Engaging Middle Years Boys in Rural Educational Settings

REPORT

Dr Bronwyn Cole
Dr Mary Mooney
Assoc Prof Geoff Munns
Dr Anne Power
Assoc Prof Wayne Sawyer
Dr Katina Zammit

Centre for Educational Research & School of Education
University of Western Sydney

With officers from within the
Priority Schools and Education Coordination Unit
New South Wales Department of Education and Training

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Engaging Middle Years Boys in Rural Educational Settings

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Background

This report on *Engaging Middle Years Boys in Rural Educational Settings* of the New South Wales Department of Education and Training (Cole, Mooney, Munns, Power, Sawyer & Zammit) shares findings from an action research project undertaken in 2008.

The research was a partnership between a University of Western Sydney research team, the Priority Schools and Equity Coordination Unit ( NSW DET) and principals, teachers and consultants in New England, Riverina and Illawarra and South East regions.

The aim of the project was to consider what pedagogical changes teachers might introduce to improve levels of student engagement among middle years boys and then implement and evaluate the impact of these changes. The project drew on the results of previous research undertaken by the University of Western Sydney into the motivation and engagement of boys, especially those from Indigenous, low-socio-economic, rural and isolated backgrounds (Munns, et al., 2006).

While the specific focus of this research was on the engagement of boys, there was a view that classrooms that engage boys are also likely to bring significant academic and social benefits for girls.
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This report presents the research processes, stories and findings from a project completed by a number of primary and secondary rural schools in three different school regions in NSW.

The focus of the research was to improve social and academic outcomes for boys in the middle years of schooling. In particular, there was an interest in finding ways that changes to teaching would bring about increased levels of motivation and engagement.

The research was carried out during 2008 and was conducted by teachers in the schools with support from academics from the University of Western Sydney, NSW DET consultants and project officers.

The starting point for the project was previous research conducted by researchers from the University of Western Sydney highlighting school and classroom strategies that had proven to be successful in engaging boys (Munns et al., 2006). A framework called the *MeE Framework* (Munns & Martin, 2005), used in the previous research, was redeployed in this study. It brings together both individual support strategies as well as whole classroom approaches to teaching that work together to bring stronger and enduring levels of student engagement. Using this framework, teachers from the participating schools considered ways that their classrooms could be changed so that boys would become more engaged. There was a view, consistently supported by research, that increased levels of student engagement are associated with improved academic outcomes. Projects were planned at individual school level or as collaborations between schools.

Teachers focused on the following aspects of pedagogy in designing their individual projects:

- Learning environments were structured so that boys would be encouraged to have a voice in their learning and greater control over classroom processes. This was aimed at promoting self-regulatory and autonomous learners
- There was a focus on quality teaching and productive pedagogical relationships
- Projects and problem-based learning became important parts of the daily classroom learning
- Changes were made intended to develop collaborative learning communities
- Boys were given access to sophisticated ICTs
- Literacy was integrated across all aspects of the curriculum rather than operating as isolated lessons.

These teaching strategies were chosen because they had been previously used by schools that had been successful in engaging boys. This research generally validated earlier findings. Though the projects were short-term there were clear signs that these changes to classroom teaching practices encouraged greater and extended interest in learning and evidence that attendance and behaviour had improved. Importantly there were also benefits for girls noted as a result of the project. Longer term interventions and research would be needed to evaluate the impact of the pedagogical changes on student academic outcomes. There were also important findings associated with the professional development model of “teacher-as-researcher”. These included:

- Teachers reported genuine encouragement and permission for re-thinking pedagogy
• There was a consensus on the high quality of projects in each region and that a high impact on the engagement of boys was achieved when teachers used data to drive changes to their pedagogy.

• Action research methodology was successfully employed as an implementation frame for the research projects and this helped to drive successful learning strategies for the boys, especially through giving them greater control and voice.

• Inclusion of planned, multiple data collections and purposeful reflection genuinely encouraged a focus on boys’ relationships with schooling.

• A general agreement was reached on the importance of strong support from the project team, with the role and support of the regional consultant and project officer, in particular, central to the success of the projects.

• Positive collegiality was reported between schools in most regions and this was seen as worth sustaining.

