 1: review of recent research Phase 2: 19 case study schools using single-sex classes, mentoring and additional literacy support to raise boys' achievement. Evaluation based on tests results and interviews.	Effective strategies included catering for different learning styles, challenging stereotypical attitudes towards particular subjects.	Used a combination of quantitative and qualitative methods but most evidence qualitative at this stage due to the recent implementation of many of the strategies.	Focuses on motivation. Changes had a positive impact on boys' confidence academically and socially and resulted in better teacher–student relationships and higher pupil achievement.

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
Vallance 2002	Australia Western Australia Secondary Motivation and teaching and learning practices	Part of larger study in secondary boys' school. 455 boys (Years 8–12) were surveyed using motivation scale. Focus group interviews were also conducted.	Differences in factors influencing motivation were seen between high- and low- achieving boys. Desired external rewards do not correlate positively with high work standards. High and low achievers describe classroom usefulness in different ways. All boys valued physical rather than abstract learning.	Triangulation of quantitative and qualitative data about motivation. Did not control for other background factors but data corroborate other research. Important challenges within motivation literature.	Particular focus on motivation as it interplays with school and classroom factors.
Weaver & Hightower 2003	International Early childhood to secondary Boys	Meta-analysis	Grouped approaches into popular/rhetorical, theoretical and practical.	Meta-analysis and discussion paper that develops new ways of looking at the role of ICTs in literacy learning in early childhood settings.	Argues that there needs to be stronger links between theory and practice.
Wilhelm 2001	United States of America Boys from a range of SES and language backgrounds	49 boys of varying backgrounds and levels of academic achievement were observed and interviewed.	Found that boys are more different than alike and that teachers tend to perpetuate stereotypes in their choices of texts for boys.	Includes students' voices. No links to theory.	Teachers need to get to know boys' individual reading preferences, provide social contexts for learning and use texts that challenge boys rather than reinforce stereotypes.
Wilhelm & Smith 2002	United States Boys from a range of SES and language backgrounds	Book chapter based on research with 49 boys of varying backgrounds and levels of academic achievement. Observations and interviews with boys.	Boys respond to contexts where there is an appropriate level of challenge and support; choice and a sense of control and competence; clear goals and immediate feedback; and a focus on immediate experience.	Includes students' voices.	

Author	Target/setting	Methodology/ duration	Key findings	Methodological strength	Links to motivation/ engagement
Woodward et al. 1999	New Zealand Secondary Boys and girls	Uses prospective data from an 18-year longitudinal study of 657 students to examine effects of single-sex and co-educational schools on academic achievement.	Results showed pervasive tendency for boys and girls attending single-sex schools to perform better across a range of educational outcomes.	Did not distinguish between boys' and girls' achievements. Results are tempered by pre-entry differences in children's academic, behavioural, social and family functioning.	Data apply to 'E'ngagement though discussion considers other factors relevant to engagement and motivation.
Yates 2003	Australia South Australia Primary and secondary Boys and girls Single-sex and co-educational and school outcomes	4-year study in a school moving from single-sex to co-educational of educational progress (tests) and perceptions of school climate (surveys) involving boys (1933) and girls (409).	Found that gender was not a significant factor in educational progress challenging previous research. Gender differences were found in perceived school climate and these differences were correlated with school progress.	Useful discussion within the debate about single-sex and improved outcomes for boys. Ongoing study but limited to 1 school.	Targets factors contained within 'E'ngagement section of the framework.
Younger & Warrington 2003	United Kingdom Primary and secondary Academically successful boys Features of schools that achieve academic success for boys	4-year study focusing on strategies employed by schools that are effective in raising boys' achievements and reducing gender gap. Action research model with successful schools working in triads with other schools.	Strategies have been classified into pedagogic, individual, organisational and sociocultural. Found that boys respond well to an integrated approach to literacy, explicit teaching, target-setting and mentoring, and challenging dominant masculinities. Research still in change cycle with qualitative data initially showing positive changes in student engagement. Quantitative data in the form of system test results is planned.	Large-scale longitudinal study involving case studies of effective practices. Potentially important research for the current project. Report is discussion of implementation and needs later follow-up on evidence of engagement and academic achievement.	Classification of strategies has strong resonance with all aspects of the MeE framework. Found that a direct focus on teaching and learning with pedagogies designed to make learning accessible to students results in increased engagement and higher levels of achievement. Challenging of dominant masculinities was found to underpin all other approaches.

APPENDIX B: CASE STUDY REPORTS

B.1 Introduction

This appendix is the complete version of the case study reports from the research project, *Motivation and Engagement of Boys: Evidence-based Teaching Practices*. This project was carried out by the University of Western Sydney on behalf of the Australian Government Department of Education, Science and Training (DEST) between December 2004 and June 2005. The project is a quality teacher initiative under the Australian Government Quality Teaching Programme (AGQTP) designed to strengthen the skills and understanding of the teaching profession.

The 15 case studies in this research show schools that have taken up the significant challenge of working towards improving social and academic outcomes for their boys. These case studies reveal a variety of policies, interventions and strategies, reflecting the different educational decisions that each school has made as a result of identifying its particular contextual needs. It also highlights the different stages that each school has reached on a significant educational journey.

For each of these educational stories, the MeE framework offers a vantage point that allows us not only to make explicit, in theoretical terms, the immediate work at hand, but also to point to possible future directions. (For more detailed illustration of the MeE framework please refer to Chapter 3 in the main report.) The complex dynamic within the individual, social and cultural relationships of motivation and engagement captured within the framework means that it is not always possible to locate each school's interventions neatly within a particular perspective (M, e or E). Indeed to attempt this is not to appreciate fully the interrelatedness and interplay at the heart of the framework.

Nonetheless, the case studies are presented in an order that invites a systematic consideration of where each school's activities are positioned across individual support strategies, group learning experiences and whole-school policies and practices. Each case study contains:

- a contextualising background to the case study school and its issues with respect to boys' education
- detail of the strategies introduced at the case study school to achieve improved academic and social outcomes for boys
- a presentation of the evidence that these strategies are working in improving academic and social outcomes for boys
- analysis of how and why these strategies are working in improving academic and social outcomes for boys.

B.2 Vermilion High School

B.2.1 Background characteristics

Vermilion High School is located in a public housing estate on the outskirts of a major city in New South Wales. Four thousand people live on the estate, the majority in impoverished circumstances. The unemployment rate in the community is 33% (and much higher for youth); 34% of the estate residents receive a disability pension and 40% of families earn less than \$200 a week. A significant number of Indigenous (12%) and Islander (17%) people have homes in the community. There is a very high proportion (51%) of households headed by single parents, most of whom are women. It is recognised that there are very few positive male role models, whether familial, peer or in the wider community. This situation is exacerbated by high mobility within the estate, which makes relationships difficult to sustain. The community is characterised by violence, drug and alcohol problems and attendant intrusive surveillance by police.

The school receives equity funding allocated to the schools in the state serving the most disadvantaged communities and constantly battles the stigma of being only for 'housos' (a pejorative term for people living in public housing). Despite its firm commitment to improving social and academic outcomes for all its students, it is very much seen as somewhere you send your child because you have no other choice. As the Principal notes, *You just can't get over that social stigma to come across that no-man's land that encircles the estate.*

The social stigma associated with living in a public housing estate works on a number of levels. Outside the community (even within local and statewide education authorities) there was the idea that the staff members were working really hard but unlikely to make any real differences to the kids or their community. The Principal explains the prevalent view from outside:

Vermilion is working really hard, they're doing a good job but that's Vermilion – so the rider had an effect on the staff, it was very much a sense of isolation, a bunker mentality.

More disturbingly, the social stigma appeared to have been internalised by many of the students. A teacher comments on this:

Every single time we returned to the school after an excursion, kids were screaming out of windows, 'We are houso scum, we are houso scum!' It was reflected in an attitude that said, 'Why would you care? We're just houso scum'.

It is not surprising that such an attitude impacted heavily on the classrooms. Physically, emotionally and pedagogically, Vermilion High School was an institution in crisis. One long-serving teacher remembers that:

Teachers were literally surviving day to day. The general behaviour was pretty hard-core: you'd turn your back and you'd have something thrown

at you. [There was] a lot of swearing. Learning outcomes were a very big shock. There was a feeling that at times we were baby-sitting, results were really poor. Teachers suffered demoralising situations because they thought they were weaker, poorer teachers ... There was no dreaming happening.

Five years ago Vermilion High School was in survival mode. Welfare programmes took precedence over quality teaching and professional development, and this was reflected in a huge imbalance in funding and resources being directed to its social rather than its academic work. Ironically, this imbalance seemed to be having little positive effect. School attendances were extremely low (5 percentage points below the district average, 7 percentage points below the state average). There was also an alarming suspension rate, particularly among boys. For example, 229 students received short suspensions in 1998, 187 of whom were boys. Moreover, 107 of these suspensions were for violence. In the same year, 27 boys were given long suspensions. Again, the majority of these suspensions were for violence. Much of this was for violence between boys, though some of it was directed against teachers.

There were two critical changes at Vermilion High School in the early 2000s that transformed the way it would work towards social and academic outcomes for its 'lost' boys. Where previously there was an emphasis on welfare and the desperate suppression of simmering tensions, a new era was beginning to work within a much stronger social justice framework. An argument was developing that if the school relationships and outcomes for the most disadvantaged students in the school could be improved, all students and staff members would benefit. This brought forward the first change, the implementation in 2000 of the *Boys' Project*, a programme designed specifically for the most at-risk boys in the school (see above). The initial success of this programme provided hope that Vermilion High School could reverse the slide. In 2001, the second critical change, the arrival of a new principal, confirmed and strongly consolidated this reversal.

B.2.2 Strategies for improved academic and social outcomes for boys

Vermilion High School became *proactive* rather than remaining *reactive*. Instead of resigning itself to the inevitability of failing students and failing teachers, it took up the challenge to re-engage its students within an ethos of what the Principal calls *pressure and support*. 'Pressure' was not accepting poor attendance and behaviours that led inexorably to suspension, but entailed shifting some responsibility back to the students. 'Support' involved introducing programmes and a changed classroom pedagogy that together would offer a more motivating and engaging school and classroom environment. The interplay of pressure and support is now highlighted in what the school considers to be the critical aspects of its increasing success with all of its students, particularly its boys.

Attendance monitoring

There were two, closely related aspects of the school's attendance issue that had to be addressed. The first was the attendance itself; the second was the way the school gathered and monitored its attendance data. A swipe card was introduced for all students to register their attendance. This allowed roll returns to be completed quickly

(in ten minutes as opposed to two hours) and accurately, and fractional truancy in the early school periods to be checked much more easily. Coupled with this more efficient tracking of students was the introduction of a 5-weekly review cycle. The whole school is monitored to see if there are any individuals or group patterns that need to be followed up. As the Principal explains, this follow-up process involves interviews with students, teachers and community members:

We always talk about the combination of pressure and support – so the interview process has an element that the kids know we’re tracking their attendance, they know we’re involving their parents, they know there’s an element of pressure on them to do the right thing rather than historically just not show up and get away with it. Pressure and support is part of my dialogue with everybody at the school. Certainly the kids understand that, we have that very much as one of our driving philosophies.

At the end of the first year there were marked improvements in attendance, especially for boys (see Tables B.1 and B.2).

Table B.1: Vermilion High School Years 7–10 boys’ attendance 2000–04 (%)

School Year	Vermilion	District	State
2000	83.1	88.4	89.9
2001	87.5	88.7	89.9
2002	86.5	88.2	89.3
2003	87.2	89.1	90.2
2004	88.9	89	90

Table B.2: Vermilion High School Years 11–12 boys’ attendance 2000–04 (%)

School Year	Vermilion	District	State
2000	85.9	87.9	89.7
2001	90.5	89.5	89.7
2002	91.4	88.7	89.3
2003	89.6	89.1	89.8
2004	90.2	89.0	89.8

Quality of classroom pedagogy

In line with the philosophy of pressure and support, Vermilion High School recognised that it was not enough to make the students come to school if there was little to hold them when they were there. This led to a major focus on the quality of teaching. In line with constructivist views of pedagogy, learning experiences were developed that had immediate relevance for the learners. Professional learning was rigorously put into practice in the development of a theoretically informed school-based pedagogy. There was continuous qualitative assessment (self, peer and supervisory) of teaching practices using phases of peer observation and debriefing. The result was a more coherent and supportive curriculum within KLAs and across the whole school. The Principal talks about how this complements the pressure around school attendance:

There are two elements. The first one is attendance monitoring and pressure and support for kids to come to school, particularly boys, and then secondly when they do come to school they are being engaged in a more meaningful way. The work is more relevant and significant for them. They're succeeding. All of this improves teachers' capacity to engage kids.

Notwithstanding the importance of the interplay of these two elements, the school also recognised that when a sizeable number of the school population has considerable social needs, then these have to be addressed as a separate issue. The *Boys' Project* was a response to this realisation.

The Boys' Project

The *Boys' Project* was initially a small, add-on scheme aimed at supporting the most disengaged and at-risk boys. It began in 2000 with 30 boys (mostly at-risk students, together with some 'natural' leaders from Years 7, 8 and 9) who were identified by teachers and then invited to participate. The impetus for the development of the programme came from a survey of the school staff that focused on the very low social and academic outcomes of the Vermilion High School boys. As a teacher who was there at the time comments, *We asked ourselves, 'What can we do for these lost boys?'*. As it was originally conceived, the programme's main features were:

- It was completely voluntary.
- Students registered a project with a design-and-make focus, for example, computers, construction, automotive, performance or creative arts.
- The project was self-directed and largely completed outside timetabled lessons.
- There were regular rewards through excursions.
- Projects were presented in an Expo as part of a school and community celebration of students' achievements.
- Successful students were rewarded with a canyoning expedition and *Boys' Project* camp (the outdoor adventure initiative was recommended by the staff as this focus had been previously successfully trialled by a couple of teachers).

The overall aim of the programme was to improve boys' self-confidence and motivation by achieving success in a supportive educational environment. The results from the original cohort of students were outstanding. There were only two suspensions that year from a group of boys who previously were being suspended repeatedly. In addition, feedback from teachers and community showed that an important difference had been made to the lives of these boys. As the *Boys' Project* Coordinator remembered:

Some of the parents were phenomenally grateful and their reactions were incredible. A lot of the teachers talked about behavioural improvements ... Those kids have left Year 12 last year and still talk about that as a major turning point in the school.

Encouraged by the success of the first group of students, the school looked to expand the project. The Coordinator argued that the success needed to be built on:

It's easy to have that one-off success, to target a particular group of kids. But we wanted to create something far more embedded in the school culture and have an ongoing success.

The expansion had four thrusts. The first was an incorporation of stronger links to classroom work through the introduction of reflective diaries for the boys to keep throughout their time in the programme. The second was the development of a mentorship programme through teachers and community members. Third, a series of student workshops was planned on issues identified to be important for boys (for example, goal-setting, role models and self-image, homophobia, rights and responsibilities). Finally, the project was to be offered to increasing numbers of boys. In 2003, there were 70 students involved. In 2004, the project was offered to all mainstream boys in Years 7 to 9 and, with external funding, was expanded to include the senior boys from Vermilion's four primary feeder schools. This development, which has continued into 2005, has also seen the use of Year 10 students as mentors for boys in the primary schools.

B.2.3 Evidence that the strategies are improving academic and social outcomes for boys

In its sixth year of operation, the *Boys' Project* has established itself as an important initiative, recognised within the school and the local and wider educational community. A long-standing teacher discusses its impact across the whole school:

They [teachers] are seeing that boys are now calmer, they have a stronger sense of self-identity and are more confident. We've actually seen some boys change ... take a different pathway. They've realised they have choice. That has been a great celebration. The boys talk about Boys' Project as being a really strong influence.

The Principal expands on the programme's achievements:

It is now no longer seen as the programme that the 'bad kids' do ... It has taken on a much higher profile in the school and community and consequently more and more boys have wanted to become involved and particularly in the mentoring side of things. The most significant work is on self-esteem and the fact they see themselves as being able to demonstrate skills and capabilities in a very positive way. It is now viewed as a more positive process that it actually creates a higher level of esteem, even for kids who are not necessarily exhibiting behaviour problems, it reinforces a whole lot of positive elements to their character and gives them an opportunity to demonstrate their leadership potential.

In many schools facing Vermilion's issues this would perhaps seem evidence enough that something noteworthy had been achieved. However, there is further proof of success across key school areas. The challenge of engaging students calls on schools to work strategically across a number of fronts. Vermilion High School's story highlights a particular response to the needs of educationally disadvantaged boys from a very impoverished community. While the *Boys' Project* has been a specific focus, it was not enough to hope that the *Boys' Project* alone would lift self-confidence and improve individual motivation if the school did not accept responsibility to raise its

own pedagogical practices. In this way the school recognised and understood the important reciprocal relationship between motivation, engagement and receptive schools and classrooms. This advances the idea that motivating and engaging school and classroom environments both promote and nurture improved school relationships. This point needs to be kept in mind when putting forward evidence of the school's success. Evaluations within the watershed period saw attendance and suspension as the most pressing issues to be addressed and these were challenged from both sides of the student–teacher relationship. As the Principal points out:

The one thing that we've significantly done is the improvement in the quality of what happens in the classroom and all of the flow-on effects from that in terms of a greater capacity to engage kids. And it's reflected in the attendance data. So the goal is not attendance per se: the goal is effective engagement in the classroom.

Despite this concentration on the bigger picture around student engagement, and a feeling that the school has its future sights set firmly on enhanced academic outcomes, there is persuasive evidence of success around the immediate issues of attendance and retention, suspension and school relationships. Each of these is now presented.

School attendance and retention

Figures for school attendance are from systems recorded data. The figures in Table B.1 show that the attendance rate for boys in Years 7–10 improved by 5.8% in the 2000 to 2004 period. In 2000, boys in this group were attending at a rate 5.3% below district average and 6.8% below the state average. By 2004, Years 7–10 boys were attending 0.1% below the district average and 1.1% below the state average.

More impressive figures are available for Year 11 and 12 boys, shown in Table B.2. Senior students' attendance improved by 4.3% in the period 2000 to 2004. Furthermore, in 2001, 2002 and 2004 attendances were above district and state averages. In 2003 the school attendances for these boys were above district average and only 0.2% below the state average.

Statistics on retention are less reliable. There is a high mobility rate among families in the community, due to personal circumstances, employment factors and public housing decisions. Given that retention figures are not sensitive to students moving to another school and staying within the education system, it is not appropriate to list them for a school serving such a mobile group. Nonetheless, the school can show that boys are being retained in greater numbers. One outstanding example of this is among the highly disengaged boys who took part in the original *Boys' Project*. School records show that out of the original 30 students:

- 18 finished Year 12
- 2 left after completing the Year 10 Certificate
- 2 left in Year 12
- 4 left in Year 11.

(The remaining four boys moved to a different school community and so could not be counted in these data.)

Suspensions

It would be inaccurate to suggest that all of Vermilion High School's issues have been resolved. The problems facing the community remain and will continue to do so. That is the nature of the impoverished public housing estate, whose inhabitants labour under the greatest social, physical and financial difficulties. Improvements in the lives of a lucky few usually mean that they move on to 'better' suburbs, and their place is taken by others in disadvantaged circumstances. While individual renewal is possible, community renewal is much more difficult. So the suspension data show that boys are still being suspended from the school and violence continues to be a factor in this suspension rate (note that 'long' suspensions are typically for extreme and repeated violence).

Nonetheless, the figures in Table B.3 show a dramatic decrease in all levels of suspension, particularly those for violence. Backing these statistics are qualitative school data collected through school and classroom observations over the last five years showing that fewer boys are being identified as having major social and learning problems. There are smaller numbers of repeat suspensions, a fact that is attributed to a post-suspension process of mentoring boys with persistent school discipline problems.

Table B.3: Vermilion High School suspension rates for boys

Year	Short suspensions	Suspensions for violence	Long suspensions
1998	187	107	27
1999	108	59	4
2000	73	54	16
2001	83	58	11
2002	97	55	8
2003	53	46	9
2004	45	27	8

The Principal also attributes the success to the total package of programmes, which together make boys feel as though they are part of the school: ... *the boys are more engaged in what's happening at the school and see themselves more as part of the school community ...*

B.2.4 Conclusion

The *Boys' Project* is, clearly, linked to motivation. It was designed to support the most disengaged boys, and works on social and practical skills and learning. However, the programme occurs alongside the development of improved classroom pedagogy across the whole school. This illustrates the connection to 'e'ngagement. The two initiatives work in partnership to support motivation and 'e'ngagement, thus demonstrating an interplay and potential to foster 'E'ngagement.

Data on attendance and behaviour present evidence on a wide scale of a school that has begun a successful challenge to its most persistent and demanding issues. Behind this wider statistical picture are collective and individual stories of boys who have had

their school and home lives changed, and who have seen opportunities for future success opening up for them. For many of these boys, such a trajectory previously would have been out of the question. They talk candidly about what they used to be like before they took up the *Boys' Project*. Some were continually in trouble:

I just went to the wrong people. I got around with bad people. I got into a fight and got suspended. Then [he] called my name for Boys' Project. He called out my name. I didn't know what it was for ... I thought I was in trouble. After that, doing the projects and going on excursions, I liked it. I got better at my classes. In Year 7 I used to be very bad, fighting, swearing, swearing at teachers. Year 8, I got a little bit better and Year 9, I didn't get into trouble at all.

Others just didn't want to be at school at all.

In Year 7 they chose some people [for Boys' Project] they thought it would help. I was like pretty bad back then. Just skipped school and stuff. I was in trouble. I didn't like coming to school. I didn't turn up to classes. I thought teachers didn't care. I didn't like teachers back then and I went on the programme ... and I thought, 'Yeah, some teachers are all right', and so I started going to school. In Year 7 I was a little 'smart arse', but now I pay attention and actually do my work and get all my assignments done.

As well as the aggressive and the disengaged, the school targeted boys who were withdrawn and lacking in self-belief. As one of the boys confided: *I was actually the silent type. I never like really talked up so I think they picked me because I was shy. Then I started getting confidence.*

It was clear from student interviews that the changes at Vermilion High School, and the *Boys' Project* in particular, had given them a chance to feel good about themselves and achieve success under their own terms. That success flowed on to other aspects of their schoolwork:

When I first started high school I was shy ... but when I started Boys' Project in Year 8 I started getting good at most of my subjects and my work ... after I did my first project I've been getting better and better at my projects. I'm going pretty good.

Taking part in the *Boys' Project* also allowed the boys to develop different kinds of relationships with their teachers. The unstructured and informal environment of the work on their projects and the excursions opened up opportunities to talk about school and outside issues. As one of the boys explains: *We are able to talk to the teachers [in the project] about stuff out of school ... like sports and then you can talk about problems.*

The importance of this is confirmed by another boy:

... When we go on excursions we just do lots of talking and we do workshops and have talking and we have a camp and sit around and talk

... If there's a problem you just tell 'em [the teachers] and they try and work it out with us.

Other aspects of the project contributed to the boys' positive experiences. Importantly, these were across social and academic areas. The written journals that they completed provided a valuable reflective tool:

The journal was used for us to write down what we were doing and how much we'd done. The writing was more important for me than for the teacher because you set yourself a goal.

Workshops were opportunities to consider seriously how to deal with school and classroom issues. One of the boys talks about this: *In the workshops we learn how to cope with stuff ... helping us with writing, our reading skills, our literacy and helping out other kids.*

Another boy shows how he found the workshops useful in planning for the future. These students were learning to think the previously unthinkable – that they could set and realise goals:

I remember learning to set goals for my future. To use a timetable. To see what I had achieved. And from that I learnt how to pace out my time. Like at home now, in my head I have a visual timetable from the time I wake up. I reckon I'll stay to Year 12 and go on to university and get a degree. Back in Year 7 I thought, 'I'll drop out in Year 10. Get out of school way quicker'. Now I'm going on to [Year] 12.

But the *Boys' Project* was not only about individual achievement. Boys were becoming much more cooperative and appreciative of the importance of teamwork. This was a critical advance on the struggle and violence that previously defined their daily existence.

The canyoning taught us about teamwork ... if one person stuffed up we all got left behind. It was really cold and you wanted to work faster. We also learnt about personal responsibility, but mainly teamwork to get through it ... at the end it was so cold we'd huddle up to keep warm. Teamwork is something I can use out in the community and at home.

One of the big achievements of Vermilion High School's programmes has been in the greater sense of responsibility taken on by the boys. The Principal observes that more boys are nominating for leadership roles. For example, more are interested in joining the Student Representative Council and nominations for School Captain from boys currently outnumber those from girls. Boys who have completed the *Boys' Project* have also volunteered to become mentors for the primary school students involved in the 2005 work with the feeder schools. One boy wanted to do this because:

I just decided that I wanted other kids to have fun like I did and benefit. We've learnt to have confidence.

Or, as another boy said:

I want to be a mentor to help other kids with their problems and any issues they got. I want to be a mentor to represent our school and make our school feel proud. I want to help my brother and all his mates in primary school.

Boys at Vermilion High School are now committed to a project designed to arrest what had once seemed their irreversible slide away from school and education. This is at the same time a tremendous result and a powerful extension of the *Boys' Project*. The potential benefit for both the mentors and the Vermilion community is significant.

The *Boys' Project*, along with the policy of 'pressure and support', clearly has opened up success to students through curriculum processes. This realisation of messages is a key component of 'e'ngagement. Classroom teachers have taken on 'e'ngagement as an important part of what they do. More importantly, perhaps, Vermilion High School has created cohorts of boys who feel that 'school is for me'. Partly because of their specific projects, but just as much because of different kinds of relationships in action at school, boys have a more future-oriented consciousness that allows them to see education as a resource to be profitably employed within their lives. Retention and suspension rates could be seen as reflecting this consciousness. 'E'ngagement as a global construct includes such features as school ethos, curricula choices, extracurricular activities, mentoring and role models. The *Boys' Project* links obviously with a number of these, but also enables others, such as formerly disengaged boys themselves, to become mentors and role models. At the same time, 'pressure and support' helps to create a positive school ethos.

This case study provides a striking example of a school refusing to accept that little difference can be made in the lives of students living in a public housing estate. Not being content to let itself 'off the hook' by taking on a deficit view of its students and blaming them and their community for their circumstances, or accepting the seeming inevitability of 'houso' kids rejecting and being rejected by school, Vermilion High School looked to changes within its own programmes, pedagogy and organisation.

The immensity of its issues means that the school has still a long way to go on its long journey towards equitable academic and social outcomes. But there is a strong feeling within the school that the goals are identified and attainable. In the words of the Principal:

There are three things: increased support for kids at school, an awareness that there are other ways to solve problems, and programmes designed to improve their own self-image. When those three things operate together there is a very powerful combination there is no need to resort to violence. It's just not there to the extent that it was ...

It is hard to place a value on the dramatic change in attitudes shown by many of these hitherto disengaged Vermilion boys. Previously 'lost', there now appears to be a general sense among them of 'hope' and 'future'. Teachers can feel it in their dealings with their male students. As one teacher puts it:

Staff can see that the boys are much calmer and this is seen in improved relationships. The boys now just aren't as in your face, certainly not as violent. The boys want to stay on and that's great. What is really amazing is the difference in pride ... kids are responding to things looking better for them.

Boys can sense it in the changes to their school, as this student explains:

Like this school has cracked down a lot ... people smoking, people doing bad things like not staying in class, jiggling and that. And they're cracking down on school work, like you gotta do your work and pass exams.

Critically, they can sense it in their own lives. As one boy admits: *I have no idea what would have happened to me if there was no Boys' Project or if the school hadn't picked up.*

In the end this is a powerful reminder that there is much to be gained even within the most challenging situations if schools do not shirk their responsibilities to *pick themselves up*.

B.3 Russet High School

B.3.1 Background characteristics

Russet High School is situated in the outer suburban reaches of a major metropolitan city in Victoria. Its leafy, bay-side setting projects its advantaged status. The school has an enrolment of around 1100 students between Years 7 and 12, the vast majority coming from the immediate area. The school's major competition for students in the area comes from two private schools. These schools have a strong drawing power for families that both value and can afford a private school education. For this reason, a visit to Russet High School doesn't immediately greet you with the air of privilege one might expect in accordance with its middle-class backdrop.

While this case study report will focus on the school's *Mindware* programme, the programme will be presented as an example of, not an exception to, the wider educational practice of Russet High School. This case report is compiled from a wide range of semi-structured interviews with every member of the School Executive, teachers, programme leaders, students and parents. These interviews are supported by a study of programme materials and work samples, observations of classes and access to records associated with the development and monitoring of the *Mindware* programme.

In 1994 the teachers and Executive at Russet High School became increasingly frustrated with the behaviour and performance of students in the middle years (predominantly Years 9 and 10). Teachers seemed to be struggling to connect with, and assert direction and influence over, students. The literature told them that they should not feel unique in this regard, but this was cold comfort in the daily grind of trying to work with students who were uninterested and disengaged. Lack of interest and disengagement were not exclusively boys' issues, although staff were unanimous

that the ways in which boys expressed these tendencies were considerably more disruptive than those of their female counterparts. The following extract from an interview with a member of the School Executive conveys this feeling:

I think the girls were also pretty disengaged from school but they don't create havoc in the same ways boys do. I think it's just the way it is in secondary schools. If the boys are disengaged you have a lot more stress on the system. So while we didn't set out to specifically design something for boys, they were always going to be the litmus test as to whether what we did was working.

It was against this backdrop that the school decided to undertake a comprehensive review of its effectiveness in the middle school years. The keystone to this review was collecting the views and perceptions of the learners themselves. In 1995, middle years' coordinators undertook in excess of 300 one-on-one interviews with students across Years 9, 10 and 11.

The collation process revealed seven core themes around which students were calling for change. In summary, they wanted:

- more say in the content and implementation of the curriculum
- more opportunities to work in groups
- greater say in the formation of school groupings
- to be able to select their teachers
- a pedagogy underpinned by shared 'exploration', rather than authoritative 'transfer'
- not to have their capabilities measured by a narrow testing regime
- greater integration in the presentation of discipline knowledge.

While the teachers shared students' concerns about the effectiveness of traditional pedagogies built up around the discipline bases, change was not going to be simple or straightforward. In effect, the interview data challenged teachers to find ways of capturing their students' interest so that they might be encouraged, or provoked, to learn more.

It is interesting to note the degree to which the concerns of the students intersect with the components of the MeE framework. Much of what the students have to say is about discourses of power and the degree to which their engagement is dependent on who is valued and whose voice is given credence. Autonomy is a key concept in both motivation and 'e'ngagement. Moreover, their desire for 'exploration' rather than 'transfer', hints strongly at a desire for deeper levels of intellectual understanding and expertise – another key component in genuine 'e'ngagement.

B.3.2 Strategies for improved social and academic outcomes for boys

The school moved quickly to establish new networks around which it could explore alternative programmes. Through a series of professional development sessions, notably a series of presentations from an educational psychologist, teachers began to explore the relationship between the learning environment and individual learner needs – each a key aspect of 'e'ngagement. While these explorations were initially

undertaken at the individual classroom level, the school channelled its resources toward the development of a radical new programme (the first of its kind in the state). The programme, for all Year 9 students, would be based on an seven-week experiential learning programme to be undertaken in their final term of study in the year. This programme was called *Mindware* and had its first year of operation in 1998.

Mindware

Mindware is an innovative programme designed to both challenge and inspire Year 9 students at Russet School. Learning is self-directed and occurs predominantly outside the classroom. *Mindware's* aim is to create young people whose thinking is more critical, creative, caring and competent than it was at the start of the year. The programme revolves around students being actively involved in setting and meeting their own learning challenges. In effect, *Mindware* creates the conditions of deep intellectual 'e'ngagement. Students are encouraged to understand themselves as learners and to develop a range of academic and social resources that will assist them to function successfully in the societies of today and tomorrow. The programme has a 'futures' orientation strongly reminiscent of the consciousness necessary to link 'e'ngagement with 'E'ngagement.

Mindware is developed around a number of unique features and culminates in students spending an entire term in an experiential learning programme. Students choose their own *Mindware* groups of 5–7 students and then select a staff member to be the mentor for their group. Throughout the year the mentor supports and challenges students to extend themselves physically, socially and intellectually by encouraging mature, honest relationships with other students, teachers and parents. The *Mindware* mentor groups meet fortnightly to plan a portfolio and prepare for a seven-week activity programme in Term 4. The portfolio contains a series of completed projects, including the students' individual investigation and a number of group and whole-class tasks. The portfolio is intended to be a compilation of all that is thought, felt, planned, prepared, reflected upon and generated during a student's journey through the *Mindware* programme.

The individual investigation

This student-driven and designed research project on a topic of the student's choice is an essential aspect of *Mindware*. The project may build upon an existing interest or may be a new topic that the student would like to explore. Students begin their individual investigation in Term 1 and conduct their work throughout Terms 2 and 3, concluding their project with an oral presentation to an audience of students and community members. The teacher's role is to facilitate the research process in which the goal is for the student to demonstrate competent planning and investigation, critical analysis of their learning, care and creativity.

***Mindware* activity weeks**

During the final seven weeks of Term 4, all Year 9 students are engaged in activity programmes that take them outside the school for extended periods of time. These include:

- Presentation Week, in which students give an informative, entertaining and succinct presentation of their individual investigation to an audience of students from Years 8 and 9 and members of the community.
- City Week, in which students go to the state capital each day for one week, visiting a number of historical sites, completing subject tasks and undertaking a group project ('City hypothesis'). Having to navigate their way to, from and around the city, hones students' organisation, teamwork and communication skills.
- Camp Week, in which students participate in a four-day camp that challenges them physically, socially and emotionally. With the focus on teamwork, they participate in bushwalking, high ropes elements, abseiling, rock climbing, initiative games and raft building.
- Community Service Week, in which students work voluntarily for a week with a local community-based organisation, providing valuable service and developing a greater sense of citizenship.
- Lifeskills Week, in which students visit the local market and Youth Resource Centre to complete a sequence of tasks designed to teach them practical life skills aimed at equipping them for future challenges. Students also visit the local courts, police station, community health centre and employment agencies and learn about programmes specifically designed to improve opportunities for young people. Students participate in sessions on workplace occupational health and safety and first aid, as well as exploring gender roles, rights and responsibilities.
- Local and Recreation Week, in which students visit a number of historical and environmental sites on the nearby peninsula, thus developing a broader awareness of their community and the local environment. Again, the emphasis associated with these activities is on the development of teamwork, leadership and cooperation.
- Evaluation and Celebration Week, in which students celebrate individual and group achievements experienced throughout the *Mindware* programme through a series of enjoyable reflections and activities.

***Mindware* for boys**

The *Mindware* programme is not targeted specifically at boys but it has specific aspects of their behaviour and profile clearly in its sights. Indeed, when talking about the value of the *Mindware* programme, most teachers list one of its key attributes as its capacity to harness and nurture the interest of boys. While *Mindware* was non-selective in offering learners a new set of experiences, new lenses through which to view them, and a basis upon which they could build new understandings and practices, its capacity to engage the interest of at-risk students was seen as being its major strength.

B.3.3 Evidence that the strategies are improving social and academic outcomes for boys

The story of the student identified as 'Jake', recounted by the Senior Teacher, points to the powerful evidence that the teachers encounter daily:

What really excites kids is the opportunity to choose what they want to do. For at-risk kids like Jake this can present as a rare chance to actually

capture their interest and excite them. Jake got referred to me because he couldn't find anything to do for his individual project. He said nothing interested him. I said, 'Is there one thing that you really like or like doing?'

'Yeh, skateboarding', he said, 'but they aren't gonna let me do that are they?'

'I'm one of "they" and I say, "Yes". Yes you can', I responded.

'Anyway, I said I like riding them, not studying them', he told me.

After a bit of banter around which I asked him about how they were made and the skills of riding them, I said to him, 'Tell me, is it like surfing? Like can you become a professional?'

'What do you mean?' he said.

'I mean are there guys roaming all around the world making money out of riding skateboards?' I said.

You should have seen the look on his face.

'I don't know', he said, 'but I'll find out'.

Well, he went on to give one of the most fantastic presentations that I've seen. He got right into it! He explained everything – how they were made, new axle systems the lot. He explained how he had to learn a whole new language to really get to understand it. Here's a kid that was at risk in Year 9 and went on to complete Year 12 at this school. I honestly believe that for him that was the defining moment.

All teachers at Russet High School talked about the quality or depth of learning that could be achieved when the learner was propelled by a genuine interest or passion in the topic. This, of course, is the very definition of 'e'ngagement – the learner actively participating, valuing deeply and operating at a level of deep understanding and expertise. Even the most difficult boys were capable of high-quality work when they were focused and engaged. The individual investigations were a compelling reminder of the sorts of results that were available when students were engaged in their work. Underwriting this, of course, was the value of letting the students choose their work focus, thus giving them autonomy and a share in the discourses of power. By placing student choice within a coherent learning framework, the *Mindware* programme achieved impressive outcomes. When they talk about *Mindware*, almost every teacher reports boys achieving results that far exceeded their performance in other areas of the curriculum: sporty boys were fully absorbed in learning about triathlons and Ironman events; boys with an interest in technology created models and animations; and boys who were manually inclined built furniture or surfboards.

Some of the best presentations we had last year were from boys that no one thought were capable of working together. There have been a few disappointments but overall it's been very successful with boys that might otherwise be disengaged through the curriculum.

The *Mindware* programme also offered teachers and students a chance to work together in ways that could provoke new communications and relationships. A year-long mentor relationship gave teachers and students the opportunity to get to know each other by experiencing and working through a wide range of issues. A big part of the mentoring programme was the notion of group responsibility – relatedness being a key concept in both 'e'ngagement and motivation. A number of the teachers

commented on the value of getting to know boys within their friendship groupings. One teacher remembers being surprised at being picked as mentor by a particular group of boys:

I had the so-called cool, sporty boys last year in my mentor group. I couldn't believe that they chose me to be their mentor. I mean, I'd always gotten on alright with them but there were lots of other teachers that seemed to have much more rapport with them than me. Anyway, I just got on with it. We had some great fun together. They were really good, did some great work. We sort of developed a special bond. When I see them in the yard they always say hello.

For the boys, the *Mindware* programme offered the opportunity to work with their friends in classroom contexts. The boys might share particular classes within the mainstream curriculum with their friends, but they very seldom got the chance to work together in groups. Physical education was identified as one place where this happened but it was usually within the structure of a game or activity. While all teachers identified particular groups of boys as being the worst at working together, there was unanimous agreement that they definitely improved throughout the *Mindware* year. From their vantage point as group mentors, teachers felt that they were able to get more of an insight into how a group worked (its codes and mores) and to assert a beneficial influence over its members by having a voice in some of its conversations and negotiations, as demonstrated in the following conversation:

Student 1: 'This [Mindware] is much better than any of my other subjects. Every time I go into any other class the teachers straight away says "[name] up the front".'

Student 2: 'Yeh, all the boys can be stuffing around and I'm the one who always gets into trouble.'

Teacher: 'But surely you have some responsibility in this. I can't imagine that the teachers have no reason for getting on your backs a bit?'

Student 2: 'I think they've just made their minds up that us boys can't work together in groups so they just split us up no matter what we do.'

Teacher: 'Well maybe you just have to learn how to do it better so that when the chance comes again you don't blow it.'

All of the students to whom we spoke were complimentary about their experiences in the *Mindware* programme. Prominent in their affirmations was the opportunity to break free of the discipline-focused curriculum that had driven their schooling until that point, and to have a say in what they would do, in other words, a sense of autonomy and a share in the discourses of power. For some boys, the opportunity to learn outside the classroom had presented them with new opportunities and insights. For those who understood themselves as not being academically inclined, having alternative forms of knowledge (such as practical or aesthetic knowledge) supported (and, most importantly, valued) was clearly a breath of fresh air. The removal of discipline boundaries was particularly empowering for learners who tended not to value the place of school in their life. A number of boys we spoke to felt that they had gained some self-respect through what they had been able to achieve within the programme.

Mindware was by far the highlight of school so far. By a long way. You get to have a say in what you are doing and spend a whole term out of the classroom. I'd only ever been to the city once before Mindware so I learnt heaps about it. It was really good. It's a bit of a shock when you get back to Year 10 and go back to working the old way. A bit disappointing really.

I thought Mindware was great. I'm not really good at school, you know like Science and Maths and that. I'm not stupid but I like learning by doing things, not just talking about them or writing them down. I guess I'm a sort of practical learner. In Year 9 [notably through the Mindware programme] I got to do lots of hands-on things. It probably kept me at school.

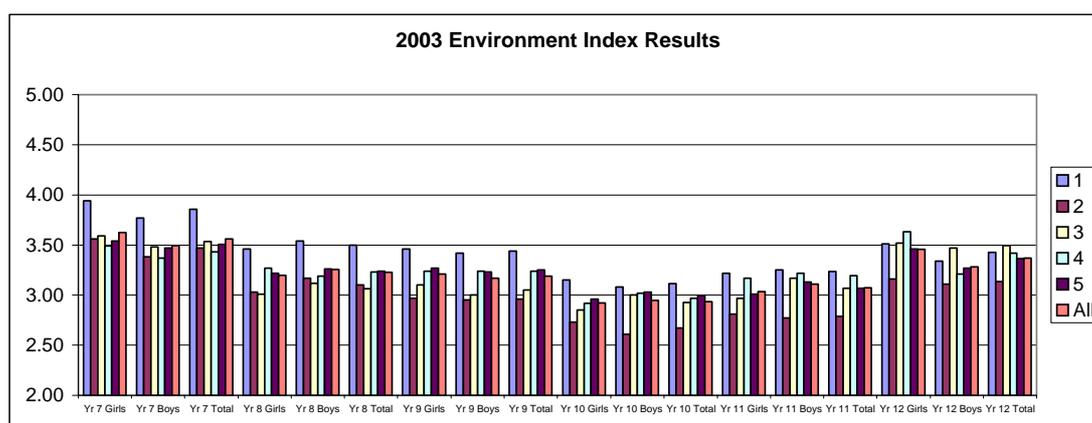
The School Executive was acutely aware of the difficulties in quantitatively measuring the impact of *Mindware*. Building on the powerful testimonial data it has gathered, the school conducts an annual survey to explore student perceptions of the learning environment across five principles that underpin the implementation of *Mindware*:

- Students feel that effort and achievement are encouraged, rewarded and/or celebrated before ability.
- Students feel that they have adequate time to explore and understand new ideas, concepts and skills.
- The staff/student relationship is personal and supportive.
- Students are challenged and supported to seek out new learning for themselves.
- Students and staff feel proud of their growth and achievements.

The survey comes up with a scaled score for each of the five principles. The scales are given by Year level and by gender, and are scored between 0–5. The Learning Environment Index in Figure B.1 shows that boys generally perceive their learning conditions to be advantageous.

Importantly, the school is enthusiastic that the Year 9 data do not reveal any sign of the decline that was evident before the *Mindware* programme was introduced. Rather, the student perceptions of the learning conditions that support them are seen to have a slight decline at the Year 10 level. Added to this is the fact that Year 9 absenteeism data are better than every other Year level. This is in stark contrast to wider state trends in which the end of exams leads to a sudden decline in attendance. This is something that marks the *Mindware* programme as offering something distinctive and positive.

Figure B.1: The Learning Environment Index



Note: 1–5 represent the five principles of the learning environment described above.

Corroborating this positive effect is evidence that Russet students do well upon their transition from school to university. Research revealed that students from Russet High School at a major Victorian university were the fourth most likely cohort to complete successfully subjects undertaken during their first year's studies (Meadley 2004). The School Executive believes that *Mindware* is a contributing factor to this result and is now engaged in comparing the first year results of students before and after the *Mindware* programme. The school is in the early stages of gathering these data but the Executive shares a wider belief that the *Mindware* programme, together with its articulating programmes, contributes to the development of independent and resourceful learners. This development is seen as integral to the successful transition from secondary to tertiary study. Further, the School Executive is convinced that not only does *Mindware* respond to the needs of 'at risk' learners, but it also challenges and extends the academically inclined. The Executive was keen to point out that, while *Mindware* has been running, there has been no dip in the Year 11 or 12 results:

Evaluating the success of Mindware has got nothing to do with ENTER [university entrance] scores. In Mindware we're interested in the way kids connect with the school and with learning. Mindware to us is about how well the kids can think, problem-solve, communicate, network and operate independently and responsibly. We're not trying to be a private school; we want to provide a learning environment where all learners are valued and catered for.

One of the teachers expresses the real effects that *Mindware* has had on the school's boys:

For me the real impact of Mindware is seen in the sorts of conversations I'm having with the boys now as opposed to a few years ago, and the sorts of behaviour we're getting from them in the classroom. They can talk with much more clarity about themselves as learners and are generally more empowered to take responsibility for their learning. Through the Mindware programme we force them to critically reflect on their thinking and get involved in their learning. It's definitely with the boys that our really big gains have been made.

B.3.4 Conclusion

It is fair to say that the *Mindware* programme has evolved. The key to its success is the fact that it is owned and embraced by the people who implement it. As opposed to top-down models of curriculum reform, *Mindware* was conceived and constructed locally. At its simplest, *Mindware* could be viewed as a programme initiative designed as a direct response to local concerns and issues. At another level, the development of the *Mindware* programme can be seen to be underpinned by sound learning and management theory.

Without doubt one of the critical features of *Mindware*'s success has been its unanimous support and advocacy from across the School Executive. Indeed, the School Executive's commitment to providing young people with rich and diverse learning experiences provides the educational foundation for the *Mindware* programme. Although the Executive revealed that they had experienced some pressure to direct resources (notably time) away from programmes such as *Mindware* and back into the competitive academic curriculum, they remain unmoved.

There is no doubt that *Mindware* has brought about major reforms to the school's curriculum structure. Its success has promoted a more integrated and outward-looking approach to learning, one that has underpinned wider changes to courses and teaching across the school. Programmes in Year 8 (*Motiv8*) and Year 10 (*Xtend*) that have developed out of the *Mindware* programme, as well as the growth of VCAL and VET programmes are compelling evidence of a school that is serious about providing for a wide variety of student interests and needs. However, for all its gains and improvements, the journey is far from complete. In their pursuit of a learning environment that is personalised, integrated and purposeful, the staff recognise that programmes such as *Mindware* go only part of the way. The challenge they confront is in substantiating and legitimising the expansion of this framework into further areas of the school curriculum.

There is strong evidence of the interplay between the motivation and 'E'ngagement areas of the MeE framework in this school. The *Mindware* programme and its associated features (mentoring, individual investigation and portfolio) can be seen as motivation in that it is separate and additional to regular curriculum, and targets, though not exclusively, the development of students' social resources. It is a whole-school initiative, capturing many students (including those the schools sees as 'at risk') and, for these students, illustrates the notion that 'school is for me'. Crucial to this are two key features of the *Mindware* programme:

- the degree of student choice and, hence
- students' sense of 'ownership'.

The degree of student choice seems to be fundamental to the students' commitment to schooling as it allows them to feel that they 'own' some part of the curriculum.