From a wider research viewpoint, the project allowed the University of Western Sydney and the teacher researchers to become involved with important theoretical and research debates with respect to gender and schooling. Issues surrounding single-sex classes, the stereotyping of boys’ and girls’ interests, the nature of classrooms that are inclusive of both boys and girls, and ways towards gender equitable engagement were all explored throughout the project. Benefits of this exploration extend beyond the immediate school projects to the wider research and educational communities.

Other teachers in both urban and rural locations can draw on the research stories detailed in this report as they reconsider their school and classroom approaches. Here are important opportunities for schools to develop local initiatives aiming to engage students and enhance the social and academic outcomes of both boys and girls. Embarking on these kinds of explorations is consistent with the NSW DET Boys’ and Girls’ Education Strategy (2008).
Section 1
Engagement of boys

1.1 Reading this report
There are four sections to this report. The first describes the research project and also takes up some of the important issues surrounding the social and academic outcomes of school students. It also introduces the MeE framework (Munns & Martin, 2005) as a way of understanding the complex ways that students construct their educational and school relationships.

A number of key questions and strategies are put forward that can help teachers make decisions about the best ways to increase student engagement within their local teaching and community contexts. The first section makes theoretical and practical connections with ideas contained in the Leading the way in school and classroom practice: Boys’ and girls’ education strategy support document (hereafter referred to as Boys’ and Girls’ Education Strategy support document, Priority Schools and Equity Coordination Unit, 2008).

The second section contains the research stories from each of the school projects. These are in the form of brief snapshots about the different ways the teachers in the project changed their practices to improve boys’ social and academic outcomes. It is hoped that these snapshots will encourage other teachers to consider how they might develop their own initiatives to improve student relationships with education, schools and classrooms.

The third section presents and discusses the findings from the research. These findings are organised into two themes: teacher professional learning and growth and classroom pedagogical changes. The purpose of this section is to develop some bigger ideas that can be taken up to improve levels of student engagement and so enhance the learning outcomes of boys and girls across rural and urban contexts.

The final section makes connections between this project and the Boys’ and Girls’ Education Strategy support document, Priority Schools Programs and Equity Coordination Unit, 2008 before exploring the implications of this research for future work in schools. Rather than suggest that there are simple menus for schools and teachers to duplicate, it raises a series of issues and challenges to be considered in order to enhance students’ social and academic outcomes.

We are constantly reminded that the important work of schools are the investigations, debates and innovations that happen as teachers look for creative local solutions to the educational questions facing themselves and their students.

1.2 Middle years boys in educational settings: about this research
The research had a particular focus on middle years boys in rural educational settings. This focus recognised that there are certain factors that impact on the relationships that boys have with education, schools and classrooms. In this case we were particularly concerned with how changes to school and classroom practices might support student engagement for boys in the late primary and early secondary stages of
schooling and how these factors intersect with geographical and cultural issues. Here we strongly resist the danger of seeing boys as a single unified category, all facing the same issues and responding in the same way to these issues. Rather, there is a view consistent with current educational thought on gender, that there are critical questions about “which boys?” and indeed “which girls?” are not achieving hoped-for social and academic outcomes from their schooling.

There are further complexities to these questions in rural contexts where factors surrounding cultural background, employment, future study, relative isolation and educational disadvantage interplay with the educational features of schools and classrooms. This is not to say that the research stories and results contained in this report do not have relevance for schools in urban locations. Again, we hope that readers will adopt the view that research of this type is not so much about ready-made solutions but about the generation of local answers to particular educational issues.

There were three different research clusters: New England, Riverina and Illawarra and South East. Introductory workshops were held during the last term of 2007 in each of these regions during which teachers were initially introduced to ideas surrounding student engagement and then drew on these ideas to plan their own projects. These school projects were implemented and evaluated in the second and third school terms of 2008.

The teachers were the researchers in their own schools and classrooms. They were responsible for the changes to their practices and the collection of student data. These data focused on social and academic outcomes of the boys, keeping in mind that there needed to be caution about research conclusions from such a short intervention period.

Teacher professional growth was seen to be an important element to the project and integral to future sustainability and longer-term consideration of student outcomes. Connections can be seen here with the Boys’ and Girls’ Education Strategy support document, Priority Schools and Equity Coordination Unit, 2008 (pp. 20-21) that has a) teacher professional learning and b) the school as a professional learning community as two of its action areas within the teaching and learning focus area. Support for each school project was through a Project Manager, NSW DET consultants and University of Western Sydney researchers working as critical friends.