The school and classroom factors that influence 'E'ngagement include: student management; shared control; cooperation between teachers and students; and the

promotion of extracurricular activities. All of these are strongly present at Russet High School.

The classroom task characteristics that promote 'e'ngagement include: authenticity; ownership; co-operation; and fun. The culture of choice and the emphasis on cooperation at Russet High School not only meets these requirements but here results in a commitment from the boys to the classroom.

Ownership and negotiation, if genuine, shift the discourses of power in a school. Jake's story shows that, to a large degree, students can negotiate their own programmes. This gives them a sense of some ownership of the curriculum and, in turn, means that the following questions have somewhat different answers at Russet High School than they might have elsewhere:

- What counts as 'knowledge' and who has access to really useful knowledge?
- Who has 'ability'?
- Who controls the teaching space?
- Who is valued as an individual and a student?
- Whose voice is given credence within that space?

Students are given some space to negotiate their own curriculum, including alternatives to the classroom. Students' personal interests are validated as 'school knowledge'. Student voices are given credence and students share control of their own school lives.

B.4 Olive High School

B.4.1 Background characteristics

When you effect change in a family ... when you get a kid that says, 'I want to go to school, come on, let's go to school' ... when you effect family change and make family life easier, you're on a winner.

(Olive High School Principal)

Olive is a rural Queensland township of about 800 within a shire of approximately 5000 people. Olive and its surrounding small townships are in the heart of a rural community which is experiencing unemployment on unprecedented levels, as the major agricultural industry (the growing and processing of sugar cane) is adversely affected by globalised market shifts in supply and demand. Coal mining, on the other hand, is booming as new fields are opened up and improved extraction techniques force older fields to yield more coal. Thus as agricultural employment opportunities dwindle and those in the mines and related industries expand, there is a migration of skilled and unskilled labour to the mine sites. As the Principal says:

This community is really doing it tough; there's no future in jobs on the farm ... Dad's at the mines ... part-time Dads ... it affects the community deeply.

Yet the demand for skilled labour cannot be met and companies are proactively supporting community initiatives to increase the number of young people who will take up apprenticeships in the trades required by the industry.

In 2005, 630 students were enrolled at Olive High School. Every day, the school receives 15 busloads of students from surrounding areas. In the middle school years, some boys are at risk of becoming disengaged from school. This risk becomes apparent as early as Years 4 and 5 in primary school. At her previous school, one of the Olive High School Deputy Principals started a *little project that dealt with just motorbikes*, for boys in the middle years of schooling. When this Deputy Principal came to Olive, she saw a similar need for boys who were underachieving in the classroom and/or had attitudinal difficulties with the school environment.

The need is obvious that boys, a lot of kids, not just boys, disengage early – much earlier than high school and you’ve got to have something that will interest them ... and when you’re living in a community like this – kids come from farms and things – they’re always tinkering with bits and pieces off the farm.

A knowledge and understanding of the home environments and interests of the students led her to the conclusion that machinery was a potential common interest link.

B.4.2 Strategies for improved academic and social outcomes for boys

In 2003, Olive High School, two feeder primary schools, the shire council, the Olive TAFE college, local businesses and companies operating in mining and its related supply industries formed a partnership. Their purpose was to develop a *Small Motors* programme in which selected boys in Years 6 and 7 of primary school and Years 8 and 9 of high school would be invited to participate. Academically, these boys were identified by teachers as underachieving and, due to limited local resources for such children, were in danger of ‘falling through the cracks’. Socially, they had already developed or were considered to be at risk of developing a poor self-image and lack of confidence. They were easily labelled and being targeted by their peers. Poor literacy skills were considered to be at the heart of this lack of resilience, and literacy therefore became a central feature of the developing programme.

Small Motors programme

The *Small Motors* programme has evolved into the *Kickstart to Literacy* programme targeting boys in Years 6, 7, 8 and 9, who are aged from 10 to 15 years. The level of focus is with the individual and is currently determined by:

- the number of teachers and mentors available
- the amount and nature of small motors, tools and associated supplies available
- the number of boys (6–8) per group per 90-minute workshop session.

The programme is based around students learning to disassemble small engines, establish faults, repair them and reassemble the parts. In the process, the boys write

about their jobs, read manuals, order parts and perform calculations, as well as other language, literacy and numeracy activities.

Initially, the Australian Government funded the programme as a *BELS* initiative. From 2003, when 18 students were enrolled, the programme has developed to accommodate 44 students in 2004 and anticipates 80+ students in 2005. Two years on, the aim is for the programme to be self-sustaining, inclusive of both girls and boys, and embedded in the curriculum. Funding and products-in-kind are secured from businesses in the service industries based around the nearest big coastal town, together with support from local mining companies and related suppliers of goods and services.

The original *Small Motors* programme developed into the current programme through a five-phase process of conception, orientation, implementation, celebration, evaluation and expansion.

Conception

Personnel from Olive State Schools Cluster met to discuss project viability and a commitment from participating schools (three in 2003; nine in 2004; 14 in 2005) was obtained. Once funding was received, a reference group comprising representatives from schools, parents and industries with the state government member as patron was established and suitable teaching staff approached. Transport was organised among parents to get the boys from their primary school/s to Olive High School or into the big town or to the TAFE college.

Orientation

In the setting-up of the programme, motors were acquired (for example, disabled small-engined machinery such as motor mowers, water pumps, motorcycles and whipper snippers), resources such as Pit Crew Workbooks, Personalised CDRoms and spelling lists developed and tools purchased. Publicity was sought through newspaper, TV and radio and partnerships then developed between the schools, TAFE, a large mining company and the Olive Shire Council.

Implementation

Under instruction from a skilled supervisor, student groups had to identify the problem with the motor, repair the necessary parts, reassemble and service the machinery. TAFE lecturers at school provided instruction on 2- and 4-stroke motors and, on set days, a full day of on-site instruction at the big town campus of TAFE. Following practical lessons at the high school, the boys received literacy support in their school to compile 'job folios' that were then burned to personalised CDs. A showcase of students' work from the participating state schools was presented to district office staff, principals and parents. At this stage the value of the *Small Motors* programme in stimulating student interest in reading and writing first became apparent. The *Kickstart to Literacy* programme was born.

Celebrations

Following the initial success of their projects, the boys participated in production of a magazine and video and conducted their own graduation ceremony. A large mining company sponsored a trip to one of the mines for all boys and staff to visit the workshop and see the 'big toys/motors'.

Evaluation and expansion

Tracking of individual progress continues via reading comprehension as measured by the Test of Reading Comprehension (TORC-3); attendance patterns; and behaviour and attitudes (for example, the number of blue/pink slips handed out). Other schools in the shire are involved and there is a plan to expand the TAFE partnership in order to provide more competencies for the original group of boys, who are now in Year 10. A new partnership is being forged with an energy company and there is planned expansion of the partnership with a large mining company to include a girls' workshop.

Kickstart to Literacy – the adventure

The boys have one session per week out 'in the humpy', which is a lean-to at the back of the Olive High School Manual Arts classrooms. Here they work on real motors, real problems and real tools with a teacher and sometimes a mentor, such as one of the boys' grandfather. While the research team was at the school they observed:

On a steamy March morning, a high school Deputy Principal drove his 1980 Holden Commodore VC car under a gum tree just outside the humpy. Four boys gathered around, peering under the bonnet and checking out the compliance plates as the teacher conferred with the Deputy on what could/could not be done with his proud purchase which gets driven to work every day. Gentle questioning from the teacher led the boys through an oral checklist as they touched, probed, wiped and prodded parts of the engine, steering wheel, lights and tires. Gradually they were directed to write down each part or function that would need repairing. Through oral questions, answers and explanations the lesson proceeded until the checklist items had been covered and each boy had a list of 'things to be done with Sir's car'.

The boys use their notes from the workshop session to fill in their 'Pit Crew Shakedown' page from the Pit Crew Workbook. Headings include:

- Describe the job your team worked on today
- What did you do?
- Tools I used today
- What new things happened in the workshop today?
- Something I would like to do next time

Back at their own school with a learning support teacher (or other designated teacher such as a teacher/librarian) the boys use their notes to write paragraphs analysing the work and adventures of that day and undertake planning for the future session/s. The Pit Crew Workbook also includes an eight-week list of spelling words that come from the world of small motors, for example, 'cable', 'socket', 'gudgeon', 'exhaust'. The boys have to learn six words each week and they can keep track of their own scores by plotting them on to a graph which is positioned on a facing page. In addition, each job has its own 'job card'. Over time the 'job card' has evolved into the Pit Crew Workbooks for each job.

B.4.3 Evidence that the strategies are improving academic and social outcomes for boys

Evidence for improvement comes from various sources:

- students' and parents' perceptions of positive behavioural and learning outcomes
- teachers' perceptions
- measurements of reading and spelling improvements
- behaviour management data from participating schools.

The evidence overwhelmingly suggests that teachers treated the boys as successful learners with a belief that they could achieve good results in a programme which foregrounds not only their own interests and aptitudes, but also the skills, knowledge and abilities necessary to work as part of a team to get a job done. Interviews with some of the boys, parents, teachers, programme coordinators and school administrators have provided insights into the operations of the programme in 2005. Documentary data from reports, memoranda, workbooks, graduation booklets, student profiles, pamphlets and brochures confirm the changes in the boys' self-confidence, sense of responsibility, enthusiasm for learning and language knowledge and use.

Thirty students (29 boys and 1 girl) provided their views on the literacy programme in a document, complete with individual photographs, prepared for the state government's 2004 Showcase Awards for Excellence in Schools. The extract below illustrates one boy's perceived improvement which has been verified through an interview in 2005:

This programme has helped me in a way that I can now understand instructions more clearly. If I get an assignment to do with school work, I can now do it. I can read and spell a lot better since I have done this programme. Some of the motors I have fixed are motorbikes, mowers, whipper snippers, pumps and a lot more. I feel excited when the motor I have been working on is going, that I have accomplished what I have done to repair the motor.

One mother reported noticeable changes in her son's behaviour after he joined the programme in 2004 when he was in Year 7. He began doing his homework voluntarily and saying things like, 'I need to use better words', while also enquiring about jobs and careers on the Internet. She reports that:

Surprisingly in 2005, following the second Lighthouse session at Olive High, he informed me that he did not wish to continue, as he was 'missing out on too many good things' (He had been taken out of woodwork, Japanese and P.E.). When offered an alternative timeslot (where he would miss core subjects) he replied, 'No, I can't get behind in those things. I don't want to miss homework'. As a parent I am extremely pleased with his transition to high school. He is positive and enthusiastic and is getting a lot out of his schooling.

Continued enrolment in the programme was dependent upon 'good' behaviour. Table B.4 records the data comparing the number of 'behaviour issues' reported at each of

two primary schools and Olive High School, before and after the literacy programme for the combined group of students attending each school in the 2003 intake.

Table B.4: Behaviour issues on a per school basis pre- and post-literacy programme (2003)

School	Pre-literacy programme	Post-literacy programme
Olive Primary School	16	3
Aqua Primary School	30	15
Olive High School	18	7
TOTAL	64	25

At Olive High School, records are issued for minor classroom and playground infringements. Referrals are issued for more serious behaviour. Table B.5 illustrates the records of five boys attending Olive High School pre-, during and post-programme participation.

Table B.5: Olive High School records and referrals for five students (2003)

Student	Pre-literacy programme	During literacy programme	Post-literacy programme
Student 1	9	6	1
Student 2	4	2	2
Student 3	4	1	2
Student 4	0	1	2
Student 5	1	1	0
TOTAL	18	11	7

At one of the primary schools (Aqua), behaviour cards are issued for minor infringements in the playground and in the classroom. Table B.6 illustrates the change in the number of behaviour cards issued to each of the boys from that school in the inaugural 2003 cohort.

Table B.6: Aqua Primary School – behaviour cards (2003)

Student	Pre-literacy programme	Post-literacy programme
Student 1	7	6
Student 2	10	1
Student 3	2	2
Student 4	0	1
Student 5	2	0
Student 6	9	5
TOTAL	30	15

Table B.7 sets out the data for the participating students from Olive Primary School for the same period in 2003.

Table B.7: Olive Primary School – behaviour cards (2003)

Student	Pre-literacy programme	Post-literacy programme
Student 1	0	0
Student 2	0	0
Student 3	3	0
Student 4	2	0
Student 5	6	2
Student 6	5	1
TOTAL	16	3

In sum, these data on improved behaviour would suggest that the boys were more engaged in their learning and more satisfied to be at school. Involvement in the programme acts as a significant incentive towards a more positive interaction with the school environment. The issues of low self-esteem and lack of confidence identified in this initial target group are being addressed successfully.

Along with promising social outcomes, there have been significant gains in academic outcomes, particularly in the area of literacy. Students were tested before the project in 2003 and again in March 2004 using the Test of Reading Comprehension (TORC-3). Table B.8 demonstrates an improvement in 11 of 14 students' reading abilities as defined by the test.

Table B.8: TORC-3 scores 2003–04 comparison of 14 students

Student	2003 Grade on TORC-3	2004 Grade on TORC-3
A	1	2
B	1	2
C	4	2
D	5	5
E	4	5
F	2	6
G	5	7
H	2	4
I	2	5
J	2	3
K	2	3
L	2	4
M	5	7
N	6	6

Six students from Olive State Primary School and 6 students from Aqua Primary School were each given 80 words associated with the 'small motors' theme. They were tested at different intervals by teachers from each school. The results for Olive Primary School are presented in Table B.9(a) and indicate the number of words spelt 'correctly'. (Some of the students from Table B.8 are also represented in Tables B.9(a) and (b). For this reason, their corresponding alphabet letter allocation has been continued.) The results for Aqua Primary School are presented in Table B.9(b).

Table B.9(a): Spelling scores out of 80 words presented – Olive Primary School

Student	21/7/03	15/8/03	8/9/03	17/10/03	27/10/03
F	8	24	38	43	46
E	23	45	51	54	55
O	28	52	57	60	61
P	30	54	58	61	63
Q	46	65	68	68	69
H	11	39	43	53	58

Table B.9(b) Spelling scores out of 80 words presented – Aqua Primary School

Student	31/7/03	5/9/03
A	7	13
C	46	52
I	41	49
D	41	56
B	30	47
S	24	29

Olive High School has submitted an application for a 2005 Teaching Showcase Award, sponsored by the state government, and has put together a summary of the evidence, shown in Table B.10, that the *Kickstart to Literacy* programme has been successful.

The teachers believe that the factors that have led to the observed improvement in academic and social outcomes include:

- the individualised nature of the programme
- the entry selection processes which make the boys feel special being selected as a ‘[literacy programme] boy’
- corporate branding of the programme (including t-shirts with a logo for the three key teachers, colour-themed documents reflecting key icons such as a lighthouse, motorbike, starting flags, and so on)
- parental support and encouragement of boys when they fix or maintain machinery around the home or farm
- the integrated nature of the learning with the boys’ shared keen interest in machinery
- male teachers volunteering to work with these boys in the workshop.

Table B.10: Evidence of success of the Kickstart to Literacy programme

	2003	2004	2005
Commencement & completion rates of programme	100%	98% (hospitalisation prevented attendance)	Not yet available
100% success at TAFE 'modules'	2 'modules' (Advanced Group)	4 new 'modules' for Advanced Group; 4 for Intermediate group and 2 for Introductory Group	Negotiations begun to embed Certificate I and Certificate II in Automotive in the high school's VET offerings for the Advanced Group
Students old enough to do work experience	1	5	8 (so far)
TORC-3 testing	See 2003 data for improvement		Not yet available
Improvement in spelling	See spelling scores above		
Behaviour improvement	60% reduction in behaviour occurrences	Aqua School (primary) 100% Olive School (primary) 98% [1 issue with one student]	Not yet available
Enrolment	18	44	80+
Schools involved	3	9	14

The programme has offered advantages to each of the groups involved:

- the students themselves
- their parents
- community members from business, industry and politics
- three programme-organising teachers
- teachers of the 'small motors' sessions
- mentors working with the boys during workshop sessions
- teachers assisting with the after-workshop literacy activities in the workbooks
- principals of all schools involved.

A selection of their impressions of what they have gained is given below.

Students

Responses to the improvements in the boys' behaviour and learning abilities have been positive. Students are proud of their achievements, as are their parents. Now in Year 10 and in his third year in the programme, one of the boys reflects:

I've had four work experiences, I've had the offer of maybe a job ... and I've made new connections in the businesses ... people know me now so ... and I actually want to come to school now so it has helped me a lot actually.

Parents

As well as being proud of their sons, parents are also relieved to think that their child may succeed in his schooling and learn from the work experience opportunities afforded him. They comment on the changes in their sons' attitudes towards work and family life around the home as well as on their willingness to go to school, especially on programme days.

There is an additional positive outcome associated with this programme. The on-site interview and document data confirm that the families of these boys have benefited from their participation in the programme: *... without this programme, we'd be very worried parents ... it's not just a school thing, it's a home thing.*

Teachers

Currently, there are three teachers directly involved in the workshop sessions: two manual arts teachers (one of whom is a qualified motor mechanic) and one science teacher (with an interest in machinery and motors). There are also mentors and TAFE teachers for specific aspects of the programme. The teachers shared some of the advantages for them of a programme such as this:

... Small classes

... It's nice I'm only dealing with six to eight kids instead of 24 kids in a workshop.

... calculated as part of teaching workload

... I've got three periods out of my timetable.

Business and industry

Crucial to the programme's success has been the establishment and maintenance of professional networks involving all members of the local community, together with specific partnerships forged between particular businesses and industries and the schools. Evidence of industry commitment and support is confirmed in a letter from a local mining company construction manager:

[The company] is backing up its Partnership in the Olive Cluster 'Small Motors' Programme with monetary assistance in the provision of much needed resources. \$18 500 from the 2005 Charity Coal Dash has been given by local and national businesses in addition to the \$15 000 committed by [the company] over the next three years.

Thanks to these partnerships and their financial support, and donations from a special fundraiser at a recent rugby league match, construction of a big new shed to replace the lean-to humpy is now under way. In late 2004, two large mining companies pledged financial support for a dedicated teacher for the students. The outcome of this is a three-year agreement whereby these two mining companies will jointly pay a teacher's wage for two days per week.

B.4.4 Conclusion

The *Small Motors* programme which became the *Kickstart to Literacy* programme targets a group of disengaged boys and encourages them to become involved in a

project that has valuable academic outcomes. It has demonstrably increased boys' motivation and engagement in learning and improved their academic outcomes in literacy. The programme has shown its worth to students, teachers, parents and the wider community. Such a focus is an excellent example of a school targeting the motivation area of the MeE framework. It seeks to improve the feelings boys have about their school, while developing adaptive behaviours.

Principals' support for the programme has been identified as paramount for its continued success, yet the principals themselves acknowledged that they cannot afford to have key staff 'off-line' for substantial periods of time. Where funding has allowed, teacher release days have been paid to put substitute teachers in their jobs. However, both teachers and principals have identified this as a less-than-ideal situation. One teacher commented that:

What's a concern is that two of the three key schools involved are losing Principals ... we cannot continue to look after the [District] unless [the State Education Department] supports it ... because we've got schools, small schools, they tend to burn out really quickly ... 9 out of 14 new Principals.

Both teachers and principals foresee the programme becoming embedded in the curriculum offerings of the respective schools, and tagged as a cluster programme for Years 6 to 12 for the district schools.

There are plans to introduce a Certificate I and II in Automotive Servicing within Olive High School's curriculum-offering structure for Years 11 and 12 in 2006. This will enable boys and girls to apply for school-based apprenticeships in this area of work that is directly related to the literacy programme. Of course, there are other school-based apprenticeships and traineeships available, but this certificate I and II will be the first pathway to originate directly from the literacy programme. The manager of a local primary producers' cooperative supports the notions of rural traineeships, although these have not yet been explored as an outcome of the programme. He notes that:

Our [...] industry is machinery orientated and relies heavily on trades people in areas such as boilermaking, mechanical and diesel fitting etc. In order to secure our industry's future, we need to give the next generation of farmers a career path and this can be done by the promotion of rural traineeships.

Although there are some problems to overcome, key staff at Olive High School are adamant that the programme is sustainable, for the following reasons:

- \$45 000 has been committed by local industry over the next three years to employ a teacher one day a week.
- One company is looking at putting in paid male mentors as well. We are presently discussing how this will work.
- Part-time teacher (equivalent to one day a week) allocated for three years by district office project is to be embedded in the high school curriculum next year.
- Manual arts staff are timetabled on.

- We are seeking federal funding for our own workshop so it will operate independently for however many days we can staff it.
- The community is behind the project and will not let it fail.
- As more sponsors come on board, we have more money, male mentors etc.
- The programme is highly valued by our community, parents, students, sponsors from local industry and retail businesses, other schools and the department.
- Inclusivity has occurred as we strive to ensure that at-risk students have the opportunity to participate. Students with special needs are successfully involved in the programme. Three girls have been involved in the project, with one now in her second year. We are working towards a whole group of girls from the shire being taught roadside maintenance.

These teachers also believe that their programme is transferable. One school in the region is being supported by Olive High School staff as they set up a project based on bicycles and small motors. Two primary schools in the shire are branching out into carpentry and agriculture projects, using this literacy programme model. The greatest barrier to transferability noted by the teachers at Olive High School is finding the time to assist all of the schools that wish to develop similar programmes.

A transferable principle from this programme is the notion of giving back to the community. The Olive Shire Council has a century-old, single-cylinder Lister machine that was used to pump water from the river and council members would like it to be restored and placed in the local museum. The original group of boys from the 2003 intake has progressed through their training on 2- and 4-stroke motors and diesel engines and will this year begin the restoration project for the Shire Council.

However, two issues related to transferability are the size of the group and the need for a specially equipped workshop. First, the difficulty of transferring the programme to a whole-class group environment was noted. Workshop teachers commented:

Not with a normal size class – too big – if the room was dedicated, set up to do it – like TAFE standard is 14 ... you've got 24 kids in here, you've got 12 old 4-stroke lawn mower engines out at the end of the class you've then got to go through and check – did all the valves come back, are there any bolts missing out of the crank case, all these sorts of things.

The size of the group is also directly related to safety, especially with a large group of students, one teacher and machinery: *With a smaller class you can keep your eye whatever students are doing.*

The size of the group also determines the number of students who would be interested in the focus of the programme, in this instance, small engines:

Because when we're doing it with the whole group, not everyone in that 24 is interested in engines whereas here we try to find the ones who are interested and let them have a go at it.

Second, as Olive High School has recently discovered, there is a need for a specially equipped workshop. This may be a problem for schools with less well-developed contacts with local industry.

The staff at Olive High School believe that some of these issues could be dealt with if TAFE was more flexible in responding to school-based initiatives such as *Kickstart to Literacy*. One way to increase this flexibility would be to reduce the age at which students are able to enrol in TAFE courses. Another would be to make funds currently available to TAFE also accessible by schools conducting work-related programmes.

In terms of the relationship between motivation and engagement and improved social and academic outcomes, we begin with an example as identified in a letter of support for the school from a parent:

*Since starting in grade 6 with this project my son has changed dramatically. He now has **confidence in himself** and is **willing to attempt tasks which before he wouldn't do**.*

*He **reads every night**, only joke books but hey, it's reading.*

I now no longer have him trying to get out of school, he's ready early and eager to go.

He is repairing bikes and our mower at home and every weekend has a new idea he can try.

*He is **confident enough to go to work with his brothers** where he **changes filters**, greases vehicles and does general maintenance work much to the surprise of the other staff who have all commented on his abilities.*

Significant messages relevant to the MeE framework are highlighted in bold and, as can be seen, the messages realised at a conscious and practical level from the Student Motivation and Engagement Wheel (Martin 2003) include:

Motivation

- Self-efficacy (self-confidence; willingness to attempt tasks; confident enough to go to work with his brothers)
- Mastery orientation (reads every night; repairing bikes and our mower at home; every weekend has a new idea he can try; changes filters, greases vehicles, does general maintenance work)
- Value of schooling (ready early; eager to go; no longer have him trying to get out of school).

'e'ngagement – behaviour, emotion, cognition

- Persistence (reads every night)
- Planning (ready early; every weekend has a new idea)
- Study management (willing to attempt tasks which before he wouldn't do).

'E'ngagement – 'school is for me'

- Self-regulation (no longer have him trying to get out of school).

Overwhelming evidence from the case study suggests that the major positive social outcome is an improvement in the boys' behaviour at school, in the home and in the community. The major positive academic outcomes are in the area of increased abilities and willingness to read and write. The boys themselves identify their willingness and ability to feel comfortable working in a team together with a readiness to take on responsibility for jobs around the house or farm.

Motivation

Initially, the boys were motivated to learn because of the explicit connection between their interests and lived experiences in their social worlds and the tasks they were performing in this programme. Experiencing known and comfortable senses of engine and machinery touch, smell, sound and sight contributed to positive feelings of belonging and achievement that came from the workshop environment's grease, dirt, sweat, actions, language and interpersonal relationships between adolescents and adults. It was a world in which the words made sense and, in turn, made the boys feel sensible.

For these boys, relationships with adults are as fragile as their relationships with each other. The fact that the programme is staffed by volunteer teachers minimises the possibility of fractured interpersonal relationships. The grouping of boys into particular workshop sessions has also been carefully managed to optimise positive learning relationships within the group. Yet, for the future sustainability of such programmes, teachers' abilities to motivate themselves and, in turn, their students will remain an ongoing professional learning issue to be addressed.

'e'ngagement

Evidence of effective teaching practices that facilitate 'e'ngagement of the boys' cognitive, behavioural and emotional responses to the learning activities of this programme has emerged from the explicit use of 'authentic' language (and numeracy) in real-life and life-like contexts. Some of the successful teaching practices include oral questioning, active listening, conversations with adults and peers, scaffolded note-taking and spelling, reading and writing activities in appropriate genres.

During the interviews, one of the boys commented favourably on his improved spelling and writing abilities and was proud of the way he could transfer the learning from the programme to the classroom:

I'm getting better with my writing and spelling ... the teacher can and I can [see] – I feel I can spell way better like when I'm here and in the classroom.

For the two units of competency undertaken at the TAFE college in 2003, all 18 boys were successful in achieving a 'competent' grade for each unit.

Moreover, the 'classroom' as both a physical and conceptual entity no longer exists in isolation because it has been replaced with a notion of 'learning sites'. Learning sites include mining camps, industry workshops (for example, motor mechanics' garages, diesel fitters and so on), a lean-to at the back of the Manual arts workshop, the backyard and/or shed at home, the library and computer rooms at school. These

authentic learning sites have contributed to the students' ownership of their learning and willingness to accept responsibility for this learning. Through the activities undertaken in these learning sites, students have been motivated to learn and work with each other, their mentors and teachers.

There is an implied, anecdotal relationship between improvement in motivation and engagement in academic outcomes at school:

A comment from a Year 7 teacher was the difference it made in their report cards, where they were getting Cs and Ds before, they were [now] actually getting Cs and Bs ... especially in behaviour, attitude and responsibility.

'E'ngagement

For these students, 'school is for me' because it enables them to work with the engines and machinery they like and in environments in which they feel comfortable. Consistent application of consequences for particular behaviours has meant that these students value the learning the school provides through this programme so they are not going to engage in behaviours that would put their participation in those activities at risk.

However, there is a tension in the future prospects for the 'E'ngagement that has already been identified in this case study. To what extent can schools provide learning experiences for every boy so that he believes 'school is for me'? Perhaps one possible answer to this question is that schools can only provide as many learning experiences as parents, community organisations, local businesses, training providers and industries are prepared to support. In this case, it was not the education system of which Olive High School is a part that directly provided these learning experiences. Rather, the education system valued the school's initiatives and, at a national level, provided funding that enabled the school to do what it wanted to do for some of its students who had been identified as at risk of disengaging from the learning that the school provided.

B.5 Cerise High School

B.5.1 Background characteristics

Cerise High School is located in a remote town in a mining district of Western Australia. The town was established in the mid-1960s to service the needs of the nearby operations of a substantial mining company. Apart from the contractors and light industry servicing the needs of the mining industry, the only other significant economic activity is tourism. Between the town and the closest large settlement are two Indigenous communities that are served by the high school.

After a period of decline, the town is now experiencing a rapid rise in population following the expansion of mining operations. The 2001 Census showed that about 80% of residents were Australian-born and the median weekly family income ranged

from \$1500–\$2000. Although there is a constant turnover of residents because of the itinerant nature of mine workers, there is a steady population of approximately 4000, of whom about 200 are Indigenous Australians. Approximately another 60 Indigenous people live in the nearby communities, both of which are outside the town boundaries.

When Cerise High School was established in 1971, it met the needs of students from Years 6 to 10. On becoming a senior high school in 1995, it catered for students from Years 8 to 12. At present 240 students attend the school of whom 48 (20%) are Indigenous Australians. There is a high student turnover, reflecting the itinerant nature of the town's inhabitants. In addition, it is not easy to staff a school in this remote location and the high staff turnover means that there is often a large proportion of new graduate teachers. In 2005 there are seven new graduates on the staff, and many of the other teachers have only a few years' teaching experience. Nonetheless, the school places strong emphasis on developing quality teaching and is dedicated to the professional development of its staff.

Due to its remoteness and the transient nature of its population, Cerise has specific problems that need to be addressed, particularly in the area of boys' education. Two years ago the Principal's examination of the school statistics, including data on attendance and the WA Literacy and Numeracy Assessment (WALNA) found that boys were performing less well than girls in a range of areas. Staff identified the issues as:

- *school attendance and truancy*: for many boys, particularly Indigenous boys, attendance was irregular and truancy was frequent.
- *retention rates*: a sizeable number of boys were dropping out of school early and their interest in upper secondary courses was at a low level.
- *purpose and motivation*: the benefits of attending school, engaging in the learning tasks and achieving academic success were not readily recognised by a significant number of boys.
- *low literacy levels*: a large proportion of the boys at the school displayed poor literacy skills, which was causing problems with lesson engagement, general classroom behaviour and the boys' ability to carry out the learning tasks in other subjects.
- *disinterest/boredom*: lack of interest toward subject matter and the learning tasks was resulting in disengagement and misbehaviour.
- *peer pressure*: this was strong among the boys and it was therefore hard for the school to make any headway with individual boys. It necessitated working with the group rather than the individual.
- *relationships*: classroom working relationships between Indigenous and non-Indigenous students were poor.

In response to these issues in boys' motivation, and in partnership with six neighbouring remote schools that had identified similar problems, Cerise High School applied for funding through the *BELS* project. Two *BELS* Project Coordinators were appointed, and programmes were developed that targeted the improvement of boys' social and academic outcomes.

One of the *BELS* Coordinators has identified Cerise High School as a school that had valuable insights to offer into ways in which the needs of boys in remote schools

could be addressed. The school is developing a reputation among the local community as a place to send boys. Previously the top students from local primary schools were sent to boarding schools in the city to complete their education, but Cerise High School is now so well regarded that many are choosing to remain to study. Last year the Principal was nominated as 'Principal of the Year' for his work in improving learning at the school. Although *BELS*-funded changes are only being implemented in 2005, the efforts to tackle the difficult issues in this remote region have begun to effect change already.

B.5.2 Strategies for improved academic and social outcomes for boys

The school recognised and set out to attend to problems in their boys' education, specifically in relation to motivation and engagement. The staff explored methods and utilised different processes and techniques to address these problems and improve academic and social outcomes for boys. In the following discussion, 'strategies' refers to all of those modifications to curriculum and pedagogy which the staff have put in place to address concerns about boys' education. Thus, it refers to both straightforward in-class modifications to teaching and whole-school programmes.

Classroom teachers have modified their lessons and their teaching and management techniques so as to promote boys' success with, and interest in, their classes. Such modifications have included:

- the use of structured group work where student groupings are carefully chosen and group members allocated specific responsibilities
- lessons involving a series of short learning tasks, with each task having an explicitly identified conclusion
- the design of learning tasks where long writing requirements are limited and alternative modes for expressing learning, such as diagrams, are offered
- the modification of the reading texts used in lessons: information texts are broken down into shorter passages and are supported by the use of headings, pictures and diagrams
- the provision of a 'learning task framework' that clearly delineates the steps of a task, the specific requirements for achieving each step, a set time for completion and the required length
- a greater use of manipulative, practical tasks where appropriate
- the use of a 'behaviour card', which outlines for students a list of required classroom behaviours, and which provides a visual prompt for adherence
- the setting of topics of interest to boys
- the use of short, in-class games to break up lessons requiring high levels of cognition and concentration.

In terms described by the MeE framework, these classroom modifications help to develop 'e'ngagement by sending messages to students that they are able to access the knowledge that schooling provides. The Principal has acted in other ways to tackle issues in boys' motivation in his school. *BELS* funding has facilitated different processes of staff recruitment. Following the recent identification of boys' needs, the school has begun to recruit male staff and has gone from zero male staff members to 30% males on staff. To cater for the needs of students and teachers the school

employs support staff, including an Aboriginal and Islander Education Officer (IEO), an educational psychologist, a nurse and two teacher's aides. Funding from *BELS* has also allowed the school to employ two coordinators between the six neighbouring remote schools and these coordinators have begun to assemble programmes that will engage boys. One coordinator is an 'inclusive learning coordinator' who has specialist training in special needs education and is employed by the school for three days per week to manage the *Intensive Literacy Immersion* programme (see below). There has also been an emphasis on professional development, which is being organised by the second *BELS* Coordinator. Her role is to assist staff with the application of teaching strategies and behaviour management techniques so as to better engage and motivate boys with the tasks of the classroom and with school in general. This year her initiatives have included a visit by a prominent researcher in the area of boys' education, in response to which the staff has begun an action research project to improve professional learning in the area of literacy.

In an effort to address educational and social issues for boys at Cerise High School, the school has instigated three programmes that target particular areas of concern. These are the *Pathways* programme, *Intensive Literacy Immersion* programme for lower secondary students and the *Walking in Two Worlds* programme for Indigenous students. These programmes are designed for both boys and girls; however, there is evidence that they have led to significant improvements in addressing the specific issues for the school's boys.

Pathways programme

The *Pathways* programme aims to create increased recognition of the benefits of schooling. It is a training programme that involves a partnership between Cerise High School, the mine, Apprenticeships WA and the local TAFE college. The programme is directed at those students in Years 10, 11 and 12 who are primarily interested in training in a mining-related trade and gives them the opportunity to consider going on to further education. Students involved in the programme attend the TAFE college one day a week and participate in visits to mining workplaces where they meet tradespeople and apprentices. This allows students to develop an understanding of the jobs that are available. They also do mock interviews with real employers and work with mentors from the mining company, who help the students to improve their presentation and interview skills.

The popularity of the *Pathways* programme is used as an incentive to encourage students to attend school. Students need to have a 95% attendance at school to be eligible for the programme and are monitored by school, TAFE and workplace staff on their attendance, punctuality, initiative, safety performance and attitude. Students and parents complete evaluation forms at the end of the programme.

Although the programme is still in its early stages, there is some evidence to suggest that boys involved in it have become more motivated to attend school and are now more engaged in the process of learning. There was a significant upward trend in school attendance of Year 11 boys who participated in the programme. By the end of 2004, their overall attendance level had increased by 37%. The school's own statistical overview revealed a minor decrease in negative behaviour but a significant improvement in attitude towards the school and authority.

The boys who were interviewed expressed a change in their motivation towards school and towards complying with the rules of the school. A comment from one boy in Year 11 summed up the opinion of many: *I wouldn't have come back after Year 10 if I didn't get into the Pathways programme*. Both his father and his teacher agreed that the boy's motivation to attend school had increased significantly since participating in the programme. Another boy's parents said that their son had previously had a very negative attitude towards school, which had improved markedly since he had started on the *Pathways* programme. This student also attracted positive comments from his teachers, who said: *He seems more interested in coming to class which is a change from last year and he shows a lot more leadership and focus than he used to*.

The students felt that involvement in the *Pathways* programme provided them with purpose. One parent reported that the programme was one of the reasons that the family had moved to the town. Teachers' comments on particular students are representative of a general trend, for example, *His attendance used to be terrible, but he hasn't missed a day this term*. Another Year 11 boy described his involvement with the programme as: *the only way I am going to get an apprenticeship* and said that *my parents are stoked with my progress this year*.

The teacher coordinating the programme was interviewed about the programme's progress. She stated that, while the programme was still in its early stages, she and other teachers had already noticed improvements in the boys, including:

- improved attitudes and attendance
- students becoming more focused
- students becoming more goal-oriented and showing a greater sense of purpose.

The 'futures' orientation of the programme, through connecting students to productive post-school options, links strongly to 'E'ngagement in the MeE framework. Students who successfully complete the *Pathways* programme are guaranteed an interview with the mining company for the apprenticeship or traineeship of their choice.

Since its inception in 2004, the *Pathways* programme has attracted a high level of interest from students and parents and now has a strong reputation beyond the town community. In fact, the Programme Coordinator has been contacted by a number of other schools because they had heard about the programme and were interested to learn more. The Programme Coordinator indicated that there are more potential students than available places. Additionally, she noted that teachers were feeling more ready to help students on the programme because the students were showing more commitment to school.

Intensive Literacy Immersion programme

The *Intensive Literacy Immersion* programme targets low-level literacy in the school. It is a small-group teaching arrangement which provides intensive, direct instruction in reading, writing and spelling. The programme is designed to increase the literacy standards of Years 8 and 9 students who have been identified as having a 'non-functional' literacy level. The Waddington Test of Reading, which estimates reading

age, is used to measure the literacy levels of all Years 8 and 9 students and those who achieve a raw score that has an interpretation of below 'functional' level are placed in the *Intensive Literacy Immersion* programme. The Waddington Test (Waddington 2000) and GAP Test (McLeod 1980) are also subsequently used to measure the effect of the programme on the students' literacy standards. The IEO teaches in various classes within the programme. Her presence during class time offers valuable support to the Indigenous students who make up about 50% of the immersion classes.

The *Intensive Literacy Immersion* programme began in February 2004 and in its second year of operation. The programme has the following features:

- Placement tests are used so that students are grouped together in classes where their current skill levels in the relevant subject are fairly uniform.
- Written unit objectives list the specific knowledge and skills which the students should gain from instruction.
- Instruction is deliberately and carefully scaffolded so that, as students work to acquire a new skill, they are provided with a high degree of assistance from the teacher. As their mastery develops the teacher's support gradually decreases.
- A lesson begins with teacher-directed work and continues with students working independently while the teacher/s assists individual students. In the reading and spelling classes the independent work is provided through the SRA laboratory programmes (see below), while in the writing classes the computer-based Think.com writing programme provides the students with the opportunity to compose a piece of writing and practise new skills.
- The SRA Reading Mastery and Spelling Mastery laboratories used in the spelling and reading classes are a series of approximately 160 work cards, with each card addressing a specific skill by providing examples and practice exercises. The cards are ordered and students work through them in that order. Students must show mastery in the skill covered in one card before moving on to another card. The SRA placement test is used to determine the students' current level of reading function and at which particular card a student should begin.
- The programme also incorporates teaching strategies and methodology from other commercially produced programmes such as the Applecross Literacy Clinic Package and the McGraw Hill Corrective Reading Programme. Various skills-based literacy computer programmes are also used.

The *BELS* Coordinator who works in the *Intensive Literacy Immersion* programme has the following responsibilities:

- administering the initial Years 8 and 9 assessments
- carrying out the placement tests to determine the student grouping
- grouping students according to like-achievement levels in each of reading, writing and spelling
- ensuring that students are regularly monitored
- running training days for teachers and parent tutors
- designing lesson structures in collaboration with the other teachers
- sourcing new teaching materials and continually refining the programme
- reporting to parents and answering parent queries.

The teaching within the programme is carried out by both teachers and parent tutors. Each teacher works with a small group of about seven students and uses the direct instruction method to teach the children the skills needed to improve their reading, writing and spelling. The parent tutors work with the teachers in the larger groups or in very low-ability classes. An important characteristic of the programme is the availability of teachers or other adults to work one-on-one with students as the need arises.

The *Intensive Literacy Immersion* programme has also led to improvement in boys' writing. While there were no measures to illustrate their writing development, the four teachers working in the programme firmly believe that there has been good progress in writing ability. The Programme Coordinator stated that: *students who were once unable to write a complete sentence were now constructing paragraphs comprising simple, compound and complex sentences.*

Two of the other teachers also expressed their delight in students' ability to write three or four complete sentences. *While their vocabulary is still basic, they will write sentences using a variety of grammatical structures.*

Notwithstanding its relative newness, there are indications that the programme is already having a positive effect on boys' motivation towards learning and engagement in lessons, and their academic progress. Discussions with boys in the programme, their parents and the class teachers indicated that there had been an increase in the boys' level of motivation. The comments that were made suggested that the programme was providing boys with a more positive attitude towards learning to read and write, greater belief in their own ability to learn and a desire to continue to succeed.

All participants in the parent focus group were positive about the *Intensive Literacy Immersion* programme. Two of the parents who had children in the programme explained that they had noticed a shift in their sons' willingness to attend school. Another parent noticed that her son was developing in confidence and was reading the writing on posters and billboards and other environmental texts. In explaining his growing confidence she cited the following incident:

One day Alex got annoyed at me when I started reading out the subtitles of a foreign movie on television. I usually read things out to him but this time he told me he could read it himself.

It appears that greater motivation has resulted in greater participation by the boys. During lesson observations a time sampling method was used where, at regular intervals, the number of boys who were engaged in the lesson was noted and recorded. Following each lesson the average number of attentive boys was expressed as a percentage of the total number of boys in the class. These are shown in Table B.11.

Table B.11: Attentiveness levels

Type of inclusion class	Number of boys in the class	Average percentage of boys engaged in the lesson
Writing lesson 1	10	76%
Writing lesson 2	8	86%
Reading lesson	5	72%

A comparison of the February 2004 and November 2004 Waddington Test results (Table B.12) indicates gains in reading ability by all but one of the boys involved in the school's *Intensive Literacy Immersion* programme. For many of these boys the gains were substantial. For instance, after just nine months in the programme, one student's reading age had improved by almost three years. Moreover, seven of the 15 boys showed reading ages that had improved by one year or more. On the first test less than one-third of the boys were operating at a reading age of above ten years, the age judged to be necessary for functioning at a basic level in society. A further two-thirds had exceeded the 10-year level at the second test.

Table B.12: Reading ages of boys from the Intensive Literacy Immersion programme using the Waddington Test of Reading

Student	February 2004 reading age	November 2004 reading age	Change to reading age
1	9.40	10.60	+ 1 year 2 months
2	8.20	8.80	+ 6 months
3	9.90	10.10	+ 2 months
4	9.40	10.40	+ 1 year
5	10.0	10.80	+ 8 months
6	6.50	7.60	+ 1 year 1 month
7	8.40	9.10	+ 7 months
8	9.60	9.20	-- 4 months
9	8.25	10.40	+ 2 year 1.5 months
10	11.10	11.25	+ 1.5 months
11	11.25	12.00	+ 7.5 months
12	8.25	9.25	+ 1 year
13	9.40	12.00	+ 2 years 6 months
14	8.6	10.2	+ 1 year 6 months
15	10.6	10.8	+ 2 months

The boys interviewed indicated that they were more motivated to behave when they participated in the *Immersion* programme's 'inclusion class' and that they found the activities of these classes interesting. All but one of the students interviewed stated emphatically that he felt that his reading and writing skills had improved. One boy explained: *You have to work on your own and I am getting harder and harder work to do.* Another boy, in talking about his general school behaviour commented: *Sometimes I muck around in school when I am bored but never in the inclusion class because we read and write stories and it gets you thinking.*

He further explained that he had changed his attitude to school because: *I am doing better.* A 12-year-old Indigenous boy for whom English was his second language, named the *Immersion* programme as his favourite school activity. When asked why, he replied:

Because I am better at reading and writing now and I want to go into the army ... At my old School, I didn't like it because everyone was fighting with you. But now I come to School because I want to learn something.

When observed in the *Immersion* programme, he was engaged constructively in computer-based writing tasks for 90% of the time.

Students in the programme appear to feel supported by the school and they are starting to see school as a place which will provide them with the educational resources important for their future lives. In other words, in terms of the MeE framework, they are seeing that 'school is for me'.

Walking in Two Worlds programme

Another programme with which the school is experiencing positive outcomes for boys is the *Walking in Two Worlds* programme. The IEO has worked hard to establish the *Walking in Two Worlds* programme and she is both innovative and proactive in looking for practical solutions to the problems that exist for Indigenous students.

The programme's activities are designed to address issues specific to the educational and social development of Indigenous students throughout the school. In some cases separate activities are arranged for boys and for girls. The activities range from bush camps to practical education sessions on topics such as car maintenance and Indigenous gender and social issues. These activities are additional to the school curriculum and involve 20–30 students at a time. The Indigenous students who take part in the bush camps must choose a non-Indigenous classmate to take with them. Participation in the bush camps is an incentive-based activity which is linked to school attendance.

The school's IEO plays a pivotal role in the success of activities for Indigenous students. In ensuring the appropriate activities and programmes are implemented, she draws upon her knowledge about the Indigenous students; her understanding of their backgrounds, family situations and needs regarding cultural and tribal issues; and her familiarity with their academic progress, school attendance and classroom behaviour. This knowledge enables her to identify students who may benefit from the programmes. She also monitors and keeps records of the students' success and their attendance and behaviour as they participate in the programme. Teachers expressed confidence in the IEO's ability to support Indigenous students in the classroom, and were very willing to use her as a resource person.

The *Walking in Two Worlds* programme aims to provide incentives for Indigenous students to attend school by:

- improving students' social skills and their school attendance rates
- limiting truancy and developing students' self-confidence
- improving cross-cultural relations
- educating Indigenous students about their culture.

The programme involves students spending time learning about traditional Aboriginal culture. The bush camp is a main activity. It is held periodically throughout the year

and teachers from the school and some parents accompany the students on the camp. A local Indigenous elder allows the school to make use of his block of land to conduct the camps. He also provides guidance and shares his expertise about traditional bush skills and tribal knowledge. As each Indigenous student is required to select a non-Indigenous ‘buddy’ to accompany them on the camp, a principal endeavour of this programme is the ‘breaking down of barriers’.

The bush camps also offer the teachers the opportunity to gain a lot of knowledge about previously little-known aspects of Indigenous culture. For example, Aboriginal elders explained that some students could not associate directly with students of the opposite sex, because their traditional ‘skin groupings’ forbade such contact. Some of these new understandings are starting to affect classroom practices, with gender segregation now being trialled for some subjects.

The *Walking in Two Worlds* programme links to many aspects of ‘E’ngagement. It creates a positive school ethos among these Indigenous boys and offers curriculum choices that value their lives and their community’s experiences and a high degree of peer support. The programme also indicates its intention to improve boys’ motivation and their re-engagement with school by offering a separate curriculum opportunity, the Bush Camp, through which boys experience social and practical learning. In this respect, it also activates ‘e’ngagement.