1.3 About boys and school

There is an extensive literature around boys in schools and their social and academic outcomes. A user-friendly review of relevant research reports for NSW schools can be found in the Boys’ and Girls’ Education Strategy support document, Priority Schools Programs and Equity Coordination Unit, 2008.

A recent University of Western Sydney study into boys’ motivation and engagement (Munns, et al., 2006) identified a number of themes about boys and their relationships with education, schools and classrooms where were found in large-scale research reports from both Australia and overseas (in particular the United Kingdom, New Zealand and Canada). Some of these themes are listed below:

- Australian educational research has moved away from essentialised views of either boys or girls as single unified categories, winning or losing the educational race. Rather, questions are being asked about “which boys?” and “which girls?” are not succeeding at school (see above)
- Socio-economic status, ethnicity, Aboriginality and regional location come
together with gender to produce disjointed effects in terms of educational
privileges and disadvantages

- There is a widening performance gap for students lower down the SES scale
- Girls from low SES backgrounds appeared to attach more importance to school
and had fewer difficulties with language and literacy than boys from the same
background
- Stereotypes around literacy as a feminine activity influenced boys’ negative
attitudes to literacy-based school experiences
- Peer relationships often influenced and maintained negative attitudes to school
and school success
- Boys tended to respond more negatively than girls to unsatisfactory or
indifferent teaching
- Underachieving boys were generally withdrawing from positive class
interactions very early in their school careers
- Some boys favoured tasks emphasising visual, logical and analytical approaches,
but these were not being strongly catered for by existing curricula and
pedagogies
- 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
- Literacy acquisition was significant for boys’ engagement with schooling;
- The importance of quality teaching and productive student-teacher and student-
student relationships
- Girls seemed more likely to employ control (planning, organising, structuring)
and personal learning assessment strategies
- School values, teaching strategies and assessment processes were often thought
to be more suited to girls than boys.

Note, as with much research, many of these ideas are still open to debate and further
empirical investigation. These themes provided an important backdrop to the framing
of the research projects detailed in this report. They helped in the mapping out of the
research territory against which the particular focus on student engagement could be
explored. This is where the MeE Framework came into play.

1.4 Student engagement: the MeE Framework

The MeE Framework (Munns & Martin, 2005) was developed to capture the different
interrelated components of student motivation and engagement. The MeE Framework
has three interconnected perspectives: ‘M’ (motivation), ‘e’ (small ‘e’ engagement),
‘E’ (big ‘E’ Engagement). Considered together, these three perspectives attempt to
synthesize individual support strategies, classroom teaching practices and whole-
school approaches that will work towards student engagement. Its movement is
represented in the following diagram, Figure 1.1, (start reading from the bottom text
boxes).
Each of these perspectives is now explained and then an expanded figure is presented as a summary of this explanation.

The Motivation (‘M’) individual focus is informed by Martin’s Student Motivation and Engagement Wheel (Martin, 2001, 2002, 2003a, 2003b). This perspective draws on research literature to point to positive or adaptive motivating thoughts (self-efficacy, mastery-orientation, and value of schooling) and actions (persistence, planning, study management). It also highlights what gets in the way of motivation: impeding thoughts (anxiety, failure avoidance, uncertain control) and maladaptive behaviours (self-handicapping and disengagement).

The ‘M’ perspective provides an important way of understanding the complex individual ways that students construct their classroom relationships in both positive and negative ways. Clear links can be seen between this perspective and the Boys’ and Girls’ Education Strategy support document, Priority Schools and Equity Coordination Unit, 2008 (pp. 22-23) action areas covering the development of positive identities and social support to do one’s best at school within the social support focus. There are a number of key questions that educators might consider in the ‘M’ perspective in order to offer support for individual boys to become more motivated:

- What support is there for each boy to develop a belief and confidence in his own ability to succeed at school, overcome challenges and perform at his best?
- What individual encouragement is there for each boy to focus on his own learning, solving of problems and development of skills?
- How is each boy helped to see that school is useful, important and relevant for him?
- How is there individual help for each boy to overcome his own anxiety, take risks (not avoid failure) and have more control over his learning?
- Is there pedagogy that promotes effort and persistence for each boy?
- Where can there be teaching and learning that fosters key individual self-regulatory processes such as planning, monitoring, and study management for each boy?
- How can there be practices that help each boy manage or minimise his own maladaptive behavioural dimensions such as self-handicapping and avoidance?
The small ‘e’ engagement perspective is particularly concerned with teachers’ pedagogies and their effect on the wider relationships that students develop with education, schools and classrooms. Drawing on ideas from the research of the *Fair Go* Project (Munns, 2007), the small ‘e’ perspective considers the kinds of classrooms that will encourage levels of substantive student engagement. Here a distinction is drawn between substantive and procedural engagement.