B.5.3 Evidence that the strategies are improving academic and social outcomes for boys

Even at this early stage, there is considerable evidence that the changes being implemented at Cerise High School are resulting in improved attendance, motivation and academic success for boys at the school. Through the development of a vocational pathway relevant to the local context, many boys are being offered an incentive to succeed, and can begin to see school as important to them. There are demonstrated gains in literacy from the *Intensive Literacy Immersion* programme. The efforts to bring the culture of the Indigenous boys into the foreground through the *Walking in Two Worlds* initiative has resulted in greater understanding between community members, teachers and students, both Indigenous and non-Indigenous. All of the programmes have been assessed by students, teachers and parents as increasing boys’ enjoyment of and engagement in lessons. The result is a school that is a desirable place to be.

The *Walking in Two Worlds* programme is such a recent innovation that it is difficult to assess the relationship between the programme and improvements in the boys’ social skills. Nonetheless, there is anecdotal evidence from class teachers and students of the programme’s beneficial effect on Indigenous students’ social development and motivation towards school.

In examining the attendance records of Indigenous boys from February 2004 to April 2005, it was apparent that attendance had significantly improved, with an overall upward trend of 33%. The feeling was that this upturn was influenced by a number of the programme’s activities. These were identified as:

- better relationships between Indigenous and non-Indigenous students

- students remaining at school until the end of the day where previously they would go home after period five. The provision of lunch provided an incentive to stay on and resulted in less lethargy in the afternoons
- greater willingness to work in groups with other students at school. The provision of showers and other hygiene facilities resulted in the students being less self-conscious among others.

The comments of several Indigenous boys and their parents about the activities of the programme reflect a more positive attitude and an understanding of the benefits that have resulted:

My son never used to want to come to school, he was always wagging, but now he knows that if he comes to school, then he can go on a bush camp.

I want to do my work experience at the Aboriginal radio station.

Indigenous kids need to do more with their hands ... stuff like work experience to show off their skills.

Teachers frequently espoused the programme's benefits to the social development of the school's Indigenous boys. They consistently observed that the Indigenous students were more willing to participate in classroom conversations, and both Indigenous and non-Indigenous students were more prepared to work with each other on learning tasks.

The students also talked about these social changes. One Indigenous student said:

I was really shy before I came here, but now I get along with everyone since the camp. It was good getting to know the white kids on the camp too.

Many students interviewed had been on the bush camps and were very enthusiastic. They said that that, although they *had to come to school most of the time to be allowed to go* on the camps, they didn't mind coming to school. One student discussed his wish to be a marine biologist, saying, *I'll have to do well in English and Maths.*

While it is difficult to prove a direct link between motivation and academic progress, the students' improved attendance means that they are spending more time in class. The IEO stated that she believed that Indigenous boys' motivation to attend school had improved over the past couple of years and that there was 'definitely a link' between motivation to attend school and educational outcomes.

Some of the students interviewed had come to Cerise High School from other schools in the region. They commented on the positive atmosphere at Cerise High School, and the good relationships between themselves and non-Indigenous students. Two Indigenous parents stated that their boys were happier to come to school at Cerise High School than they had been at a neighbouring school, although they weren't sure whether the Indigenous programmes were directly responsible for their boys' improved attitudes. Teachers interviewed said that they believed that Cerise High

School was 'doing better' at serving the needs of Indigenous students than they had done in the past.

B.5.4 Conclusion

As a result of the *BELS* initiative, Cerise High School has been able to launch the *Pathways* and *Intensive Literacy Immersion* programmes and to employ extra staff for the further development of the *Intensive Literacy Immersion* programme. Students are making genuine gains in literacy, and improved outcomes are expected in the next round of WALNA tests. However, the programme relies on ongoing intensive support for small-group work, and that requires sustained funding. The high staff turnover, the relative lack of teaching experience in remote schools such as Cerise High School, the transient nature of the community and limited family support for schooling make it difficult to envisage how such programmes can succeed without the provision of specialised staff. Whatever the long-term benefits, it is certainly the case that staff are currently gaining valuable professional learning, and students are experiencing improved engagement in reading and writing.

The *Walking in Two Worlds* programme has proven to be successful in improving social outcomes at Cerise High School and there is some evidence that this is leading to improved academic outcomes. The gains in community understanding make this model potentially useful for other schools. Central to the programme's success is the involvement of a committed member of staff who can liaise effectively with the local community. The programme's most valuable features have been identified as the involvement of both Indigenous and non-Indigenous boys with Aboriginal Elders on camps, and increased communication between community and teachers as a result of their involvement in out-of-school activities.

The experience at Cerise High School shows that, even though the problems facing remote communities are considerable, such schools can become viable alternatives to city boarding schools. With genuine commitment from principals, staff, support workers and communities, opportunities can be offered that will attract students and make them feel that school is worthwhile. The classroom and playground can become friendlier and more productive as social tensions are addressed and eased. Cerise High School has some way to travel in its journey to make the school a place where all boys can do as well as girls, and where all students can be successful, but the range of programmes offered, their focus on the major social and academic problems, and professional learning opportunities for the school's staff mean that the school is off to a good start.

In the opinion of the researchers, all of the programmes implemented at Cerise High School could be adapted and transferred to other remote schools. The *Pathways* programme is already attracting interest in neighbouring areas. The key to the success of such a programme would appear to be cooperation between local institutions and businesses, and the creation of real employment opportunities for the students in the region. Provided such cooperation can be developed, any such programme would be sustainable and ongoing. The array of support pioneered by the *Pathways* programme, through education in interview techniques, to financial assistance by way of apprenticeships, offers a framework that other schools in similar situations could adopt.

B.6 Teal High School

B.6.1 Background characteristics

Teal High School is a Years 7 to 12 boys' high school in New South Wales, with a 2005 enrolment of 615 students. Teal High School is in the suburbs of a large city and draws from a large geographic area. The school population is diverse, including Asian, Arabic, Islander, Macedonian, Yugoslav and Greek students. The school is situated close to a neighbouring girls' high school (with whom senior classes are shared) and a TAFE college (which students attend to gain certificate qualifications for industry). The school is linked to its seven main primary feeder schools to ensure an effective transition to high school.

B.6.2 Strategies for improved academic and social outcomes for boys

In 1998, a staff team began to study how the school might improve its students' performance. The team's expressed aim was: *We wanted to provide success for every boy in the school, in some form or other.*

That initiative led to the diversity of programmes in place at Teal High School today. At some stage in their school career, every boy is involved in one of the programmes at the school.

The Principal and staff at Teal High School want to offer the boys as broad a range of experiences as possible, both within and beyond those pursuits that are seen as being traditionally 'male'. The school is also keen to offer students from its low-SES area experiences that may not have been contemplated by the boys or their families.

Men's stuff

Men's stuff, a creative and performing arts strategy, began in 1998 and eventually became a government initiative. The Principal describes the rationale behind *Men's stuff*:

Because we come from a low socioeconomic background, we wanted to provide experiences for these boys that they would normally not have access to. In Men's stuff, we had about 20 workshop programmes with people donating their time. Glen Woods [Tap Dogs] was one that came in. The staff also participated. The school ran it in school days, one workshop a week for ten weeks. We put aside a term and all were involved in a workshop for one or two sessions a week. Students could choose their activity.

Two teachers on staff who had outside contacts in the field of the creative and performing arts initiated the programme and arranged for their contacts to offer workshops to the boys in a range of experiences. It included cartooning (with a cartoonist from *The Australian*) and aerial performance (*Legs on the Wall*). It evolved

into a circus in 2001, which grew in popularity until, as the Principal remembers, *We had to introduce a rule here about not being able to ride unicycles in the playground.* The programme's benefits were varied. Attendance improved, with boys coming to school not just on the days of the workshops and classroom work improved. Boys had greater interest in school, and staff saw a spin-off from this in class. As the Principal commented, *There just seemed to be a general sense of the school going forward.*

Here we see in operation the issue of curriculum choices and extracurricular activities which are part of the 'E'ngagement frame. Such choices and activities form part of the interplay between motivation and 'E'ngagement and help to form the student's personal attachment to messages that 'School is for me'.

Gifted and Talented programmes

Another impetus at Teal High School is to offer gifted and talented students the chance to excel. Along with *Men's Stuff* the school adopted a policy of acceleration which, as the Principal confirms, has led to some outstanding results:

This year we had a student who was a best all-rounder in the HSC. Scored over 90 in every subject. One of the bonuses was that he'd actually scored 90 the year before for an accelerated subject.

A Teal High School boy who was earlier involved in the *Men's stuff* programme received the State Education Minister's Award for Student of the Year in his final year at school. He was accelerated in his studies at Teal and the Principal is proud that he became *an outstanding Honours Law student, gaining the University medal.*

In 2005, the Principal initiated a Gifted and Talented class. In 2004 there were advanced learning classes in Years 7, 8, 9 and 10. These students were offered *Rich Tasks* and *Philosophy in Schools*. The school identified the students for the incoming Year 7 class through work with feeder schools in June 2004. Primary school Principals were notified and the school used STEMS (School Transition Enterprise Management System) data. To make this initiative happen, the school appointed a Programme Coordinator and arranged for staff to attend professional development courses. As one teacher comments:

This Gifted and Talented course is prompting us to look more closely at a range of ways of getting students to think critically. Next term, we'll consider how we can apply, across the faculties, aspects of a unit of work to one of the critical thinking techniques. I'm noticing how this role is changing my teaching and prompting me to challenge mainstream classes. The syllabus is demanding deeper thinking. Here, the level of vocabulary can be poor, so those basics need to be cared for before we shift the boys into the more critical level. You have to train students to respond and respect each other so that in turn allows them to reach the critical conclusion and the whole class to start analysing and synthesising. This needs to become a whole-school approach. This is where it's going to invigorate.

The Year 7 Gifted and Talented class takes Aquaculture within the Technology and Applied Studies (TAS) programme. For their project, the teacher is presenting the students with real problems to solve:

They are looking at sustainability of fish stocks and sea food because there's such a shortage of it.

The teacher has created a fish breeding site in which the Gifted and Talented class can pursue their TAS study.

At the moment we are looking at two specific areas and they are the silver perch and fresh water crayfish or yabbie. The students are currently learning about the structure of the yabbie. They measure with their rulers and look for damage if they've lost legs, lost their nippers or whatever. Are they female or male? Do they have babies under their tail?

The Fisheries Department put the teacher in contact with fish farms, which the teacher then visited, and *That's where we got 90% of our information from.* The students are now researching marketing and the registration of a business with the Department of Fisheries. As the teacher says, *What better way is there to remember something than if you've done it?* At the moment, the boys have to design a filter using recycled materials. (The school uses recycled water in the Aquaculture project and on its gardens.)

And I gave them six weeks and some came back with ideas but no way of building them. One boy just came up with the idea of a tube blocked at one end with the water flowing through it, just using gravity. So we'll go with that.

The teacher acknowledged the Principal's support, saying: *You've got to have someone who's got a vision.*

In addition, the school offers talented athletes the chance to develop their skills. The *Talented Athletes* programme (TAP) commenced in 1998 but really took off after the circus in 2001. TAP now works with some elite sportsmen who come to the school on a Tuesday afternoon to mentor and coach the boys. As the Principal observes, a number of these sportsmen are former pupils:

The school has a longstanding reputation as a football school and we have had a number of boys who went on to play for Australia. We have used some of them for mentors.

These areas of acceleration and programmes for talented students clearly appear to have brought 'e'ngagement into operation. These students are engaged with the learning processes at hand and are actively involved in tasks of high intellectual quality.

School-to-work programmes and service learning

The school works closely with the local TAFE college. For example, the *Teach-in* programme involves students in two-and-a-half days a week at school, one day at

TAFE and one-and-a-half days at a major vehicle manufacturer. The school offers such programmes to between five and 16 boys each year. These students leave school with the School Certificate, TAFE advanced accreditation and a full-time job. The Careers Adviser states that the *Teach-in* combination of days at school and days with an industrial company is:

... an excellent way of doing it because it just takes a lot of the burden off the boys while they're at school. We're a pilot school and the other side of it is that the employer gets someone they know. Everyone fits in with it very well so it's quite successful.

Teach-in awakens in a number of boys the future-oriented consciousness which allows them to see education as a resource to be employed profitably – a key factor in 'E'ngagement.

Teal High School is also a pilot school for service learning. The school offers boys in Year 9 the opportunity to be involved in the *Meals on Wheels* programme – cooking, cleaning, delivering and assessing the programme. The *Meals on Wheels* programme began as part of the *Men's stuff* programme, and participation was aimed at improving students' self-esteem. The Careers Adviser says that the programme was introduced to give students more opportunities for participation in the community:

Some of the boys could have been problems or had problems at school but in that programme they were fine. They did a good job, took on responsibilities. They were reliable, friendly and they got a lot out of it as well as obviously the people who were the recipients. It is a really good programme. About 80 boys take part at any one time.

Students with special/particular needs

Underpinning the school's approach is a philosophy that their students will achieve. Where the needs are greatest (with low-ability students), the class sizes are 20 and less, which the teachers regard as *the magic formula for success*.

One initiative to improve boys' progress was the *Counting On* programme. Initially a withdrawal from class, but later a separate class, the programme assisted boys having difficulties with maths. The programme began in 2001 and targeted boys in Year 7. Initially the programme withdrew about 17 boys from class for 2 periods. This withdrawal was for focused, small-group attention.

The programme emphasised consolidation of skills that the teachers felt were weak. In particular, the students had, for some reason, missed some vital understanding of multiplication and division. Testing halfway through the program showed improved levels in multiplication and division and development of a more positive attitude to maths. In subsequent years, the boys were graded and those experiencing difficulty could be taught as a class together rather than through withdrawal.

The school also gathered data from its primary feeder schools, as one teacher explains:

Our School Counsellor goes to the primary schools; so when students have problems, he is already aware of them. When the boys arrive [at Teal] they get a smoother transition into high school. [The school] has also taken Year 9 boys as maths mentors to the primary schools. They buddy-up with them and then the younger boys know them when they arrive at the school. They had to be the caring ones. And they were.

In 2005, staffing issues have meant that the *Counting On* programme has had to be discontinued.

The school also offers peer tutoring in which Year 10 boys tutor younger students with reading needs during the *Drop Everything and Read (DEAR)* programme. In support of its literacy initiatives, the school encourages the *DEAR* programme for 20 minutes each day. The boys who tutor receive training and accreditation (up to certificate II) at TAFE. Vertical roll groups were introduced a few years ago for the peer tutoring reading scheme and to provide older buddies for younger students. The tutees are identified by their English language and literacy assessment (ELLA) results. After they have been in the programme for a year, the boys' ELLA results are used to assess improvement. The programme has been shown to increase not only these students' reading speed but also their accuracy.

There is an IM (intellectually moderate) class that offers students from Years 7 to 12 individual programmes as well as integration in the mainstream in their respective years for subjects of choice and capability. There is also a support class, which receives assistance from the special needs teacher, or the teacher's aide.

In addition to the above programmes, the school has, for three years, been running a 'homework centre'. It is used for a variety of reasons, some boys needing a quiet place in which to work after school, others needing more substantial help with assignments. If required, the teacher who runs the centre will work one-on-one with students. A common area where students require help is in interpreting questions. Teachers acknowledge the homework centre as the Principal's idea.

Generally speaking, it's the junior boys that come along. After a time they get the confidence to ask for help. It's a resource that a lot of those kids could use.

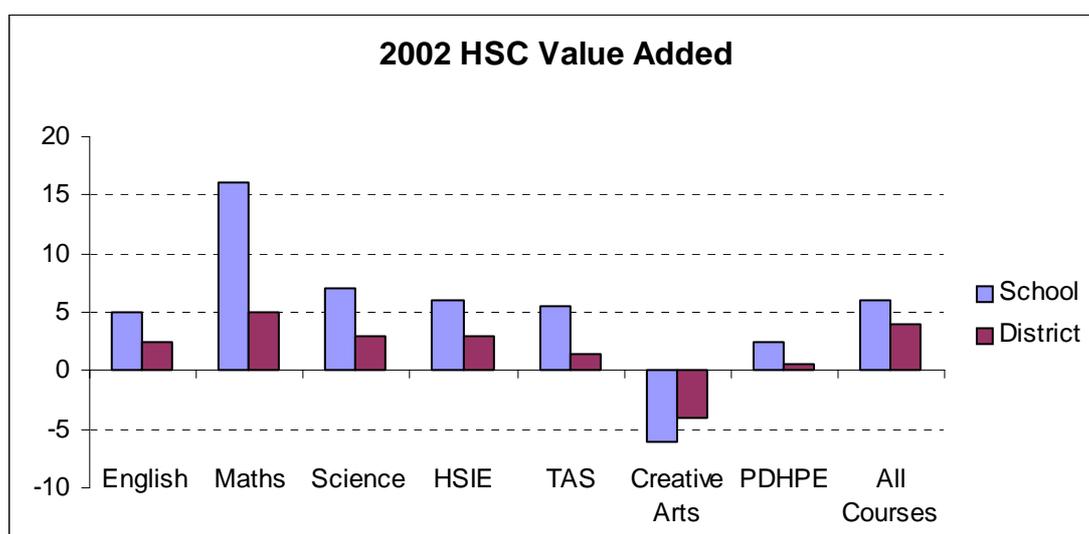
Each of these programmes promotes success among these students. The school's support and belief in their ability to achieve offers students the potential to promote the self-efficacy, persistence and low anxiety that are key factors in motivation.

B.6.3 Evidence that the strategies are improving academic and social outcomes for boys

Documentary evidence of the school's improved academic outcomes comes from Year 6 to Year 10 reporting against state reference points. In 1996, the school was below the state reference point. Over a period of nine years, academic results have been turned around. The Principal attributes the school's success to the breadth of programmes it offers, with a focus on literacy, acceleration and Gifted and Talented programmes. Figure B.2 shows the 2002 HSC value-added data from the school

report. The figure shows that the degree of value-addedness in Year 12 from previous years is positive in all courses except Creative Arts and higher than district averages in all courses except Creative Arts. (Paradoxically, the ‘drop-off’ in Creative Arts can be explained by the school’s very success in that area up to Year 10. If boys then choose not to continue with Creative Arts into the HSC, value-addedness would very likely appear as a negative.)

Figure B.2: Teal High School 2002 HSC value added data



Evidence of the student response to the breadth of programmes offered at Teal High School comes from a school-devised survey conducted on the *Men’s stuff* programme. The students were asked to indicate whether they wanted to experience more workshops in the future and whether their interest was related to career choices. Table B.13 provides the results of the survey. As can be seen from the table, boys overwhelmingly expressed a desire to engage further with areas of the *Men’s stuff* programme and relatively high numbers expressed interest in these areas as potential careers.

Table B.13: Teal High School survey on Men’s stuff programme: A random sample of four workshop areas

Workshop area	Definitely wished to experience more	Expressed interest as a career prospect	Were unsure if they wished to continue	Showed no further interest
Cartooning and animation	96	16	2	2
Film making	100	19	0	0
Dance	86	4	12	2
Singing	92	11	4	4

The Principal, Deputy and Head Teacher Welfare spoke about the parent response being very positive. Parent interviews confirmed strong support for the programmes and quality of teaching offered by the school. One parent spoke about the electives her

son had chosen – sports science, electronics and computing studies – and applauded the school for the choices it offered the boys. The options in programmes being presented by the school were also valued, and parents commended the value of the students' exposure to cultural diversity and a range of abilities. Another parent talked about her son being in the *Talented Athlete* programme and his success in the Australian championships for indoor soccer. Indeed the school has had many letters of support from parents grateful for specialised training which, outside the school environment, would have proved costly. Another parent spoke about the excellent grounding in technology that his son gained at the school, along with his involvement in helping to set up the school's website.

All the parents felt that the school's teachers were of high calibre and the main motivating influence on the boys to work for success.

They go the extra mile. If there's no motivation, the boys are not going to succeed. They're not going to try. The staff make boys feel comfortable, feel safe, feel secure. This helps the boys personally as well as academically.

Many staff spoke positively about the programmes being offered in the school. The staff qualities that kept coming through were their commitment and passion for the boys to achieve success. Staff turnover is very low, other than for teachers having gained promotion, a fact that speaks loudly for teachers' contentment and pride in what they are achieving together.

Six Year 12 students interviewed for the case study spoke about their involvement in a variety of school programmes. One spoke about performing in the circus as a unicyclist and juggler. Another student was studying nursing through TAFE and visiting the special school in the area every week. Another student spoke about the accelerated programme in chemistry, which had allowed him to complete one of his HSC subjects in Year 11. Another student was in the *School-to-Work* programme, doing Business Studies. Another was in *TAP* for cricket and soccer. He explained, *It brings the more skilful students together with a coach.* All the boys felt that these programmes helped make school interesting. One of the boys had been involved in visiting local primary schools and doing role plays to stimulate an anti-bullying discussion among students. Most of the boys felt that they were doing well at school and that their parents were both pleased with their current results and encouraging continued efforts.

Six students interviewed from the Year 8 Advanced Learning class spoke about good sporting and educational opportunities. The boys were aware that teachers encouraged them and knew their strengths. *They make the lessons interesting with activities and explanations so that you want to learn more.*

One student was particularly enjoying Design and Technology and was starting to wonder about studying architecture later. Another was thinking he would like to create *a new idea that would help everyone.*

Overall, there is much documentary evidence to support the Principal's interpretation of the contribution made by the various programmes to improved academic outcomes

in the school. There is also evidence through observation that the boys enjoy their learning. In the newest of the school's initiatives, Aquaculture, the teacher stated:

They love it. They work together on it. They often put their hand up at lunchtime and come out and clean up the filters or measure some of the main fish or yabbies to see how much they've grown. And they're always offering to bring stuff in through their parents ... Because the kids don't get many chances to go and experience dams and yabbies. Especially in the city ... there's nowhere to experience it.

B.6.4 Conclusion

The multiple strategies and programmes at Teal High School highlight aspects of each area of the MeE framework. *Men's stuff* shows a strong interplay between motivation and 'E'ngagement. It addresses boys' thoughts and behaviours about school, while suggesting that school is a place that 'works' for them. A number of programmes – *Talented Athletes*, Aquaculture, Service Learning – support the motivation area; others draw attention to the classroom teaching and learning or 'e'ngagement (for example, acceleration of students, Gifted and Talented class, *Counting On* and peer tutoring). There is strong discipline and guidelines in place for students.

At Teal High School the key people currently are: the Principal, Careers Adviser, Head Teacher Welfare, Coordinator Gifted and Talented Programme and the TAS teacher who initiated the Aquaculture programme. Although there have been staff changes since the *Men's stuff* programme began, other programmes have evolved from it and the richness of opportunity on offer to the students has never been compromised. Members of staff are often long-term and a number of teachers interviewed had been at the school for 15 or 16 years. The school is strong in the area of student welfare and there is a focus on personal relationships between student and teacher.

The school's Technology High School accreditation is well earned. The school commences computer studies in Years 7 and 8 in order to standardise students' abilities and to enable some students to accelerate earlier. Teal High School is a pilot school for web services. Students have individual log-ins for the network and personal space on the file server. The school plans to integrate ICT skills into each department. To this end, there are several mini-labs in the school rather than only one centralised resource. Currently, there are mini-labs for Music, English/History, Library and TAS.

When you enter the school, there is evidently 'work in progress'. In the lessons observed – a Year 12 Chemistry class (containing Year 11 accelerated students), a Year 7 Science class and a Year 7 English/Drama class – the students were focused. They listened and participated in corrections to the Chemistry exam paper with the teacher guiding them; they fired questions at the teacher about the nature of chemical substances and helped in the construction of mindmaps to gather the information; and they participated with enthusiasm and perception in Drama exercises. In each instance, the teacher–student relationship was respectful and collegial. The relationship between students was also supportive in the process of understanding.

It is important to note that the programmes offered by Teal High School are transferable, but their ongoing success is dependent on the passion and commitment of the teaching staff and the continued efforts of the boys.

B.7 Heliotrope School

B.7.1 Background characteristics

Heliotrope School is in a Northern Territory community of relatively recent origin. The area has some history of small-scale mining, an experimental farm that was growing coffee around the time of the First World War and continuing pastoral and agricultural enterprise. Until the mid-1990s, two enterprises – a zinc, wolfram and lead mine and a local abattoir – provided local employment opportunities but both have ceased operations. There are now limited employment opportunities locally. In the words of one of the teachers interviewed, the town is *economically up the creek*.

There're no jobs, no money and we've hit the bottom of the trough ... we need the mine and the meatworks so boys can see there's jobs for them where they live.

The territory's Parks and Wildlife Service has established regional headquarters in the town. A local national park attracts an average of 250 000 visitors a year, or about one-third of all tourists who visit the Top End region. Five caravan parks and three accommodation resorts, mainly family-run businesses, have been established in recent years to meet visitor demand. This gives the community a relatively small share of the territory's \$1.2 billion annual income from tourism.

The statistical local area (SLA) within which the school is located has a population of 1364. There are discrete Aboriginal communities in and around the town and 2001 ABS statistics revealed that 28.5% of the town's population identified as Aboriginal and Torres Strait Islander. This is an increase of 19.8% on the 1996 Census of Population and Housing and 52.4% on the equivalent 1991 Census. Individual and family income levels are among the lowest in the territory, at \$300–399 and \$700–799 respectively.

In 1974 an Indigenous institution was established nearby, which shares resources with the school and the community. Local residents are employed at the institution in administrative and maintenance positions.

Heliotrope School was established in 1954 and has had varying enrolments throughout its history. In recent years, it has assumed responsibility for running a Batchelor Outdoor Education Centre which is available for outdoor activities and camping to primary schools across the territory, as well as to schools from interstate.

In 2004 there were 196 students (91 girls and 105 boys) at Heliotrope School, ranging from preschool to Year 11. Fifty-nine of the boys were Indigenous. In 2004 the total Indigenous population of the school was 53% (significantly higher than the percentage of Indigenous people in the SLA total population). This figure was down

slightly from 2003 (61%) and 2002 (63%). There are far fewer Indigenous boys in the secondary school than non-Indigenous boys. Tables B.14(a) and (b) contain full details.

Table B.14(a): Year 2004 enrolment of by year, gender and ethnicity

Year/level	Girls (Indigenous)	Boys (Indigenous)	Girls (non-Indigenous)	Boys (non-Indigenous)
Preschool	5	5	8	10
Transition	4	5	3	0
1	7	4	4	2
2	3	6	2	2
3	1	5	4	2
4	6	9	2	1
5	6	3	6	2
6	5	6	2	4
7	2	3	5	5
Primary (T-7) Subtotal	34	41	26	18
8	3	5	4	7
9	3	4	3	7
10	2	4	2	3
11	0	0	2	3
Secondary subtotal	8	13	10	18
Total	47	59	44	46

Table B.14(b): Indigenous students enrolled (% of total school population)

2004	2003	2002	2001	2000	1999
53	61	63	62	55	49

As can be seen in Table B.15, in 2004 overall attendance in Heliotrope's secondary school improved to 83%, up from 75% in 2003, but there is currently no breakdown of attendance by Indigenous and non-Indigenous boys.

Table B.15: Attendance (%)

Year	Primary	Secondary	Total
2004	90	83	85
2003	84	75	81
2002	89	84	83
2001	81	79	80
2000	86	84	82
1999	67	84	71

A significant factor for Heliotrope School is a high student turnover rate. Recent changes in the local employment situation have reduced the itinerant student population at the school, which in turn has contributed considerably to a more stable population and possibly has also influenced attendance rates for 2004. The previous high turnover of students means that trends in attendance across years need to be treated cautiously.

In 2001-02 it was recognised that the boys in the secondary school were not achieving academically as well as the girls, and Indigenous boys were especially at risk. The boys, particularly the Indigenous boys, were less engaged with the programmes at school. This was evidenced by more erratic attendance, more

suspensions, more aggression and generally less-focused behaviour. There were more boys than girls in the secondary school, and the upper primary years comprised nearly 80% boys. Across the school, boys had considerably lower literacy and numeracy levels than girls.

In 2002, as one teacher remembers, these difficulties were compounded when a group of boys arrived, all from the same area and *none of whom could read and write in English*. Some rivalry developed between this group and the local boys causing additional friction. At the same time there was also an intake of high academic achievers.

Teachers had first recognised issues of non-engagement with the boys in general and Indigenous boys specifically in 2000, a year after the Senior Secondary Teacher began at the school. Two teachers comment that:

There had been the ongoing issue of attendance in the first instance ... and seeing things through to completion, in other words maintaining interest. It was motivation, kids that thought learning had to be fun, otherwise they wouldn't engage and ... just believing that there were better ways of teaching other than strictly classroom based teaching, sitting at your desks, eyes to the front.

The boys had more behaviour problems, they were less motivated and they weren't attending.

In 2003 and 2004, literacy and numeracy results in Years 5 and 7 indicated that the Indigenous students at Heliotrope School were less likely to achieve the relevant benchmarks than their non-Indigenous counterparts. Table B.16 contains full figures for the statewide standardised teaching programme (MAP) over Years 3, 5 and 7.

Table B.16: Results of Multilevel Assessment Program (MAP) 2001–04

Year 3 Reading

Year	All students			Indigenous students		
	No. tested	No. achieving benchmark	%	No. tested	No. achieving benchmark	%
2004	11	10	91	6	5	83
2003	13	7	54	10	5	50
2002	19	11	58	9	4	44
2001	7	3	43	9	0	0

Year 3 Numeracy

Year	All students			Indigenous students		
	No. tested	No. achieving benchmark	%	No. tested	No. achieving benchmark	%
2004	12	9	82	7	4	67
2003	13	13	100	10	10	100
2002	22	16	73	12	6	50
2001	13	12	92	9	8	89

Year 5 Reading

Year	All students			Indigenous students		
	No. tested	No. achieving benchmark	%	No. tested	No. achieving benchmark	%
2004	13	8	62	5	2	40
2003	15	12	80	11	9	82
2002	13	11	89	5	4	80
2001	9	7	78	3	1	33

Year 5 Numeracy

Year	All students			Indigenous students		
	No. tested	No. achieving benchmark	%	No. tested	No. achieving benchmark	%
2004	15	8	53	7	2	29
2003	15	7	47	11	4	36
2002	13	10	77	5	3	60
2001	12	5	42	5	1	20

Year 7 Reading

Year	All students			Indigenous students		
	No. tested	No. achieving benchmark	%	No. tested	No. achieving benchmark	%
2004	13	11	85	5	3	60
2003	8	6	75	4	2	50
2002	9	8	89	4	3	75
2001	12	9	75	7	5	71

Year 7 Numeracy

Year	All students			Indigenous students		
	No. tested	No. achieving benchmark	%	No. tested	No. achieving benchmark	%
2004	16	10	63	8	3	38
2003	8	3	38	4	0	0
2002	9	5	56	4	1	25
2001	12	5	42	7	3	43

B.7.2 Strategies for improved academic and social outcomes for boys

In 2000 the school began gender-specific activities that were formalised as the *Men's Business* and *Women's Business* programmes. These included Indigenous studies and, in the case of the boys, were designed to offer students activity-based projects and take them off school premises, as well as discussing health and sex education issues in a more informal atmosphere.

Given the high proportion of Indigenous boys at the school at that time, the notion of *Men's Business* did resonate with students. The notion of 'men' has particular meaning in an Indigenous context, especially where some school-age boys may have gone through formal initiation ceremonies which occur between the ages of 10 and 14 and turn 'boys' into 'men'. Initiates can then expect to be treated as men, but at school

they are to a large extent still treated as boys. Not surprisingly, this can cause problems around self-identity and problems in relation to school authority. *Men's Business* fully acknowledged this emerging status, even if the activities were not directed solely at Indigenous boys.

The programme offered an opportunity to be less formal, to get away from the confines of the school grounds and some of the school's restrictions, such as rules about swearing. The programme allowed boys to develop traditional skills such as spear-making in a collaborative atmosphere. Football matches were also arranged and played away from school grounds on the community oval. This allowed the rivalry between the groups of boys in the school to be played out in appropriate ways.

Having identified the requirement to deal with the individual needs of its students, Heliotrope School responded with the specific programmes, pedagogies and curriculum strategies discussed below.

Restructuring classes/grouping in both primary and secondary schools

Classes in both the primary and secondary schools were restructured. In 2001, restructuring the secondary school – from age-related groupings to groupings according to ability, interest and gender – began. For numeracy and literacy there were three levels determined by ability:

- a numerate and literate level across Years 8, 9 and 10, most of whom were girls
- an ESL literate and numerate level (26 students, the majority of whom were boys)
- those with emerging numerate and literate skills (10 students, all of whom were Indigenous and most of whom were boys).

This regrouping stemmed from the notion that students can 'belong' to the school in a variety of ways. As the school maintained home rooms by age group, teachers met students in a variety of different settings. As one teacher comments: *And this strategy worked because most of those boys learned to read and write.*

Other structures were interest-driven and the *Men's Business* and *Women's Business* were, obviously, organised by gender.

In 2003, the upper primary (Year 4 through to Year 7) was restructured into loose ability groups as well as into gender groups for specific activities. As one of the upper primary teachers had a Botany background, the gender programmes included an investigation into local bush foods. Student groups were accompanied by local Indigenous inhabitants.

Targeted boys' programmes

From 2001 the school has built up a range of programmes targeting specific groups of boys. These include visits to Darwin for the secondary boys, to allow them to investigate a variety of workplaces and thus make connections between education and work.

The *Men's Business* programme that began in 2000 was continued into 2004. As one teacher remembers:

... it was getting out and about, doing things like making spears, fishing, cooking, dancing for the school ... and it gave the boys time to sit and talk and share opinions.

Unfortunately, in 2005 the programme had to be discontinued, due to the lack of male staff in the school.

In 2003, funding was achieved to run a *BELS* project that ran for Terms Two and Three. This programme employed two Indigenous men to work as role models with targeted boys in the upper primary and secondary schools. One man was heavily involved in the *Men's Business* project and the other, a musician who assisted Year 7 boys with literacy and numeracy issues, was highly praised for his work. One teacher commented that he was *an all round good guy, a local hero, a popular man, been through it all himself and come good.*

The focus on particular programmes, especially the *BELS* project, highlighted the teachers' role. As one teacher commented:

I think it really highlighted the critical role that teachers play and if there are good teachers – good male role models – then boys will do well. They'll want to come to school, they'll want to learn from that teacher. It gives that teacher a right and responsibility to share things with those students in terms of life skills, other than strictly subject-based teaching. So it broadens it out to teaching in the social skills area. [This] is possible in a small school because you can maintain contact with the students.

In addition to the two Indigenous men, in 2003 there were several key people influential in the *BELS* project and supplementary activities:

- The Senior Secondary Teacher (Teacher 2) was a key player and part of the success of the project at the time was because her 'level of commitment and energy' ensured the various aspects of the project were developed.
- Teacher 1 was a teacher in the senior school specialising in numeracy and willing to be creative with his programme.
- Teacher 3 was a teacher in upper primary school who carried out gender-specific programmes with the boys while his wife ran similar programmes for the girls.
- The Aboriginal and Islander Education Worker (AIEW) at the time is still in the school. In his capacity as support worker for the Indigenous students in the school he supported the various programmes.
- Local male Indigenous community members from different cultural groups assisted in the *Men's Business* programme.

From 2000 to 2003, the male staff in the upper primary and secondary schools also provided a strong collaborative group to support the *Men's Business* programme and the integrated literacy and numeracy programme.

Two male teachers working in partnerships with their wives (who also worked at the school) provided strong models of appropriate male behaviour in relationships with partners. The AIEW noted that the strong, supportive relationship between Teacher 1 and Teacher 2 helped the boys to see that strong men can be caring and compassionate men too. It was further noted that having a female principal (1999–2002) and a female senior secondary teacher actively supporting the projects developed for boys helped the students to see that they were valued by female as well as male staff.

A *Resourceful Adolescent* programme (RAP) was also run in 2003. This targeted Year 8 boys in Term One. The programme focused on resilience, but the school has minimal data on the outcomes of the programme. Schools such as Heliotrope can trial such programmes but there is a real need for long-term funding that goes beyond supporting trial programmes.

The physical action programme *Rock and Water* was instituted for boys in the primary school in 2004 and is continuing in 2005, with four staff now being trained. This programme uses physical activity and structured discussion to guide boys towards an understanding of their emotions and provide them with ways to ‘think before they act’. It is too early to have data on the programme’s sustainability.

In 2004, two additional initiatives were undertaken. A *Families in School Together* programme encouraged parents to be more involved in the school and further links were developed to the (on-site) TAFE’s programmes using workshop facilities. From 2005, the school has become a *Tribes* school with 14 staff being trained.

Pedagogies and curriculum options targeting boys

A number of initiatives have occurred in this area. These include:

- A more ‘hands on’ approach to learning, especially numeracy. This targets the secondary school boys from Years 8, 9 and 10. An *Integrated Numeracy and Maths* programme developed by Teacher 1 took a whole-school approach to maths teaching by involving the senior boys in various ‘hands on’ projects. One example is of students helping to build a house by calculating the materials needed and ordering accurate amounts for building the roof, floor etc. This project also entailed the use of geometry and algebra and demonstrated a meaningful basis for the practical use of mathematical constructs.
- An *Integrated Literacy* programme which reflected the interests of the boys. The Community and School Library made access to meaningful literature easier. This library sits adjacent to the school and it is a valuable experience for Indigenous boys to see Indigenous men using the library. The library has a much wider range of material than a normal school library and includes special-interest magazines such as trade and rural magazines.
- The *Rainbow Project*. This was a cooperative reading project in upper primary in 2003 in which local fathers and other men from the community (including Indigenous men) took boys off school premises to read to them. In the lower primary school they read to boys in groups. The men would use the library for this purpose. The *Rainbow Project* is the primary school’s link to the *Men’s Business* and *Women’s Business* programmes.

B.7.3 Evidence that the strategies are improving academic and social outcomes for boys

There is some evidence that the programmes as a total package are working to improve social and academic outcomes for boys as well as their motivation and engagement. Such evidence includes:

- At the end of 2003 there was a small margin of improvement in attendance from 78% to 79% (Coordinator of *BELS* project). As Teacher 1 commented, this attendance figure continued to improve in 2004: *over that year [2003] attendance did improve and there was a general improvement in behaviour ...*
- Attendance levels have again improved in 2005 but it is difficult to assess how much this is due to the changes made in the school and how much to a dramatic change in student turnover. Attendance rates by year are given in Table B.15.
- Retention rates have increased. There has been an increase in the number of boys staying on after Year 10. With no structured programme in place, provision was made in 2003 for senior school students to work through correspondence courses. One student took up this option in 2003, and in 2005 seven students, five of whom are boys, are enrolled in Year 11. The difficulty remains that there are no resources to support these students. Several have low literacy levels and need support. Teachers have to find time outside their other duties and this can be very difficult, given their other commitments.
- Boys have begun to take advantage of other educational and related opportunities. For example, as Teacher 1 pointed out, some senior boys completed Certificate II in Woodwork and Metalwork:

... we also used the TAFE woodwork and metalwork shops and that helped the boys see the value of tertiary education, because a couple of them got Level 2 certificates and they started to see more relevance for Maths and Science.

There is little employment opportunity in the township, but at the time of writing eight former students (all 17 years old) are employed in a Green Corps project de-weeding in the local catchment area. They are being supported by Teacher 1, who has taken leave without pay from the school:

... it's Work for the Dole and we're only funded for 30 weeks, but they're learning skills and we'd like to try and set up a full-time ranger group that could do contract work.

Various staff members offer observational evidence on improved social outcomes:

They were more supportive of each other, more able to avoid physical confrontation.

Having the boys together got them to be more willing to talk, share feelings and just have a go ... they weren't showing off in front of girls or trying to be cool ... The boys were more willing to listen – boys being good at talking, but not so much at listening – and there was more openness to discussions.

[Separating out the boys] was really helpful in the sense of boys being able to identify with boys and boys being able to identify with male teachers.

I think there was an improvement in the ways the boys related to the girls. From when I first went to the school [in 1999] and there was a lot of quite sexist behaviour from the secondary school. In the five years that I was there, there was a noticeable change. That was as a result of my expectations and other teachers' expectations ... we made it very clear what was appropriate behaviour and what was not and sexism was definitely out.

Boys demonstrating considerably increased interest in their schooling:

The boys made mammoth jumps in attitude.

The boys searched the timetable and eagerly anticipated and looked forward to [the programmes]. Some of them certainly learned to work relatively independently. Certainly the Indigenous kids whose literacy skills who initially were not that brilliant had fantastic skills in spear-making, fishing and painting [They also did some art work] so that was really good for their self-esteem.

... boys [are] enjoying school more ... we've now got Year 11 ... the kids like school so much they don't want to leave. Normally after Year 10 they either drop out or go to [X] ... these boys who hated school are now voluntarily staying on to do Year 11.

B.7.4 Conclusion

Challenges

For a number of reasons, the programmes that were successful prior to 2005 have not proved to be sustainable. These include:

Very transient school population

In such a context, programmes need to have on-going funding or long-term effects cannot be measured. First, the baseline from which many of the students are operating, that of chronically low literacy and numeracy, is already so low that measurable outcomes can only improve significantly if programmes are sustained over long periods. The messages need to be constantly re-introduced, re-learned and reinforced over time as new students and new staff enter the school.

High turnover of staff

A key figure of 2003 left the school in 2004. Currently there is no funding for extra staff and this problem has been compounded by the cancellation of Aboriginal Student Support and Parent Awareness (ASSPA) funding during 2004. Only one male Indigenous support person is left in the school and there are no male teachers in the secondary school. As Teacher 2 comments:

We wanted to keep all that going [the projects from 2003]. If you can offer to pay people it certainly helps, but it is also finding people in the community to have some standing with the kids. ... There is one man who taught some Aboriginal dancing to the boys for Harmony Day, but he is employed full time at [a tertiary institution].

There was considerable comment on the need for suitable male role models. The unanimous feeling was that the Indigenous musician who had been involved in the *Men's Business* programme was an extraordinarily positive role model for the boys because he had their respect, had had a tough life himself and was prepared to share those experiences with students. He was also living locally and several people commented on the close-knit community that was suspicious of anyone not local, that it took time for students to trust 'outsiders'.

The *Men's Business* programme, which depends on male support and especially Indigenous male support, is no longer running because there are no men teaching in the secondary school. Teacher 1 describes the effects this has had on the older boys:

It's critical to have men involved and at present there're no male teachers in the high school and both behaviour and performance have dropped badly ... they don't just need male role models ... it's having a chance to express themselves in ways that they can't in an all-women environment.

This in turn has had a major impact on the structuring of the secondary school. The *Women's Business* programme ceased as a new school plan was developed. Without the *Men's* and *Women's Business* programmes, the other areas of ability and interest have also had to be modified. Students have had to return to classes grouped by age rather than ability, although those with the poorest literacy and numeracy skills are still in their own group. This move has caused considerable consternation among parents.

Change in emphasis as leadership changes

A new principal came to the school in 2003 and a new senior secondary teacher at the beginning of 2004. Heliotrope School is relatively remote and it is always difficult to attract staff, but it was fortunate in having a steady secondary school staff for three to four crucial years. This allowed issues to be identified and programmes and strategies put in place. Those programmes resulted in a marked increase in appropriate behaviour, attitude and application in the school's boys. The irony is that, as a result of these very programmes, when the new principal arrived there were no obvious problems with the boys. Neither the 2004 school annual report nor the strategic plan 2005–2007 for Heliotrope School focuses on boys. The only ongoing programme is the *Rock and Water* programme, but out of the four trained staff, one has left and another is the Principal, who does not have the time to commit to active involvement in the programme. Teachers and parents are concerned that a lack of continued emphasis and support will cause boys' performance to decline.

Achievements

Notwithstanding the very real challenges it faces, Heliotrope School's experience demonstrates that schools in remote areas can initiate effective programmes to improve boys' social and academic outcomes. Teacher 1 found that more meaningful programming in an integrated curriculum kept the boys focused:

We tried to cater for them by offering boy-oriented ways of learning ... more hands-on work, particularly in Maths and Science ... we integrated open-ended projects so all of the kids could perform and achieve, no matter what their school level was ...

The notion of 'shame' or 'shame job' is significant in Indigenous cultures. According to Teacher 2, re-grouping by ability level seemed to protect the students from being shamed because of the stark contrast in literacy and numeracy levels across age groups. This was made more visible in that the students at the lowest level were all boys and nearly all Indigenous:

I think it was not just the boys' programmes [that led to higher levels of motivation]. I think there were a range of things happening that made the school a great place to be for those kids. And some of it was definitely the gender-based programmes. But we also structured the school in a way that meant that kids who were struggling with reading and writing – 14 and 15-year-olds – were not in the same class as mainstream ability kids so they were grouped together. They were grouped with similar ability kids and they got on with their work that way. So there that streaming, which actually, I know it is frowned upon by a lot of people, but for our kids it actually made school a no-shame place. So they could come, they could get on with what they were able to do, at the level they were able to work at.

Teacher 2 also commented that being involved in the types of projects and restructuring that were developing from 2000 *gave staff room to be creative*. There was a sense of being able to be innovative and a keenness to look at a variety of pedagogical practices, particularly those that would take students outside the school.

The programmes instituted between 2000 and 2004 worked because there was a shared understanding between the teachers about what was required and agreement on the strategies to be initiated. The projects at this school, by their very nature, are highly dependent on personnel who believe in the need for male teachers and a focus on good male role models for boys. Such programmes will always be vulnerable in schools where there is high staff turnover. Fortunately for Heliotrope School, the staff was relatively stable for four years and so significant achievements were possible.

By tailoring a range of programmes to the needs of their students, particularly their Indigenous boys, Heliotrope School succeeded in improving student engagement which, in turn, led to more students staying on at school. Boys still report that *this school is better than those I've been to so far*.

The employment of suitable male role models was also a key feature in improving social outcomes. Boys responded well to the individual attention of men from the school and local community who could demonstrate that care and compassion could be *Men's Business*. By developing an understanding of the local Indigenous culture, teachers were able to implement programmes that increased student motivation. Students who had not experienced success in literacy or numeracy could demonstrate skills in art/craft that directly related to their lives and culture. This increased enjoyment of school led to increased attendance. However, sustained support may be needed to provide continuity of staffing so that sufficient male role models remain available and staff who have built understanding and rapport with the students can continue to be what one student described as *real* and another as *they respect you, they're savvy, they're on the same level*.

The initiatives undertaken here also demonstrate areas of the MeE framework. The *Men's Business* programme potentially linked strongly to motivation as it worked to foster more positive feelings and values around school life. The reviewed literacy and numeracy programmes resulting in integration, hands-on work and connection to students' lives are indicative of 'e'ngagement in that students are actively participating, genuinely valuing and becoming involved in deep understanding in their learning. The whole-school links to the local community and TAFE offer potential 'E'ngagement for boys. School can be perceived as a place that addresses post-school options.

As earlier quotes indicate, from the outset it was clear that the staff had themselves conceptualised the issues surrounding boys' education at Heliotrope School in the terms set out in the MeE framework:

It was motivation, kids that thought learning had to be fun, otherwise they wouldn't engage and ... just believing that there were better ways of teaching other than strictly classroom based teaching, sitting at your desks, eyes to the front.