When students are substantively engaged they have a psychological investment in their learning experiences. They are “in task”. When students are procedurally engaged they are complying with teacher instructions and are “on task”. It is that substantive engagement that is termed small ‘e’ engagement. It is defined as the multifaceted coming together of the cognitive, affective and operative at high levels. Put simply, this means students are thinking hard, feeling good and working well.

The implications for classroom pedagogies are captured in the *Fair Go* Project’s “engaging pedagogies”. These pedagogies have a dual focus on classroom experiences that encourage high cognitive, affective and procedural responses from students while simultaneously developing a collaborative learning community (see *Fair Go* Team, 2006, for a wider discussion of these pedagogies).

The research argument is that these pedagogies and discourses are the vehicles that carry either engaging or disengaging messages (Bernstein, 1996). This focus raises some important questions that teachers need to ask themselves about their own classroom pedagogies:

- What counts as knowledge in my classroom and which students have access to really useful knowledge?
- Which students have ability as a result of my teaching?
- Who controls the teaching space in my classroom?
- Which students are valued as individuals and as learners?
- Whose voice is given credence within the teaching spaces in my classroom?

The answers to these questions highlight influences on both sides of the teacher-student exchange: the way teachers teach and how students see themselves as learners. This perspective on student engagement builds on and complements the individual focus and questions of the ‘M’ perspective.

Critically, this perspective opens up opportunities for educators to consider how some boys from certain backgrounds and in some school locations have historically received disengaging school and classroom messages. From this position alternative classroom practices might be developed in order to produce messages that powerfully engage all boys from all social backgrounds.

The third perspective of the *MeE Framework* is big ‘E’ engagement, captured by the term “school is for me”. This comes about as a result of the joint effect of the individual and group strategies undertaken within the individual (‘M’) and pedagogical (‘e’) frames. That is, the proposed interrelationship of the three perspectives suggests that for each student to feel that “school is for me”, he has to feel supported as an individual learner and as a member of a cohesive and culturally inclusive learning group. It also may be influenced by schools working widely on policies and practices that complement these individual and group strategies.

So it is useful to think of ‘E’ngagement as both a positive social outcome, as well as a whole school focus that encourages students to feel valued, supported and catered for across operative, emotional and cognitive levels.

Strategies at this level include a positive school ethos, inclusive curricula choices that support
a wide range of learning needs, a variety of extra-curricular and culturally appropriate activities catering for many different interests, peer support through mentoring, the use of role-models and the design of productive post-school options. Some key questions for educators within this perspective are:

- How can schools look after boys in ways that will convince them that this will continue to happen throughout their school career?
- What are the ways that schools can provide boys with a wide range of educationally worthwhile and enjoyable experiences in curricular areas?
- What are the ways that schools can provide boys with a wide range of educationally worthwhile, enjoyable and culturally appropriate experiences in extra-curricular areas that will support and not interfere with achievement of academic outcomes?
- In what ways can boys be supported if they need help when they have learning or behavioural problems?
- What strategies and support systems can schools put into place so that boys are not left to “fall through the cracks”?
- How can educators help boys see that their school is a place that will really help them gain the educational resources that will be important for their future lives?

The expanded *MeE Framework* is now represented in its detailed form in Figure 1.2.
Figure 1.2: Expanded MeE Framework of motivation and engagement
1.5 How the MeE Framework was used for this research

The whole of the MeE Framework was introduced to the participating teachers at the introductory workshops. The decision had been made earlier in consultation between the Priority Schools and Equity Coordination Unit (NSW DET) and the University of Western Sydney research team that this research should primarily focus on the small ‘e’ engagement perspective.

There were good reasons for this decision. Even though the MeE Framework points to the three interrelated perspectives (‘M’, ‘e’ and ‘E’), and each is considered important for the development of the highest levels of student engagement, the view was that, in the end, what happened in classrooms was the critical perspective. For example, a school might decide to support a group of disengaged boys through an out-of-class series of workshops in computer technologies where they were mentored by more senior students.