The boys had more behaviour problems, they were less motivated and they weren't attending.

Some teachers believed that it was the environment of the school itself, including restrictive pedagogical practices, which had created this disengagement and a lack of motivation. The strategies at Heliotrope School were often focused on removing students from that negative environment: the primary school reading programme had fathers and other male community members taking students to places other than school to read to them; the secondary school boys took trips to Darwin to look at workplaces and the university to establish a connection between the relevance of study to work; the *Men's Business* programme often took boys from the school out to the bush; and the integrated numeracy programme saw boys building a house on a local property.

In an interview with four Year 9 boys there was certainly a sense that they were 'E'ngaged with the school as a place that works for them in ways that previous schools had not. As the student identified as 'Nick' comments:

Well so far I've found at this school it's a helluva lot better learning because the class sizes are much smaller than in public schools in Queensland. The general attitude of a school like this, a small outback school, is helluva lot better than the city because people can get together and learn on a more one to one basis than a teacher standing up and teaching 35 kids at once. So people get a lot more learning out of individual attention. But here the standard is a lot lower. The way the school has been split up, the way it's been divided into sections, I think ... trying to even them up more between working and behavioural levels.

What did they see as the reasons for this? Nick had the experience of a city school to compare Heliotrope with, and he claimed the school's smallness was a factor:

Yeah. 'Cause everyone knows everyone. It's not like in the city where you go to a school and there are fifteen hundred. You can go up to someone and pay out on someone and you'll never see them again so nobody cares.

Once one is a part of a small community a changed dynamic comes into play. There were several references from students and adults interviewed that there is a 'them and us' mentality in Heliotrope, meaning Heliotrope's community against the rest of the world.

The boys also highlighted their relationship with their teachers as another factor in their 'E'ngagement with the school. The way they were treated by teachers clearly tapped into their motivation to work and their levels of 'e'ngagement with individual teachers. It seems if the teachers were seen to be working hard for the interests of the students, the boys responded in an equivalent way.

Comments made by some of the teachers in previous sections certainly suggested the approaches were having a positive impact on motivation. The students were happier in the school and consequently there were manifest improvements in behaviour and attitude. The students wanted to learn and were responding to a positive school ethos in which being clever is not necessarily 'uncool'.

Teachers' comments also supported the impression that 'e'ngagement had increased. This was noticeable in that several students had opted to remain at the school to do Year 11 through correspondence. For many of the students, just wanting to be at school is an achievement in itself.

B.8 Amber High School

B.8.1 Background characteristics

The context of Amber High School is both complex and unusual. The northern Queensland region in which the school is located supports a number of industries, mainly primary production and tourism. Situated in what is a service centre for surrounding pastoral properties, the settlement around the school has a population of approximately 1400. The school contends with being geographically isolated and is

often cut off by floods and poor weather conditions which can make travel impossible for both staff and students. The school draws on diverse communities and distant primary feeder schools (the closest being approximately 40 kilometres away).

Amber High School is a single-campus school with 450 students from Preschool to Year 12. It is the only secondary school in the region and, with a low level of transience in the general population, the student population is relatively stable. While the primary school has a long history, the secondary school is a more recent addition.

Approximately 45% of the total student population is Indigenous and most of these are secondary school students. The school serves both Indigenous and non-Indigenous communities and most of the teachers have had previous experience teaching in Indigenous communities. The school has 21 teacher's aides, learning support teachers and an Indigenous education training support officer (IETSO). Amber High School has a high teacher turnover, as many teachers come to Amber to complete the two-year Remote Area Incentive Scheme in order to accumulate high transfer points and then move to other more 'desirable' locations. This makes sustaining school initiatives difficult.

Amber High School has experienced a variety of problems impacting on boys' motivation, engagement and academic outcomes. These include poor literacy and numeracy skills, difficult behaviour, poor attendance, low retention rates among boys, particularly Indigenous boys, and the failure of the mainstream curriculum to cater for certain students. In standardised tests in Year 7, such as the ACER trial numeracy test, the State Spelling Test and the ARC Test, the poorest performers have been Indigenous boys.

Boys' poor literacy and numeracy skills are often due to lack of attendance at the primary school level. In the past, one of Amber High School's feeder primary schools did not insist on school attendance, so there was no follow-through on poor attendance rates. This primary school now has a new principal who insists on regular attendance, and is supported by the community elders, but many parents still won't make their children go to school. The attendance problem in the other feeder primary schools doesn't seem to be as great. Consequently, most of the boys in the *Links* class and the new multi-age class described below are from the former community.

B.8.2 Strategies for improved academic and social outcomes for boys

Early programmes

The boys' education strategy initiated at Amber High School was implemented in two phases over a period of six years, from 1997–2003. The first phase was the *Links* programme for Years 7 and 8 Indigenous boys and the second was a *Vocational Education Training (VET)* programme.

The *Links* programme was aimed at Indigenous boys with poor literacy and numeracy skills, poor attendance and behavioural problems. A combined class for students from Year 7 and Year 8 was created to accommodate this programme. Each student worked at his own pace in English and maths. Computers were also used to allow students to work individually with ICT. Although each student worked at his own pace, the focus

of the programme was on working together and on fostering cooperation between students and peers and between students and teachers. The emphasis was on practical skills such as reading topographical maps and the use of marine charts. Excursions to a number of local sites were also a key feature of the programme. Good attendance was often a criterion for students participating in excursions. At this time, there were no alternative programmes for non-Indigenous boys with similar problems.

The second phase, the *VET* programme, was an effort to remedy low school retention rates. Amber High School collaborated with the local community to develop the programme for disengaged students designated at risk of not completing secondary school, most of whom were boys. The programme was needs-driven and culturally inclusive, although the majority of students were Indigenous males. The programme's clear purpose was to increase the educational opportunities for the youth of the Amber district, many of whom had already left school by Year 10.

From the beginning, the school recognised the importance of developing the *VET* programme as a partnership between school and community. A management committee was formed comprising representatives from all the stakeholder groups: the school, the local council, the construction, mining, pastoral and hospitality industries, Indigenous groups and parents. The care and time taken with the screening and selection of students and employers was a key feature of the programme. Funding and support from government agencies was also critical to the implementation of the programme.

The *VET* programme also offered Australian Qualifications Framework (AQF) Level I training to students. The early stages of the programme included academic outcomes related to work. Work placements reflected the industry base of the region, and included rural skills, building and construction, engineering (pre-vocational), basic office skills and hospitality.

Current programmes

In 2005, the *VET* programme was adapted to become much more flexible. Work experience for Years 10, 11 and 12 is now undertaken on a more individual basis. The *VET* Coordinator personally negotiates work placements for each student and students are placed for work experience at times appropriate for the community. Amber is too small to cope with large numbers of students entering workplaces at the same time. A previous one-week-in-three pattern of work experience has been changed to a programme of 'sampling' one day per week to allow students to judge their suitability for specific jobs. The students have also been encouraged to access mainstream programmes for Years 10, 11 and 12 which include Pre-Vocational Maths and English, Future Options, Communication English and Numeracy, and Workplace Preparation and Planning. There is also greater emphasis on the theoretical side of vocational training as well as the practical.

Amber High School is also a registered training organisation (RTO), in which school traineeships can see students finishing their first training year by the end of Year 12. The *VET* Coordinator considers that this is *a much gentler transition to the workforce*. The school also provides a Portfolio of Achievement which students can take to TAFE colleges in the larger centres. The *VET* Coordinator has become a mentor and counsellor rather than just someone who places students in vocational settings. She

tailors vocational programmes to suit individual student needs and her role has evolved further as she now spends more time with individual students, particularly those with major behavioural issues. While the research team was at Amber High School, the *VET* Coordinator had significant success with a particular student and his mother, managing to keep the boy employed and increasing his self-esteem so that he wanted to work because he believed that he had something to offer. Other staff commented that they had never seen that boy's mother smile until that week and that she was supporting her son for the first time that they could remember. The *VET* Coordinator stresses the *need for good teachers with empathy for the kids and strong positive support from parents as students are getting varied messages from school and home*. The *VET* Coordinator and the IETSO have formed a positive working partnership which works to maintain strong links between the senior school students, the Indigenous communities and the employers.

In 2005 Amber High School instituted Years 7, 8 and 9 multi-age girls' and boys' classes, each with a maximum of 15 students. These gendered classes target students who need a high level of support with their literacy and numeracy learning but, unlike earlier programmes such as *Link*, are culturally inclusive. Each class has one teacher and one full-time teacher's aide. The students attend mainstream classes for other subjects such as Science, thus allowing a number of staff to be involved in the education of these at-risk students. In fact, the overall goal of the programme is to assist students to access mainstream class options. As soon as this is possible, the students are supported in their transition from the alternative programme to a chosen vocational pathway. Many of the students integrated into the mainstream operate on 'individual education programmes' (IEPs) and have tutor support.

In addition to these two programmes Amber High School has recently joined a range of other initiatives such as a *Pathways Outreach Education* programme (*POEM*), the *IDEAS* project, the *Priority Country Area* programme (*PCAP*), *Productive Pedagogies* and *Feliks*.

POEM

This programme is for students 13 to 19 years of age who have disengaged from traditional education but would like to re-engage with learning. *POEM* will operate from the student 'home' (a house opposite the school which has been converted for less formal teaching purposes), and receives funding from DEST. Students will have individually designed learning plans depending on their needs. Some options could include gaining a driving licence online, basic literacy and numeracy skills, structured work placement and Year 10 equivalent certificates. Courses may be delivered online.

IDEAS project

This project is a comprehensive approach to enhancing school outcomes, especially student outcomes. *IDEAS* proposes to examine the 'school's overall successes, achievements and limitations during the previous year'. Staff and parent surveys have been issued which ask for participants' 'perceptions' of school success in strategic foundations, cohesive communities, staff morale and professionalism, infrastructure design, teaching, learning and assessment, and professional supports.

PCAP

In 2005, this programme provided funding for Amber High School secondary students

and staff to access the Sport Development Officers and to gain further experiences through opportunities for cultural and sporting exchange. Boys interviewed as part of the focus groups expressed the need for greater access to sporting teams and skill development.

Productive Pedagogies

Amber High School is currently implementing and training staff in the *New Basics* curriculum and *Productive Pedagogies* as well as continuing to develop a regional curriculum framework which incorporates literacy intervention. Amber High School is a trial school for the Education Queensland's *Literate Futures Project*, a programme which assists middle-school teachers to teach literacy skills (Queensland Government 2005).

Feliks

Feliks is a programme specific to Indigenous students. Workshops in *Feliks* have been conducted to raise staff awareness of the issue of Aboriginal English and the need for teachers to promote Standard Australian English (SAE) without devaluing Aboriginal English. *Feliks* is a significant programme for many of the Indigenous students, whose first language is not SAE.

The School Executive is aware of the difficulties and complexities inherent in the Amber School situation and is actively seeking ways of reducing staff turnover, increasing communication between parents and staff and implementing *Productive Pedagogies* and authentic assessment strategies, all of which could have significant impact, not only on Years 7, 8 and 9, and not only on boys, but on the school as a whole. A small group of teachers and Executive members are actively trying to develop a whole-school boys' education strategy. Some members of staff, both Indigenous and non-Indigenous, have taken on mentoring roles with the boys, particularly in regards to sport. Although there are no Indigenous classroom teachers, despite repeated requests from the Principal, there is a significant number of Indigenous teacher's aides, who appear to play an important role in maintaining vital links between the school and the Indigenous communities.

Classroom pedagogy

At a classroom level, several strategies aimed to increase boys' motivation and engagement have been adopted. These include:

- peer mediation: as a teacher's aide describes it, the *natural leaders in the group are convinced and then they convince the others or lead by example*
- group consensus: an Indigenous style of decision-making
- group activities: such as running up a local mountain and drag fishing, each of which involves team and social skills. One teacher commented that boys *have more difficulty working in pairs or small groups than the girls*, so these group activities were aimed at developing social skills
- a reward day: translates as an excursion, a lunch or a video. In the opinion of one teacher's aide, the possibility of being deprived of the reward fostered a work ethic
- story telling: boys were given the opportunity to *tell about their experiences ... who was first up [the mountain]*. According to the teacher's aide, these stories

often become moral tales about *What happens if you forget your water, or if you kill sting rays just for the heck of it and not for food? What happens if you haven't brought any food with you but you expect the others to provide? You go hungry.*

It was observed and noted that boys needed time to cope with change and appeared to like structure and predictability. One teacher's aide said that the classroom offers them stability, as *it might be the only place where this happens.*

ICTs

There is a move at Amber High School to encourage more academic recreational use of computers. One teacher is attempting to identify at-risk students by the amount of time they spend on computer games rather than on the curriculum-related uses of ICT. She attempts to engage kids using computers as an *excellent motivator*, and tries to channel this interest into more productive and constructive access. The boys interviewed all wanted more time on the computers and regarded them as a positive learning experience. The teacher considered that computers *generally provide the opportunity for individual activity and that empowers them* because the boys 'own' what they see, think and feel. This teacher also feels that the computers provide a great motivation for boys to read.

B.8.3 Evidence that the strategies are improving academic and social outcomes for boys

Recent positive effects in the school have included increased retention and attendance rates. The *Links* programme and *VET* programme have had a 'ripple effect' on the staff by making them more 'culturally aware' and the Principal commented that staff are developing a *great feeling for the boys themselves*. Staff members involved in the *Links* and *VET* programmes have made a concerted effort to get to know their students and the communities to which they belong. They have implemented, evaluated and modified the programmes to suit individual students and their parents.

However, it is difficult to gauge the specific effect of the *Links* programme. The Principal considers that students in the *Links* programme gained a sense of identity – of their place in, and value to, the community – and became positive role models to other young people. One teacher's aide commented that these boys wore a different uniform by choice, called themselves 'Links' and *they were proud to be Links*. Although the programme no longer exists, some of the boys still wear the uniform. On the other hand, when we interviewed boys who had been in the *Links* programme, they generally wanted to be in the mainstream and have access to mainstream subjects. In 2004, 25 of these boys achieved entry into mainstream classes. These boys responded positively with comments such as, *it's better now that there are boys and girls and not all black*. Not only could they now mix with everyone, but they believed that in the mainstream, *you get somewhere*. There are more subjects and it's more of a challenge. Indigenous parents, too, want *proper education* for their children. One *PCAP* report records parents insisting that their sons *have the same access to mainstream curriculum as does any other student throughout the state*.

The boys agreed that in *Links* it was *hard being in the same classroom all day, or for three or four periods straight. Other kids were able to get up and change classes but we weren't*. They all expressed a simple *need to move around*. They also said that they *weren't getting to use the good equipment* in classes such as in Art, because they were *stuck in the same classroom all the time* and not able to go to the art room where all the good materials were stored.

Further on *Links*, the boys argued that it was *better now that we are not just a group of Indigenous boys in a bad class*. Having left *Links*, all of the boys, with one exception, thought it was *good having boys and girls together* because *the girls keep the boys in line*. One thought it was *good to be in a class with girls who want to work when you do*. In addition, some teachers had been seen by the boys in their *Links* classes to be *lost and didn't know what to do*. According to one teacher's aide, some of the teachers *were scared of their [the boys] bad behaviour and rightly so*.

Yet despite these calls for a diversity of staff and experiences, the boys who were previously in *Links* consistently spoke highly of 'Mr J', the current Years 7, 8 and 9 multi-age boys' class teacher who previously taught in the *Links* Programme. *Mr J took us everywhere, did fun stuff and was just cool*. 'Mr J' also insisted that they did the work. The boys valued his consistency, fairness and understanding of their needs. They felt that he listened to them and made learning interesting and purposeful. Thus despite their desire for a range of experiences, the relationship they developed with this one teacher, because of the time they spent with him, was valued.

A similar situation has occurred with the Indigenous Teacher's Aide ('B') who is attached full-time to the current Years 7, 8 and 9 multi-age boys' class and previously was involved with the *Links* class. He *believes* in the boys, *values* them, *knows their parents* because of his community connections and has their respect. He is not their teacher, which allows him greater freedom in relating to the boys as there is a different community expectation in terms of his role. His emphasis is on encouraging the boys to try to *have a go*. He identifies the boys' frustration as stemming from their poor school attendance when they are young: *Their skills are behind already so they can't cope when they hit Year 7*. He actively tries to break through the perceptions of the students who think that, because they can't read and write, they are not capable of anything. He himself emphasised that the right person is needed, one who understands that boys are *ugly, rude and have huge amounts of hormones rushing about* and need physical activity. The boys interviewed see 'B' not only as a teacher but as a friend. 'B':

helps with problems ... doesn't forget if he says he is going to take a boy fishing who is working really well ... Nothing is written down ... it isn't formal ... If the boy is still working well by Friday he just says, 'We're going fishing' ... If you haven't worked well he just drops your name off his memory and doesn't say anything and puts another boy in there. ... He is always there.

Again, the boys value this relationship with a key figure whom they respect.

On balance, the change away from the *Links* programme appears to have been a positive step. Although fostering a sense of pride, the programme created an

Indigenous class with what the Principal described as an *'us versus them' mentality*. Although there had been attempts to include non-Indigenous students in the class, they wouldn't go, saying *I'm not going in there, it's a black class*. The students themselves, while they enjoyed being part of *Links* and recognised some advantages in it, were generally dissatisfied. The Principal commented that they had become *isolationist and not prepared to mix with the mainstream* because, although they *didn't like the barriers*, they didn't have the social skills to *renegotiate their way back in*.

The effects of the *VET* programme are less ambiguous. The programme has resulted in some students gaining employment through school-based apprenticeships and positive local and statewide publicity generated by the programme's success has increased the community's self-esteem, sense of identity and pride. In addition, the Head Teacher considers that the *VET* programme has helped to bring about a greater general community awareness of the need for ongoing education and training.

Ironically, however, the programme's very success has added to the fragility of community-school relationships as there are a significant number of parents who have different aspirations for their children. Due to falling student numbers, Amber High School is fast becoming one which offers mainly vocational options. This means that it cannot retain teachers for university pathway subjects as, by state government formulae, student numbers are too low. Those parents who want more 'academic' programmes send their children to boarding schools, thus reducing student numbers further. The perception of many in the community and some staff members is that the move towards vocational education is a school administration decision rather than a state government mandate where funding is *based on numbers not on need*. The design and development of productive post-school vocational options, however, is strong and appears to be successful.

B.8.4 Conclusion

The Principal and teachers at Amber High School have evaluated the success of their programmes and been willing to change or refine these programmes. They have involved the students in decisions about how they learn. Two powerful themes emerge. First, the need for 'perceived relevance' to engage boys. Amber High School's focus on post-school options demonstrates to its boys that education is a resource they can deploy successfully in the future. The boys talked about the way their feelings about school changed once they were offered the option of returning to the mainstream classroom and pathways to employment opened through school-based apprenticeships. The boys agreed that the mainstream was more structured because students know *where they are going*, not only in terms of a timetable but in terms of a goal. Boys in the *VET* programme are school-based, but are monitored and supported in the field. Here is a strong example of 'E'ngagement. Taken together, a number of Amber High School's initiatives support 'e'ngagement and motivation through classroom and ICT strategies.

The second major theme is the importance of 'relationship' for boys' educational outcomes. Relatedness is a key component of motivation and 'e'ngagement. Research into the MeE framework found that caring and supportive environments, which make students feel as though they belong, enhance student engagement. Amber High

School's belief, as expressed by a teacher's aide, that *success in learning bears a high correlation to the extent to which genuine care and concern for the individual student are demonstrated* is evidenced by the ways in which the school responds to the needs of the students, encourages their risk-taking and actively seeks to build confidence and self-esteem. The research team's interviews with boys revealed that they do feel supported.

The boys are also more confident about their post-school options. They expressed the opinion that coming to school *is about education and getting a job* and they felt that it was better to come to school because *if you stay at home you get nowhere*. One student is working as a bull catcher on three different stations on weekends and during school holidays. His immediate goal is to buy his own truck, but his long-term goal is to use the Marine Studies he is enjoying. Such a future-oriented consciousness is an important link between 'e'ngagement and 'E'ngagement.

B.9 Indigo Preschool

B.9.1 Background characteristics

Indigo Preschool is a regional, community-based and managed double-unit preschool in New South Wales on the outskirts of a large town. There are 20 children aged three to five in each room of the preschool. Children attend part-time with 95 children attending in any one week. Most of the children come from non-English speaking backgrounds (NESB). The educators include teachers with university degrees, a child care worker with a diploma and several untrained staff. All members of staff have extensive experience in early childhood education. For example, the Teacher-Director and the aide in her room have taught together for 20 years and other staff have all been at the preschool for at least seven years.

Indigo is in a low-SES area. In 2004, 21 children came from families with a total income of less than \$20,355. Also in 2004, 23 children came from single-parent families, and only five families had both parents in full-time work. Enrolment information indicates that fathers are generally employed in trades such as carpentry and mechanics, work in local mines or at the aluminium smelter, or are factory workers or labourers. A few of the fathers are employed in professions such as engineering or work in managerial positions. Mothers generally work in the hospitality industry, administration, sales or childcare.

In 1995 the Teacher-Director began to track the careers of boys who had attended Indigo Preschool as they progressed through primary school and high school. In 1995 she noticed that boys generally weren't achieving as well as girls. This was based on Higher School Certificate results as well as evidence that the boys in the local region and at the local high school were underperforming. At this time her son started school and encountered difficulties with literacy, despite having attended the preschool. The Teacher-Director observed that he was engaging in literacy practices related to his interests, but not engaging with conventional school literacies.

When they [teacher] gave him stencils he would turn them onto the other side and draw the game plans for the Mighty Ducks [his favourite ice hockey team] ... so in his own way he was still writing and he was interested in [literacy] ... He could write all of the players' names, he could write all of their numbers and he knew where each player should be ... but the school didn't like that ... He wrote his own letter to the Mighty Ducks and they sent him back a beautiful year book and so he took that to school and read it ... The only problem was when he got to school they told him it wasn't a real book and he wasn't to read it ... when it came to reading something the school wanted him to read he didn't do it.

Similarly, when she inquired at the local primary school as to how the boys who had attended the preschool were doing, she found that many of them were not succeeding, particularly in areas such as literacy. She commented that:

We were finding lots of our children, in particular our boys, were finding it very difficult after they left our centre and they weren't coping very well once they had attended school for two or three months.

Parents also felt that there were problem areas that needed to be addressed, such as boys' generally poor academic achievement, low literacy rates, problem behaviours and need for remedial education. One parent summed up these concerns by saying:

I know my brother can't read. He's 33 or something. He's one that went through the system and I think there are a lot of boys that went through the system that can't read and it was never ever picked up.

Around this time the local high school started the *Boys in Action Team*. The staff at Indigo Preschool were inspired by this programme but decided that action needed to be taken much earlier, that is, at the preschool level, to bring about far-reaching changes in the educational achievements of boys. The Teacher-Director began finding out more about what was happening in the area of boys' education and investigated potential funding. During this period the New South Wales Department of Urban Affairs and Planning was offering grants to groups who were facing issues within their local communities and she was successful in obtaining a grant. She also worked with the local council and the local university, which had a *Men and Boys* project, to focus on boys' education at Indigo Preschool.

Other educators at Indigo commented that an additional reason for introducing a focus on boys' education at the preschool was that they needed to find ways of engaging the boys in learning. Several educators commented that, prior to the preschool focusing on strategies to engage boys, the boys had spent large amounts of time running around and participating in superhero play. One teacher suggested that when most of the challenging playground equipment was removed due to safety concerns the boys' energy had to be channelled into different areas.

B.9.2 Strategies for improved academic and social outcomes for boys

The Teacher-Director emphasised that effecting real change is *not a quick fix*. It is essential that educators engage in ongoing questioning of practices such as the

experiences that are provided in the preschool programme and the ways that educators interact with boys.

The staff at Indigo Preschool have been focusing on boys' education for ten years and are continuing to work in this area. Some of the strategies they have found to be effective are informing educators and parents of issues in boys' education; strengthening links to home and community; early intervention; mentoring; challenging dominant masculinities; developing a curriculum that builds on children's interests; active learning; everyday experiences; adopting an integrated approach to literacy; and fostering educator-child interactions that scaffold learning. Some of these strategies are described below.

Informing preschool educators and families of issues in boys' education

Indigo Preschool has run a series of workshops on boys' education for parents and educators from local childcare and preschool centres. The Teacher-Director commented that:

We wanted to make sure that our parents knew that there are issues facing boys in education and not get to Third Class or Fourth Class when they've done their Basic Skills Tests and all of a sudden they're faced with 'Ah, my child isn't progressing. Why not?'

Educators at Indigo Preschool continually engage in critical reflection on their practices and attend professional development sessions.

Strengthening links to home and community

Indigo Preschool's philosophy encourages strong partnerships between the children, educators, families and members of the local community. The preschool has created a 'homelike' environment through the use of everyday, natural materials such as wooden furniture, cane baskets, lamps and lounges. Pastel and earthy colours predominate, rather than the traditional primary colours of many early childhood settings. Photographs of the children and their families, as well as children's artwork, are displayed in frames on a wooden display unit in each playroom. Pets such as fish and guinea pigs also help to create a homelike environment.

The provision of authentic resources that children are familiar with, such as boats, bikes, wheelbarrows and hammers, also help to provide connections between the preschool and children's family and community experiences. Outdoor resources observed during the research team's visit to the preschool included a boat with fishing lines and plastic fish, an outdoor restaurant with menus, bikes and bike helmets, wheelbarrows and rakes, blocks and pulleys connected to a tree with a ladder, diggers and pipes in the sandpit and a conveyer belt with blocks and toy trucks.

Families and communities are involved in the preschool in various ways. They are encouraged to visit the preschool, attend special events, share expertise and provide resources. Parents and grandparents are involved in the day-to-day programme in a number of ways. For example, when a group of children showed an interest in knitting, some grandmothers spent time showing the children how to knit. Grandfathers often bring in old machinery for the children to investigate and may stay

to help the children to pull the machines apart and then put them back together. On one occasion a father worked with a group of children to assemble the new garden seats.

Indigo Preschool's educators work collaboratively with other professionals in the local area to support the children and their families. A number of the parents who were involved in the focus group discussion mentioned the support they had received from the preschool in accessing services such as speech therapy. A substantial number of children attending the preschool have been identified as having speech disorders and the preschool educators integrate each child's therapy programme into their individual planning for the child.

A number of parents whose children have been diagnosed as having speech disorders commented that they had all had difficulty in accessing early intervention until they enrolled at the preschool and received assistance. Comparisons were made with other childcare and medical services where children's individual needs were not addressed. Many parents expressed frustration at the lack of support in the community, with one parent stating:

That's one of the main problems, if your son does have a problem most people roll their eyes and go 'Oh he's a boy ... He'll just grow out of it. He's just a boy'. That's why he's bashing people over the head and that's why he's not talking properly 'cause he's too busy being a boy and until you actually come to somewhere like this [preschool] or actually see someone who knows they're not just a boy ...

The Teacher-Director reported that ten boys and one girl had recently been referred for specialist support for language disorders. In addition, seven boys are currently receiving special needs funding and another three are waiting for funding. The Teacher-Director also stated that, in the 24 years she has worked at the preschool, it has always been predominantly boys who are in need of speech therapy. Due to the high number of children with language disorders and the long wait for speech therapy at the local hospital, Indigo Preschool now employs a speech therapist. This has been achieved through a combination of special needs funding, contributions from local clubs and preschool funds.

Parents are encouraged to visit the preschool at any time – for a few minutes or the whole day. However, several years ago the educators noticed that few fathers were spending time at the preschool, so they focused on strategies to create a 'father-friendly preschool'. This included moving the focus from pastel colours to bolder, earthy colours with the use of wall hangings and providing a lounge and a range of reading materials. The Teacher-Director found that providing manuals and trade magazines encouraged fathers to sit down and read with their children *so that boys can see that men do read and that there is a reason for reading*. Fathers are encouraged to visit the preschool at any time, so that if they are driving past they might come and have lunch with the children, or spend ten minutes playing or reading. Many fathers were reluctant to visit at first but did so with encouragement from their partners and the preschool educators. One mother noted:

My husband came down but I had to push him to come down. He was quite reluctant to at first. He thought: 'What am I going to do with them?' He worked that out and he came down and he had a great day. But they still need pushing. It's not the natural thing to come down to their child's preschool.

The educators at Indigo Preschool are supportive of parents who are separated and work to include both parents in their child's programme. Both parents are given invitations to preschool events and at the end of the year both parents receive a copy of their child's portfolio, which provides an overview of the child's experiences at preschool. For one separated father, inclusion in preschool events was a very important way of staying connected with his children. He reflected on his experiences:

My oldest who's 7 in July ... I came for the day with her and with Janette. It was a funny day at first but I really wanted to do it. I was a bit nervous but once I got here I played the old 'Wibbly wobbly song' and my name come up and out the door I had to go with all the kids wibbly wobbly. All in all, my little girl got a lot out of it ... yeah, it was a good day for her.

Another example is a father who spent time in a correctional centre and who was kept in touch with his child through the preschool sending him newsletters and copies of his child's work. When he was released he came to the preschool and spent time there quite comfortably due to this ongoing contact.

The educators believe that fathers are more likely to spend time at the preschool if they have a specific activity to do. Some of the activities that parents and educators remembered fathers being involved in include: working with the children to build something using one of the construction sets; pulling apart a bike and putting it back together; building a go-cart; playing a game of soccer; playing an instrument; setting up and being involved in completing an obstacle course; and cooking sausages on the barbecue. One of the fathers who used to visit the preschool became so interested in preschool education that he enrolled in an early childhood teacher education course.

Mentors

The involvement of fathers in the preschool provides male mentors for the boys. Some of the educators and parents believe that this was particularly important for children who did not have a father living with them at home. The employment of male childcare workers helped to break down stereotypes by giving children the message that men can be as nurturing as women. The Teacher-Director commented that when fathers and male educators sat with boys to read books they were providing a positive model. She also stressed that when there are male staff members or fathers at the preschool, all the staff are careful not to reinforce stereotypes by always asking the men to do tasks such as lifting and carrying. The display of posters of men involved in non-traditional roles also encourages boys to take on a range of roles in their play.

An interest-based curriculum

Educators encourage boys to be involved in all areas of the curriculum, including creative arts, literacy and dramatic play, by connecting to their interests. The preschool staff have developed a curriculum that builds on the interests of both boys

and girls and which connects to children's family and community experiences. The Teacher-Director emphasised the importance of educators being responsive to children's ideas. One parent, who is also an early childhood educator, reflected on the way that programming in early childhood settings has changed over the last ten years so that curriculum is now more open to children's ideas. She believed this change is *so much more advantageous for boys ... [who] will do it if it's something they're interested in.*

The parents who participated in the focus group discussion commented that their boys are interested in literacy when it is connected to something practical, such as using an instruction book to pull apart a bike and then put it back together. As one parent noted:

It's really got to reflect their interest. I know my son would spend all day outside ... You know, he'll be outside building, he loves to build and mow the lawn and things like that, so he's got lots of books on trucks and bulldozers and colouring ... Otherwise if I sat him down and said, 'write your name', he'd just look at me and laugh. He's just not interested in that at all.

This parent comment highlights the need to focus on the interest of the child. Another parent commented that educators encourage children to find out more about a topic by looking in books and using the internet. As one of the educators explained:

You can't just expect them to be interested just by using books. You've got to have hands-on stuff that they're really involved in.

Children's interests are used to challenge their ideas and to extend their thinking. One of the teaching assistants at the preschool is very aware of the need to plan experiences that extend on children's interests, stating:

You can't expect to find what they're interested in, put it out and just go from there. You've got to keep adding a little bit of new interest to it. We might start with something and it's extended over the next few weeks so we can keep them interested for that long by adding something new to it all the time. I think it's important to keep adding and extending that activity to keep their interest and to be there with them, to make sure ... that the interest is always maintained.

Programme documentation, interview data and the research team's observations revealed that children are encouraged to engage in long-term projects where they investigate big ideas, and where children, educators, families and the local community learn collaboratively. Something that one child is interested in, such as a building site or a bird's nest, is often picked up by other children, particularly when educators extend the initial area of interest with further, related experiences.

Most importantly, the Teacher-Director stated that the preschool's philosophy is to focus on the processes of learning rather than on the end product and to encourage children to be in control of their own learning. Thus literacy is not viewed as an end in itself, and the curriculum relates to everyday life. Children are encouraged to explore,

discover and investigate, and to be actively engaged in problem-solving. In a video created by the preschool, the Teacher–Director emphasises the importance for boys of ‘real life puzzles’ such as finding out how a torch works, and the incidental learning that occurs as boys engage in real-life tasks. She also stated that staff *set up activities that allow the boys time to look at a problem, to work it out, to solve it and then to start to put it into practice.*

In terms of the MeE framework, Indigo Preschool’s use of hands-on materials and active learning promotes children’s ‘e’ngagement in learning. In addition, the focus on learning processes, such as problem-solving, encourages deep learning and higher-level thinking, as well as social processes of collaboration and cooperation. Moreover, the ‘real life’ puzzles pick up the important concept of authenticity. Learning is made relevant to children’s lives by linking it to their family and community experiences. In this way children see literacy, numeracy and science as integral to everyday life and thus immediately relevant to them. The curriculum builds on children’s strengths and provides experiences that enhance opportunities for success, thus potentially activating the predictors of resilience identified as important to motivation: self-efficacy, persistence, control and low anxiety.

Children develop confidence in themselves as learners and have positive attitudes towards learning and school. Because the preschool staff know about and value the learning that occurs in children’s families and communities and link this to the preschool curriculum, children can see themselves as strong and competent learners. The positive, supportive relationships that staff members have developed with the children, their families and the local community also assist boys to develop strength and resilience as learners.

The MeE notion of who holds the discourses of power, particularly the issues of who is valued and whose voice is given credence, is also a central concept in assessing Indigo Preschool. The preschool’s programme empowers children by providing them with opportunities to make choices, not only about the experiences they are involved in, but also in the direction they take within those experiences. Children are also empowered through opportunities to engage in real-life experiences, to use real equipment in meaningful ways and to have control over their environment. Children’s voices are acknowledged as staff listen and respond to children’s ideas, questions and interests.

B.9.3 Evidence that the strategies are improving academic and social outcomes for boys

Indigo Preschool offers anecdotal evidence that the boys are engaged in learning and communicating. One staff member noted that, compared with ten years ago, the boys are more engaged in learning rather than aimlessly running around or re-enacting superhero narratives. Another staff member observed that compared with the situation before the boys’ programme, the boys are now able to *hold their own* as participants in group conversations rather than letting the girls do all the talking. The samples of work collected for inclusion in children’s portfolios also demonstrate that boys are actively engaged in learning and are competent in literacy and numeracy. The Teacher–Director noted that boys are now more engaged with literacy:

[The boys'] confidence levels have increased. They are wanting to have a go at writing. They are wanting us to record what they are saying and want to read that back to us. They want to read it to their parents ... They will write their own spiel ... Today they [the children] had the numbers [number cards] out with the blocks. Later on it was actually a boy who said 'I want to have a go at writing my own numbers'.

Educators were observed participating in experiences with children and encouraging problem-solving, negotiation and cooperation. An untrained educator commented on one boy's engagement in a woodwork experience. She noted that this boy, who had only recently commenced at the preschool, and who often spent long periods of time running around, spent an extended period of time in constructing objects at the woodwork table. On reflection, she believed that this was due to her involvement in the experience. She stated:

I think because I stayed at the table, that kept him going. He was really proud of what he'd made at the end. You really need to direct them to the task and stay on task with them. Don't walk away. Don't leave them. You've really got to stay and try and extend it further ... if you stay and it's really exciting, interesting, make it interesting, they will stay there.

Through active involvement in literacy processes children are empowered to become literacy users. The Teacher-Director recounted the time that one boy had completed a block construction of a spaceship and asked her to draw it for him:

I said 'I will, but right now I need to finish what I'm doing'. He said 'It's alright. I think I can do it myself'. We went and got the paper (we had clipboards there for them to use themselves) and he did. He drew it and from that pattern he decided that he would like to be able to make one to take home. From that he went and collected timber from the wood pile ... We did some measuring to make sure that it was all going to be the right size. This project went for weeks. He ended up building [with the pieces of wood] what he had created with a block building.

Feedback from parents and the local primary school indicates that boys are now doing well at school and are receiving awards for literacy. The Teacher-Director noted that:

The boys are interested in reading ... There is an intrinsic motivation for these boys. There is a need for reading, where as before they really didn't see the point.

Evidence that the boys' programme is working can also be found in the strong reputation Indigo Preschool has in the local area. Parents and educators from other centres consult the educators at Indigo Preschool to find out what works best for boys. Many families travel so that their child can attend this preschool as they believe it offers the best programme for boys. The parents who participated in the focus group discussion were very aware of the importance of literacy and the difficulties that many boys faced with literacy learning. Many of their sons had speech and language disorders and they emphasised the role of the preschool in diagnosing and providing assistance. One parent stated that when her son first came to the preschool:

he had limited speech, he ... one or two words and pointing like a two-year-old sort of thing, but since all the work they've done and all the help they've given me, he's writing. He knows the alphabet. You know, he can write, he's reading, you know and he's just gone ahead so much that it's just great.

Another parent reinforced this view, stating:

It wasn't until he came [to Indigo] that the problem surfaced and I got a proper diagnosis ... If I hadn't come [here], he would have been off to school with all the problems that he had.

B.9.4 Conclusion

There has been a notable increase in the number of fathers involved in the programme since the preschool first targeted fathers' participation. Parents and staff reported that many fathers were reluctant to visit the preschool at first but did so with encouragement from their partners and the preschool educators. According to the Teacher-Director, the numbers vary from year to year, but approximately 25%–30% of fathers spend time at the preschool. Involvement of fathers in the programme has many positive outcomes, including providing role models that, as the Teacher-Director commented, enable the boys to *see that men do read and that there is a reason for reading*.

A number of fathers mentioned that involvement in the day-to-day events of the preschool kept them informed about what was happening in their child's life and promoted conversations about the day's events at home. Children are also enthusiastic about the involvement of fathers, reportedly talking about this when they go home and recording it in their portfolios with comments such as, *My dad came to preschool today and played soccer*.

All educators emphasised that a curriculum that actively engages boys in learning involves more than the provision of resources. They believe the key to the successful engagement of boys in learning is educator interactions that foster boys' interests. Educators highlighted the importance of sitting down with children individually and in small groups, talking with them about what they are doing and asking questions that stimulate further conversation.

Educators discussed the strategies they use to motivate and engage boys in learning. An untrained educator, for example, stated that she encourages boys to be involved in a range of experiences by asking questions such as *Have you seen what we've got over there?* or *Have you seen what somebody else is doing over there?* She also encourages boys to stay involved in an experience by sitting with them and talking about what they are doing. This is not so much a structured-learning approach as a strategy for encouraging continued attention to solving a problem. Another member of staff commented that she encouraged boys to be actively engaged in learning, by inviting them to take an interest and get involved in an experience, and encouraging them to persist at tasks by providing comments and feedback that scaffolded their learning. She gave an example of a boy who was reluctant to draw something he was

observing outdoors as he believed that he wasn't capable of doing this. She supported his efforts with comments such as, *Why don't you start here? Have a look at it ... what can you see?*

Staff believed that the employment of male educators brought a different perspective to the preschool. The Teacher-Director commented that both the male trainee and the male casual educator did things differently from the other educators and that this challenged the staff to reflect on their practices. She noted that the fathers and male staff members involved the children in different sorts of activities, such as sports, climbing trees, crawling through tunnels and 'rough and tumble' play that many of the female educators were reluctant to participate in. She also expressed the view that the male staff members and fathers were often able to engage boys in conversations in an area of interest such as cars or karate that the female staff members and mothers had little knowledge of. Another staff member reflected that the inclusion of male educators and fathers encouraged the staff to think about the sorts of experiences they were providing and whether there was a balance of activities that appealed to boys as well as girls.

There is a strong element of team work and collegiality at the preschool, built from effective leadership and stability of staff. All staff are involved in professional development workshops and programming discussions and are active decision-makers, meaning that all staff have ownership of the programme and any changes that are made to it. Families are also involved as active partners and attend workshops and meetings. As a result, there is a shared language for discussing boys' issues and a cohesive approach to the preschool's philosophy and directions. The staff at Indigo Preschool emphasise that, for change to be effective, it must be gradual and, to this end, engage in ongoing reflection and evaluation of their practices that lead to the introduction of changes.

The approaches undertaken here are most strongly illustrative of 'e'ngagement, although these are clearly supported by strategies linked to motivation. Mentoring and partnerships with families and the local community give the boys individual support. The interest-based curriculum, a focus on active learning, relating the curriculum to everyday life, scaffolding learning and integrating literacy are all related to improving participation, emotion and cognition for learners – 'e'ngagement. The whole preschool approach also highlights the 'E'ngagement area of the framework.

The practices at Indigo Preschool could easily be replicated in other early childhood settings. Staff expressed surprise that others weren't employing similar strategies and emphasised that *anyone can do it*. While the preschool has committed resources to workshops for staff and families and to the employment of a speech therapist, it is important to note that the programme does not rely on additional funding. The emphasis is on engaging boys in learning through programming that is inclusive of children's interests and social worlds and relevant to everyday life.

B.10 Hazel High School

B.10.1 Background characteristics

Hazel High School is a Year 7 to Year 10 High School located in a medium-sized Victorian town. The school draws students from a large outlying rural area, as well as from local urban residential areas, and has a current enrolment of 660 students. A high proportion of students are from low-SES backgrounds, with 45.5% receiving an Education Maintenance Allowance (EMA). Hazel is one of five schools linked to the nearby senior secondary school where students undertake Year 11 and 12 studies. The school's six feeder primary schools are linked to the school in a cluster, coordinated by a teacher on staff at the school. The school was formerly a technical high school with a majority of boys in its enrolment. In the last three years the school has enrolled more girls than boys, so the balance has shifted. The school curriculum is organised as Years 7 and 8 (Middle Years) and Years 9 and 10 (Later Years). The school charter emphasises that the middle years' focus is on engagement of students.

In the early 1990s there was a high incidence of student misbehaviour. Results were below statewide benchmarks and the Principal saw a need to address the issue of underachievement. As a result, the school implemented strategies aimed at reducing a perceived lack of motivation, especially among boys. The Principal spoke about how this poor performance was addressed through a series of stages:

There was an opportunity in 1996 to be involved with the Centre for Adolescent Health in the Gatehouse project. This looked at the social and emotional impact of working with students in schools. I think there was a recognition that student management and curriculum went hand in hand ... and that the Gatehouse project, when it came along, gave us that vehicle to be able to look at social competencies and social-emotional impact ... how kids felt about themselves, how kids felt about school, but to do it from a curriculum point of view by using poetry, prose, health and physical education material.

When the *Gatehouse* project closed, the school participated in another project involving what the Principal remembers as *quite a lot of research in regards to teacher attitudes and student attitudes*. This project developed seven components of effective teaching and learning and created a network of interactions between the feeder primary schools. This has assisted Hazel High School in subsequent efforts to improve student outcomes throughout the cluster. Using the knowledge gained over the preceding ten years of working with these projects, the school then developed what the Principal calls *programmes depending on the needs of our kids, and what we believe works for us*.

Hazel School has three initiatives designed to increase student motivation and engagement: the *Middle Years Strategy*, the *Cluster* and the *Community House* programme. In essence, all the strategies are concerned with interactions: teaming of teachers, networking between the primary teachers and the school through the *Cluster*,

and coordination between the school and workplace regarding work placements and apprenticeships.

B.10.2 Strategies for improved academic and social outcomes for boys

Keeping in mind that the programmes under discussion are aimed to motivate and engage both boys and girls, the key relevant programmes are:

The Middle Years Strategy

What began as a pedagogy specifically targeting boys has become a *Middle Years Strategy* and is applied over three curriculum areas. The central pin of the improvement programme is team-teaching in double classrooms. The strategy involves the components of team-teaching, a double classroom and table-based group work on a cooperative learning model. In most double classes the two teachers who teach English also teach the students Studies of Society and Environment (SOSE). A further two staff teach maths. This reduces the number of teachers with whom Years 7 and 8 students interact in the early years of secondary schooling. Each Year 7 double class moves into Year 8 with a team of teachers for English and SOSE and another team for maths. Subjects other than English, Maths and SOSE take place in single classrooms with one teacher, the table-based group strategy often being maintained. In terms of the boys, the Senior [school] Manager says: *From my observation of Years 7 and 8, it seems to be a lot more supportive in terms of boys learning.* Certainly the improved Achievement Improvement Monitor (AIM) results (shown later in Figures B.4 and B.5) confirm that boys are doing better as part of an overall school improvement. This in turn suggests improved motivation and engagement among the boys.

The Cluster

As part of a research project studying teacher skills and student outcomes, Hazel High School became involved with a cluster of seven primary feeder schools. The *Cluster* targets the middle years and aims to ensure a smooth transition to the Junior Secondary School. The *Cluster* Coordinator travels to each of the feeder schools regularly for one-on-one planning meetings with teachers as well as whole-staff meetings, to try to ensure that pedagogy continues to develop and that content continues to challenge students. She is currently working on maths:

We were looking at an average of 60% of boys working below the expected standard [in maths]. We're trying to improve our results in Year 7 so we're actually addressing problems in [Years] 3, 4, 5 and 6.

The Cluster Coordinator also conducted the Attitudes to Schooling from Primary through to Secondary Survey (see Figure B.3).

The Community House programme

The third programme is the *Community House* programme. This is designed for Years 9 and 10 students at risk of leaving school without experiencing any success in achieving academic outcomes. The programme targets students with very poor literacy and numeracy abilities and offers these students small-group (not more than

12 students in a group) tuition, TAFE Certificate 1 qualifications and opportunities for employment and apprenticeships.

B.10.3 Evidence that the strategies are improving academic and social outcomes for boys

Evidence of the team-teaching/double-classrooms success comes from several sources: the school's own Attitudes to Schooling Survey; AIM results and a Parent Opinion Survey. Teacher results against the Curriculum Standards Framework (CSF) were also sighted during the research. These are not included in this report, but support arguments that results have improved.

In the Attitudes to Schooling Survey Year 8 student groups (8A–8F) answered a 20-question survey (Figure B.3) on: double- and single-classrooms experiences; one and two teachers; and working in table-based groups or alone.

Figure B.3: Hazel High School Year 8 survey

Below is a list of situations that may have helped your learning or you enjoyed. Colour in the box that best shows your response for each statement.	YES	NO
1. I enjoyed being in double classrooms.		
2. I enjoyed being in single classrooms.		
3. I enjoy having a large percentage of my classes in one room.		
4. I preferred two classroom teachers.		
5. I preferred one classroom teacher.		
6. I prefer having the same teacher for more than one subject.		
7. I liked working in table groups.		
8. I prefer working on my own than in a group.		
9. It is easy to obtain help from people I work with.		
10. I feel comfortable asking for help from table-group members.		
11. I liked working in single-classroom settings.		
12. I preferred learning in double classrooms.		
13. I preferred learning in single classrooms.		
14. I felt I had some ownership of the double classroom.		
15. I felt I had some ownership of single classrooms.		
16. It is socially advantageous working in double classrooms.		
17. It is socially advantageous working in single classrooms.		
18. It is easy to get teacher assistance in double classrooms.		
19. It is easy to get teacher assistance in single classrooms.		
20. I enjoyed my Year 7 and 8 at Hazel Secondary school.		

The data showed that all groups of students preferred to work with two teachers rather than one. The Principal noted that the data also showed *everybody much preferred to work in a table group. I think they think that they learn more and bounce off each other.* With regard to double classrooms, the results of three groups were significant, showing that half the students preferred double classrooms and, as the Principal explained:

ownership was ... strong ... the reason is in Year 7 the double rooms are their home rooms and Year 8 they still have ownership in the fact their

work is displayed for at least two subjects in that room, so they still have the feeling of ownership in there. Now the reasons they liked double rooms were that there were more friends, more people, more help, new people.

For the case study, students interviewed in Year 8 focus groups discussed the positive effects from the double classrooms with team-teaching. Several commented on getting more opinions from people, including different examples from other students. One said:

What I like about having double classrooms is you get to sit with different people. That's better than sitting with four of your friends because you get used to them and just their normal ideas.

Another spoke of the team-teaching, saying: *They've got two of them thinking about what they can put into the assignment rather than one, so there's a bit more of a range of questions.*

This view was endorsed by teachers:

There were 160 students, the whole year, surveyed in last year's Year 8. And a quarter say that nothing is a distraction. And the other the two teachers, more help again, quicker assistance.

I think it's more the fact you can have one teacher who's actually delivering the lesson and someone could put up their hand and where it's only one teacher in the class then the student waits; with two teachers, the other one is circulating and can get there straight away. Or you've got two teachers that can be at different positions but both are approachable you can ask either one. And that approach makes kids feel they're important because they're seen to straight away. And that's why there's probably a high preference when we've looked at all the preference between one and two teachers that that's really high in all the groups. In Year 7 the teachers watch the kids work in partnership; the table group's not based on friendship but on working partnerships.

Observations of team-teaching showed that students work in mixed gender and ability table groups of 4. Students' opinions of table groups were positive about the potential to gain more help, working with friends and making new friends.

There are usually 12 of these table groups in the room with an additional couple of chairs where students can move for more individual assistance from one of the teachers. The teachers noticed that the students grew in confidence in working with others:

In a mixed ability group, the strugglers get carried along and they're much more confident, working with a table group. We talk about learning the skills of cooperation, body language, the things you say to one another. The table groups in Year 8 work really well because you put in a lot of effort in Year 7, teaching them how to do it.

As one of the teachers commented, the *Middle Years Strategy* also has the benefit of taking a Year 7 class into Year 8:

You don't have to waste time going through the transition of a new teacher. It's just 'Bang, straight back into it'. Especially with the programme Headstart that we have. That's 2 weeks of the Year 8 curriculum at the end of Year 7. So first day back, they're into it. You don't waste that first week.

The *Cluster Coordinator* felt that the *Middle Years Strategy* helped maintain relationships and trust with the students, which also meant that there was less disruptive behaviour in class:

If you've got a student who's involved, engaged, comfortable, safe, you can teach them anything. Getting that down pat and then addressing the learning stuff.

One teacher emphasised the notion of engagement with the middle years students generally:

At the beginning of their orientation in Year 7, the students are given learning preference survey sheets to fill out and they're asked questions about their learning styles. I've never had any problems with the kids understanding the questions, you know. They're fairly simply worded: doing hands-on activities, doing worksheets, activities or excursions working in groups. So kids have had experiences in most of those things. It helps staff plan because you have 2 groups coming in to a double classroom and you have kids coming in from different settings. We get kids from rural settings, we get kids from the city, so there's a different combination of kids and they have different learning styles. Teachers would want to negotiate with the kids their project work that they feel strongly about. Probably the biggest fear a lot of kids have is doing oral presentations; so we look at that and try to work out how we can break down those barriers. In the double classrooms you can actually have quite big audiences and you build up their confidence and do a lot of activities with the kids. So these are data staff can work with and we discuss a lot of that in our teams meeting, how we can use those data for developing assessment tasks for them to do. Which I suppose is all about engagement.

Another spoke about engaging boys and improving their academic performance:

If you've got a boy having difficulty, hands-on stuff is great. And they enjoy the whizz-bang aspect of things. Most boys will be great verbally. They'll ask really good questions, get involved in class discussions and get involved in prac. When it comes to putting that knowledge on to paper, they're very scattered, very disorganised and really reluctant. I really emphasise the need for that bookwork to be organised. Otherwise it can get to a point where they don't write on consecutive pages, they don't use headings. They can't find what they've written; they can't revise what's there. Generally my feeling is that improvement for boys is improvement

for all students. Every student in the class enjoys hands-on work. Every student in the class likes to be engaged and involved. I'm really keen to be working out ways to get kids involved in Science and working in groups more. And then take that back to a thinking process that might be solo.

The Year 8 students themselves talked about why they worked well at school. According to one it was about *the future; so I can achieve good marks and do what I want*. One student reviewed his own progress: *My spelling and deadlines have improved. The deadlines I set out to improve but the spelling just happened*. Another boy added, *My parents were surprised with my report, with the subjects that I got 'A's for. I got an A for PE, Indonesian, Drama and Maths*. In talking about things that might help them learn better, the students suggested that what mattered to them was *things you want to learn about, things that interest you. Like learning about other countries*. Another said: *I like it when the teachers make stuff enjoyable. Not just playing games. Making things more interesting*. This focus on making things interesting was also noted by another student who was enjoying English and SOSE and *one of my favourites would be technology because of the hands-on and the variety*. One student said:

When the teachers treat you with respect because you treat them with respect you have a real good time together in class.

The school AIM data contained in Figures B.4 and B.5 confirm that boys and girls have improved, and in some cases are now above statewide benchmarks in reading and mathematics.

Figure B.4: Hazel High School AIM data – mathematics

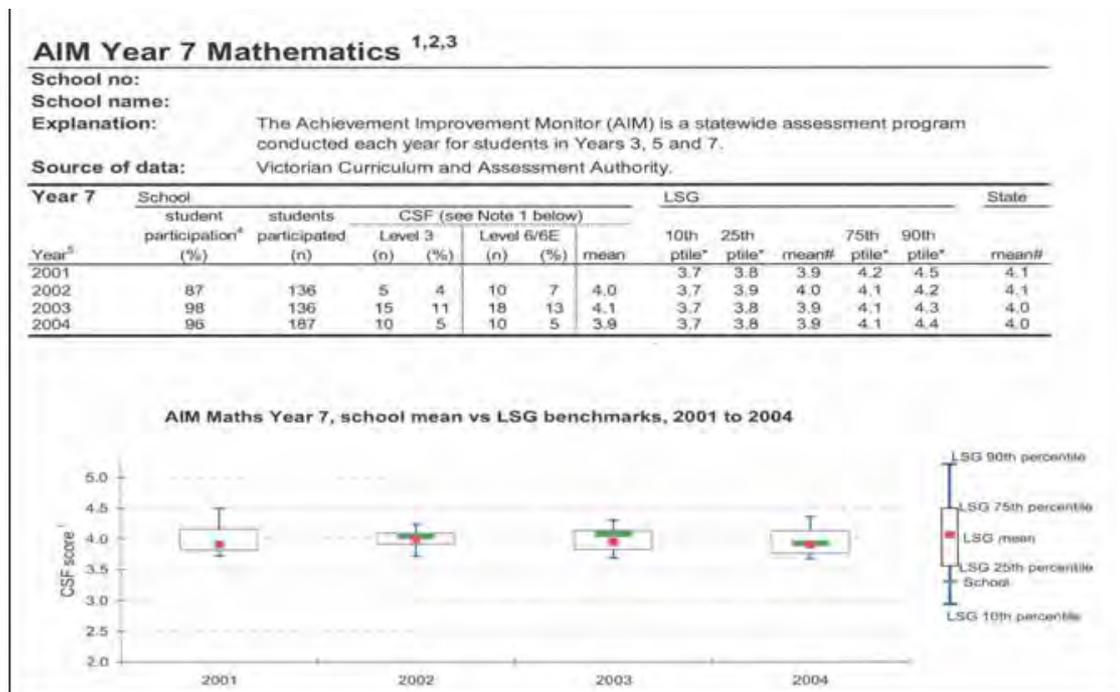
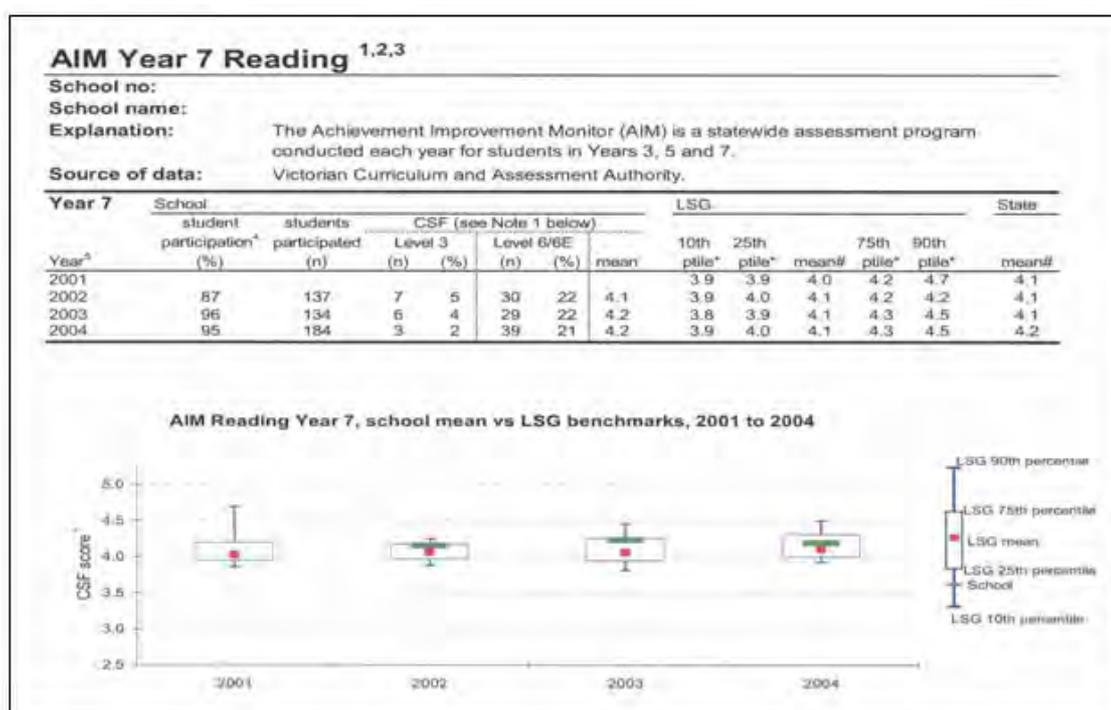


Figure B.5: Hazel High School AIM data – reading

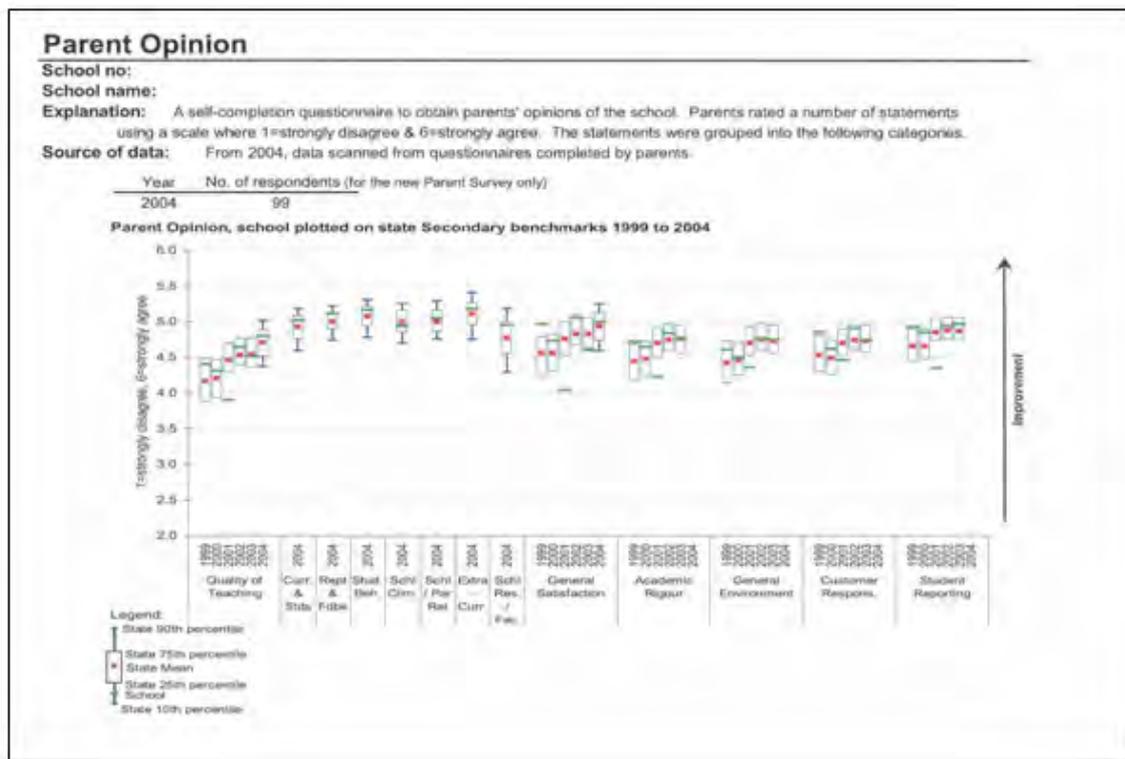


The Principal stated:

Our data shows that our students have improved. With our Maths and English we are now better than our like schools, and in some cases above statewide benchmarks. We're in like schools 7, based on socioeconomic factors. That's in reading, writing, speaking, listening. And in algebra, chance and data for maths. Our AIM results are comparable with where we were last year. They're probably better than like schools. Just a little bit under statewide benchmarks. That hasn't always been the case. We've been lower than like schools.

The Principal spoke of the change in parent opinion in response to the team-teaching in the middle years: *In the last 5–6 years, our parent opinion data has skyrocketed. And we're above state benchmarks. In 2001 that wasn't the case.* Evidence of this change is contained in Figure B.6.

Figure B.6: Hazel High School AIM data – parent opinion



The Principal also spoke candidly about the teachers' views of the processes. He acknowledged that the teachers who support the programme are teaching in it. For example the Junior School Manager team-teaches with three other staff members this year. That is a characteristic of the way in which the strategy has spread through the school staff. As the latter explains:

I team-taught with a guy when I first came here. He was completely disengaged from teaching. Had a high number of sick days that he'd taken. Over the three years it was good to see his approach change and flourish.

However, the reluctance of some teachers to join the programme makes staffing difficult, with some staff feeling that to join the programme would lock them into teaching Years 7 and 8 and prevent them having the opportunity to teach upper classes. There are other members of staff who view the process with suspicion. As the Principal said, *There are varying perceptions about what we are doing in the middle years but I'm convinced that it's working for us.*

The other initiatives at Hazel High School also appear to be contributing to its success in engaging and motivating boys. The *Cluster* Coordinator spoke of data regarding self-esteem gathered from the primary schools cluster:

I gathered self-esteem data from one of our primary schools 2 years ago; only 24% of Year 5 boys felt they had a number of good qualities. We've surveyed those same boys again in Year 7 this year ... and now for boys

it's at 50%. Now that this data is coming through, we know what we're dealing with. We're looking at ways to try and build on engagement so that these boys can have a say in what they're doing. What will make them happy.

There has been an unexpected trickle-down effect in the Hazel Primary School and its associated cluster schools. As part of the interaction with cluster feeder schools, changes in pedagogy were being implemented that provided opportunities for students to develop cooperative small-group skills. For example, the *Cluster* Coordinator spoke of the cluster schools:

picking up on the team-teaching and team planning. And all of that comes back to where as a cluster we meet together. We have whole cluster professional development days. The primary schools see the double-classroom idea and they see it working. And when I speak to other cluster coordinators, all of a sudden they've got these 'neighbourhoods' or 'school communities' but they're double classrooms with teachers teaching together.

Evidence of the success of the *Community House* programme is the number of the students continuing their education or taking up apprenticeships. In 2004, out of 16 students, 13 of whom are boys, ten were continuing their education and six going into apprenticeships.

The essence of the school's approach centres on pedagogy, with a focus promoting mobile, lifelong learning. Or, as the Principal puts it, *Engaging and connecting students, creating students' personalised learning culture ... embedding a culture of continuous improvement*. To this end, the school has been given a Leading Schools Fund. This has enabled the employment of three extra teachers who have been employed as 'pedagogy coaches'. The staff regularly has consultants come to the school to work on specific approaches, for example, professional development on teams working together. Another consultant came to work with the team leaders on the curriculum. The funding to release three teachers as coaches to be able to work alongside staff at Hazel High School is directly associated with that dominant focus.

Whether in a double classroom at the school where team-teaching is in progress or during a discussion with a student focus group, it was evident to the research team that, in terms of the MeE framework used in this research, both boys and girls genuinely feel 'school is for them'.

B.10.4 Conclusion

The Principal links the ten-year experience with team-teaching in the school to the reform agenda in the state's schools, which is about improved outcomes for students and more forward-thinking pedagogy. The improvement is also about fostering links between the school and its primary schools. He states:

In student learning, we are involved in Innovation and Excellence, the AGQTP (we have two projects going in that at the moment), the Australian Research Council ... looking at Science teaching and learning strategies

... And we're in a coaching and mentoring programme and we're concentrating on establishing a supportive school climate and culture.

The Principal believes that the strategies in use at Hazel High School could work anywhere, as long as people were willing to work at them. He points out that: *We've come to team-teaching without it being forced on us as a way of structuring the school. We've seen these gains as they've come through.*

There are some definite benefits that he highlights from the point of view of students' sense of belonging, connectedness and self-esteem.

What the school is trying to do is to skill teachers in teaching and learning strategies. That pedagogical approach is based on students' relationships and connections to school. It is clear that the students, both boys and girls, see a purpose in their learning and feel supported by the team-teaching, double classrooms, table groups and transition programmes from primary to secondary and from secondary to work or further study.

The Principal talks about being *wise in applying to be involved to use the professionals from outside and the consultants to work and support us*. There is an understanding that it is impossible to do everything at once. To concentrate on new priorities, work on integrated curriculum has had to be set temporarily aside. It is in the plan to revisit that as a part of the Leading Schools Fund because an ICT-rich curriculum lends itself to integration.

Parent interviews confirmed strong support for the whole-school environment. One parent commented that her son had liked being able to move around to different table groups at different times. She added:

The environment here is one where the students feel encouraged. When my son was working with technology then the staff in those practical subjects treated the student more as an adult. The students have the feeling that they are somebody. And by doing that it encourages kids to have a go at extra stuff such as the school council and the school production. Challenging them to be leaders. I think there's a link between that respect and the students doing better. And the school emphasises that.

In all aspects of school life, Hazel High School is making a difference for its boys. While the school's approach is aimed at all students, the impact on the boys is noticed by their parents and it is evident in school data.

Motivation

Individual boys have been supported in developing the confidence to succeed at school. The *Cluster* Coordinator's data are significant here, recording as they do an increase in the number of boys feeling higher self-esteem. Some students spoke about their parents' surprise at their reports showing clear evidence of developing knowledge and skills. In the *Community House* project, boys considered to be at risk moved from having no skills to achieving TAFE certificate I and understanding that they were not *being left behind*.

‘e’ngagement

Research has demonstrated that the consultative process embedded in team-teaching has a positive effect on both social and academic outcomes (Bleach 1998a). The classroom climate at Hazel High School has certainly had a positive impact on behavioural, emotional and cognitive engagement (Fredericks et al. 2002). Hazel High School has focused on the achievement of all students rather than focusing exclusively on boys’ programmes. This is in line with research acknowledging that pedagogy and curriculum innovations designed to benefit boys will advantage all learners (Demie 2001; Lingard et al. 2002; Martin 2002a). The positive impact of the classroom environment is true also for the students in the *Community House* programme. They have been able to identify a personal goal or goals in literacy and numeracy they see as achievable and which will work towards their gaining future employment. This is consistent with the ‘futures’ orientation which links ‘E’ngagement with ‘e’ngagement. Goal identification is the result of established school–industry links and community-based learning (Alloway & Gilbert 2002b; Martin 2002a).

‘E’ngagement

Observation and interview data show that students at Hazel High School believe that ‘school is for them’. Initiated by a need to engage the boys in a technical high school, the team-teaching strategy grew to become a *Middle Years Strategy*, designed to make the early years of high school less daunting. By reducing the number of teachers with whom students interact in Years 7 and 8, Hazel High School has sought to provide a comfortable transition level before the stage of choosing electives. By having two of those teachers engage with the students for two subjects, the school has provided its younger students with two teachers who know them and their interests well. The fact that students study several lessons in the same double classroom offers the students some temporary ownership of a space in the school. This offers another transition from primary to the separate interests of the later years of high school. The evidence of the success of the strategy is in the student responses to the team-teaching and in the results of students in AIM and statewide benchmarks.

B.11 Azure Primary School

B.11.1 Background characteristics

Azure Primary School is a Year K to Year 6 primary school in the Australian Capital Territory and opened in 1995. It is situated in a community that the ‘school facts’ document describes as *a harmonious mixture of people from different backgrounds and cultures*. In 2004, the student enrolment was 468 which puts Azure Primary School in the category of ‘large’ primary schools in the Australian Capital Territory. There are very few Year 6 students (23) as, after Year 5 the majority of students move to a separate Year K to Year 10 school. Only those students (with few exceptions) who will be attending private schools for their high school and college years remain at Azure Primary School for Year 6. The composition of the cultural background of the students is just over 1% Indigenous and 33.5% NESB. While the cultural languages

data were not available, the students we spoke to indicated that books in various languages were readily available at home or from the library.

The school has a total of 33 staff, including three administration staff, and is set up in grade groups of four classes. Team-teaching within and across grade groups is usual. Resources are well established, with multiple online computer access and what the school facts document describes as a *very well-organised and stocked library*.

The Principal said that Azure Primary School's problem was located in the upper grades. Boys' literacy levels were of particular concern as there was apparent disengagement and disinterest with schooling in general. This problem was identified through longitudinal data from the ACT Assessment Programme (ACTAP) and anecdotal evidence such as classroom and individual observations and conversations with students and teachers. In fact, the Principal states that *the ACTAP results were appalling*. While Year 3 boys' results in literacy were average, there was a sudden dip in the Year 5 results. Teachers were reluctant to teach reading in the upper grades. The Principal discussed this with the staff and found that they believed *reading should be taught in the junior grades* and that *there was complacency among the staff who had little understanding of the results of ACTAP*.

B.11.2 Strategies for improved academic and social outcomes for boys

Since 2003, all the teachers of Years 4, 5 and 6 implement cooperative reading. This is a literature-based, instructional reading strategy that draws on three specific areas of research to provide sociocultural, motivational and metacognitive perspectives to reading. According to Glenda Raison (2001), the creator of this programme quoted in the School's Cooperative Reading document:

Cooperative reading [uses] discussions with a listen, check, clarify and communicate process that promotes a cooperative learning community. It focuses on specific processes that facilitate reading engagement and motivation to read, aiming to encourage all students to choose to read more.

In 2003, the first year of the programme at Azure Primary School, two teachers were 'trained' as cooperative reading teachers for Years 5 and 6. A continued focus on the processes to be implemented saw the programme become embedded in the day-to-day running of the school, despite staff changes. Teachers who implemented the programme in 2004 are assisting and working with new teachers in 2005. The Principal considers that teachers are very committed to the programme and the gains in the school as a whole are obvious in improved ACTAP results and an increased enthusiasm for reading. Classroom observations conducted for this case study confirmed this enthusiasm. Nevertheless, the School Executive is aware of the need for follow-up support.

Concerned to involve the families of their students in reading, the school's *Talk to a Literacy Learner (TALL)* programme assists parents to understand more about the reading process and reading pedagogy. Run over a series of weeks, the programme has increased its parent intake in 2005. The School Executive is contemplating running a night programme so that more fathers might get involved and therefore be

able to assist their children with their reading. School newsletters to parents have included a section entitled 'Motivating your Child', focused on the work of Andrew Martin (2003) and giving parents some questions from Martin's work to help them understand the concepts of motivation.

As a result of a field trip to Melbourne in 2004, the school established the position of Pedagogy Coach. The coach works with other teachers, focusing on pedagogy incorporating ICT as a way of motivating for boys. Staff have individual and team consultations with the Pedagogy Coach to assist them with technical issues. The Pedagogy Coach also offers advice on how ICT can be integrated into classroom programmes. The Pedagogy Coach stated that there was a definite need for computers to support and demonstrate learning, and that time, energy and commitment were needed if this programme was to be both viable and produce observable student outcomes. Actual engagement of boys in learning depends on how the computers are used.

The school day begins for students with 30 minutes of exercise. The *Fitness* programme consists of a regulated series of activities such as running, games and exercises. It has been very popular with the boys and those interviewed rated this activity very highly and would like it to be longer. All students take part in the programme, but the staff see it as catering for the particular need of the boys to burn off some of their energy. There is also an organised indoor sports programme which was developed to meet a perceived need of particular boys in regard to playground behaviour and their difficulties in managing relationships. It includes indoor soccer matches and other team games. A physical education (PE) teacher has been employed and, in lieu of playground duty, he plans indoor activities. Indoor activities initially only took place in extreme weather but now are a regular occurrence due to a request from the Student Representative Council (SRC). The boys for whom this activity was originally planned take an active role in its organisation and there is a well-attended spectator gallery.

The school runs a choir and a band to cater for creative interests. Along with other school initiatives, this has resulted in a renewed interest in schooling in general, as boys now see that the creative side of their nature is very important. The Principal prioritises these programmes by ensuring they are carried out during school time. In order to attract the interest of the more active students, care is taken that these programmes are not in opposition to outdoor activities.

Azure Primary School prioritises the wellbeing of the whole child. The School Executive wants to create a heightened sensitivity within the staff towards the identification of gifted and talented students. A 'buddy' system in which the older students 'mentor' the younger students has been put in place. The system is in its early stages and will benefit from training to support the older students in dealing with the variety of situations they meet while 'buddying'. Some of the students interviewed said that at times they found it difficult to manage their buddy and didn't know how to *fix it*. Teachers commented on the value of this exercise in that they were able to see the natural nurturing ability of some of the boys come to the fore.

An ongoing development plan has been put in place to ensure continuation and development of all programmes.

B.11.3 Evidence that the strategies are improving academic and social outcomes for boys

Measurement of progress in reading is chiefly assessed through the ACTAP results. The 2004 ACTAP results showed an improvement in that the Year 5 boys who had been in Year 3 when the programme commenced not only had increased their individual scores, but were above the state average. In addition, their scores were higher than the girls in the same grade. While this is significant, it is interesting to note that the boys improved far more than the girls, even though they had the same access.

For the teachers, the realisation that implementing such programmes is a slow process means the visible gains will be slow to surface, but already there has been observable difference in attitude. The Principal and Deputy Principal comment that teachers became committed to the programme and very enthusiastic as a result of the training and development that was supported by the *BELS* Project.

The employment of a Pedagogy Coach and efforts to move the students and the teachers away from the notion that computers are for games and ‘free time’ rewards have resulted in staff showing interest in learning how to integrate ICT into the curriculum in meaningful ways. The Pedagogy Coach has seen a *shift in some teachers’ pedagogy with more use being made of group work using ICT and integration of ICT into the grade programmes.*

The school facts document shows increased numbers of boys participating in the music activities and highlights the enthusiasm of both boys and girls for the fitness and sports programmes. Other measures of success include: portfolios each term that include a reflective statement from each child; feedback from interviews with parents; reading progress of each child (which is monitored twice a term); absences, attendances that are noted and followed up (the Principal comments that these have improved greatly); and tone, behaviour and lack of suspensions.

Another source of evidence is the students’ overall attitude towards the school. The students have great admiration for their school. Of the students spoken to in the focus groups, all loved reading and were avid readers outside school. The only thing that interrupted their reading was *the Simpsons*. Some students obviously had great role models at home, as one boy for whom English was a second language stated, *my father carries his book [in English] around as if it is part of him.* The cooperative reading programme has been in place for at least two years for these boys.

Most boys prioritised maths as one of their favourite subjects but had some difficulty in aligning ‘school maths’ with their everyday lives. The sports programme at the school was popular and an intra-group conversation broke out about how to cope with some of the repetitive issues that were disliked, for example, walking around the same route every week. This willingness to discuss such issues showed that the students were confident and eager to offer help and accept differing ideas. The boys we spoke to felt successful at school but commented that in some cases handwriting was difficult, as it was expected to be neat all the time. They also felt that their parents thought they were succeeding even though one parent in the parent discussion group

conducted by the research team was very concerned about her son's progress. The students admitted that they never really told their parents if they had a *bad day*.

Overall, the students wanted more choice in their learning, indicating that some of the classroom processes were teacher-dominated. This statement was supported by our classroom observations. Some students emphasised that while they felt successful it seemed that they were in fact successful at *doing school*, as in many cases the work in the classroom was not challenging enough and boredom had set in with the many repetitions they experienced. This group of students demonstrated a range of capabilities, as another two students were also bored – but because the work was far too hard and they could never get it finished. The common notion that work should also be fun was predominant. When they arrived for the discussion one asked, *Are we in trouble or are we here because we are dumb?*, although others commented that their teacher thought they were smart.

The Principal sees an evident connection between playground behaviour and the expected outcomes in increased attendances and a lack of suspensions. The 'buddy' system had developed better social outcomes. For example, when all the teachers were called to an emergency meeting during lunch time, the older 'buddies' had to care for the younger ones under the stretched supervision of casual teachers. The students responded appropriately and all went well.

When the school began to focus on improving boys' outcomes, some Year 4 boys had become disgruntled, unable to read at grade level and basically disengaged in school. Now, the Principal states that the same boys appear to be happy at school; the Librarian has evidence that their library lending rates have increased; and they themselves are asking why they can't go into the classroom and work on the computers during lunchtime.

Engagement is evident in the classroom at a procedural level, with little debate from the students about doing the work the teacher gives them. In one class, however, the research team saw the teacher involve the students at a more substantive level when she engaged them in purposeful conversation, while at the same time involving them in the process of constructing the task.

There was some conflicting evidence about the amount of student involvement in planning and implementation of the programmes. Planning, from an executive point of view, was seen as cooperative in that the teachers used a cooperative planning model that meant that the students could be involved at certain levels. The Deputy Principal was of the opinion that students may be beginning to drive their own learning as they planned a unit around 'Jobs of the Future'. The SRC (which is rotated every term) looked at the needs of others, for example, charities and at the needs of the school and its students, for example, indoor sport at lunchtimes.

Professional learning has a high priority at Azure High School. Some of the grants the school has been successful in obtaining have helped fund this development but much is done outside this financial assistance. Some examples of the professional development programmes that have been put in place are:

- workshops on data collection and its relevance to student development

- a qualified De Bono trainer (one of the fathers) spending time in classes and assisting teachers and students to understand the De Bono principles
- a training course for teachers in cooperative reading with an ongoing intrastaff development for the senior classes
- the employment of the Pedagogy Coach to assist teachers with curriculum integration of ICT in the classroom
- all staff and students learning about the brain and learning styles resulting in a 'different' style of meta-language being used in both the staffroom and the classroom.

These programmes encouraged the teachers to share their experiences as they transferred their learning to their classroom processes. There is an understanding that professional development needs to be ongoing as the individual teachers move through the various stages of their learning to implementation with understanding.

Some of the changes that have been made to policies and practices around the issues of motivating and engaging boys in are:

- employing personnel in a 'different' way to support teachers and programmes
- helping teachers to be action researchers by supporting them through the various stages of implementation of new areas
- introducing the various programmes such as cooperative reading as policy (first for the senior students but eventually for Years 3, 4, 5 and 6).

B.11.4 Conclusion

The Principal was the driving force in the identification process that resulted in a successful application for the *BELS* project Stage 1 and, subsequently, Stage 2. The achievement of the grant applications made further studies and a pilot programme possible. The School Executive and the *BELS* Committee decided that several strategies would be trialled. These were the *Cooperative Reading* programme, an integrated ICT programme and the *TALL* programme. The *Cooperative Reading* programme was intended to take the students beyond the apathetic climate of reading in the upper grades by building on an already existing programme. The potential for computers to motivate boys was also considerable. The Deputy Principal comments that ICT was perceived as *a primary tool for learning in literacy acquisition*. The staff also decided that there was a need for more physical activity, hence an intensive session of 30 minutes of PE at the start of each day. An increase in activities such as choir and band offered more opportunity for creative participation for boys.

As mentioned above, change takes time at every level, but small improvements encourage teachers to continue. Gradual implementation of the programmes and continual professional development of specific teachers has led to greater achievement.

The tone of the school is indicative of a community that is thriving both academically and socially. It's a very 'busy' school with many interesting programmes being implemented. While the core of these programmes has been well planned and its value well documented, the teachers have not had time yet really to focus on the theoretical underpinnings and the ongoing thinking, which are the basis for the

implementation. While the emphasis of many of the programmes has been on achieving better outcomes for boys, the school is aiming for a well-balanced education for all students, with a particular focus on boys and what it is that motivates and engages them. Some teachers have needed to travel further than others in their learning about and implementation of these programmes but all those interviewed, though often challenged, were supportive of the implemented programmes.

Of the parents interviewed, a few were aware that Azure Primary School was in the *BELS* project but were unsure what that meant. However, all the parents in the discussion group had boys at the school and were satisfied with the school's approach to their sons' education. Two in particular had noticed a change in their sons' attitude to school and were very pleased with their progress.

The outcomes associated with improved strategies are already permeating through the school. One of the progressive outcomes has been the ongoing programme development in the PE and music programmes in line with the students' needs. The Deputy Principal said that the boys engage so enthusiastically in the creative and literacy areas that one of the directions the school would like to take next would be in the area of drama.

The staff believe that, for the programmes to continue to be successful, there needs to be a focus on the possibility of transferring the principles of cooperative reading to other areas; the meta-language processes that have been developed about specific areas of learning need to be applied to wider learning areas; and reflection and self-assessment, which are still in the very early stages, need to be seen as sustainable across the school.

The sustainability of the programmes that have been established at Azure Primary School to help boys become more motivated and engaged in their learning is well supported by the processes the staff have put in place to continue, maintain and further develop teacher learning as well as that of the students. According to the Principal, this is due to the realisation that the students need to be recognised as successful not only by themselves but also by their peers, that they need to be looked at as individual learners, and that the school needs to develop a culture that gives each child a fresh start each day.

The whole-school fitness, sport and music programmes can be seen as examples of motivational strategies; however, in contributing to whole-school ethos they also can be envisaged as addressing the area of 'E'ngagement. In conjunction with programmes centred on 'e'ngagement (for example, cooperative reading and ICT integration into the curriculum), they can work to foster a feeling in students that 'school is for me'.

While there has been some evidence of maladaptive behavioural and impeding cognitive and affective dimensions of motivation, Azure Primary School has continually promoted the adaptive cognitive and adaptive behavioural dimensions of the MeE model. This is evident through the increasing development of the teachers' and the students' awareness that Azure Primary School is a 'good school' to be in. The research team was not able to ascertain if this awareness went beyond Azure Primary School to school in general and towards the notion the 'School is for me', but

the boys interviewed were intensely proud of their school and one even commented that he liked the school because *it housed my learning for 6 years*.

The idea that students need to have a belief in themselves as successful learners was evident but confined to the classroom. Most students seemed to believe they were successful at school but not necessarily outside the school.

Azure Primary School is experiencing great changes and it is evident that each teacher 'takes hold' of those changes from a perspective of comfort as they then move on, perhaps slowly, to a point outside their comfort zone. Staff discussed issues of energy, drive and thoughts, but perhaps gave only basic attention to feelings. Thinking was talked about overtly with the students using De Bono's Thinking Hats as part of their daily work. The Principal used the meta-language of engagement and motivation with the students every day. Energy and drive were more central to the teachers' thinking, and the ideas that collected around the introduced programmes were focused on developing energy and creating drive within the students. This was resulting in many of the boys being motivated to participate voluntarily in the programmes.

There are varying levels of 'E'ngagement within Azure Primary School. While there is evidence that both the staff and the students are working towards motivated and engaged learners, it is also recognised that Azure Primary School is in the early stages of a long journey. In terms of the discourses of power, there is a developing understanding that knowledge is not the possession of the teacher alone. In some classrooms the sharing and creating of knowledge is obvious but not yet in all. This notion is spreading as the teachers become more 'in tune' with the programmes evolving at the school. While the classroom experiences varied from class to class and situation to situation, the principles of the programmes are gradually becoming more widespread.

While the research team was at Azure Primary School, one of the grades had a market day to raise money for charity. The students developed a series of 'shopfronts' where other students could come and learn, practise or enjoy selected activities. The shopfront students had to plan, design, make and advertise each activity. This project demonstrated an array of learning, most at high-cognitive, operative and effective levels. All, including the teachers, were deeply engaged, as at this stage the students became the fund of knowledge. They could show their ability beyond expectations, they had control of their space and they were being valued by themselves, their peers and their teachers. Above all, they had a voice and were able to make choices and discuss their ideas without fear of being judged. It is hoped that the principles of motivation and engagement underlying this day will be developed further.

B.12 Ochre Primary School

B.12.1 Background characteristics

Ochre Primary School is a Victorian Government school which opened in 1971 in a suburban location. The 366 students currently enrolled come from economically and culturally diverse backgrounds. In recent years Ochre Primary School has been

prominent in the teaching of gifted and talented children. As a former Regional Resource Centre for the teaching of gifted and talented children, staff members are often called upon to advise teachers and parents from other schools. Senior staff are frequently asked to speak at school curriculum days and educational conferences. The school also maintains a library of resources from which interested parents and teachers can borrow. As a further service to schools in its region, Ochre has, for a number of years, conducted workshops for gifted and talented children. In 1998 over 1800 students participated in this programme.

While the education of gifted and talented children remains a priority, Ochre Primary School no longer views their needs in isolation from those of other students. Providing a differentiated curriculum designed to address the needs and talents of all students is central to the school's educational vision. Ochre Primary School prides itself on its contemporary approach to the education of its students. Underpinning all its programmes is the strong belief that schools must embrace the need for change if they are to remain relevant in a rapidly changing world. Moreover, such changes must be based on contemporary educational research. It is believed children come to school autonomous, enthusiastic learners – attributes which all too frequently fade once they become 'students'. Providing every child with a differentiated curriculum in order to create a 'thirst' for learning was central to these innovations, as was the desire to make schooling relevant to life in general. The school's aim became:

LET'S CHANGE THE SYSTEM, NOT THE CHILD.
LET'S DO THINGS *WITH* CHILDREN, NOT *TO* THEM.

In the late 1990s the Principal applied for Ochre Primary School to become self-governing, which would entitle the school to make decisions about funding and employment of staff. This provided the staff with an opportunity to plan and develop programmes that were based on a coherent philosophy grounded in educational research. These programmes introduced the Autonomous Learner Model (see Betts & Kercher 1999). The successful application for self-government won the school specialist centre funding of \$50 000 per annum for three years. It also provided the opportunity for the school to select its teachers and to employ technical specialists, including a professional filmmaker and an ICT technician.

Staff appointments were made on the applicant understanding and committing to the school's philosophy. The resulting process of change at Ochre Primary School, the stages of which are described below, led to the development of a school that has become an exemplary model for the education of all students. What began as a school-based philosophical change to enhance the learning of gifted children led to changes that provided learning opportunities for all students and resulted in positive social and academic outcomes. This was particularly evident for lower performing boys. In fact, Ochre Primary School was chosen as an example of a school which, by addressing the needs of all of its students, was able to achieve improved academic and social outcomes for boys. Hence, the description of the processes and programmes which follow may not necessarily always focus specifically on 'boys' programmes', but will attempt to demonstrate important outcomes for boys.

According to the Principal, Ochre Primary School arrived at the educational philosophy that currently underpins its success through a series of stages. First, prior

to 1996 there was intensive discussion among the teaching staff about proposed strategies for engaging and extending brighter students. As part of this effort, the school invested in an \$18 000 robot, a radio station and a music-recording studio. However, these isolated attempts to increase interest and engagement were not meeting the needs of all students.

Second, in 1996 the Principal attended a meeting on the urgent need for reform of school structures and policies. As a result, in 1997, the school community underwent an extensive review of teaching practice and developed a five-year programme. This included:

- extending the school buildings, with the addition of the Autonomous Learning Centre (ALC) (the Da Vinci Centre)
- overall change in structure to multi-grade classes and team-teaching
- extensive teacher professional development
- incorporation of ICT.

Third, in 2001 the Principal acted on research into the Reggio Emilia philosophy, and a government grant enabled the school to employ two teachers to incorporate this philosophy into the Prep class.

Fourth, the *Links to Enterprise* project established a number of connections with prominent business companies. These links have been beneficial for the students and teachers, and planning has already taken place to extend involvement with these companies in order to benefit students and teachers from surrounding schools.

The teachers expressed the views that these stages had progressed by *Trial and error where you trial new things that do not always work, then you reflect on what you did and try to do it better*. The evolving philosophies were disseminated through pairing of teachers, where one mentor (a more knowledgeable teacher) was paired with one new teacher. The Assistant Principal acted as mentor to both teachers. A strong support network formed due to the openness of the setting and the relationships that were developed through teachers working closely together. Where teaching rooms are very visible and activities are transparent, teachers observe and constructively review what others are doing. The teachers *bounce ideas off each other and support each other through the sharing of knowledge and experiences*.

B.12.2 Strategies for improved academic and social outcomes for boys

Changes to curriculum and pedagogy

In the late 1990s the school incorporated George Betts' Autonomous Learner Model (ALM) for Years 5 and 6. In 2001 the philosophy of Reggio Emilia, where learning experiences emphasise student use of symbolic languages to demonstrate their knowledge and understanding, within a project-oriented curriculum, was trialled in the Prep class and subsequently expanded to Years 1 and 2. According to the Ochre Primary School website homepage, both of these philosophies recognise the need to *maximise children's options, present and future, so that they might achieve social flexibility, economic well-being and personal satisfaction*. To this end the school offers a comprehensive programme through an integrated curriculum using Bloom's

Taxonomy, De Bono's Six Thinking Hats, Gardner's Multiple Intelligences and the state's Learning Essential Programme.

In terms of the MeE framework, the movement away from traditional educational practices has resulted in an innovative approach that is totally directed towards ensuring that 'school' is a place where children feel valued, have a voice that can be heard and have control over their own learning. The school planning is directed towards achieving curriculum, pedagogy and assessment practices that are driven by the needs of individual students.

Students are required to work in mixed-ability and multi-age groups, as well as in independent activity. In conferences with home group teachers they establish daily and weekly goals, design and plan their projects and negotiate work requirements on an individual basis. In particular Years 5 and 6 students are expected to accept more responsibility for their learning. To achieve this, students are given the opportunity to plan the curriculum and have ownership over the direction of their learning. The role of the teachers is that of a learning 'scaffolder' and monitor of student progress. One teacher described the change as, *Not a particular programme but a whole school philosophy where we do not pay lip service to child-centred learning ... we do it ... it is very challenging.*

The 2003 school annual report highlights the philosophical change that has occurred at Ochre Primary School. The extract from the SAR is detailed in Figure B.7

Figure B.7: Extract from 2003 school annual report

<p>OUT: The traditional, teacher-dominated classroom. An approach to curriculum in which everyone moves at the same pace. Emphasis on factual knowledge.</p> <p>IN: Students accepting responsibility for their learning. Self-appreciation (understanding strengths & weaknesses). Ability to access knowledge. Life-long learners. Time and change management skills. Catering for learning styles. Passion for learning. Collaborative teaching groups. More inviting learning environment. 'Real Life/Authentic Learning'.</p>
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Coupled with this change in philosophy was the introduction of team-teaching where two or three teachers work together with their groups. The term 'class' was abolished. To enhance student socialisation, children move between groups, and different groupings are formed for different activities. Within this new grouping approach, multi-grade groups of Years 1/2, Years 2/3, Years 3/4 and Years 5/6 were introduced.

This facilitated greater interaction of age groups. One teacher regarded *joining Years 5 and 6 together so that teachers can team-teach and students have more than one person to whom they can turn for help* as a very positive step forward.

Staff role changes also occurred as a result of Ochre Primary School's new approach. Specialist teachers and skilled advisers who float between groups were introduced. These included secondary teachers with subject specialties who joined teaching teams. Traditional specialist subjects were incorporated within the general curriculum where feasible. New plans also saw the introduction of team leaders who were more experienced in Reggio Emilia and ALM and therefore could act both as advisors and facilitators of teacher learning and as guides who assisted in the planning of classroom activities by *pushing things along*. Another significant role change was the change in the Assistant Principal's role to that of staff mentor and educator.

As part of the professional development of teachers, theorists such as George Betts, academics and other experts have been invited to the school. The whole staff has undergone intensive and extensive professional development and, at the outset, teachers conferred for two days on the philosophy to be incorporated into the school. All teachers are also given the opportunities to travel overseas to conferences and to view Reggio Emilia, as well as meet with George Betts.

Within the school's new pedagogical framework, teamwork and cooperation became key concepts for both student learner and teacher learner. Formal team planning sessions were timetabled and in these meetings the teachers and Assistant Principal discussed the progress of their groups in terms of interests and responses to 'offered activities'. Such offered activities are known as 'provocations' where students are offered several alternative activities in response to the interest they show in a particular area. From their responses the teachers develop further activities that can be loosely linked to units of work in order to satisfy the Curriculum Standard Framework (CSF). The teachers do not work from syllabuses but are in the process of developing profiles that relate to the CSF. Within this framework, a more flexible approach has been adopted regarding administration and planning time.

Integration of all KLAs and social outcomes became paramount within the new framework and there has been a change in focus favouring interdisciplinary study. This approach brought with it challenges but also, as these quotations attest, rewards.

Teaching integrated units of work that are connected to life so that it is more interesting for students and they can see how school will help them in their lives has been a rich reward for coping with change.

One teacher also saw benefits in students *using a range of assessment tools ... like using their artwork to explain their maths* and, importantly, *developing their independent learning skills*. Arising also from this change of direction is a strong emphasis on the development of social skills relating to team work and cooperative group learning. ICT is extensively integrated at Ochre Primary School and the school has a music production studio and film-making unit. Specialist ICT and Music/Drama aides are employed to support student and teacher learning in this area.

In some classrooms, the use of the computer as an alternative for handwritten work is negotiated as some students struggle with the fine motor skills required for writing but manage to convey their understanding through computing. This is especially appreciated by the boys, because *boys love digital portfolios and the use of the radio station*.