These would be ‘M’ and ‘E’ strategies aimed at helping them value school, become more skilled and gain some positive planning and study strategies. However, if on their return to their normal classroom they still received disengaging messages, then these would arguably undermine the positive effects of the workshops.

Engagement needs something to hang onto and it seems reasonable to conclude that engaging classroom experiences and processes are the critical anchors in the complex set of school and classroom relationships captured in the MeE Framework.

With the small ‘e’ perspective established as the research priority, teachers were introduced to a series of classroom strategies identified in the previous University of Western Sydney study into the motivation and engagement of boys (Munns, et al, 2006 – see above). This study had located 15 schools across Australia that had strong social and academic outcomes for boys. The strategies were those most commonly found in the teachers’ pedagogies in these schools. In summary, these ‘e’ engagement strategies were as follows:

- Structure learning environments that offer student voice and control
- Promote self-regulatory and autonomous learners
- Focus on quality teaching and productive pedagogical relationships
- Offer projects and problem-based learning
- Develop collaborative learning communities
- Offer access to sophisticated Information Communication Technologies (ICTs)
- Integrate literacy across all aspects of the curriculum
- Introduce a variety of texts that widely appeal to the interests of boys
- Contextualise and individualise literacy learning
- Provide feedback that is explicit about task criteria, processes for learning and self-regulation of learning.

All of these strategies are consistent with the first three action areas of the teaching and learning focus area in the Boys’ and Girls’ Education Strategy support document, Priority Schools and Equity Coordination Unit, 2008, (pp. 18-19):

- promoting whole school engagement with gender inclusive curriculum;
- catering for the needs of individual students using effective teaching practices;
- involving boys and girls as partners in the learning process.

Project teams used these strategies as the final springboard for discussions at the introductory workshops about the shape of their action research. Initial plans were taken back to the schools and finalised during the first term of 2008 for implementation during the next two school terms. An outline of each of these school-based projects is found in the next section of the report.
Section 2
School research projects

This section of the report begins with an introduction to the regional contexts and issues before providing an overview of the each school and their student engagement project. Reading this section provides a series of brief insights into the ways that teachers changed their practices to encourage greater levels of engagement among their boys. Details of how these school projects worked within the MeE Framework and strategies that encouraged engaged and enhanced learning opportunities for boys follow in Section 3.

2.1 Research contexts
The research was conducted in three different clusters of schools in distinct geographical locations.

In the New England region there were school projects in the large town and city centres of Glen Innes (Glen Innes Public School and Glen Innes High School), Tamworth (Farrer Memorial Agricultural High School) and Tenterfield (The Sir Henry Parkes Memorial Public School and Tenterfield High School). There was also a group of more isolated small schools at Bonshaw, Jennings and Mingoola that were involved in the research.

In the Riverina region the participating schools were in the cities of Griffith (Griffith Public School, Griffith East Public School and Griffith High School) and Wagga Wagga (South Wagga Public School and Wagga Wagga High School).

In the Illawarra and South East region research was conducted in schools in the regional centres of Bega (Bega High School), Goulburn (Goulburn High School and Mulwaree High School) and Yass (Berinba Public School and Yass High School). Another group of projects was initiated in schools serving the smaller districts of Bombala (Bombala High School) and Boorowa (Boorowa Central School).

2.2 Background issues
There are a number of significant issues affecting regional and rural communities in New South Wales and these impacted in varying degrees on the work of the participating schools; in the ways students formed their relationships with schools, classrooms and teachers, and viewed future education and employment prospects.

Perhaps foremost among these issues is the influence of the enduring drought and accompanying rural recession. Some schools, like Boorowa, reported a sense of great community and personal loss as crops failed and farms were lost. In other areas environmental concerns and diminishing work forces threaten traditional rural industries and young people increasingly look outside their family traditions and locations for education, training and work. Bega is a case in point here. Within smaller communities like Bombala, Bonshaw, Jennings and Mingoola, relative isolation from major centres and capital cities further compound the issues.

Larger cities and towns are also feeling the impact of rural tough times, and are at the same time experiencing the effect of social and cultural divisions caused by durable economic disadvantage (Vinson, 2007) and the movement of people into and between rural areas. Communities like these can often reflect what Kenway et al (2006) have identified as “melancholy masculinity” as young men in particular deal with the loss of those employment opportunities which had previously defined their sense of being “male” and “rural male”. In Glen Innes, for example, students come from homes in the town, from large rural properties in
the surrounding area and from smaller nearby villages. Consequently, the school has a very mixed socio-economic profile.

It faces a spectrum of issues around attendance and retention. These include retention of students from wealthier families in the local public education system as they transition from primary to secondary school, low aspirations and engagement amongst students who frequently receive messages about rural depression and few local employment opportunities in the town and surrounding areas, and significant absenteeism amongst some students from low socio-economic families, who are often Indigenous.

Another example is Griffith, one of the most multicultural regional cities in Australia. There are 60 cultural groups represented in the community, with the largest groups being Australians of Anglo and Italian background. A significant Indigenous population (about 4% of the population) lives in Griffith. Over 50% of the Indigenous group is under 20 years of age and this is against the city’s trend towards an aging population. Increasing numbers of people coming to Griffith are from South Pacific nations (Fiji, Tonga, and Samoa) and there are refugees from Afghanistan settling in the area.

The students of the school are representative of Griffith’s diverse community. As can be seen in the project at Griffith High, the cultural diversity presented some critical challenges for the students and their teacher as they negotiated complex educational and classroom relationships. Participating schools in Goulburn, Yass and Tenterfield faced similar issues around diverse SES groups and the cultural composition of their communities.

2.3 Snapshots of school projects

2.3.1 Projects in primary schools

**Berinba Public School** has a school population of 270 students, with 6% identified as Indigenous. The school provides education for children living in southern Yass and bordering rural areas. Quite a few of the students travel to school by bus. ICT is one of the school’s key focus areas and it boasts both a modern computer laboratory and a mobile laptop laboratory. The issue identified by the school concerned some senior boys (in Years 5 and 6) who were showing signs of disengagement.

The plan was to develop a “buddy” system between these students and Kindergarten. This was an ‘M’ strategy aiming to support these disengaged students and develop their self-concept by offering them opportunities to mentor younger students. The school also wanted to connect this action research project with two other long-standing ‘e’ngagement projects in the school, involving information and communication technologies through the Partners in Learning program and the Positive Behaviour for Success program. The goal of the project was for the Year 5 and 6 students to see themselves as positive role models for children commencing school, by forming “buddy” relationships between the Stage 3 and Early Stage 1 students.

The project’s focus was on the expectation that this change could develop collaborative learning communities. These “buddy” sessions were planned with an ICT focus, using Photostory®, and so worked within the ‘e’ focus of using sophisticated ICTs as a way of encouraging high affective, cognitive and operative learning experiences.

**Bonshaw Public School** and **Mingoola Public School** combined in the design and implementation of their action research project, identifying the priority areas as: addressing geographic isolation, the smallness of the students’ peer group and increasing community participation. Bonshaw Public School is a small, isolated school close to the Queensland border with a 2008 student population of 16 students. Mingoola Public School is an isolated small school about 60 kilometres west of Tenterfield.
In 2007 there was an enrolment of 13 children and one teaching Principal with a part-time casual teacher. Most families in these schools derive their income from rurally-based vocations. Bonshaw and Mingoola are in the Country Areas Program that provides additional resources in recognition of the schools serving an area of rural disadvantage, and they are also both in the Priority Schools Programs.

The schools worked on building programs involving high school mentors and parent supporters. The joint project was entitled “Let’s build together” and focused on Year 1–6. The mentoring and support environment was an ‘M’ focus. Activities that drew on small ‘e’ strategies were hands-on, interactive and involved higher order thinking skills, using Habits of Mind and reflection.

At an initial planning day, the students were introduced to the Habits of Mind concept in cross-school/gender/age groupings. The schools planned their project collaboratively using inter-school videoconferencing as the embedding of technology was also a priority. “Technology”, “community”, “hands-on” and “interactive” became the driving concepts of the project. The final phase of the project was a day of building a variety of school improvements involving high school mentors and parent supporters.

**Glen Innes Public School** is a large primary school, located in the Northern Tablelands area of New South Wales. With a combination of historic and modern buildings, the school is typical of many primary schools servicing mid-sized rural towns. It had approximately 443 students in 2008, and a significant proportion of students identified as Indigenous. Behavioural observations, suspension rates and analysis of several years of the Basic Skills Test results indicated that Stage 3 boys, in particular, showed low engagement and academic achievement, especially in the area of literacy.