One member of staff related the changes at Ochre Primary School directly to boys, stating:

The boys in particular have a say in things and have the opportunity to plan, discuss, debate and justify such as choosing where they would like to go for an excursion.

More generally, she recognised that *the students' voices [were] being heard in the leadership forum and in class negotiation at the beginning of each day*. Another teacher commented that: *The boys exhibit the ability to remain engaged with or without the presence of the teacher as they take ownership and responsibility for their own learning*.

Changes to the physical environment

In order to achieve the desired sense of 'E'ngagement, changes were made in the physical environment of the school. As part of the incorporation of the ALM, students in Years 5 and 6 were placed into one large group. The Year 5/6 rooms were restructured into one big area called the Autonomous Learning Centre. This provided an open-plan environment in which children could move freely to interact with peers, teachers and specialists as needed. The rooms were sub-divided into learning areas such that each had a particular focus, such as computing and reading areas, an art and craft room, a recording studio, workshop areas and meeting rooms with boardroom tables and couches. In addition, an interior designer has been working with the children to re-design the inner structure of the Years 5/6 room.

The four teachers who would have been assigned to four separate classes were now working collaboratively as a team with their multi-aged students. They had the assistance of teacher's aides (for students identified to have physical, behavioural or learning difficulties) and specialists (non-teachers). The students had the freedom to approach whichever teachers or specialists they considered would be able to assist them at the time.

Other changes to the physical environment included the Infants' building being changed to incorporate the Water Wheel Room and being subdivided into areas where children can work in small groups or individually.

The school had a \$75 000 grant to allow these physical changes to take place. When staff were asked how the school was manifesting its changed philosophy, one comment was that *The change in the physical environment promotes the interest of the students*.

B.12.3 Evidence that the strategies are improving academic and social outcomes for boys

Anecdotal evidence of student achievement levels is freely available. Teachers use observation, discussion and student reflection to monitor each individual's progress and these data provide most evidence for the success of the programmes at Ochre Primary School.

The statewide testing data available were inconclusive and lacked continuity, making the identification of trends difficult. There are two statewide assessment tools used in this context, CSF and AIM. Both of these tests include reading, listening and speaking, writing, mathematics and measurement. The analysis of the results of these two measurement tools was inconclusive, as there were data missing from the AIM results for 2001 and 2002. There also appeared to be a change in the methodology for CSF between 2000 and 2001 so those data did not match. A search for trends elicited no apparent pattern of student outcomes.

According to the parents who were interviewed, there was clear evidence that the new programme had resulted in changes for the better. The following quotes indicate the range and nature of changes parents were observing.

What the children bring home is amazing ... my learning at school was not useful ... my learning began after school but at this school the children are involved in real life learning ... the adding and spelling is just a bonus.

The classroom set up is for real life rather than traditional ... they [the children] get the skills to work anywhere.

The children have listening ears and patience ... my son is a typical boy with selective hearing because of a short concentration span ... he needs to be physical ... at the beginning was allowed to be himself but has been taught how to learn, to take turns and taught concentration skills ... this allows them to see themselves how behaviour should be modelled ... wonderfully behaved and listens, not sulky ... helpful child ... because he knows what attitude is expected.

The children learn that there are different types of people from different countries and colour of skin ... we need to listen and see that we can learn from them.

The students are not spoon-fed ... but encouraged to use their interest and passion, for example computers, painting in their preferred way. Children are valued.

Children can think for themselves, explore, take charge of their learning.

Initially my son was negative ... now he likes work that is, 'real stuff' ... the teachers are embedding 'real stuff' in the classroom.

These statements attest to the value parents place on what the students were learning. Many interviewed spoke of the value of the academic progress of their children but felt that if their children had good communication skills, a love of learning, knowledge of community and an awareness of the needs of others, then the *Maths and English was just a bonus*. In the terms described by the MeE framework, education was viewed as a resource that students could employ successfully now and in the future.

Observations revealed that staff–student interactions were calm and positive, reflective as well as collaborative. The tone of the school was calm and there was an apparent lack of aggressive behaviour on the part of students and teachers. Within the classroom students appeared to be actively involved and in control of their own learning with minimal teacher intervention, thus demonstrating behaviours of self-regulated, autonomous and responsible learners. Positive interpersonal relationships among students were evident in all learning environments. Students were also seen to display evidence of feelings of ownership within their learning environment. Students were actively engaged and displayed engaged behaviours when participating in student-centred activities of their choice. Students were given the responsibility and freedom to access and utilise all learning areas and resources required to complete their learning tasks.

The MeE framework sees ‘e’ngagement manifested in a number of ways at Ochre Primary School. Take active participation, for example. In all learning experiences, students were observed participating actively in tasks, on physical, cognitive, social and emotional levels. Most learning experiences were student-centred, thus requiring high student involvement throughout. As a result, it was observed that few behavioural problems were evident. Rather, students worked cooperatively in a supportive, quality learning environment.

In addition, there is a genuine valuing of activities. Student-centred, challenging tasks enabled students to see the relevance and value of their learning experiences. As students engage in meaningful, student-centred tasks, they are developing positive values and attitudes towards themselves, others, school and their learning.

The MeE framework also asks whether students are reflectively involved in deep understanding. At the beginning of each day the students reflect on the learning they achieved the previous day and begin to plan what they want to learn about that day (see Learning Agreement Time, below). As part of this process the teacher negotiates a daily project with each student and how this learning can be facilitated. During the session, the teacher is used as a resource by the students and only rarely needs to remind students to get back to their tasks.

At the closure of each learning session, students from Prep to Year 3 were required to complete an entry in their learning journals. Teachers encouraged students to think and write about the task they had participated in, new knowledge and understandings acquired, any challenges they experienced, as well as any feelings they had during the activity or about the activity itself.

Reflection upon students’ knowledge and understanding appeared to be an integral part of the learning experiences in the senior years. In Years 5/6, students were

observed to be reflecting upon their learning continually, as they discussed their progression and challenges with their peers and the teachers. All students were observed using self-assessment procedures to decide on ways to improve their work while reviewing their plans, designs and proposals in collaboration with their peers.

Teachers are also helping individual students to adopt strategies that build persistence, planning and study management – key areas of ‘e’ngagement. Students negotiate during Learning Agreement Time with their teachers about the content and processes that the student will be involved in on a daily and project basis. Students are encouraged to be autonomous, self-regulatory learners and specific workshops have been facilitated to develop the necessary skills. Again in Years 5/6, students were observed applying effective learning strategies of planning, researching, writing and thinking critically about their tasks. All students were observed participating in the planning and designing phase of group projects. Various students were locating and comparing information gathered, explaining their findings verbally and in writing, assessing their own progress, making decisions, and prioritising the sequence of tasks required in order to complete their plans, diagrams and proposals for the design project.

Some specific observations from some of the groups are:

Year 1

Learning Agreement Time enabled students to pursue their own interests in regards to their learning needs. Various provocation areas were set up to encourage students to think about certain concepts or topics such as ‘light and shadows’, or constructing with paper. Students interacted well with each other, regardless of gender and worked cooperatively in groups, discussing the tasks, asking questions, listening to each other, taking turns to speak and sharing resources. All students were participating and contributing. Teachers interacted with some students and provided individual feedback about their progress.

Years 2/3

A workshop was conducted to assist students to further develop their writing skills. The session focused on the planning phase of writing, including the structure of various text types and what content could be included. The teacher reminded students to plan their writing before they began, by thinking about it first, then writing a draft. Some student work samples were started with the heading ‘draft’, others had points written on the page indicating what they were going to write. During the writing task, a group of boys were working with the teacher, who was providing prompts, examples and assisting them with their writing in general. One boy showed the teacher what he had completed so far. Again, planning and reflection were emphasised to the student through questioning.

Years 5/6

Throughout the sessions observed, teachers and students were heard discussing tasks and issues openly, without raised voices and apparently displaying an equal level of respect in the learning environment. Both teachers and students asked questions, listened to each other’s responses, took turns to speak, made comments about each other’s contributions without negating or dismissing any comments or suggestions.

It was noted throughout the school that students were expected to be self-regulatory and autonomous learners who controlled the learning process at their own pace and according to their needs. Specific workshops were facilitated to promote the skills required for this. Learning communities were set up where teachers and students were resources for one another, and positive interpersonal relationships were evident among all members of the groups. Most students appeared to have a sense of belonging within their groups, as all students interacted well with one another, assisted each other if required and communicated positively during all activities observed. Individual and group projects, where students had the opportunity to pursue their own interests, were common. Learning Agreement Time was also a feature of this group.

In the majority of learning environments positive learning communities were evident with all members, teachers and students alike, playing important roles in the teaching and learning process. Teachers were observed as being co-learners as well as facilitators. Students' opinions, suggestions and questions were seen as valuable and significant to all, with no comments or responses ignored or discarded.

Teachers were observed helping individual students to adopt strategies that build persistence, planning and study management. From Prep to Year 6, student academic need was catered for individually and collectively during all learning experiences. The teachers reported that there has been increased participation of boys in *traditionally feminine* activities such as writing and singing. There are many success stories for NESB students, students with learning difficulties and those with limited literacy. There has been improvement in their academic outcomes such as improved writing. Some of these boys are now writing their own computer programmes and are being encouraged to enter science competitions and apply for a Science programme being run by the local high school.

As well as such evidence of evidence of active participation and 'e'ngagement, boys were receiving engaging classroom messages around knowledge. Cooperative group learning experiences facilitated quality learning, developed high conceptual knowledge and reduced misconceptions through collaboration with peers. The learning experiences generally incorporated the use of De Bono's Thinking Hats, Gardner's Multiple Intelligences and Bloom's Taxonomy of Thinking to guide the content and facilitation of learning experiences. Samples and posters referring to these processes were clearly displayed in classrooms and hallways. Students were required to develop and apply multiple ways of thinking to enhance their development of factual, procedural, conceptual and metacognitive knowledge, across all curriculum areas. This, in turn, helped them to develop lifelong learning skills.

Boys were also receiving encouraging classroom messages about their abilities. The adapted curriculum and teaching approaches increased opportunities for all students to experience success and teachers encouraged and praised students for their personal efforts and achievements. In particular, the Learning Agreement Time used open-ended tasks to enable students to work at their own pace and pursue interests relevant to their learning needs. Teachers conveyed high expectations to students during all tasks and learning experiences observed. The teachers encouraged students to have goals and plan ways they could achieve these goals.

The MeE framework also asks questions about the discourses of power in the classroom. Students at Ochre Primary School appeared to be actively involved in and in control of their learning with minimal teacher intervention. The students are given the choice of topics they wish to study; teachers were observed as being co-learners; and all students' opinions, suggestions and questions were seen as valuable and significant.

Students across all groups either demonstrated, or displayed development towards, behaviours of self-regulated, autonomous and responsible learners. Student-centred activities enabled students to control the pace of their learning, as well as entering and exiting from learning experiences relevant to their needs and abilities. The physical environment appeared to be a mutually shared space where teachers and students alike access resources according to their needs. Resources and equipment in all learning environments are varied and plentiful, with students having the freedom and responsibility to access anything they require without asking their teacher's permission. All students displayed behaviours of ownership of and responsibility for their learning environment. Teachers have observed higher levels of student connectedness to the areas being learned.

In particular it was recognised that boys need to be provided with opportunities to be successful and to have ownership of their learning. One example is students who had little literacy skills but liked music being offered the opportunity to write a rap song. In the process of producing their own CD the students had to write the words and the music. They were introduced to literacy concepts such as rhyming, then had to write down their words and put them to music. These boys had previously been unsuccessful in mainstream literacy classes.

Motivation is also directly addressed at Ochre Primary School. There is evidence that individual boys are being supported to develop a belief and confidence in their ability to succeed at school, overcome challenges and perform to the best of their ability. Students are not handed the answers to their questions but are challenged to reflect on their question and plan a process for discovering the answer for themselves. Even students who have been expelled from other primary schools have flourished at Ochre Primary School. One example is 'Warren', who came to the school ready to fight everyone. After ten months he is now busily applying for school positions of responsibility. This change is due to that fact that his aptitude for rap music was discovered and nurtured by the teachers. Warren came to the school unable to write coherently. With patience and praise he was encouraged to use his love of rap to write his own song, produce it in the music studio and the song about garbage bins became a school hit. This school's practices encourage many students to focus on their strong skills and develop them further, while attaining new skills during the process. Students at Ochre Primary School experience successes daily.

Individual boys are being shown how their work at school is useful, important and relevant. Student activities are developed by the students and incorporate ideas and concepts that they themselves find important. The product of their work is relevant and important to them. Students are encouraged to send their work off to competitions and Ochre Primary School students have won many awards. The school is literally covered both internally and externally with samples of finished and draft works. Mind

maps of current projects are always visible in the hall for others to view and make comments.

The fact that students choose their own interest activities and develop their own learning programmes is also evidence that teachers are helping individual boys to be less anxious, to take risks (that is, not avoid failure) and take more control of their learning. Each morning discussions are held about classroom activities where children are encouraged to reflect on their tasks. The research team observed children speaking confidently about their work, listening to constructive criticism and offering constructive suggestions to others. There is a strong culture of positive reinforcement within these discussions and within the school as a whole.

Students are offered the opportunity to work with whichever teachers they choose and are also supported by non-teaching staff who are experts in areas such as art, music and computing. They are encouraged to use all learning areas and resources available to extend the outcomes of their work. From observations of student behaviour it became obvious that these children were extremely confident and self-contained. In focus groups one of the concerns mentioned was the bullying that occurred by new children that came to the school *who did not understand how things work at our school*.

The balance of evidence suggests that the philosophies integrated into curriculum and pedagogy at Ochre Primary School have been very successful in improving social and academic outcomes for all students, and have been particularly effective in engaging boys in their schooling.

B.12.4 Conclusion

While it can be argued that the whole-school approach to improved curriculum and pedagogy signifies a move to foster 'E'ngagement, the strongest connection to the MeE framework at Ochre Primary School is to the area of 'e'ngagement. The emphasis on engaging learners in the classroom through integration, student-centred learning, scaffolding and cooperation is a clear indication of the school's focus on classroom pedagogy to develop high interest and intellectually challenging experiences.

It was reported by one teacher that:

the leadership team is vital in continuing the investigation of the philosophies and current research to further our understanding of pedagogy that would facilitate our journey.

The leadership team, which includes the Principal, Assistant Principal and the more experienced teachers, provides vital support for newer teachers and those who are making great changes to their teaching practices.

However, while the leaders were acknowledged as being important in the transfer of knowledge and skills, it was recognised that teachers also had to take responsibility for their own learning (as was being modelled in the school) and *take the baton and run with it*. As the Principals admitted:

Not all staff stay ... When new staff apply to come to the school we encourage them to come for a week to see what we do and to see if they could cope within the school. In 2001 two teachers were employed because they were new graduates with constructivist ideas and had learned about Reggio Emilia at Uni ... They have to learn to work with children to be researchers. The more you know the more you realise that you do not know ... all are trying ... [some teachers] believe that they are there but they are not ...

Staff are openly encouraged to attend professional development days. There is also an open policy for staff to travel overseas, supported by the school and its board. The following quotations represent further views from teachers regarding the sustainability and transferability of the various strategies and programmes:

They are transferable because they cater for all kinds of learners but you need to make change slowly; when something is hard you need to stop and listen and let go of some control you need to be good at listening ... it also depends on the support of the admin.

You plant seeds to generate change and then improve existing programmes and it is sustainable if you believe in what you are doing. You require staff who are committed and supportive.

There are some things an individual can do but for structured change to take place the environment must change.

I could not teach any other way so it would be difficult to go into a traditional school ... I could not work like that.

B.13 Violet Primary School

B.13.1 Background characteristics

Violet Primary School is a Year K to Year 6 Catholic primary school located in a moderate-sized town in northern New South Wales in an area that suffers significant economic disadvantages. The local economy is reliant on tourism, timber, beef, fishing, manufacturing and mixed farming. The school's current student enrolment stands at 510, of whom 272 are boys. There are 26 students identified as Aboriginal. Just over 70% of students are from low-SES backgrounds. The school is part of a diocesan cluster group of primary schools that are working together to improve educational outcomes, particularly for boys. These schools work closely with the local Catholic College (Years 7 to 12). Violet Primary School is developing a five-year strategic plan for student emotional health and wellbeing. This plan states that schools are a major site of masculinity formation and that the school environment plays a major part in how boys react and behave. The members of the School Executive believe that pastoral care structures need to be constructive rather than punitive.

Basic Skills Test (BST) figures prior to 2004 indicated that Violet Primary School was well below the state average in areas related to literacy. The majority of students were performing at Band 1 and 2 levels. The Principal, who came to the school in 2004, reported that *our boys were achieving very low results in basic skills and writing assessment*. Literacy concerns relating to spelling and comprehension were common issues. There was also an awareness of the relationship between the wellbeing of the boys and their academic performance. The Principal stated: *we had to look at how to analyse wellbeing for students*. The school staff had observed a high incidence of violence in and out of the classroom. In Stage One (Years 1 and 2), 60% of the students were boys and this had an impact on the social dynamics of those classes. Teachers had identified 6- and 7-year-olds as requiring additional direction in ways to address violent behaviour. Staff had reported a number of the older boys in Stage 2 (Years 3 and 4) for bullying via SMS and online. The Principal stated that there had also been an increase in *high risk and aggressive behaviours*.

Since its involvement in the *BELS* project (2004), Violet Primary School has reviewed its policies, focusing on literacy levels and ICT in supporting the successful education of boys.

B.13.2 Strategies for improved academic and social outcomes for boys

Violet Primary School prides itself on being an inclusive school and aims to meet the needs of all its students. A number of specialist teachers and programmes have been introduced to address four areas of focus for 2004–05 at Violet Primary School. These are programmes aimed to address student wellbeing, target literacy, integrate ICTs in the curriculum and build a strong school ethos.

Rock and Water programme

In response to staff concerns about disruptive behaviour, the school obtained funding to train staff in the *Rock and Water* programme. This commercially available programme uses physical activity and structured discussion to guide boys toward an understanding of their emotions and provide them with ways to *think before they act*. The programme leads from simple self-defence, boundary and communication exercises to a strong notion of self-confidence. Topics include intuition, body language and positive thinking. To date, three teachers have been trained, and by the end of 2005 most of the boys in the school (all 180 boys in Years 3, 4, 5 and 6) will have been through the programme. Teachers nominate students for the *Rock and Water* programme. The programme's coordinators then select from the nominated students, deciding who will benefit and in what way.

The students explained that they learned *how to defend yourself* and that *the mind controls the body*. One teacher had recently trained in *Rock and Water* and was now leading a group through the programme. She had previously watched a boys' group and her observation was:

It's different with boys and girls. Boys were very focused and held a lot of respect for the programme. They really tried to bring Rock and Water principles into the classroom and the playground. It's not about reacting, it's about thinking, 'Now, how are we going to deal with this?'

She also felt the boys were more interested in the discussion part of the programme, and less likely to be inhibited by group dynamics.

A beginning teacher also felt that the programme had supported his professional learning:

How to control a group of kids. Time management techniques. When the kids don't know a word in reading, how to help them get that word. How to help them solve problems in maths. I have created a teacher's diary. A lot of things are adding up for me at the moment.

Big Brother, Big Sister

This is a mentoring programme that is designed to contribute to a smooth transition from primary to high school. The programme is about relating to peers and, for the primary-aged children, sharing learning with older students. The teacher whose class was involved in 2004, when this programme began, described it the following way:

It started off as Big Brother with Year 10 boys from the High School and our Year 3 boys; since then we're extending it to Big Sister with Years 10 and 3. On the first day when the children went up to the High School they got their buddies and spent time talking about themselves; then they did some non-tackle sports and had a barbecue lunch. They absolutely loved it, the boys from both sides. The Year 10 boys were so excited about having this buddy. The Year 3 boys were so excited they wanted to send them cards. They were just so excited waiting for the next time. A real friendship straight away. We had no problems with boys not getting on with their buddy. On another visit the boys joined the buddies for lessons at the high school, in science, woodwork, music and agriculture. The last visit involved the boys going 'up river'.

This teacher also commented:

Some of the boys had a big impact on each other ... I had my son in that group as well so it was exciting to watch how much better he was relating to his peers as well as Year 10 boys. It's just a culmination of lots of different things. My son has actually gone on this year to do Rock and Water, and I just think all these things together are adding up to have a big impact on these boys. Certainly I can see from my own personal experience the impact on my son.

At this time only these Year 3 students have been through the *Big Brother* programme. The school plans to continue and extend the programme in 2005. Not only the teacher whose Year 3 class participated in 2004, but also two male teachers on the Violet Primary School staff observed that boys *talked about it for a really long time*. These three teachers believe that the programme might make the transition to high school easier. The male teachers reported that: *The younger ones are seeing better role models in the playground. I think it'd be a real positive to actually revisit these groups.*

The Year 3 teacher reported:

When the boys came back they wrote or drew a picture about it. They were not at all hesitant about it so it showed that when you gave them something interesting they were happy to write. With boys it is sometimes difficult to get them to write, but having something to write about they were quite excited.”

Another link was made between improved literacy and motivation by encouraging the students to report on their experiences. At a school assembly the Year 3 boys showed a Powerpoint® presentation of the different things they had done ‘up river’. As the Year 3 teacher stated, *That was done with one of our support teachers who comes in, making a more public communication.*

This was one instance of the success of the school’s policy of connecting academic outcomes to the wellbeing of their students. Positive professional learning outcomes were reported by the Year 3 teacher, who was only in her second year of full-time teaching. She felt that she had gained experience interacting with the older students, as well as a greater understanding of the procedures at the high school.

‘Yes, we can’

The *Yes, we can* programme at Violet Primary School is designed to support and encourage those children in the school who, for a variety of reasons, are referred by the class teacher. The school is recognised as being particularly good at providing programmes and structure for this group of students. The Special Needs Team includes a male special education coordinator, along with six literacy and general assistant aides. The Special Needs Team designed and now coordinates the ‘*Yes, we can*’ programme to assist students with their learning development. Parents are also encouraged to be part of this consultation process when defining learning goals for the children. Although this programme does not specifically target boys, there are currently 14 boys and 10 girls in the programme. As the Special Needs Coordinator stated:

Together, the team works to cater for the individual needs of the children through individual tuition, small-group withdrawals and in-class support. The programme works with children in a way which helps them develop a range of communication, listening, cooperation, decision-making and leadership skills. Trained volunteer tutors also provide valuable assistance.

The teachers reported that students were better behaved and able to concentrate more easily since entering the programme. A group of boys now in Year 4 reported that they had done ‘*Yes, we can*’ the previous year and *we got a lot of fitness. You have to learn to draw and do maths and sing.* A Year 3 teacher spoke of a boy from her class in this programme:

He enjoyed his day. I eventually saw him looking happier in the classroom. He has been through a lot of break-up problems and had a lot of anger inside him.

Overall the ‘*Yes, we can*’ programme acted as a valuable sub-section of a multi-part approach addressing students’ wellbeing and making school an inviting place to be.

Programmes targeting literacy

Spelling Mastery is a commercially available programme designed to work on a student’s phonemic awareness towards whole-word identification. It works on developing a student’s skills in recognising spelling patterns of regular multisyllabic words: by identifying syllables in speech; by building words from known parts (*be/low, slipp/er, bun/dle*); and using phonemic spelling to build the parts. The programme was introduced by the Principal in response to staff pressure after the BST results indicated student problems in this area. The Principal felt that this was a costly measure and is hoping that staff commitment to the programme will pay dividends in the next BST results. For children in Bands 1 and 2, the school arranged individual parent interviews to inform parents about and work with them on their own child’s needs in this area, thus ensuring that parents too could help in the acquisition of spelling and reading skills at home.

There will be little evidence on the effectiveness of this initiative until the next BST results. It is hoped that work in this area will move the school’s overall performance up from its current position of largely Band 1 and Band 2 performances. Data are available from pre- and post-testing using the Bounce Back Inventory, and this evidence confirms that there have been some gains in academic outcomes as a result of the interventions, although it is too early in the programme for reliable figures to have been generated.

The *Reading Recovery* programme targets all children in their second year of school. *Reading Recovery* lessons assist students in Stage One who may need extra support with their learning. The school also incorporates *Count Me In Too* into mathematics lessons to help in the targeting of literacy in the context of numeracy skills. *Reading Recovery* teachers, tutors, parents and aides work with individual students, building on their strengths and developing the skills and strategies necessary to read and write independently. *Reading Recovery* students attend daily sessions of approximately 30 minutes for 12–20 weeks. Teachers considered that this programme helped children to *catch-up* more quickly and that they could see the children *wanting to read*. One teacher commented that, *seeing children read to a male is something that a lot of them have said they just don’t do at home*.

The acquisition of new Smart Boards was an ICT innovation researched as a result of boys sitting back in classes and not engaging in positive ways with the materials and the learning processes. Smart Boards are interactive whiteboards linked to computers and projectors that display information from the computer on a touch-sensitive whiteboard. This technology facilitates students’ active engagement with digital learning environments. The teacher involved in servicing and developing programmes for staff to introduce is highly motivated, enthusiastic and more computer-literate than many of her peers. Pupils are called up to engage with the Smart Board in class (of about 30 students): *We use any way that you can engage boys in a really exciting and interesting learning activity*.

Sport

Violet Primary School places great emphasis on sport and, although it is not a formal intervention, it was mentioned repeatedly in discussions with teachers and students. A Year 3 teacher commented that the boys *like a bit of action and League does allow for that ... It's a pity that League in our sporting programme is a choice [rather than compulsory]*. This emphasis on sport extended to the boys themselves. In the Year 6 focus group all efforts to find out what the boys liked about school led back to sport: *We did soccer down on the oval. I like soccer and cricket on the oval*. Similar responses were obtained from all focus groups.

Rock and Water and *Big Brother, Big Sister* in particular are illustrative of the motivation area of the MeE framework. They demonstrate key motivating task characteristics: authenticity, cooperation and fun. They also highlight relatedness and positive peer interactions, both important parts of motivation and its relationship to engagement. Creating a positive school ethos, having popular curriculum options, mentoring and positive role modelling are also part of these programmes, which therefore also link to the 'E'ngagement aspect of the MeE framework.

The focus on some literacy programmes and 'Yes, we can' links potentially to student 'e'ngagement, although data not yet available will reveal the extent to which students have valued their learning and developed at a high-order level. Persistence and low anxiety are certainly being addressed by these programmes as boys experience success. There is therefore a connection between re-engaging students by generating positive feelings and socially productive behaviours and improvements in pedagogy.

B.13.3 Evidence that the strategies are improving academic and social outcomes for boys

There is evidence that the *Rock and Water* programme is reducing the disruptive behaviour at the school. A teacher's aide who works with some boys who have been through the programme observed that *'they are more confident, they are not as shy, not as withdrawn, not acting out'*. In his opinion the programme has meant:

There is less detention. The teachers are getting better responses, kids are less distracted ... I haven't heard one teacher say anything negative about Rock and Water and the kids love to go to it.

In his view the advantage of *Rock and Water* was *simply making them stop and think about what they are doing, engaging the brain before doing stuff. It's what they needed.*

Another male teacher's aide has been monitoring the behavioural impact of the *Rock and Water* programme for the staff and reported the change he has observed with evidence of children's work and attitude:

The children in the small groups I work with are a lot better in the time tests for comprehension. I had some boys last year who were a real handful. This was before Rock and Water. I had a battle getting them to class. I think the school now has less detention, less bullying ... the teachers are getting responses from the kids, there's less mucking-up ...

and that goes out into the community ... parents are saying 'Why didn't you do this last year?'

Teachers estimated the social outcomes as being considerable, but formal academic outcomes cannot be measured yet. The Principal identifies this as an area requiring further research. Data on student developments are being collected and analysed using qualitative (journal writing) and quantitative (Bounce Back Inventory) procedures. The *Rock and Water* programme is to be reviewed at two further stages in the year. One teacher whose son is in the programme comments that his son is more focused. Furthermore, the Principal reports that detentions have dropped from about 15 a week to zero, and she attributes this directly to the *Rock and Water* programme. The boys agreed that maybe they were now better behaved for their teachers (but possibly not for their parents). They liked the teacher who did the programme because *He's funny. When he did Rock and Water he was mean* [said with relish]. The physical side of *Rock and Water* seemed to have had the most lasting impact for the Year 6 group. The take home lesson for all appeared to be *it is good to do exercise*.

A benefit of the funding for literacy programmes is that it has brought male teacher's aides (TAs) into the school. One TA assists with literacy and numeracy in a number of classes and settings, including *Spelling Mastery*. He describes one of his duties as 'male role model.' He does writing with a group of 'special needs' boys:

They like coming in. It's special, a different room and they get to write anything they want to. We did a narrative and we work on text types. They go back and talk about their work in class.

This TA makes a special effort to include boys.

Look for half an hour today we just did 'boys stuff'. We talked about cabins, axes. They came out, they were all happy. Normally these guys don't get on.

He feels there is a link between academic outcomes and social outcomes for the boys he works with. He has evidence (from testing) that his groups have improved in maths and spelling.

The feeling in the school, supported by evidence gathered for this case study, is that the initiatives introduced by the Principal have been successful in making Violet Primary School a better school, especially for boys. According to a Year 3 teacher: *I just think everyone is benefiting in the long run. The whole school has been recognised in boys' education.*

This view is also endorsed by the Educational Psychologist who works with the diocesan cluster, and by the *BELS* Coordinator. Boys in focus groups spoke about their teachers helping them learn. Boys generally felt positively about their progress at school. They commented about their results in the Basic Skills Test: *I got in Band 6 or I got all Band 5s and 6s.*

Although it is too early for the BST results to show major gains in boys' academic outcomes, the staff, students, parents and Principal are aware of positive gains in

student attitude. The programmes introduced in the last two years have been successful in engaging boys' interest in reading and writing by giving them an opportunity to focus on areas of interest and in generating activities that stimulate them to contribute to the academic environment.

The general feeling expressed in focus groups about the *Spelling Mastery* programme was that it was succeeding in helping the students learn to spell. Repetition appeared to make the programme boring (*she makes the kids do new words over and over again*), but may also contribute to its success. One group (Years 3 and 4) reported liking the 'word finds' and games. This group wanted harder words to make it more interesting. When asked what helps them learn at school this group put *Spelling Mastery* at the top of the list, but this may have been because they had just been talking about it.

B.13.4 Conclusion

The Principal is actively trying to change the school culture towards boys' education. The school also has an Aboriginal education assistant who assists all teachers and children in the school, but particularly Indigenous students and their families.

A number of professional development initiatives have been introduced, including visits by an educational psychologist who specialises in boys' education. There are new opportunities for professional learning, including training in the *Rock and Water* programme. This is an area that Violet Primary School is trying to develop further as the school proceeds with the *BELS* Project to consolidate staff understanding that the school's programmes are part of an integrated whole.

At this early stage, it is difficult to predict which programmes will prove to be sustainable. Violet Primary School is taking a multifaceted approach to boys' education, with its action-based activities and learning experiences that build confidence by setting students up for success. The Principal is aware of the need to reinforce the principles the students learn in *Rock and Water* and is planning to get the programme coordinator to conduct one-day revision workshops. There is evidence of change in staff attitudes as a result of working with the programmes and with the support staff engaged as part of the *BELS* initiative. Certainly morale is positive and this aspect of the initiative may effect lasting change on the school ethos. Violet Primary School is now a popular place for teachers, parents and students.

B.14 Sienna High School

B.14.1 Background characteristics

Sienna High School is a Category 4 disadvantaged school (a South Australian DECS classification category) located in an outer suburb of a large city in South Australia. In 2004 there were 650 students in the school, 350 boys and 300 girls. Over recent years, the school has undergone rapid demographic change and the students at Sienna High School are no longer well served by, or interested in, narrow curricular pathways directed primarily towards scores for university entrance.

Student numbers with school cards (that is, means-tested government support in the form of grants to students) have increased from 29% in 2002 to 40% in 2004, indicating a significant increase in poverty in the area. NESB students have increased from 12% to 18% over the same time and most of these students have come from refugee communities. The retention rate at the school is below both state and district average for Year 10 to Year 12, although there has been a 15% increase over the last two years. Attendance is also below district and state averages across all years, but again, increases have become evident in the last two years, with an 11% increase in 2004. In addition, issues of transience, youth mental health and homelessness impact significantly on the current student community.

When the current Principal arrived at the school in 2001, student dissatisfaction was evident from falling enrolments at all levels. Potential students were choosing neighbouring schools rather than Sienna High School. Enrolled students were leaving during the year to go to other schools as well as to non-school destinations. Although destination data were not collected prior to 2004, anecdotally it seemed that Sienna High School students who left school for work were not job-ready and often did not retain these positions. Many students left school for part-time and casual unskilled work offering minimal job security. Simultaneously, staff morale was perceived to be low.

B.14.2 Strategies for improved academic and social outcomes for boys

In response to the above, the school identified *lack of resilience* in the students and staff, and indeed the entire school community, as a key problem for the school. The school's staff conference brochure from 2005 defined resilience, through the school's work with Clinical Psychologist Andrew Fuller, as the ability to *bungy jump through life and rise above adversity*. The brochure states that resilience in young people is a consequence of three factors:

- a sense of being loved and belonging to a family
- having diversity of friendships
- having a sense of fitting in to a school where there is a possibility of success and where an adult outside the family indicates support for or attachment to the young person.

Resilience is regarded as a critical quality for both male and female students at Sienna High School and the school has taken the approach that every strategy to increase resilience has the potential to have a significant impact on learning outcomes for both boys and girls. The Principal says that:

if you focus on social outcomes first then the others will come second. If you don't have the connection with kids, it doesn't matter what you teach them, they will actually choose not to learn it, but if you have the connection you can actually teach them.

The focus on staff in the resilience strategy recognises that if staff themselves are not resilient and robust in their relationships and positive in their outlook, they are unlikely to be able to nurture such qualities in their students. In addition, the

importance of resilience in families was also recognised and became the focus of several of the school's programmes.

The Principal is the key figure behind the effort to improve resilience at the school. She arrived at Sienna High School from a nearby school in 2001, replacing a retiring principal and taking up her first permanent position as principal in a mainstream school. Her arrival heralded a radical transformation of a school, which by most accounts was moribund. When another Executive position became vacant at the end of her first year, the Principal redesigned the Executive roles and built a team that has developed a shared vision for Sienna and is committed to the work that needs to be done.

Since her arrival, the Principal has been responsible for whole-school renewal strategies, including the *FISH* framework (a philosophy that approaches resilience with four key ideas, explained in detail earlier) which she brought back from a local district leaders' meeting. She subsequently applied to the *Learning to Learn* project for funding. These initiatives have forged a leadership team who are committed to the whole-school approach to fostering resilience.

The parents directly credit the Principal for the changes evident at the school:

She's put a lot of the programmes ... into place here and they are working. It takes time to get them up and running but once they are running, they will work well. There are more kids coming here to the school. There are lots more coming back. There's lots more going on for them.

A member of the Executive team described her as responsible for providing the *jolt* that the school needed. The flexibility for which the school is becoming known began in the Principal's first year at the school and includes *being flexible with how students are being handled and how they were assessed differently to previous admin.*

A range of improvement strategies and programmes that target the three components of resilience have been mobilised at Sienna High School. Flexible learning and alternative pathways encourage students, particularly older boys, to fit into school whatever their circumstances and allow them a greater chance to experience success. Particular programmes, such as the Flexible Learning Centre, *Moving On and Up*, [SMS@UNISA](#) and the *North East Vocational Education* programme are offered to students at risk of leaving or failing at school. Although they target particular groups of students, these programmes require a whole-school focus, as timetable reform and considerable support from teachers, parents and students have been necessary to enable these programmes to function effectively.

Other programmes are aimed at increasing the sense of belonging and creating deeper relationships, thereby increasing resilience. For example, projects such as *Chill Out* have targeted student and community welfare. Programmes with teachers such as *Learning to Learn* and *FISH*, and with parents, such as *Bounce* (a local version of the Family Matters Materials), aim to enhance the quality of relationships within the school and within families. Resilience and relationships complement each other and contribute to the school's core objective of improving student learning outcomes.

Currently, improving literacy levels is a key focus; the introduction of Personal Achievement Books (PA Books) is a key component of the literacy strategy.

Success is currently evaluated in terms of retention and participation of students who would otherwise not be at school. Several students told the researchers that they *wouldn't be here if it wasn't for this*. On completion of these programmes, student success will be determined through measures of retention and from destination data into the workforce and other valued pathways. Ultimately, changes to classroom practice and pedagogy will provide for improvements in traditional learning outcomes.

A number of the strategies put in place in Sienna High School have had significant impact.

Flexible Learning – experiencing success

The Flexible Learning Centre (FLC) was opened during 2004 as a supervised space alongside a specially designed Student Services Centre. Students can opt for time out of their regular classroom to spend time in the FLC. Students can work quietly on their own, or with help from the teacher timetabled into that room. Some students are permanently programmed in the FLC on one or more lines of their timetable. For students in the *School-to-Work* programme, their formal contact with the school takes place in the FLC. In the second year of its implementation, the school annual report states that the FLC has become *an accepted programme within the school where on average 12 students per lesson use the FLC either as a permanent part of their flexible timetable or via flexi-lessons*.

Student attendance and management processes at the FLC are handled at the Student Services Centre, co-located with the FLC. The Student Services Centre opens on to the front of the school, so students can enter as they arrive at school and then proceed on to classes after they have signed in. The Student Services Centre has a dedicated administrative officer and one of the Assistant Principals has her office located there. Offices for the Aboriginal Education Worker (AEW) and Aboriginal Education Teacher (AET) are also nearby. The foyer of the building has new carpet laid by the boys' vocational education students in 2004 and is furnished with armchairs, potted plants and posters related to youth health and employment issues.

The FLC is supervised by staff who are timetabled permanently into the room on particular times. The staff includes the two student counsellors, the VET Coordinator, the Aboriginal education workers, the two Assistant Principals and the Deputy Principal. As the Assistant Principal states, the benefits of this staffing initiative lie in:

helping to build relationships with students who are having difficulties. They'll already know [the teacher] and that gives a chance for kids to see [staff] in a different environment as well, rather than see them as the disciplinarian.

A range of students attend the FLC. One group of students is in a *School-to-Work* transition programme. These students are off-site for most of the week completing a range of work-related tasks, but each student meets once a week in the FLC with their

School-to-Work case manager. The meetings last for approximately an hour and are designed to allow students to discuss their progress and be assigned job-related tasks for the week to come. Other students are working on negotiated Individual Education Programmes (IEPs) through Community Studies, Vocational Education courses or South Australian Certificate of Education units. Students from all Year levels may be timetabled into the FLC for one or more lines by administration, student counsellors or the FLC Coordinator. This may be to provide students with a different learning environment for personal, health or family reasons.

Students are also timetabled into the FLC for shorter periods of time, known as flexi-lessons, in order to catch up on work missed, to complete an exam under supervision or to have some time out from a class in a non-punitive environment. This option tends to be used more often in the junior school, with students who *need a break from regular classes*. The FLC is not intended to be a punishment site but rather a place in between the Behaviour Planning Withdrawal Room and the regular classroom, where the focus can be on learning rather than on (mis)behaviour. Records suggests that thus far in 2005, significantly more boys are using the FLC for 'time out' from regular classes than girls, although often a group of boys is sent to the room. Students may not spend more than three single lessons in the FLC each week and they are required to bring work with them to the FLC. For some of the students who attend the FLC for single periods, it provides *somewhere safe where a welfare eye can be kept on them*.

The Aboriginal students at Sienna High School are also timetabled for one line in the FLC with the AET and AEW. During this time students complete a range of activities and they develop study plans and strategies designed to build success in school and outside school. The AEW stated that the Indigenous boys are considered to be at extreme risk as there is *a lack of Dads as role models, sometimes because their dad has died*. In these families, the mothers may have to be the positive influence for sons who are stronger and taller than them and who have peer pressure from their mates. The AET described the impact the FLC was having for these students:

Grandparents look after 20% of these students while 20% are in the guardianship of the State Minister. They go from school to unemployment, and have lack of self-esteem ... The FLC has been excellent for our students. We are located there and they come over for sessions with us and for free periods.

Building good relationships and trust with the AEW and AET is seen as essential to the retention and success of these students.

Sienna High School has implemented several strategies that focus on relationships, both between students and between teacher and student. The aim is to cultivate a learning environment where all students are valued and feel that they belong to their school community.

Chill Out

Chill Out is an anger-management programme that was run in 2003 and 2004 for groups of girls and boys in Years 9 and 10. In 2004, the School Counsellor ran the girls' group with a female youth worker, while a male counsellor, who has since left

the school, ran the boys' group with a male youth worker. The programme ran off-site, at various community centres, for approximately half a day per week for one semester of 20 weeks.

It was not conducted like a normal class; instead, students and counsellors would *have breakfast together* and the first group of students to complete the programme had the whole day off school every Friday and were able to *go shopping or whatever*. Students in the *Chill Out* programme learned about goal-setting and practised communication skills. They had sessions on sexual health, alcohol and drugs with a range of community agencies and service providers in the area of adolescent public and mental health.

Whole-school literacy

The school approach to literacy emphasises sustained prose-writing in every subject area. This has been driven by the PA Books, which have become prerequisite for a pass in English in every semester at every Year level (see Dumbleton 1995). On top of any other formal assessment in English, students must compile and submit a bound folio of their best original writing. This forms a *never-ending book* that students continue to refine and develop through their years at the school. The work is not graded but must be submitted in order to pass English each semester.

The PA Book is cumulative and under constant revision as older pieces are replaced or supplemented by new work and as writing from other curriculum areas is gathered ready for *binding day*. Students are also required to include a range of genres, with a particular focus in Year 8 on recounts, in Year 9 on argument and in Year 10 on discussion, as these display *increasing complexity* and represent *the critical modalities* necessary for writing in the senior years.

As part of the whole-school approach, considerable effort has been put into the professional learning of teachers. Two key initiatives are involvement in the *Learning to Learn* action research project, whose aim is 'to transform schooling from a teaching to a learning paradigm' (Department of Education and Children's Services 2003, p.2); and *FISH*, an organisational change programme. Both are directly related to the whole-school focus on resilience.

Learning to Learn

Sienna High School has joined the *Learning to Learn* project for Phase III which emphasises in particular 'the interrelated DECS priorities of improving retention, attendance, engagement and wellbeing, literacy, numeracy, staff morale and performance' (Department of Education and Children's Services 2003, p.26).

The intention at Sienna High School is to move resilience from one-off alternative programmes for at-risk students into the mainstream of the school curriculum, with the ultimate aim of achieving long-term sustainable change. *Learning to Learn* is aimed at curriculum renewal, with a designated goal of rewriting approximately 100 curriculum units across the school by the end of 2006. Although the rewriting of units has not yet begun, an earlier project which served as a pilot project saw the successful rewriting of units across all subject areas in Year 9 to incorporate new paradigms and learning. Through staff training and development on resilience, the *Learning to Learn*

team aims to energise staff, to increase their sense of connectedness and belonging, to increase their excitement about learning, their hopefulness and their sense of possibility for the future.

At this stage it is not yet clear where *Learning to Learn* will take Sienna High School, as much of the staff development and the curriculum renewal are in early stages, but the commitment and enthusiasm of core staff is evident. The Principal describes how a more broadly inclusive classroom, as envisaged through the *Learning to Learn* central training:

would not be about providing 30 different programmes; it's about whatever you're doing, having the opportunity for the kids to develop the skills associated with that predominant learning style of that particular activity.

FISH

FISH is not an acronym. It is a philosophy that is said to be inspired by activities at the Seattle Fish Market. The *FISH* philosophy unpacks resilience into four key ideas: *Choose your Attitude, Play, Make their Day* and *Be There* (Lundin, Paul & Christensen 2000, 2004). The ideas are about boosting morale, transforming the classroom environment, adapting to changing times and achieving goals. The *FISH* philosophy has been used to frame the programmes of staff development days held at the beginning of each term. It is also manifested in everyday practices with teachers. For example, one of the imperatives of *FISH, Play*, was evident during the week of the case study through a green-themed lucky dip at the staff morning tea where gifts wrapped in green paper were distributed by the green-clad Principal and Assistant Principal to all staff and to the researchers. Staff who did not make it to morning tea had a gift placed in their pigeonholes.

Strategies like this act as models for teachers on how they might organise such events with their students. An annual 'best-dressed classroom competition' was inaugurated late in 2004. Teachers and students used small budgets to redecorate classrooms in categories such as *most floral*. This had the intent of increasing connectedness and belonging for both teachers and students. One teacher, taking his lead from Andrew Fuller's idea that boys like to be in caves, used industry contacts to acquire several huge plastic 'skins' from advertising billboards and lined the walls and ceiling of his classroom with them. Huge images of cars, fields of flowers and children's faces wrap the room and the teacher's desk. The whiteboard was unscrewed and replaced after the skins were attached to the walls.

During the initial staff conference at the beginning of 2005, home groups became a particular focus of professional development. On the first day, teachers were asked to brainstorm the qualities of good home group teachers. The Executive used these responses as the basis of an activity for the second day that had teachers expand from generalities into a grid. This contained about 30 specific home group activities that would reflect these qualities and that consequently gave them permission to, for example, *run a football tipping competition* as a strategy to engage students and increase their sense of connectedness.

Focus on the family

The whole-school approach to resilience extends to the community, and to that end Sienna High School has implemented *Bounce*, a programme involving parents in improving relationships.

Bounce is a local version of the Family Matters Materials, developed as part of the Mind Matters repertoire of training materials on adolescent mental health and wellbeing. The *Bounce* programme is delivered to parents by parents and has been closely nurtured by the School Executive and School Counsellor. The current parent–trainers chose to call the Sienna High School version *Bounce* because *you do bounce ideas off each other*. They describe the programme as being about *adolescence and how to communicate, how to survive*. The first *Bounce* session of 2005 will be presented to all Year 8 parents who attend the first term open night and sausage sizzle: *We'll do an actual session there and give an overview of how the sessions will work and how it will be for families to share ideas*.

Parents reported that in the past the school had hosted a course focusing on respect for parents and their adolescent children. In that instance, targeted families were seen to be already ‘in crisis’. Sessions took place in the evenings and whole families were involved with meals as part of the training. Parents reported that apparently the programme was very successful. *Bounce* is an earlier intervention strategy and builds support networks that aim for crisis prevention rather than repair. With *Bounce*, the Sienna community recognises that resilience is also contingent on healthy and empowered families with good networks of support.

B.14.3 Evidence that the strategies are improving academic and social outcomes for boys

What became evident to the researchers was that both boys and girls had benefited significantly from the whole-school approach at Sienna High School. In the short time from 2001 to 2004 remarkable changes had occurred. Teachers were open about the challenges they faced and the resultant efforts that are needed to continue to build resilience to improve the educational and social outcomes for all who attend and work at Sienna High School.

The Flexible Learning Centre and the variety of senior electives have been successful in offering students who might previously have dropped out of school a chance of experiencing success. Students, parents and teachers who have been involved in the welfare-oriented programmes *Chill Out* and *Bounce* are also positive about the effect these programmes have had on the students’ lives. During the case study researchers spoke to a number of students who had completed the *Chill Out* programme. These students stressed that *Chill Out* had made an important difference to their ability to cope with school and to learn. One Year 10 girl described how: *We had a lot of trouble with the teachers in Years 8 and 9*. Another girl suggested that the programme would be beneficial for students starting in Year 8. Although she and her friends had thought of moving to neighbouring schools, they stayed *and then, we got better, as we got older the teachers got better*. Once you get a reputation for getting into trouble, it becomes very difficult to stay out of trouble in classrooms.

The students were quite explicit about the qualities of *good* and *bad* teachers and saw their learning as contingent on the quality of the teacher and of the relationships that they are able to develop with their teachers. A good teacher is one who doesn't *talk down to students*. In terms of content, a good teacher is one who will teach *so that we would understand it*. This was particularly identified as being essential in maths classes, where the good teacher *sits down and explains everything with us and shows us how to do it* by comparison with bad teachers who:

expect you to know something [already] and if you don't know it they get angry ... they say you have to stay behind ... they think you haven't done your work.

A science teacher who had students making *toothpaste and crystals* was named as a good teacher, as was an English teacher who took a class to a live theatre performance because *he said you have to have been to an actual play to experience it, to know what it's like*.

The students spoke initially about relationships with teachers and about classroom pedagogy, but they also spoke about how *Chill Out* had improved the quality of relationships within their families and their own self-esteem. The close relationship they developed with the School Counsellor was seen as instrumental in this: *if you had problems at home or whatever she'd just talk to you about it and tell us what we could do*.

Another student said:

I used to keep everything inside I wouldn't be able to talk about anything cos I had heaps of problems at home and I'd talk to [the Counsellor] and she helped me. I got through it.

The School Counsellor in particular was named as a good teacher because she *listens to us ... it's not like she sides with us but she listens to us and sorts it out*. They stressed that trust was pivotal to this support: *she made us feel comfortable. You knew that you could trust her no matter what you told her* and thought that, in general:

It's a really good idea that kids have someone at school that they can trust that they can talk to about problems or they have questions to ask or things like that.

As a vehicle for cross-curriculum literacy, the PA Books are recognised by teachers and parents as having had an impact on improving student writing. PA Books have become part of the ethos of the school since they were introduced by the current English Coordinator. He describes how:

in the second term I start saying 30 PA days to go [to the completion of the Personal Achievement Books] and this goes on day after day, the PA countdown, 10 days, 9 days and so on. It comes out of the ink. Everyone does it.

Students value their PA Books:

I've never had a kid who's left the school come back for an exercise book but we've had kids come back a year later for their PA Books to be sent on to them.

On PA deadline day, students have been known to use time in other classes to the point where, one teacher reported:

I actually made a little practice with PK chewing gum. I changed the label to PA chewing gum to relieve the tension and we traded lessons so if that's an issue in maths they can catch up on the maths in the next week. We'd just never come across that before.

The PA Books lead directly towards the externally assessed Writing Based Literacy Assessment (WBLA) that all students are required to complete during their SACE. The WBLA has a similar structure to the PA Books at Sienna High School: four pieces of writing each of 250 words in the categories of English/ESL, Arts/Humanities, Social and Cultural Studies and Maths/Science and Technology must be included. The writing is verified and assessed by a trained panel at the school and moderated across the state and district through SABSA. The weekly Sienna High School newsletter in the week this case study was completed attributed the increase in student success in the WBLA directly to the *effort that has been placed at Years 8 to 10 with the Personal Achievement Books, which has been a whole-school focus on literacy across the curriculum* as this group of students is the first to have *had the full benefit of the three years of PA Book Development*. The latest WBLA results show that Sienna High School students have achieved results 8.2% above the state average and 8.6% above like schools.

Overall, at Sienna High School writing is taken seriously and seen as a normal practice. In terms of gender, the English Coordinator suggests that:

We've got lots of kids here, boys too, who have the facility for language. Sometimes it's not sort of cool to engage in that or show that but I think there's a general acceptance that writing anything, poetry, stories or whatever [is OK]. The boys don't get paid out so much here.

What may be of more importance than gender is that:

there are a lot of other things going on in kids' lives ... what is going on in the classroom is secondary and I'm talking about kids who slept on concrete the night before in centres or in malls ... You've got to keep it in perspective a bit.

Although Sienna High School has not *directly sought to address issues with boys* or *overtly push boys' themes* in English, the PA Books have been seen to be of direct benefit to boys.

Low-SES backgrounds and limited employment opportunities affect most Sienna High School students. Forty per cent of enrolled students hold school cards that designate them as disadvantaged. Indigenous and ESL students have additional

disadvantages that can impede their learning. In all these groups there are more boys than girls, as there are at Sienna High School overall.

Family involvement has been identified in the literature (Lingard et al. 2002) as being essential to boys' engagement in schooling, particularly for those from low-SES backgrounds. Family involvement at Sienna has begun to increase through the re-design of open nights to make them more welcoming for families (for example, holding 'sausage sizzles' on the oval), and through the involvement of parents in setting up and delivering *Bounce* to other parents. School community links are particularly strong in areas such as workplace learning, vocational education and community-based learning.

However, some of the responses offered during the focus groups signalled how much work still needs to be done at Sienna High School, particularly in the Junior School. Boys' behaviour remains an issue for teachers and a degree of cynicism was evident in some of their comments. One teacher parodied *Moving On and Up* as *moving up and out*. Another teacher lamented the disruptive behaviour of boys in her junior English and SOSE classes, saying that these subjects *are really things the boys are not interested in* and that *I can't do anything until I deal with behaviour and it's behaviour that I spend most of my time dealing with*. This teacher dislikes sending students out to the Behaviour Planning Withdrawal Room or the FLC. She feels that these escape routes reduce opportunities for her to build more effective relationships with the students by sitting down with them on a one-on-one basis and finding out about any underlying problems with English that she can help them with.

A number of teachers raised confidence as an issue that is particularly important for boys at Sienna High School. One teacher has a Year 9 Drama class with four girls and 17 boys and *none of them [the boys] want to be there*. She describes the students as being reluctant to take risks:

They've all said to me one-on-one, 'Yeah, well I'd do it but the others'd laugh at me' so every single boy's done that but not in front of the others ... They're nice boys. I like them one-on-one, but when four of them are throwing chairs around the whiteboards, I'm a little less fond of them.

The Drama Coordinator describes how boys in his classes hide their lack of confidence by bravado or, more often, *by withdrawing completely into a corner*. He constructs his lessons by breaking down activities, and:

that allows them to take risks without appearing to take risks and to develop some skills that they can then use later in other lessons and therefore to become in themselves more confident to present themselves to the rest of the group.

Although he says this can lead to behavioural problems, what he is more worried about is *the fact that they won't take that risk because of what other people [students and parents] might say about them or to them*.

A science teacher described how students came in to Year 8 from feeder schools with established relationships that work against risk-taking in investigating the world beyond their immediate location, so:

we deliberately split all the schools up and allocated them prac partners and it's been amazing the risks that they will take once they're out of their comfort zone.

Teachers stressed that boys' lack of engagement is a problem that goes beyond the arts and humanities subjects. A technical studies teacher said that even though he teaches in a very practical area, students:

come in there with no sense of direction about what they want to do or where they going to be in a few years' time or even the relevance of what they're doing even in a practically based subject.

He described how in part-time work outside school *the paypacket* encourages students to monitor their behaviour effectively. In their part-time jobs *they're on time, they don't argue, they behave themselves and they're totally the opposite in class.*

The package of measures to increase resilience at Sienna High School, with its interweaving of flexible curriculum with development of relationships, has made good progress toward improving outcomes for all students, and especially those at risk. Improvements in social outcomes are evident in the increased rates of retention over the last years in the senior school. Senior students who would otherwise have exited to *nowhere* rather than do SACE studies are staying at school longer and becoming more job-ready. Many of them are moving into the workforce gradually via a period of time where they are enrolled at school and working part-time for some of the regular working week. However, there is still some way to go before the school can declare that the community of teachers, parents and students is sufficiently resilient to ensure that boys make the most of their years in the school.

Many of the actual programmes at Sienna High School are transferable to other contexts. The idea of PA Books has been taken up by a number of other schools in the state and is detailed in a widely available publication (Dumbleton 1995). The approaches to learning styles and constructivist pedagogy that underpin the *Learning to Learn* programme are already shaping projects at more than 100 South Australian primary and secondary schools. The *FISH* philosophy that brings another dimension to the push of resilience into school reform at Sienna High School is a commercially available programme for organisational change already being marketed to schools in Australia. Regardless of the vehicle or agent for professional development, the ultimate key to transferability of the Sienna High School vision to other schools and its sustainability in Sienna High School itself is the will of the staff. Staff must be prepared to put students first, particularly students who have been alienated and disenfranchised by schooling.

Sustainability and continuing development of resilience and improved learning outcomes at Sienna High School are affected by staff turnover. As with many schools serving disadvantaged communities, staff turnover is a consistent characteristic of the school. The 20 new staff members who began at Sienna in 2005 missed the first

workshop of the *Learning to Learn* programme and do not have the corporate history to understand where the impetus for other change has come from. The School Executive needs to build strategies that address such issues. As Sienna High School gains more good publicity, there may well be more teachers who transfer in because they are interested in supporting such innovations.

Rigid staffing formulae also create barriers to further development. The vision for flexibility at Sienna High School sees the senior school curricular pathways being extended into the junior school. The Principal explains that: *We know we need to do it differently but we are staffed on a formula that says you have to do it the same.* The challenge for the school's leadership is to generate creative ways of responding to these rigid formulae, to seek additional funds and resources, or to obtain a long-term commitment from the system to support these innovations and changes.

B.14.4 Conclusion

The Principal believes that the key to improved outcomes for boys at the school has been, *developing appropriate pathways that lead somewhere with a good chance of success ... retention and participation.*

Although it is still in the early stages, the staff development at Sienna High School has helped to forge an enthusiastic team committed to improving outcomes for all students. The whole-school approach has been effective in increasing resilience across the community. Underpinning the effective initiative at Sienna High School is the effort that is being put in to school leadership and professional development of staff. Professional development delivered through the *Learning to Learn* programme will raise teachers' awareness of students' potential and of ways they might re-design curriculum and classroom practices to facilitate student achievement. Senior management is fully committed to the suite of changes that are underway and the school ethos has already shifted so that students are at the centre of all programmes. The percolation of the *FISH* philosophy through the school and staff conferences on resilience aim to ensure that all staff share the commitment and the vision that drive the Executive team. All these strategies aim to create a context for learning which values students and staff. The focus on individual learners is consistent with research findings that boys need to be valued as individuals, and that mutual respect is a vital aspect of student-teacher interaction.

The Principal reflects on the lack of confidence that some boys at Sienna display with the suggestion that:

boys need a different way of approaching things. If they've already been unsuccessful, more of the same won't work. Sometimes with girls you can persist and it sinks in but with a lot of boys who've been unsuccessful you just dig bigger holes.

The implication of this is that boys need greater help to become resilient. They need to be given the opportunities to succeed by engaging in school in flexible ways in areas where they feel the curriculum is relevant and friendly toward them. Teachers need to be aware of this need to encourage boys to take risks when they are most reluctant to *get out of their comfort zone.*

One example illustrates the scaffolding that the school has set up to help Sienna High School students move out of the comfort zone that keeps them from taking risks and exploring the world beyond their immediate social group and geographic location. In the popular Community Studies subject students have to find and consult with an outside expert who can help them with some aspect of their project. This usually requires them to make contact with strangers and often to visit sites away from their part of the city. As the AEW and AET describe, one of the senior Aboriginal boys who hopes to play AFL football:

[professionally] surveyed all the Aboriginal football players to ask them about their own pathways and how they got there ... he got letters back from all of them and wouldn't even let us read them. He made us listen while he read them out. Didn't want to let them out of his sight. He was that proud. They're probably framed at home on the wall.

The players' advice encouraged him to focus on his education, helping him to overcome the problem these teachers had identified, that *many of our students dream of playing AFL football, but have unrealistic ideas about how to get there and how school can contribute.*

In addition, as the students interviewed about *Chill Out* stressed, relationships are key to success. This programme's approach towards disengaged groups of boys provides an example of the motivation area of the MeE framework. The school's focus on resilience places emphasis on nurturing relationships, building positive attitudes and forging a sense of belonging. The resulting networks of support have begun to contribute to the improvement of student learning outcomes and a sense that 'school is for me'. In essence, the school, with its focus on large, inclusive strategies such as the FLC, shows strong attention to 'E'ngagement.

The MeE framework entails a number of elements that are evident in the suite of projects underway at this school. The MeE framework is interested in both sides of the student-teacher relationship and focuses on teachers as much as students. At Sienna High School, boosting staff morale has been an important focus of the *FISH* approach to organisational change and of the initial phase of the *Learning to Learn* project. Thus the resilience of teachers is seen as critical and was the core of Sienna High School's application to Phase III of the *Learning to Learn* programme. The school aims to enhance staff resilience through professional development and a range of everyday strategies and management practices designed to energise staff, increase their sense of connectedness and belonging, increase their excitement about learning, their hopefulness and their sense of possibility for the future. These qualities are essential if staff are to create structures and build relationships that help to develop reliance in their students.

Thus far, the staff conferences with Clinical Psychologist Andrew Fuller have been the key elements of this strategy. These conferences look at resilience explicitly in terms of the students of Sienna High School. As noted earlier, the staff conferences have defined resilience for students as dependent on the following characteristics:

- a sense of being loved and belonging to a family

- having diversity of friendships
- having a sense of fitting in to a school where there is a possibility of success where an adult outside the family indicates support for or attachment to the young person.

Predictors of resilience identified in the literature (Martin & Marsh 2003) – self-efficacy, persistence, control, low anxiety – intersect quite well with the characteristics of resilience that are identified at Sienna High School. Quality relationships between students and staff are envisaged as one of the most desirable outcomes of the *Learning to Learn* project. The Principal describes her vision of Sienna High School becoming a place where teachers will even choose to *teach something outside their subject expertise because it will mean they get to teach the same kids twice. Content will take a back seat to the relationships they have with kids.*

The MeE framework draws from both psychological and sociological explanations of learning contexts. It makes a space for theory to inform classroom pedagogy and curricula. Within the *Learning to Learn* project to date, centrally delivered DECS professional development has focused on individual learning styles and cognitive learning theories. DECS describes ‘both the context and conceptual framework’ of *Learning to Learn* as being about ‘generative learning – learning how to learn’. The project ‘recognises:

- Recent research in the neurosciences confirming the efficacy of constructivist approaches for all learners
- A growing concern about increasing student disengagement and disintegrating social capital in our communities
- Labour market trends which have identified new competencies and capacities required for future employment.’ (Department of Education and Community Services 2003, pp.2–3)

Thus the rationale of the DECS curriculum renewal project derives predominantly from psychological approaches to learning that valorise the student as a discrete and individual learner. Discussions at Sienna High School around the need to recognise individual learning preferences and to adapt teaching to suit the entire range of individual learners in every classroom clearly reflect the individualistic orientation of the theory underpinning *Learning to Learn*. In addition, the flexible curricular pathways that have been developed for senior students are very much focused on making space for each individual student to pursue their own interests and imagined futures. Nevertheless, Sienna High School also focuses also on quality relationships and thus recognises that all learning occurs in complex social contexts.

There may be scope at Sienna High School to consider how insights from sociological approaches to learning might also inform work with students, particularly in the junior school. In some of the teacher talk around boys, for example, reference was made to characteristics that were seen to be more typical of boys than girls. Teachers said boys were much more afraid to move out of their ‘*comfort zone*’ or *take risks*’ at Sienna. The Science Coordinator described how organising lab partners in Year 7 so students were not with their primary school peers had made a huge difference to students’ preparedness to learn. Records in the FLC thus far in 2005 suggest that groups of boys are sent there for flexi-lessons much more often than groups of girls. In a school

where enrolments indicate there are significantly more boys than girls in most Year levels and thus in most classes, it seems useful to consider more sociologically oriented questions as well, such as whether there are local constructs of ‘appropriate’ masculinity or working-class masculinity that are not conducive to success for boys at school and how these might be redressed.

One of the key ideas of the MeE framework is that ‘e’ngagement is a consciousness and is more concerned with the processes happening within students’ thoughts and emotions than with the actual tasks they perform. Consciousness of oneself as a learner is shaped by the teacher and by curriculum, pedagogy and assessment practices. Students are aware that their capacities as learners are differently enabled and disabled by the pedagogies adopted by particular teachers. These students were able to re-articulate their places as learners after leaving the FLC programme and now can describe what subjects they are good at and why. There is an emotional dimension to their talk of now *liking* English or SOSE when they didn’t previously.

Another of the key ideas of the MeE framework is that messages must be realised, that students should not only feel that they are being successful but success should be opened up to them. The *Boys’ Vocational Education* programme had students who had been otherwise unsuccessful at school laying carpet and paving around the school. As more than one teacher noted:

they loved that paving ... You could walk straight past them and instead of the swearing and the carrying on you know just hanging around like, you know, thugs. They had something to do and they were pleased with themselves. They were often there. You saw them with it. The paving is the track near the library. They just loved it.

The curricular element of *Learning to Learn* intends to bring strategies that enable student success from the alternative programmes into the mainstream. At Sienna High School, a student’s inability to be successful is seen by the Executive team not as an individual deficit but as a ‘call to action’ in terms of attendance, classroom practices and pedagogy, or whatever factor will better enable that student to achieve success.

‘e’ngagement is manifest through a synthesis of behaviour, emotion and cognition that enables a highly productive learning environment. The Principal described one of the units that had students writing *mini-mystery challenges* in a Year 9 English class. These texts were later compiled into a school calendar that was sold in the community. Over half the narratives published in the calendar were by boys. The Principal said: *I have never seen a Year 9 English class so engaged ... It was not just kids who had a fantastic time and learnt a lot but also parents loved it.* This task has all the characteristics that research suggests are typical of engaging activities in classes: it was authentic, in that there was a real audience and purpose for the writing; it allowed ownership, as students devised their own mini-mysteries; it entailed real-world thinking and planning, particularly in the calendar production and marketing phases; and it was fun.

The MeE framework defines ‘E’ngagement as denoting a longer and more enduring relationship, an emotional attachment and commitment to education, and a sense that ‘school is for me’. Most of the transformative programmes witnessed at Sienna High

School have operated at this macro-level. By all accounts, Sienna High School was not a school that welcomed students who did not fit a narrow conceptualisation of the right sort of student. Programmes such as *Moving On and Up* have made new spaces where school can be for students who were previously too easily excluded.

The effects of this on students are already apparent in comments such as those made by the footballer who believed he was *not very bright* and that if it wasn't for *Moving On and Up*, he would be *at home on the couch*. He comes to school *because I don't want to leave next year and have a bum job*. He hopes that being at school in the *Moving On and Up* programme will help him find out the best route to his desired future *to work either in a sports store or become a gym instructor*. As the interview concluded, this student was deep in consultation with the Counsellor over a TAFE guide looking for courses that might help him achieve these goals. The huge increase in VET programmes and partnerships with other educational sites such as SMS@UNISA creates bridges between school learning and the outside world. Students become used to the idea that education is for them, that they can find a niche that will suit their own interests and ambitions and that education occurs in many sites and at many times throughout people's lives. Thus they might acquire an orientation towards life-long learning that will stand them in good stead in the future.

The MeE framework attends also to the discourses of power that structure classroom spaces. Already, initiatives such as the classroom decoration competition have begun to alter the balance of who controls the teaching space. There is much further to go at Sienna High School in terms of questions such as, *What counts as knowledge and ability?* and *Who is valued and given voice inside the classroom spaces?*. While individual teachers are noted by students for their inclusive or democratic practices, and students can describe the consequent motivation they have to succeed in these classes, the *Learning to Learn* curriculum renewal process will focus attention on these factors across the entire school.

The focus of the *Learning to Learn* training on individual learners is consistent with research findings into what suits boys, although the accompanying dimensions of high expectations and clear boundaries may take some time to become consistent and visible at Sienna High School. Notably, research (Noble 1998) suggests that change processes that benefit boys are most effective when they target underachievement rather than attitude and behaviour. The Sienna High School projects are, clearly, targeted at underachievement. And again, as the literature (Younger & Warrington 2003) suggests, professional development of teachers is the most critical element of whole school change. Within classrooms, the transformation that is envisaged by the endpoint of the *Learning to Learn* project is improved classroom relationships and productive classroom activities. The positive climate of classrooms that enable student success will lead to a change in attitude and improvements in behaviour. This sort of climate was already evident during the case study.

The *Learning to Learn* team envisages that, by the end of 2006, classrooms at Sienna High School will be places where individual differences are both expected and valued, and where teachers are developing differential curriculum that involves all students in complex and meaningful learning experiences. Relationships will be paramount.

The MeE framework weaves together cognitive and social dimensions of learning. Although the *Learning to Learn* element of the project seems to stress cognition, the language used at Sienna High School and the range of projects that are underway recognise that learning takes place in complex social spaces. They also take account of socioeconomic and other disadvantages that can have negative impacts on learning.

B.15 Magenta Primary School

B.15.1 Background characteristics

Magenta Primary School is located in an urban area of a geographically remote town in the Northern Territory. It has an enrolment of 243 students, 162 (66%) of whom are from Indigenous backgrounds. Of these Indigenous students, 104 are boys. The school is located in a low-to-medium-SES area. Magenta Primary School students not only come from this local area but are also brought in by school and local bus services from other parts of the town. A substantial number (40%) of the Indigenous students come from remote communities or live in fringe-dwelling ‘town camps’. Most of the remote community students and some from the camps speak an Indigenous language and are classified as ESL speakers. All of the Indigenous students, but especially those from the camps, live in communities dealing with social problems associated with other underprivileged Indigenous people throughout Australia (damaging personal relationships, domestic violence, alcoholism and petrol sniffing).

Magenta Primary School’s problems of low attendance rates, disengaged students in classrooms, low academic outcomes and playground tensions are typical of a school serving a sizeable number of Indigenous students. The large number of boys in this group perhaps heightens these issues. However, these issues need to be viewed within the school’s historical context. The current school principal arrived in 1997 and found what he termed a *harsh and controlling environment* and believed this was an approach that needed to be altered. Magenta Primary School was then a much larger school with its 180 Indigenous students ‘lost’ in a predominantly white school. However, in the late 1990s, the opening of a school in a nearby more advantaged suburb changed Magenta Primary School’s student composition. The Indigenous student population stayed about the same but the non-Indigenous numbers dropped to the point that it became much easier to identify Magenta Primary School as an Indigenous school.

This meant that, at the same time as the Principal and the teachers were re-defining their ethos from tight school and classroom control (including the use of corporal punishment) towards a more encouraging and inclusive environment, there was an emerging student imperative among the now majority Indigenous students. Previously lost in the school, their social and academic difficulties were becoming more apparent. In the classroom these students were over-identified as having behaviour ‘problems’, and were not achieving the same results in literacy and numeracy as their non-Indigenous peers. In the playground, they were often involved in violence and bullying. Changes were needed across the whole-school environment. As the Principal puts it, *We had to turn our school around to suit our kids ... settling the place down and then seeing how we were going to work with these kids.*

B.15.2 Strategies for improved academic and social outcomes for boys

Magenta Primary School has a multilayered approach to *working with these kids*. There is a strong social justice orientation, with major decisions being made for its most educationally disadvantaged Indigenous students. It must be pointed out that while the school has identified that the Indigenous boys were particularly in need socially and academically, its main programmes were not aimed specifically at them. Rather it was reasoned that changes aimed at benefiting all students would produce a positive flow-on effect to this particular group of boys.

At a whole-school level there is an ethos of inclusion and social and academic support for all students. While the specific Indigenous programmes are central, there is a strong sense among parents that, regardless of cultural background or individual need, *no-one is ever left to fall through the cracks*.

Underneath this ethos of support, there is a Transition (Kindergarten) to Year 6 literacy syllabus that is the hub of the school's curriculum work. This programme, the *Accelerated Literacy Programme (ALP)* simultaneously addresses social and academic issues. Although designed specifically for Indigenous students, *ALP* is implemented for all students in all classrooms for a significant part of each school day.

The final layer comprises two programmes purposely adopted for the school's senior boys. The first of these is the *Rock and Water* programme that aims to improve boys' physical and mental self-control. The second is a music-based programme, *Boys' Business*, which focuses on both personal growth and co-operative skills and attitudes.

The whole-school Indigenous programmes

Magenta Primary School has a number of Indigenous staff members who work together to support and encourage the Indigenous students. Their presence and work also have an importance for the non-Indigenous students in relation to their understanding and appreciation of Indigenous culture and issues.

An Aboriginal and Islander education worker (AIEW) offers individual support to students and liaises with the community. While this role is not unique in schools with large Indigenous student populations, it is important to acknowledge that this is a critical position that needs to be sensitively handled for productive school–community relations. The AIEW works out of a demountable building situated a short distance away from the main school building. It is painted outside and decorated inside in a way that makes it clearly identifiable as an Indigenous place. While there may be an argument that the building's physical situation in the school grounds might afford it and its programmes an 'annex' status, the school's Indigenous and non-Indigenous staff recognise that many parents feel more comfortable in a less formal and culturally sympathetic half-way space. This is especially important when a school is working with people who have not had productive relationships with schools, teachers and education in the past. Many Indigenous people have been adversely affected through educational policies and decisions at local and system-wide levels. These have included the removal of Indigenous students from schools and classrooms,

segregation of Indigenous students into special education classes and culturally inappropriate curriculum and pedagogy.

As well as the AIEW, the school has three Indigenous teachers and an Aboriginal regional officer. All of these staff members provide important role models for the Indigenous students and their families. Magenta Primary School also regularly brings in other male Indigenous role models to speak to the children. These include men working in the local community and the wider town, as well as community-based elders and storytellers.

There is an Indigenous language programme available to all students, in which a locally spoken language is taught by grandmothers from the community. The programme has an emphasis on cultural understandings.

The school places a central importance on the annual celebration of National Aboriginal and Islander Day of Celebration (NAIDOC).

Indigenous Bridging Unit

Two of Magenta Primary School's Indigenous teachers staff a special unit for at-risk and disengaged students. In 2002 the school recognised that large numbers of children coming from remote community backgrounds or from the town's fringe camps were either having major problems integrating into classrooms or not attending school at all. Not only were those students who did come to school experiencing serious social and academic difficulties, but they were placing considerable pressure on their teachers and other children in the classrooms. Funding was successfully sought to establish the Indigenous Bridging Unit ('the unit') for up to 15 students at a time to be taught by an Indigenous teacher and an Indigenous assistant teacher. Students who were not attending and/or were disengaged were brought into the unit (via a school-funded bus), the aim being to facilitate their transition into mainstream schooling. There is a dual social and academic focus in the unit and a current priority on younger students. The students are taught social skills and are helped with school and classroom routines, while at the same time being introduced to more formal aspects of the school's curriculum, including the whole-school *ALP*. Students' individual needs are catered for within a friendly, non-threatening and culturally sensitive classroom environment. In the words of the Indigenous Assistant Teacher:

... [the Unit] gets kids used to school rules and stuff that happens at school ... and helps to build social skills and self-esteem ... making them feel that they belong to the school ...

To build students' confidence, while they are in the unit they have experiences with other classes, for example, music, physical education, sport and library. Parents are encouraged to attend school assemblies and to drop into the Unit. This helps to build relationships that will support the transition processes. The importance of these relationships is noted by the Indigenous teacher: *We learn off them ... they learn off us ... it's sort of like we are learning off each other.* The transition of students from the Unit into mainstream classes is scaffolded. Their prospective teacher visits the Unit to get to know the students and then begins to take them into their classrooms for limited periods. There is continuous communication both during and after the transition

period between the Unit's teachers and the classroom teachers. When the Indigenous students finally move into their mainstream classes, they are presented with special graduation certificates.

Other whole-school initiatives

Magenta Primary School implements a number of other programmes designed to provide a varied, contextually relevant and interesting curriculum for all students. Physical education and sport hold a pre-eminent place in the school's life. Students take part in daily fitness sessions and are encouraged to join sporting teams both at school and on the weekends. Sport is seen to be important both physically and culturally for the Indigenous boys. The Assistant Principal believes that *it plays a role in holding the school together*. The AIEW agrees, noting that *sport plays an important role at school and in the community ... it's a sporting kind of town*.

The school also places importance on values education, identifying that students need to cooperate and get along with each other. An anti-bullying curriculum reinforces this across both classroom and playground and is tied into programmes such as *Rock and Water* and *Boys' Business*. This stress on relationships has strong ties to 'e'ngagement and, in fact, each of these programmes can be seen also in terms of motivation and of valuing the lived experiences of these students, hence aiding 'E'ngagement.

Community outreach programme

In line with Magenta Primary School's commitment to working with the most 'at risk' Indigenous students, it has established, in cooperation with government and local health, youth and family services, a learning centre in one of the town camps. This camp was suffering high levels of substance abuse (including petrol sniffing) among adults and youth and there were high levels of community and family violence. The school in the learning centre has a teacher and assistant teacher from Magenta Primary School and is helping children and youth to get off petrol sniffing, attend school and have a chance at gaining an education, so opening up future life opportunities. Since this programme began, the community has reported a decrease in violence, petrol sniffing and involvement in the criminal justice system. While as yet no children have moved from the learning centre to Magenta Primary School, this continues to be an aim.

Accelerated Literacy Programme (ALP)

This whole-school literacy programme is the pivotal component of Magenta Primary School's work. While the whole-school initiatives described above arguably provide a supportive climate that fosters its implementation, *ALP* is widely viewed in the school to be the key component in addressing social and academic outcomes. There is a critical dialectic in play at Magenta Primary School, through which *ALP* is not only supported by the school ethos, but in turn plays a decisive role in the building and maintenance of that ethos.

ALP is a systematic and intensive approach to literacy that in many ways challenges accepted literacy practices in primary schools while maintaining links to seminal theory (for example Freebody & Luke 1990). Previously known as 'scaffolded

literacy', the programme was first implemented in the 1980s and researched among urban Indigenous students in Central Australia by Australian academic Brian Gray. In 2001, Magenta Primary School offered to take part in a pilot programme involving 114 of its Indigenous students. At this time the school was looking to develop into a learning community, with a focus on enhancing learning outcomes as a means to improving behaviour. The Principal sums up:

When kids come to school and learn well and progress academically ... that's your core business and that's the underpinning of developing the kids socially and academically.

ALP not only fitted in well with this philosophy but evaluations of the pilot were pointing to literacy gains among those students taking part. Consequently, Magenta Primary School decided to implement *ALP* for all its students, from Transition to Year 6 and the programme is now in its fifth year of operation. There is a whole-staff approach to the teaching of *ALP*. New teachers are recruited to the school on the dual criteria of being committed to both *ALP* and Indigenous education. Extensive professional learning and ongoing support for all teachers is provided by the *ALP* School Coordinator. Regular assessments of all children are undertaken using running records and comprehension questions.

What is important for this case study is a consideration of the principles of student engagement that *ALP* promotes. In essence, all students in each class are involved in concentrated reading experiences (90 minutes per day) of the same fictional texts. These texts are 'real' literature as opposed to schemed readers. For example, senior students might be reading works by Paul Jennings or *Rowan of Rin* by Emily Rodda. Since the structure of each *ALP* lesson is explicit and predictable (for example, whole-class unison reading and text deconstruction), it can claim that all children are catered for and, as the *ALP* School Coordinator put it, *that all children can participate in the lesson*. This participation relies heavily on the teacher's modelling and providing vital information for the learners.

Classrooms stay with each text for extended periods (up to eight weeks) and this helps children who are not regular attendees as they can 'pick up' when they next return to the classroom. The structure also allows individual children to *tune in and out* of each lesson without overt teacher sanction. Indeed the *ALP* philosophy asks teachers primarily to ignore minor student disengagement and continue with the content of the lesson, the idea being that these disengaged students will eventually be drawn back. There is a double benefit here. The teacher maintains a concentration on learning and students are not constantly subjected to minor reprimands. The *ALP* School Coordinator observes that *ALP is part of the day when very few can't achieve*. It thus targets the important literacy part of the day when research has shown that Indigenous students feel most threatened (Munns 2005) and aims to lessen student disengagement. It provides a heavily scaffolded environment that gives students the opportunity to experience success in reading. Its whole-class orientation means that individual students are rarely singled out, either for their behaviour or their learning. In this way the programme simultaneously addresses learning and behavioural issues.

Importantly, the programme targets aspects of 'e'ngagement in that classroom processes and assessment practices now show the boys that they are capable of

achieving academically. Daily struggles over discipline and behaviour are significantly lessened. Boys can now see themselves as being valued as individuals and learners. Importantly, too, students can see that they will be supported if they need help with learning or behavioural problems. Students are not left to *fall through the cracks*. In this respect, these programmes also tie into ‘E’ngagement.

Rock and Water programme

The *Rock and Water* programme is specifically designed for boys and is a recent introduction to Magenta Primary School. Originating from The Netherlands, the programme was developed in response to the perceived need for boys to adapt to the changing roles of girls and boys. It incorporates developing physical strength alongside fostering self-esteem and self-confidence. A mental element is crucial, although at Magenta Primary School the physical lessons are taught first, in order to motivate the boys about the whole programme. The mental and the physical then coincide. As the *Rock and Water* teacher commented:

Kids are learning about their inner-self. Learning to take notice of their early warning signs and what’s important to them and what’s worth fighting for and what’s not.

The programme comprises a set of lessons covering physical strength, relationships, body language and mental strength. All boys in Years 5 and 6 take part in the weekly programme. A modified programme is taught separately to the girls, and the possibility of extending the programme next year to incorporate Year 4 boys is under consideration. A number of Magenta Primary School teachers have trained in the programme.

Boys’ Business

This is a programme specifically for boys, designed and implemented by music educator Bob Smith. At Magenta Primary School, all boys in Years 5 and 6 participate in *Boys’ Business* sessions approximately twice a term. These sessions feature singing, movement and games and Bob Smith claims that they are *designed to offer positive affective, physiological and intellectual outcomes for boys*. The activities and songs are used to facilitate concepts and skills around communication, interdependence, physicality, trust and creativity, with a particular focus on being male. One feature of the sessions is boys giving and receiving compliments and feedback.

Both of these programmes strongly exhibit aspects of the MeE framework. The *Rock and Water* programme works partly at the level of individual psychology and aids motivation. Their status as extracurricular activities also ties in with ‘E’ngagement and with giving boys the sense that ‘school is for me’. Boys are able to see that Magenta Primary School will look after them and provide them with a wide range of educationally worthwhile and enjoyable experiences across both curricular and extracurricular areas.

B.15.3 Evidence that the strategies are improving academic and social outcomes for boys

There is compelling evidence that Magenta Primary School has made significant gains at school and classroom levels for all its students in both social and academic outcomes. Its whole-school and multilayered approach to dealing with its issues makes it difficult to attribute results to a particular programme or differentiate these results across cultural or gender groups. Nonetheless, this case study has revealed that there are four key areas where there is evidence that the school *is making it work for these kids*.

The first is in Magenta Primary School's burgeoning reputation as an Indigenous school that looks after all of its students. The second is in student attendance. The third is in the changes to behaviour at both playground and classroom level. Finally, there are the school-based and systems data on literacy outcomes. In this area, stronger links may be established between the data and *ALP* although, as stated above, other programmes arguably contribute to these classroom outcomes.

School reputation

The student population change that turned Magenta Primary School into a majority Indigenous school could well have adversely affected its standing in its local and wider community. There are many cases of schools in similar circumstances that become 'residualised', the kinds of places that students are sent to because they cannot gain entry to schools serving more advantaged and mainstream populations. As the Principal points out, this does not appear to be the case at Magenta Primary School:

This school used to be looked down on before as a 'blackfellas' school' but now we're getting non-Indigenous people coming and saying 'Can my kid come to this school? We hear it's a black school but we want our kid to come here'. People will come and seek enrolment at Magenta because they want their kids to come here, Indigenous and non-Indigenous.

Such a shift in reputation seems all the more remarkable when it is considered that during this period there was an active commitment to bringing disengaged students from remote and camp communities into the school. Magenta Primary School did not shirk its social justice duty by only looking after those who are easy to teach. This was appreciated by people in the town, as one non-Indigenous parent confirms: *I never hear anything bad about Magenta. I'm really happy with the school. I don't know what they do, but they do it well.*

An Indigenous teacher agrees, speaking for her community:

We see people outside [in the community] and they say their kids are doing well, their kids've been here and when we have those assemblies there's more parents coming in and a fair few Indigenous ones who never used to come here. They're safe and looked after here and everyone looks after them. We're here for them while they're here.

Importantly, the school had gathered support from both non-Indigenous and Indigenous people. A mother notes how the school's work is important for bringing communities together:

Going back, previous to the Principal we've got, there was a definite cultural divide ... and when boys don't feel comfortable, it's a lot rougher ... The [Indigenous] community had heard that their children would be accepted at Magenta, that they would be given help ... Just the feeling of confidence that comes from both the parents and the kids. The philosophy is known around town and it's such a positive one ... The town is feeling empowered because of what's happening. The kids here are feeling empowered. They get a lot of help, and that's wonderful. A lot of non-Indigenous families are very happy for their kids to be here because the future of this town is going to be eventually far more unified than it ever has been.

The school's reputation is not confined to people in the town. During the case study visit Bob Smith was conducting his *Boys' Business* class with the Year 5 and Year 6 boys. His work as Departmental Music Advisor takes him to every school in the territory, so he is in a position to evaluate the work that schools are doing. In a conversation about the Magenta Primary School, he offered this unsolicited comment: *Magenta does more for boys and Indigenous boys than any other school in the state.*

School attendance

Data on school attendance also have to be read in context. In schools serving majority Indigenous populations there are always going to be substantial periods of time when families are away from their homes on community business. This may involve travelling between communities to maintain familial and cultural contacts or the more common 'sorry business'; that is, the extended period of time when Indigenous people are in mourning for relatives and friends who have died. The high mortality rates of Indigenous populations in Australia and their extended sense of community mean that 'sorry business' accounts for a lot of student absences from school. On top of this, Magenta Primary School's attendance data have to take into account its position and philosophy in the town. It is the public school with the largest ratio of Indigenous to non-Indigenous students and also energetically works to include the most disadvantaged and disengaged students. Table B.17 shows attendance statistics for 2004, with comparisons to other schools in the territory and the surrounding region.

Table B.17: Attendance statistics 2004

Non-Indigenous students	88.9%
Indigenous students	74.4%
Whole school	81.7%
State: Primary schools	83.7%
Region: Primary schools	78.1%
Region Indigenous students	77.8%

A reading of this attendance data shows that Magenta Primary School has a 2004 attendance rate that is statistically very close (-1.4% points) to the state average. By

comparison with other schools in its region the school has a significantly higher attendance rate (+3.6% points). The Indigenous students' attendance figures are slightly below the region's average for Indigenous students (-3.4% points) but this figure needs to be placed against the school's outreach and integration programmes and the fact that the Indigenous Bridging Unit's attendance figures are counted with the rest of the school. If these figures for chronic non-attending and disengaged students were not included, the school's Indigenous attendance rate would be above the region's Indigenous average (for example, six of these students alone averaged 38% unauthorised attendances during 2004).

What attendance statistics cannot reveal are the stories of chronic non-attendees whose presence at school, no matter how limited, is a significant victory for their families and their communities. The school is working hard to build on these victories. An Indigenous teacher puts this into perspective:

The kids who never used to come to school, they're attending now a lot more than they used to and there's an awareness, that if you're going to be away this time, you gotta let 'em know, or your name's gonna go off the roll. And I think the parents are putting their foot down and sending them to school. It's a good environment and everyone has fun here.

Classroom and playground behaviour

Observations of classrooms and the playground at Magenta Primary School during the case study visits gave the impression of a quiet, friendly and relaxed atmosphere. In some ways this was surprising. Many schools in these kinds of situations exude feelings of simmering tensions, of the lid being barely kept on through measures of control. Magenta Primary School does not have major whole-school discipline systems of the kind that promote and demote students through different levels with either reward or punishment at either end of the continuum. Management strategies are shared throughout the school by the whole staff. Whereas previously the Principal remembers that the School Executive was handling *30 to 40 kids around the front office each day* for classroom and playground incidents, that situation has changed. The Assistant Principal talks of a *softly, softly approach* and *upstream management*, of taking students aside to prevent or minimise issues. He comments that the school is a better place now and acknowledges that the anti-bullying curriculum is making a difference. A Year 6 teacher comments on the development of positive reinforcement, of providing opportunities for collective voices to be heard and valued:

My biggest buzz is when students take on responsibility and are aware that what they want to say is important and they will have somebody listen to them ... that's been an exciting aspect of what I have seen.

Students were also able to talk about the difference they are noticing in their school. Consider the following comments from an Indigenous student who has been at Magenta Primary School since transition. Noting that the biggest change in the school has been that there are now fewer fights, he continues:

All the other years I've been at school I've been in trouble, but this year I want to learn more ... This year is good because I've got all my mates in my class and there's more sports and learning.

He goes on to describe how programmes such as *Rock and Water* and *Boys' Business* teach him how to control his strength and to use it properly. One of his classmates adds, '*it [Boys' Business] gets us excited and then calms us down*'. Teachers confirm that these kinds of programmes enable students to handle themselves more appropriately and so self-regulate the kinds of behaviours that previously would have had them lining up outside the Principal's office:

I've been out in the playground. I've seen kids trying to discuss things or tactfully ignoring or using some of the things they've learnt in Rock and Water. I also see them doing some of the exercises in a really constructive way. They're not being competitive. They're genuinely trying to improve their skills.

The Assistant Principal thinks that the programme has led to a decrease in the number of kids being sent to the office for fisticuffs.

Finally, it is worth mentioning that there have been only 11 suspensions at Magenta School over the last nine years and this alone is the most telling of statistics in this kind of context.

Literacy

As discussed above, it is reasonable to speculate that the changes in reputation, attendance and behaviour are closely related to improvements in literacy across the whole school. Magenta Primary School reasons that *ALP* has brought about measurable achievements in both social and academic outcomes. The Assistant Principal expands on this:

Through ALP kids are able to achieve. They are able to achieve something and able to achieve to a pretty good level. So kids feel good about themselves. Their self-esteem is evident. It's not a 'This is too hard for me. I can't do this'. The way the programme's structured, every kid can achieve and they can respond to, and participate in, lessons.

These links between self-concept and literacy success were similarly felt within the Indigenous community:

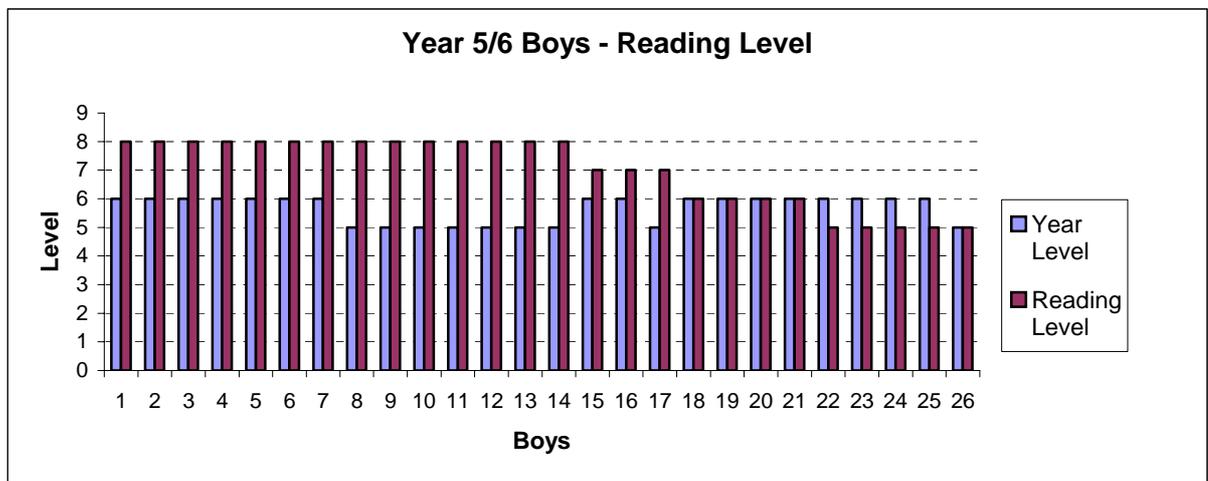
By getting an hour and a half of literacy every day even those kids who didn't used to participate well, become involved ... It was a great thing that happened here. A lot of our kids are literate by the time they go to high school.

In very few schools with such a high ratio of Indigenous to non-Indigenous students would Principals be able to make extravagant claims about literacy levels. Such claims can be made at Magenta Primary School:

If we can have a student participating for 70% of the time we can have them reading at a chronological age appropriate to themselves. We can almost guarantee that. And going along with that, probably the most powerful thing is the personal development of the kids in terms of their self-esteem. It's sort of had a calming effect across the processes of classroom learning but outside too. We can take our kids anywhere and they behave pretty well and present pretty well.

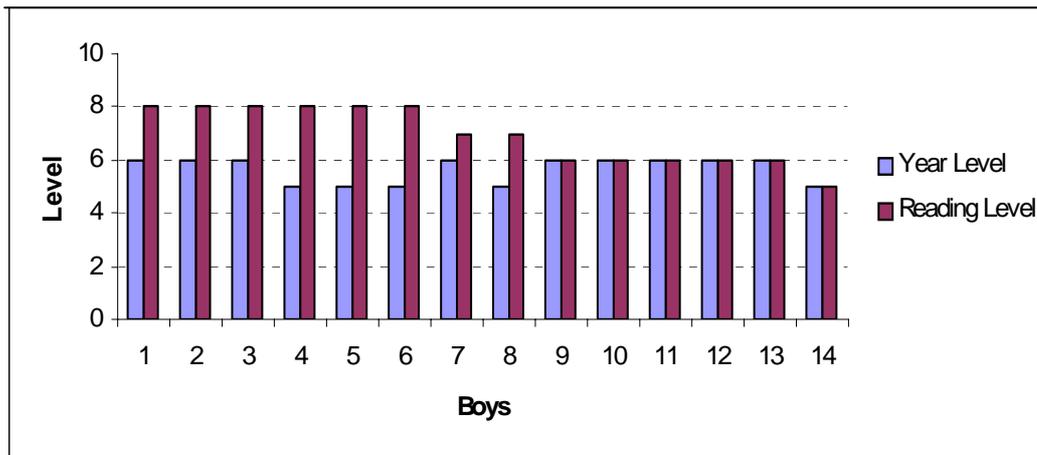
Can these claims be backed with outcome data? Results from the school-based assessment data (running records) show that out of 26 boys in Years 5 and 6, only four are not reading at Year level. This is shown in Figure B.8.

Figure B.8: Magenta Primary School reading assessment data for boys, Years 5 and 6



Further, 14 of these 26 boys are Indigenous, and all but two are reading at or above Year level, as shown in Figure B.9

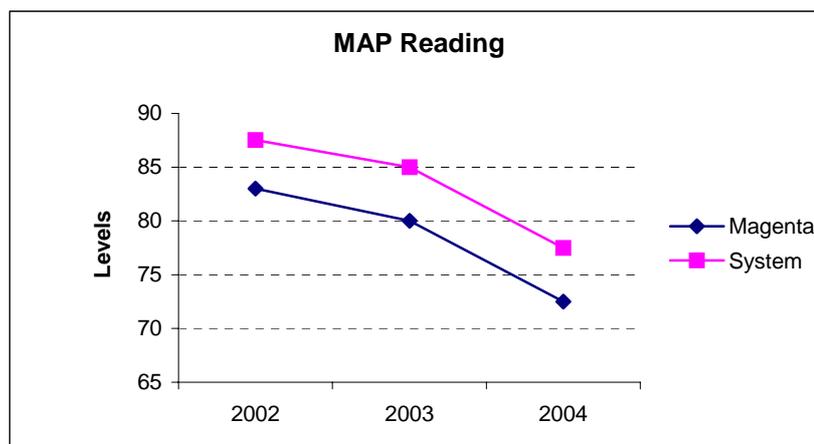
Figure B.9: Magenta Primary School reading assessment data for Indigenous boys, Years 5 and 6



It is also interesting to note that, of the five boys graduating from the Indigenous Bridging Unit, four have reading ages equal to or above their chronological ages. This is very encouraging for both the Indigenous Bridging Unit and the *ALP* programme.

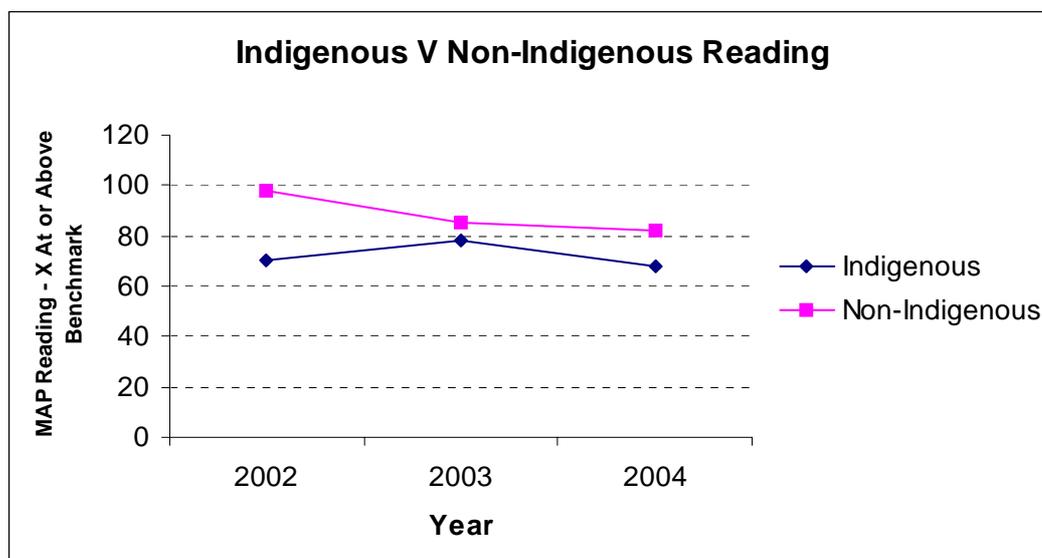
Data from the *ALP* assessment processes show that the Year 5 and Year 6 boys have achieved impressive literacy outcomes with regard to accuracy of text decoding. In schools such as Magenta Primary School these are noteworthy achievements and no doubt will provide solid opportunities for these students to be productive in their future schooling. Results from the statewide standardised testing programme (MAP) reveal that there are still some areas to address. Figure B.10 indicates that, across all students in Year 5, the school is still below state averages with a consistent gap over the three-year period. That the literacy equity gap has not widened during this period is a notable achievement and not common among schools working with Indigenous learners.

Figure B.10: Statewide testing programme data for Magenta Primary School



A comparison of Indigenous students with non-Indigenous students shows that there is a narrowing of the equity gap which, as the Assistant Principal explained, was one of the school's aims. This can be seen in Figure B.11

Figure B.11: Comparison data of Indigenous and non-Indigenous student reading abilities



Drawing conclusions across the school-based and systems literacy data it is evident that Magenta Primary School is moving in a positive direction for all its students (including its most at-risk boys) but has still some work to do. It is possible to speculate that the discrepancy between the results might be attributed to issues around MAP test facility and the cultural relevance of test items. That said, however, the *ALP* incorporates only fictional texts and seems to emphasise decoding over other reader roles, thereby perhaps not fully preparing students for the wider literacy demands made in standardised tests. Further, the occasions in the school term when students' reading is assessed varies, with running records often being conducted at the time when a student is demonstrating competence at class level. Conversely, system-wide testing occurs at one point in time for all learners whether or not curriculum material has been addressed and or demonstrated.

Nonetheless, the evidence discussed above suggests that the *ALP* programme is equipping students with fundamental and crucial reading competencies that translate into enhanced self-esteem, an opening-up of learning potential across all other classroom subjects and the flow-on social outcomes for the whole school. This achievement has been widely recognised, resulting in Magenta Primary School receiving a State Achievement Award for Literacy (2003) and being named as a 'quality school' in the National Quality Schools Award for Literacy (2003).

B.15.4 Conclusion

There is much to be learned from the story of Magenta Primary School. It embraced its own crossroad period with a determination not to lose sight of the immediate needs of its own students and what they really needed for their educational futures. The school's achievements point to the efficacy of a multifaceted approach in addressing issues related to low academic outcomes and unsatisfactory social outcomes. While not all of its programmes specifically target boys, the AIEW highlights important

school and classroom intervention areas that have benefited all boys, particularly the Indigenous boys:

Boys, when they start here, they might run off the rails a bit, but generally by the time they get to Year 6, a lot of the teachers know they can go on, they're going to be all right in high school ... and that's a huge change from ten years ago. We've had two generations of non-attendance. The economic circumstances haven't changed, but something at the school has.

Here is a change that continues to bring advantages for all members of the school community. The multilayered approach to the school's perceived problems reflects the interplay between all areas of the MeE framework. The specialist boys' programmes show a desire to enhance motivation. The pivotal programme, *ALP*, has at its core an improved classroom pedagogy which is taught to the whole school. This is most closely linked to 'e'ngagement. Whole-school Indigenous programmes illustrate strongly the 'school is for me' or 'E'ngagement aspect of the framework. The interrelated success of each programme reflects the interplay between the framework areas.

B.16 Cyan High School

B.16.1 Background characteristics

Cyan High School is a comprehensive, co-educational school in Tasmania, catering for students in Year 7 through to Year 10. The school is situated at the industrial end of a medium-sized city in a low-SES area. Cyan High School has 621 students, most of whom come from low-income backgrounds. Seventy-two per cent of families have a family income below \$22 000 and 64% of dwellings in the school's suburb are rented from the State Housing Commission. Among the student population, 12% are Aboriginal or Torres Strait Islander (ATSI) and 1.4% are from an ESL background. Among the school community, there is a high incidence of single-parent families, welfare dependency, inter-generational unemployment, high crime rates and drug and alcohol dependency. This is a school community facing significant problems and challenges.

Cyan High School has an interesting history. The school was founded in 1948 and came on to its present site in 1991. In its earliest days, it was a community school which offered technical education for future blue-collar workers in a two-tiered education system.

From the 1970s, due to its size, the school was divided into four 'sub-schools', each of which included students from Year 7 through to Year 10 and to which a teacher was attached. 'Class teacher' groups were vertical and this is where students gained their 'basics', although there was still a balancing act against teachers staying within their area of expertise. One sub-school was specifically for remedial teaching. Elective classes were highly gender-based. Under the sub-schools system, there was poor attendance, poor adherence to uniform and no student commitment to school. There were a lot of *boys' issues*, particularly fights. Boys were highly disengaged.

One of the long-term Year 8 teachers said that teachers were afraid of playground duty because of the fights. Three successive principals have worked to turn this situation around.

In the early 1990s, the school faced endemic problems of poor attendance, general student disengagement from schooling and very poor student behaviour, especially in the form of bullying and fighting. Boys were a prime concern. In addition, the school continues to face poor literacy levels in the incoming student population. In 2003, for example, 29% of entering Year 7 students had a reading age of less than 9 on a Neale Analysis and many of the boys were regarded as more 'at risk' than the girls. The Neale Analysis of Reading Ability is an individually administered standardised diagnostic reading test. It comprises six short graded narratives, each with a limited number of words and having a central theme.

B.16.2 Strategies for improved academic and social outcomes for boys

For some years now, the school has been developing a wide array of strategies to address its problems. A key component of these strategies has been an evolutionary change to curriculum and pedagogy, leading to the introduction of a curriculum based on two main components: *Kitbag* and *Personal Choices (PCs)*. Years 7 and 8 students also elect *Team Personal Choices (TPCs)*. In *Kitbag*, students gain the 'basics' such as literacy, numeracy and personal and social responsibility. These 'basics' reflect the state's Essential Learnings (ELs) framework, against which the state's students are assessed.

The timetable year is two semesters of 20 weeks. Each Year curriculum is divided into three areas.

Kitbag

Here, students gain the 'basics', that is, literacy, numeracy etc. *Kitbag* covers the same areas in each Year:

- Literacy
- Numeracy
- ICT
- Learning Support
- Personal Responsibility
- Social Responsibility
- Personal Futures
- Sexuality and Drugs
- Sport.

There is also an emphasis on thinking/enquiry. One teacher per class covers all areas of *Kitbag*. These teachers/students have these classes for six 'blocks' out of 15, that is, the equivalent of two days per week. Students thus spend 40% of their time in *Kitbag*. Classes in each year do the same thing at the same time in *Kitbag* (and also in *TPCs*). Teachers can combine classes or swap classes if the team determines it. *Kitbag* is aimed at providing the skills to underpin *PCs* and is driven by the feedback from *PCs*.

Years 7 and 8 are described by the teachers of Year 8 as focused on literacy, numeracy, transition from primary (Year 7) and work (Year 8). They aim to get every student to a reading age of 10+ (Neale Analysis). The school's in-class literacy programme is based on the programme *Stepping Out*. The school has been a lighthouse school for *Stepping Out*, although some teachers feel that *Stepping Out* has been let slip as staff members have left. The Deputy Principal Curriculum feels that boys particularly like the aspect of the literacy programme that details the criteria on which they are being assessed. He also says that a lot of work goes into motivating boys to be writers.

Personal Choices (PCs)

Students choose from a range of *PC* projects in each year. *Kitbag* is designed to develop the skills for success in the *PCs*. For Years 7 and 8, these *PCs* include:

- Craft Technology
- Where to Now? (Adventure pursuits)
- Animals and Us
- You are What You Eat
- Science for Life
- Junior Performance
- Sport and Recreation.

In Years 7 and 8, *PC* classes are six 'blocks' out of 15, or two days per week. The students choose two *PCs* for the year.

For Years 9 and 10, *PC* choices include:

- Basic Catering
- Why Fish?
- Forensic Science
- How to get a Licence
- Love Makes the World Go Round.

In Years 9 and 10, *PC* classes are nine blocks out of 15, or three days per week. The students choose three *PCs* for the year.

PC classes are multi-age and attended by students from both years. *PC* classes change every eight weeks and, in weeks 20 and 40, there is a 'Celebration' in which students present their work publicly. This can be on stage or in the form of a video, a performance, or a gymkhana. The audience comprises families, community members and other students. According to the Principal, the idea of 'Celebration' is to have *a long-term view of what you're doing in your Personal Choice course*.

A *PC* content might change each time it's taught, according to the specific interests of students. Students are taken out of school to *PCs* such as *Why Fish?* Cyan High School has a bus and a three-block timetable to allow this. The teachers see *PCs* as having the potential to engage students, and interviews with students did show that the choices available and the freedom of choice are highly valued. Boys are taking up non-traditional *PCs* – 50% of students taking *PC* cooking classes are boys.

Another *PC* on outdoor adventure sports, *Where to Now?*, is extremely popular. Many more students opt for it than can be accommodated. This subject is based on teaching independence, team-building, confidence and leadership. It includes a three-day orienteering camp in which students make all the decisions – rationing food, direction-taking etc. The essence of this *PC* is ‘fun’ imbued with strong discipline. There is a marine studies *PC* in which students learn, for example, snorkelling and cooking (of abalone). There is a school sailing team which has grown out of these *PCs*, which is a 50/50 mix of girls and boys. The school has a new gym, which allows weight training. There is also a school radio station which plays during the recess and lunch breaks. Performance options include woodwork and art for sets, dance, drama, music, catering and a fashion parade.

The Deputy Principal Welfare argues that the links between *PCs* and *Kitbag* are not quite strong enough yet. *Kitbag* is always aiming at having relevance, hence the Year 10 maths curriculum developing Maths for Living, Maths for Work and pre-tertiary maths components. Nevertheless, she says, *PCs* give the students motivation to come to school. They *grin and bear Kitbag* because of the *PCs*. She feels that *Kitbag* will evolve into something *fun and relevant* by about 2008. Most staff teach *Kitbag* and one *PC*.

Kitbag is less flexible than *PCs*. As one Year 8 teacher explained:

We sat down as a Year team and we said, ‘These are the essential things that you need to know in numeracy and literacy’ ... So we developed that curriculum ... that’s very much teacher directed.

There remains some anxiety among some staff about the loss of traditional subjects. In student interviews, it was clear, for example, that the traditional study of literature and film which constitutes ‘English’ was lacking in the concentration on ‘literacy’, which tended to comprise spelling, language work and reading ‘activities’ such as cloze exercises.

Team Personal Choices (TPCs)

These are available for Years 7 and 8 only and choices include:

- enrichment classes
- literacy/numeracy
- science
- sport
- ‘concept integrated units’, for example, Year 7: Can You Afford to Party; Where Do I Fit In? Year 8: Chocolate Galore; The Band

TPCs are negotiated within ‘the team’, which means the whole team of year teachers and students. Negotiations are based on the James Beane (1997) model of asking two questions: ‘What are your concerns?’ and ‘What are the concerns of young people?’ This is an entirely negotiated curriculum.

Accompanying these curriculum reforms have been a suite of targeted programmes in the area of welfare and work. These include welfare programmes, *Warrigal* and *Autoworks*, a set of *No Dole/Work Studies/Career and Transition (CAT)* programmes; and a range of off-campus work experience programmes, such as *Schoolworks*.

Warrigal

Warrigal is an off-campus programme to which students are referred for areas such as welfare, management and leadership training. The programme is housed in an old building bought by the school ten years ago. As well as individual referrals, planned attendance of groups also occurs: 90–100 students might attend the programme in any one week in one timetable block, to work on a variety of respite, renewal and enrichment programmes.

Autoworks

Autoworks is an on-campus automotive mechanics programme, taught by a mechanic to groups of four to six students. Most of the students are boys, and a total of 64 boys in the school are in the programme currently. Students apply to get into *Autoworks* through the Deputy Principal Welfare. In terms of skills, *Autoworks* concentrates on attendance and punctuality, use of worksite language, honesty and trustworthiness, safety and equipment use, working with others, communication and interpersonal skills, attitude to the job, following directions and instructions, ability to learn, self-esteem and quality of work.

Agriculture programme

An *Agriculture* programme is based on the school farm. The students groom and show animals and the school runs a disabled riding programme.

Schoolworks

Schoolworks is an off-campus programme that was founded by Cyan High School, but is now available to students throughout the greater city. It is a working factory employing a supervisor and technicians, as well as cafe staff. After lead-up visits, students are enrolled usually for a year. Over that time, students alternate a week at school with a week at *Schoolworks*. The factory has government funding, but needs to be self-sustainable, thus the students make and sell a range of wood and metal furniture to the wholesale market, as well as undertaking contracted work from local businesses.

No Dole/Work Studies/Vocational programmes/CAT

Cyan High School is permeated with the culture of looking to the future in terms of work or further study or both. A pivotal point in this is the place of the *No Dole* charter of the Beacon Foundation. Staff members are aware of the potentially negative messages sent by this slogan in a community where many parents are on the dole. However, at Cyan High School the *No Dole* programme is not just the charter or the *No Dole* pledge. The school's genuine commitment to the students through this programme is to help them get a job or enter further education. The charter-signing ceremony plays a big part in bringing businesses on board with the school. The

Principal sees Cyan High School's position in a heavy industry area as an advantage because it gives the school access to the community workforce as a resource.

Apart from the Principal, there are three key roles to the successful running of the *No Dole* programme:

***No Dole* Coordinator**

This is a senior teacher whose role is exclusively related to the school's vocational agenda. This teacher chairs the school's Education/Business Partnership Committee. Partnerships within the community, especially with businesses, are extensive and this teacher is responsible for keeping and continuing to extend those partnerships.

Education/Industry Liaison Officer (EILO)

The EILO is not a teacher, but is someone from business employed by the school in this role. She is regarded by everyone on the teaching staff as absolutely crucial to the success of the vocational programme. Her role is to support the students in the programme and to help them meet their identified individual needs. The degree to which the EILO caters for individual students is highly impressive. She assists students to identify goals and identifies those at risk of dropping out. By the time students are in Year 10 they are informed, motivated and focused on making real and viable decisions. The EILO liaises closely with employers and clearly knows the local business scene extremely well. This enables her to match the students to specific businesses. She lists and categorises local businesses as either 'business' or 'nurturing environment'. At-risk students are sent to the latter, which in itself indicates the degree of care with which students are placed. Thus, to a great extent, the vocational programme is linked to the welfare programme. The EILO also organises a number of events that are part of the programme, such as 'choices workshops' and she tracks students after they leave school in order to help keep them on course.

Education/Industry Support Officer (EISO)

This role entails administration and organisation in support of the EILO and is presently filled by a teacher's aide.

Cyan High School values senior high schools, workplaces and TAFE as post-school destinations. The EILO told us that a large component of her job is about preventing disengagement. She is strongly imbued with the sense that school is *about* the future and sees this perception as strongly motivating students at Cyan High School. She has a sense that students agree to learn *because* they are focused on their potential futures. Motivation, she believes, is embedded in the *No Dole* programme. Endemic generational unemployment means that many parents do not discuss the workplace and work culture with their children. The school has taken on this role. The EILO told the researchers of one student whose whole timetable was literacy + numeracy + work placement. It was the latter that made the student attend school for the former. She talked, as did many others, of the school identifying students early and giving them flexible programmes. It is this aspect of the programme that links the vocational and welfare programmes.

The vocational programme is carefully embedded into the whole curriculum. The orientation to work begins in Year 7. Students undertake a simulation programme called *The Real Game*. The game takes a minimum of 25 hours and is embedded in

that area of *Kitbag* called ‘personal futures’. Through role play the students receive jobs, learn to budget within their income and to work in a community group. Literacy and numeracy skills are directly linked to the programme.

Year 8 undertakes the *Adopt a Class* programme, in which students ‘adopt’ a local business and vice versa. Again, this is embedded in ‘personal futures’. The nature of the relationship is negotiated between the teacher and the business and may involve the whole class, small groups or individuals visiting the business with reciprocal visits from the business person. It was introduced into Cyan High School in 1998 using a grant from AusIndustry and is now funded from school resources.

In Years 8 and 9, students take on a one-day mentored work placement. There are separate programmes for girls and boys. On the *Girls’ Day Out*, girls spend one day working one-on-one with a female mentor in the workplace. Female school staff visit the girls in the workplace on the relevant day. Boys remain at school on this day. The *Men at Work* programme is different, in that boys are surveyed to identify an area of workplace interest and encouraged to arrange a placement for a day with a male relative. The school sees the programme as potentially providing a source of ongoing mentoring. Girls remain at school on this day.

In Year 10, students undertake work experience. Students are surveyed and the *Work Studies* programme and the *No Dole* programme are based on the results of the survey. Year 10 students also have two ‘Choices Workshops’. These are mini-careers expos, at which a variety of business people are invited to speak. Representatives from TAFE and the senior colleges are also present. Year 10 students also participate in the *No Dole* charter signing event.

A complementary *Career and Transition (CAT)* programme also exists. This is funded by DEST and is aimed at developing, implementing and revising ‘learning pathways plans’ to help students to identify pathways for their future. All students have a learning pathway planning document. *CAT* employs a career and transition adviser to the region and establishes seamless pathways through the development of community partnerships. A formal Community Partnership Committee within the school oversees and drives the project. It is currently tracking students for 18 months post-school.

A small number of students (15) take part in the *Transition and Apprenticeship (TAP)* programme. *TAP* students are mainly boys, who will receive relevant and practical literacy and numeracy skills. Maths, for example, is programmed on apprenticeship requirements. The *TAP* teacher is their *Kitbag* teacher. The programme is two days at TAFE (gaining a head start to TAFE or pre-vocational courses), one day in work placement and two days in school doing only *Kitbag*.

Six Year 10 students are ‘career leaders’, who help link all the vocational programmes to the classroom. They help with surveying students, run the *No Dole* charter-signing ceremony, liaise with industry and run the ‘Back to School’ event, in which former students return to discuss their lives post-school. These students do a course in career leadership as a *PC*.

The school's Business Partnership Committee advises on career issues. There are 19 members, with representatives from business, education, the Beacon Foundation, state government, the federal MP and the student career leaders. The committee meets monthly.

Industry visits and displays

Businesses, industries and other institutions set up displays and make visits to the school throughout the year. Year 10 students make industry visits and local employers run mock interviews each year for about 35% of Year 10 students.

Adopt a Professor programme

This programme was introduced in 1999 to complement the vocational programmes and is aimed at those students wishing to pursue tertiary study. Students are linked with a university academic who spends time at the school. This is a springboard for university visits and for a mentoring relationship with an ex-student.

The school's focus on vocational programmes is seen as an important part of supporting the students. Students in Years 7 and 8 interviewed for the case study saw school in terms of preparing them for a world outside school. Even Year 7 students are aware of thinking through career options and of the *No Dole* scheme. Some staff argue that this programme provides the school's profile in the community. Some teachers see this focus as being particularly good for boys. The school has a strong 'futures' orientation which begins in Year 7 and the EILO sees it as great motivation. She argued that *just coming to school for its own sake and moving from subject to subject was no motivation* for students. Students made choices about their *PCs* based on their futures, for example, those who wished to have an automotive apprenticeship would choose a maths-oriented *PC*. Thus the spirit of *No Dole* permeates classroom learning. Parents interviewed saw great benefit in the vocational programme

Learning Support programmes in literacy and numeracy

In addition to in-class literacy programmes, the school offers one-on-one literacy programmes for the weaker students, who are mostly boys. These programmes are carried out by teacher's aides. Funding has enabled the school to establish a large learning support team. Twelve of the 15 team members are teacher's aides (TAs). A learning support teacher sees literacy and numeracy at Cyan High School as *a real boy issue*.

Students are generally withdrawn from *Kitbag* classes, but there is no resistance from the students to the withdrawal programmes for learning support. On the contrary, a learning support teacher argued that the students in the programme really seemed to thrive on the relationship with their support aide. This view was supported by the Year 8 teaching team.

Students are tested in Year 7 to be targeted for learning support and the school is running an experimental *Re-Start* programme for some students. This is a middle school catch-up programme which uses *Stepping Out* strategies. Again, the staff stress relationship as the basis of success of these one-on-one sessions.

The in-class programme is supported by a withdrawal programme run by the TAs under the supervision of a learning support teacher. This programme begins with a testing process of all of Year 7 in comprehension, vocabulary, spelling and basic mathematical operations.

The withdrawal programme has two phases: a staged phonics-based programme, supplemented by sight words. Students are withdrawn for four 20-minute sessions per week. In any one year, 20–30% of Year 7 students are in this programme. Seventy-five per cent of these students are boys; the second phase involves a staged cloze programme levelled by reading age, up to a reading age of 10. Sessions are 45 minutes long and can sometimes involve a group of two to four students.

The *Re-Start* programme runs in groups of four to six students. Sessions run for 30 minutes, on the basis of ten minutes each of guided reading, familiar reading and writing. It has a similar approach to *Stepping Out*, and in that sense is consistent with the in-class literacy programmes. It differs, however, in that it is also based on the idea that, for adolescents, group withdrawal is better than individual withdrawal. At this stage, the programme is experimental and focuses specifically on students with high absenteeism. Groups are taken by learning support teachers.

As well as the focus on the provision of appropriate curriculum, teaching, learning and assessment, welfare and off-campus programmes, the school designs IEPs for particular at-risk students. The Principal says: *In terms of would you change a school for one child, well I would, as long as it doesn't disadvantage everyone else.*

The Deputy Principal(s) selects from among the multitude of options offered by the school to develop IEPs for at-risk students who might otherwise drop out of school. The Deputy Principal Welfare is responsible for IEPs, especially where they involve off-campus work or days away from school. Some examples of IEPs include:

- a Year 9 boy who was on a programme of Warrigal, Autoworks and work placement
- a Year 8 boy who was on a programme of Warrigal, Autoworks and two days of the week at home
- a Year 10 boy who attends the school for literacy and numeracy in Kitbag and spends the rest of his time on work placement.

Cyan High School also offers students a Australian Government-funded *Equity into Work* programme. Six students (three of whom are boys) are currently on the programme for three days a week and at school the other two. The programme offers 30 hours of literacy + numeracy and work or a work placement.

A programme, now ended because of funding termination, was called *At School on Time (ASOT)*, which employed a part-time person who spent time in the students' homes working with them. Typically, these students would have a timetable of *ASOT* + *Autoworks* + *Warrigal*.

There is a huge range of alternative programmes available at Cyan High School, especially over the last two years: *Student Works*, *Start at TAFE*, *Equity into Work*, part-time school (for example, students who take only *PCs* or *Warrigal*). The school

has the philosophy that *if you can't reach 'em, you can't teach 'em* and that even two to three days at school are better than none, which is what such students would have if forced onto a traditional subject timetable. The slogan of Warrigal is *Whatever it takes*, and the school refuses to allow any student to *slip through the cracks*, by always offering a made-to-measure timetable for at-risk students. Obviously, such arrangements need departmental approval, and the Deputy Principal Welfare has to submit any IEPs to the Department of Education.

Other students get extra learning support time or students can be moved sideways at the discretion of the Year team. IEPs and timetable flexibility are strongly interlinked. In fact, the school's willingness to be flexible is what enables individualisation to happen.

Collectively, these whole-school, targeted and individualised programmes provide a coherent focus on improving the social, educational and career outcomes for the boys and girls in the school.

The school's shifts in pedagogy are reflected in the current principal's belief that skills are best learned when they're needed:

You have far more of an authentic approach to curriculum, so the maths is related to something else ... When do you learn about measurement? Is it just in case they need it or when they realise they don't know it or ... ? ... To teach subjects when you have to assess against a set of ELs doesn't make any sense to me.

The move is also partly driven by or authenticated by the state's recent move to assessing students against ELs. Cyan High School has done away with traditional subject areas entirely and the timetable is based on three periods (curriculum blocks) per day, two of 105 minutes and one of 90 minutes. As the Principal says, *Obviously to teach traditional subjects, you can't even think about that.*

Staff are not attached to subjects, but to Year groups. Geographically, each block in the school is dedicated to a Year group. Staff rooms are located within Year blocks and the classrooms for those Years are next to the staffrooms. The area outside the block is the students' play area. With a very few exceptions, teachers of particular Years teach those Years only. They also do playground duty in these Year areas. Students identify with their Year and its teachers and strong relationships are built within the Year.

Student choice has also become a key feature of the curriculum. The teachers see the *PC* programme as having the potential to engage students. Importantly, staff have noted that the boys are making a number of 'non-traditional' choices.

In the *PC* lessons observed by the researchers, boys seemed to be engaged in their work. In one lesson, a discussion was being held after a think/pair/share time. Such an activity allows time for individual thinking before sharing ideas with one other student and then with the whole class. In this observed discussion, the boys were contributing equally with the girls. In a cooking lesson, all boys were engaged in the task at hand. In a design and materials technology lesson, almost all the students were

boys, who were deeply engaged in the lesson. The young male teacher had a good working relationship with the students. He insisted that the key to these students was *relationship* and that he lived by the motto, *firm, fair, friendly*. During *PC* Performance lessons students can elect to work in areas such as catering, woodwork and art for sets, dance, drama, music or fashion. This range of choices allows for artistic, creative and technical skills to develop through hands-on group work. Performance is so popular that there are junior and senior classes, and 65 students take Performance under three teachers. Parents interviewed felt that in giving the students choices, the school was *doing the right thing by the kids*. They described the school as *each student being able to find a place to fit*.

Cyan High School is running a programme in conjunction with its feeder primary schools for Year 7 entrants. This programme takes a proactive approach to individual students and prepares a programme for them before they arrive. This means that on day one of Year 7 the students *hit the ground running* with alternative programmes in place for specific students. The school has moved, say the Year 8 team, from being reactive to being proactive with respect to the students' welfare and programmes.

The current success of the school has been apparent since 1990 when the school moved to its present site under the first of three key principals. In 1992, this principal travelled to the United States and the United Kingdom and brought back to the school a middle schooling ethos. He sent teachers to middle schools to observe the ethos and structure and they began by using volunteers in Years 7 and 8 to be 'basics' teachers. The first step was to divide the school into junior and senior schools, which at least had the effect of removing the younger students from the older, and dealt with some of the bullying issues. As one Year 8 teacher put it, the school needed to *build an environment where you could start learning again*. At the same time, the first Year 8 teams were set up, a move which a Year 8 teacher describes as *a fairly big step because you took people out of their expertise area*. This meant that there would be one Basics teacher for each class of Years 7 and 8 and a maximum of four other teachers for each Year. As a Year 8 teacher put it, the *basis of the whole thing* was to build relationships with the students. The Deputy Principal Welfare remembers that the students fought it the first year, particularly Year 8. They were still on six periods a day, with 20 periods of Basics, which she says was too much. The teams, though, appeared to be a very good idea. She says it took five years to get the Basics structure right and ten years to get the whole thing right across the school.

This first principal was also responsible for opening *Warrigal*, the off-campus enrichment and leadership programme. The Deputy Principal Welfare says that this principal had *huge vision*. He was good at bringing people on board with new programmes and with being able to access funds from a variety of sources. The *Warrigal* programme began as an alternative for students who were a distraction to others but initially became a dumping ground for *bad boys*. The programme had no real structure or guidelines in place, but the *Warrigal* teacher recognised these problems and the programme gradually evolved into what it is today under the vision of its current teacher. It has strong community support.

While all this was happening, the school was employing a large number of TAs, particularly focusing on literacy and numeracy. At the time, it was identified that 60% of students had reading ages of 7–8. The focus on literacy aimed to raise this to 11–12

by the end of Year 10. There was a spelling programme heavily influenced by *First Steps* and small groups of needy students were formed. One Deputy Principal estimates that 90% of these students were boys. The TAs are not teacher-trained, but were trained within the school and continue to go through intensive training programmes. TAs are encouraged to undertake TAFE TA courses, which are available from certificate I to IV. Most TAs are Australian Government-funded. TAs liaise with learning support teachers for assistance with the programmes and the Head of Learning Support is their supervisor.

These people are long-term members of the school, although not all are full-time. The Year 8 teachers told the research team that the learning support team has had a big impact on the boys here. The TAs are crucial to the success of the one-on-one withdrawal literacy programmes. TAs also run the literacy testing in Year 7 as well as running small maths groups. They also have a support role within classrooms. Thus, the way in which TAs are used in Cyan High School is unique, as is their sheer number.

In 1995, this first key principal also began the *No Dole* programme. Numbers of students receiving income support halved in the first year and by the third year were reduced to zero.

The next key principal came to Cyan High School in 1999 and carried on and extended these reforms. He was responsible for getting the *Autoworks* programme going. Again, this was aimed primarily at boys, although girls have accessed it. He also introduced the *Men at Work* and *Girls' Day Out* programmes.

In 2000, the school formally brought in a programme around 'Basics' plus 'Options' with one teacher per class taking Basics. One Year 8 teacher who was at the school then taught Basics as literacy, numeracy and personal wellbeing. It was at this time that the school moved from six to three blocks per day. Under the current principal, 2004 saw the implementation of the current curriculum, with the *Kitbag* and *PC* structure. This coincided with the introduction into the state of the ELs.

The Year 8 teachers who recounted some of this history told the research team that the school had a *pleasant* feel now, a view the researchers can confirm. Teams know the students well and build relationships.

There is a general feeling in Cyan High School that they are not being driven by the ELs, but that they manifest the ELs. They see the ELs coming along at an opportune moment in their history when the school was moving in that direction anyway. The Deputy Principal Welfare says *the ELs have done us a favour*.

However, the current curriculum has only been in place since the beginning of 2004 and the Principal believes that some of the teachers still teach *pure subjects*, which is seen as against the spirit of the curriculum. However, this was certainly not overly evident among the Year teams to whom we spoke. The Year 8 team confessed that they felt the arts had been neglected and that Year 7 should be introduced to a greater range of compulsory subjects. They believed that *PCs* should be *lined* so that students choose from different lines.

The Deputy Principal Welfare, a long-time member of the school, believes that *payoff* is a very big issue for boys and that they need to see the relevance of their subjects. She believes that now more boys are engaged than ever before and that this is because of the positive relationships within the school and the varied curriculum. Some boys have moved into non-traditional areas such as fashion parades, dancing and singing, but it has taken ten years.

B.16.3 Evidence that the strategies are improving academic and social outcomes for boys

There is strong evidence for improvement. Student performance data over the period 1999–2003 suggests that the withdrawal literacy and numeracy programme complementing the in-class ‘Basics’ programme was gaining results for all students, although this was not disaggregated for boys.

This improvement can be seen in a trend towards more students achieving ‘average’ and ‘above average’ scores on the PAT (ACER Performance Achievement Tests) Comprehension test; ‘average’ and ‘above average’ scores on the PAT Vocabulary test (although this shows some decline in Year 9); and ‘above average’ and ‘superior’ scores in the SA Spelling Test and PAT Maths test.

Out-of-school testing reflected similar results. In 2002, the statewide Year 9 Literacy Monitoring Test results saw Cyan High School students attaining the state average and performing significantly better than similar Economic Needs Index (ENI) schools. Year 9 Numeracy Test results show the school outperforming the state average and performing significantly better than similar ENI schools.

In terms of school suspension data from 2001–04, after an initial rise during 2001–02, boys have steadily and consistently reduced as a percentage of total suspensions. ATSI boys are over-represented in suspensions during 2001 and 2002, but dramatically under-represented in 2003 and 2004.

The Principal estimates that a *good half* of the students getting prizes are boys. Anecdotal evidence gathered by the school from discussions with students, teachers and parents points to improved student behaviour, greater student satisfaction and positive parental attitudes. This was certainly reinforced by interviews conducted during the case study. Teachers interviewed consistently argued that the school in general has *half the problems* with boys’ behaviour that they used to have. A long-term TA told the research team that boys are these days much more settled in the school, and maintained that it was a *completely different lot of boys we’re turning out at the moment*. The Deputy Principal Welfare says the students regard school as fun and safe. Attendance is up, she says, because of the choices available in *PCs* and behaviour issues have dramatically dropped.

It is clear that students support the school. One Year 10 boy who was described to the researchers as a ‘tough nut’ enthused that he *just loved school, loved coming* and that these were *the best years of my life* and the *best part of my day*. Interestingly, this ‘tough nut’ told us proudly that he was appearing in the school’s fashion parade. Students support the programmes because of the freedom of choice they offer. They also support the ethos of the school. Parents interviewed confirmed this.

In 2001, Cyan High School was awarded a Tasmanian Department of Education and Training (DET) award for Educational Excellence for the *provision of alternative education*. In 2002, the school received the same award for an *outstanding comprehensive vocational learning and transition programme* and their *whole-school approach to literacy*.

B.16.4 Conclusion

The current Principal sees that *People have got their own life experience of subjects* and the school's success is an issue of leadership. Under an unsympathetic Principal, things could turn around, although staff appear to be committed to the ELs-based curriculum. He sees his contribution as:

How are we going to package this? We're going to teach the ELs. I arrived here and I found the discussions on the staff, they'd used the word 'radical'. They said 'We're going to do the ELs, we need a radical approach to this stuff' ... mostly you don't hear the word 'radical' in schools.

There is a genuine democratic impulse in the school and a real distributed leadership. Leadership at the Year level, for example, is crucial: this is where the curriculum and programmes are determined. The ethos of the school is such that the TAs are regarded as equal staff members with the teachers.

The school has had a succession of three like-thinking principals who have turned the school around and yet provided continuity. Thus change within the school has been a process of evolution, rather than a series of shock waves. Each stage has built on the previous stage. Teachers remembered that:

The first of these principals ... was amazing ... He did have foresight in how education was going to change ... He was the one who initiated ... the No Dole project ... He lived his job too ... He always had the kids' benefit at heart.

The next principal carried on this tradition:

He knew that education was not just locked in the classroom, that you had to accommodate a variety of programmes to engage kids and get them back involved.

Each of these principals have directed the school's considerable funds to people rather than equipment, for example, a \$100 000 Learning Support Grant was used to employ TAs. Staff also stressed, however, that teachers did accept and embrace change and that principals did not have to deal with entrenched opposition within the school.

An important part of leadership is gaining teacher support for change. Teachers interviewed were all enthusiastic about the school's programmes and, while each could identify one or two staff members who were wedded to traditional subject organisation, all agreed that the vast majority of the staff had *bought in*.

A number of teachers commented on the fact that the school has a number of young, sporting male role models. There have been, and are currently, a number of Australian representatives in disciplines such as cycling, sailing and running on the staff. The Visual Arts *PC* teacher is a speedway racer. Because of the SES of its drawing area, Cyan High School is perceived to outsiders as a difficult school. As a result of these perceptions, it can be a hard-to-staff school and there is a young staff. This is despite the fact that very few people leave on transfer – all leavers in the previous two years have left to travel. Although the staff is largely young, there is a good balance of youth/age and gender within the Year teams. One long-term teacher in the school argued that she saw this role modelling as having a positive effect on the boys. The Deputy Principal Welfare says there has been a deliberate recruiting strategy to attract young male role models. The Principal is encouraged to ‘push’ for particular people when recruiting is needed and the school’s standing in the community is now so high that, within departmental recruiting restraints, ‘head-hunting’ is possible. The school also has a number of teachers trained in middle schooling or with primary backgrounds who have transferred into Cyan High School.

Cyan High School’s programmes are sustainable because of the structures built into the school and the shared vision of its staff. One of the key factors in this sustainability seems to be reflexive pedagogical practice. The culture of the school has changed from one of individuals chiselling away at huge problems to a whole-school cohesive approach with staff who support, share and care about their students. The importance of support networks is that they do not rely on finite funding from submissions or grants. The programmes could well be adapted to other schools and, in fact, *Schoolworks* has spread beyond Cyan High School to the wider city.

Motivation

Key issues in motivation include relatedness, autonomy and competence. Students clearly support the culture and ethos of the school and this is arguably built on the issue of relatedness/relationship. This school is strongly focused on the development of relationships. Year teams know their students well and build strong relationships with those students. Relationship with a significant adult is an issue that comes up continually as a need of children in the school. Sometimes a teacher is the only significant adult in their life. As one Year 8 teacher put it, developing relationships with the students was:

... the basis of the whole thing. And I think that’s why it’s improved here. Because we do have dealings with the kids and you know them so very well ... You have this wider knowledge. It’s not just how good they are at maths or ‘Can they read a book?’

This focus on relationships has resulted in a school in which there is a very friendly atmosphere:

These kids, if you’re out socially, they’ll cross the street to talk to you.

The kids respect people ... who are up-front and honest with them ... they’re a ‘No bullshit’ sort of a group and if you don’t take yourself too

seriously, you haven't got any problems. If you have a good dose of humility ... they respond really well.

Relationships within staff Year teams are equally good. Staff Year teams use the word 'family' to describe their relationships: They believe that the students: ... *see that being modelled and they know that we respect and like each other; it's quite obvious ... and they know that we expect that from them.*

The Year 8 team told researchers that in the past under 'Options', students would still get into trouble with teachers who weren't 'their' teachers. The current *PC* structure requires *PC* teachers to come down to Year assemblies. The students get to know these teachers and recognise that they are part of the 'family'. One teacher thought that students were getting slightly less time in *Kitbag* than they had been getting under the 'Basics' scheme, but that both had been good for building relationships. She felt that the best aspect of the middle schooling structure of Cyan High School was that relationships were continued into Years 9 and 10 by keeping the *Kitbag + PC* structure in those years. She felt that in this school, relationship was very important for students. She recognised that the relationship between students and staff was *casual*, but argued that it was not disrespectful.

The Deputy Principal Curriculum argued that the secret to the school's success was the combination of *Learning Support, Autoworks, Warrigal, No Dole* and the Year teams, all of which intertwined to create the key ingredient of 'relationship'.

Other teachers stressed that *consistency* was the key to relationships within the school and that one needed to earn respect; it was not automatic. A number of teachers argued that the boys worked best in a situation where there was a certain amount of *mateship* with the teacher. Researchers saw evidence of this in the classes on Design and Materials Technology and Art, and at *Autoworks* and *Warrigal*. The art *PC* teacher felt that the boys used art to represent their lives in different ways from the girls and that his talks with them always focused on the art, because this was the way of talking around their issues and their feelings. He also felt that while the *mateship* issue was similar to the relationships available to boys at *Autoworks*, that the dynamic was different in art. *Boys could be men at Autoworks*, he said, but art was like *Autoworks with the volume down*. This teacher also stressed that relationship was the key, that it was facilitated by the Year teams, and that it wouldn't necessarily be attained by a subject-based staff. This arrangement, he said, allowed teachers to *get to know the kids well as individuals*.

The Deputy Principal Welfare says that the students have lots of people they trust. She says the students are friendly, attendance has improved (the school's attitude is *I can't help you if you don't come*) and parents ring in now. The school has a good relationship with parents. *Relationship*, she says has calmed the boys down.

Parents interviewed recognised that relationship was a key issue in the success of the programmes. They saw the school as 'friendship-based' in terms of relationships with teachers and felt that the teachers were very approachable and relaxed. They also recognised that the teachers in the school could fill in as role models that might be missing at home.

In terms of autonomy, what also struck the researchers was the sense that this was a school that had avoided ‘infantilising’ students and, hence, boys. The teachers argue that because the students have choices and because they can negotiate their own programmes, they are able to be confronted with the consequence of those choices: *You chose this, you agreed to do that, you have gone back on the bargain.*

A Year 7 teacher told researchers of his telling his students about his own strengths and weaknesses as a teacher and how he had laid out a plan of work for his *Kitbag* class that would allow them to work towards success in together. He argued that he had effectively formed a contract with the students and that they were all being held to it. The terms of this contract were revisited constantly and it progressed based on feedback from the students. This was sought directly and included feedback on his teaching practices. It struck researchers that the thrust of the authentic curriculum drove an independence that in turn created its own logic of students *having* to be genuinely responsible for their own learning.

With respect to competence, the quantitative data suggest that students are gaining the skills they need to continue both in schooling and in post-school pathways. The Deputy Principal Curriculum talked to researchers about the importance of creating resilience in the students, especially given their SES circumstances. The sheer amount of information about career options available to students at Cyan High School and the planning of individual career pathways would seem to be resulting in a thoroughly informed, educated student population with some confidence in their ability to face the world outside school.

Other key issues with respect to motivation identified in the MeE framework include self-efficacy, persistence, control and low anxiety. Self-efficacy is embedded in the issues of control and ownership already discussed. Persistence may or may not be present in individual students, but it is certainly present in the school ethos in which ‘whatever it takes’ is genuinely acted out. Because of this degree of care, students are given every opportunity to reduce their anxiety levels.

‘e’ngagement

The characteristics of classroom tasks that promote ‘e’ngagement include authenticity, ownership, cooperation and fun. The culture of choice within Cyan High School meets these requirements and results in a genuine commitment to the classroom. The Year 7 teachers believe that boys in particular respond positively to choice. When the Deputy Principal Welfare says that students *grin and bear Kitbag* because of the *Personal Choices*, she may be underselling the influence that ‘payoff’ is perceived to have. The ongoing commitment to making the *Kitbag* classes relevant to *PC* areas can only aid in this direction. There is no doubt that the students are committed to their *PCs*. *PCs*, says the Deputy Principal Welfare, *give the students motivation to come to school.*

‘E’ngagement

Students are not allowed to *fall through the cracks* at Cyan High School. The motto of the *Warrigal* programme, *Whatever it takes*, is acted out every day on a whole-school basis. The investment in a strong futures orientation appears to be paying off in terms

of students seeing the relevance of schooling and feeling that ‘school is for me’. Crucial to this are three key features of the school:

- the degree of student choice
- student sense of ownership
- the ability to individualise programmes because of timetable flexibility.

The degree of student choice, as has been stressed, seems to be fundamental to the students’ commitment to schooling. They feel they own the curriculum. The Deputy Principal Welfare argues that the students even have ownership of their space – both their Year play areas and their teaching space. The students feel they know their teachers well and they run the classroom space together. The degree to which the school can offer alternative programmes to individuals is probably unique and explains the school’s ability to keep foster a degree of commitment to school in even the most at-risk students.

Whole-school and classroom factors that influence ‘E’ngagement include student management, shared control, cooperation between teachers and students, and the promotion of extracurricular activities. All of these are strongly present at Cyan High School.

The MeE framework identifies the notion of the ‘future in the present’ as the link between ‘e’ngagement and ‘E’ngagement. Cyan High School is futures-oriented in a way that is probably unique. The degree to which vocational/post-school pathways are embedded in the curriculum means that students cannot avoid building a future-oriented consciousness. *No Dole*, which gave the school its original high profile, would be only a slogan if the school did not commit the time and resources it does to making the slogan a reality. The notion of the ‘future in the present’ underpins the total school curriculum.

A key issue here is authenticity. This obviously involves the futures orientation so fundamental to the school but authenticity needs to also involve current adolescent experience, that is, to be authentic to the students’ *present* needs.

Discourses of power

Ownership and negotiation, if genuine, shift the discourses of power in a school. The fact that, to a remarkable degree, students can negotiate their own programmes and that students have a genuine sense of ownership of the curriculum means that the following questions have quite different answers at Cyan High School from those they might have elsewhere:

- What counts as knowledge and who has access to really useful knowledge?
- Who has ability?
- Who controls the teaching space?
- Who is valued as an individual and a learner?
- Whose voice is given credence within that space?

Cyan High School students can see in action that really useful knowledge is held by a number of people. TAs, mechanics and other support personnel deliver the

curriculum. These staff members are on an equal footing with teachers and equally respected and valued. Students are given space to negotiate their own curriculum, including alternatives to the classroom. Students' personal interests are validated as 'school knowledge' and they themselves are valued to the extent that no one is allowed to fall through the cracks. Student voices are given credence and students share control of their own school lives.