Drawing on the ‘e’ component of the MeE Framework, the school decided to implement a Stage 3 Boys Literacy Project, in which 33 “non dominant” boys would come together with a senior male member of staff, serving as both teacher and mentor, for an hour each day to focus on literacy. The classroom space used for the Boys Literacy group was large, with flexible working areas and the boys were allowed, and encouraged, to embrace and use the various spaces to maximise their personal engagement in learning tasks.

The teacher’s pedagogy embraced both ‘M’ and ‘e’ strategies, focusing on developing the boys’ routines and organisational skills, promoting positive relationships with the teacher and each other, and building the boys’ confidence and skills in literacy by incorporating content and resources that were meaningful to them, and tasks that were short and varied. These strategies were chosen because they would keep the boys affectively, cognitively and operatively involved during the sessions.

**Griffith Public School** is a highly multicultural school with 350 students, and an Indigenous student population of approximately 20%. It is a Priority School and is supported by Schools In Partnership. The Year 6 project involved collaboration between two teachers. The priority areas identified were poor student attendance, individual behavioural issues and the need to develop social and networking skills. It was believed these played a part in creating a negative culture within the group and the wider community.

The aim of the project was to focus on improving boys’ motivation and engagement for learning across the curriculum, with a focus on their literacy and numeracy, by developing collaborative learning environments through buddy teaching and structuring some learning environments to give the students voice and control. Their project actually included three main phases clustered around the ‘e’ strategies of offering projects and problem-based learning, developing collaborative learning communities and promoting self-regulatory and autonomous learning. The initial phase involved small groups of boys in designing and building with the assistance of a male teacher’s aide as a supporter and mentor.
The second and third phases used ‘M’ strategies as individual support mechanisms focused on mentoring and community involvement. On a weekly basis, small groups of boys visited a local community resource, the *Griffith’s Men’s Shed*, to talk with older members of the community. The third phase of the project involved the boys mentoring a “buddy” Kindergarten class, providing them with an opportunity to build social skills and confidence in literacy.

*Griffith East Public School* has 480 students from a range of socio-cultural groups. It has a small number of Aboriginal students and an increasing population of Islander students. The population of Turkish students is also increasing, resulting in an expanding ESL program. Priority areas for the senior classes were both inside and outside the classroom. Many students showed little independent or engaged learning with classroom attainment dominated by a handful of high achievers. There were playground behaviour concerns and a general lack of teamwork and cohesion. Newcomers were not very willingly accepted.

A small “sporty” group dominated team selection in the successful school sporting teams. The project was conducted in two Year 6 and two Year 5 classes. COGS units provided the curriculum focus and the teachers on each Year planned to work collaboratively. Initial ‘e’ strategies focused on developing collaborative learning communities, using a variety of high interest texts and contextualising and individualising literacy learning.

As the project proceeded, the teachers changed their teaching practices to further include the ‘e’ strategies of: using ICTs, active and problem-based learning and promoting self-regulation of learning by increasing student voice and control. In addition to classroom projects, students were placed into weekly gender-based grade groups addressing the different PDHPE needs of each group and providing opportunities for students to socialise and interact in a less formal or threatening environment. In these groups, discussions revolved around physical, social and emotional changes, group dynamics and addressing playground issues as brought up by students.

*The Sir Henry Parkes Memorial Public School* is located in the historic town of Tenterfield. It had a 2008 student population of 251, with 18% Indigenous. The school is supported through the Country Areas Program and Priority Schools Programs. The school identified a significant number of students as lacking in motivation and self-esteem, with accompanying low levels of attendance and engagement with classroom activities.

Basic Skills Test results identified the need for attention to students’ numeracy and mathematics achievements. The Stage 3 teachers focused their project around enhancing engagement and achievement in numeracy, especially in the *Patterns and algebra* strand of the Mathematics Syllabus.

Drawing on ‘e’ strategies, the teachers planned to enrich the classroom learning tasks cognitively, affectively and operatively, and encourage greater risk taking and confidence by offering students more control over their learning. Significant pedagogical shifts occurred as the teachers designed and implemented four mathematical activity centres around which small groups of students would rotate for two weekly mathematics sessions.

The centres involved cooperative work using the interactive whiteboard, independent computer-based activities, working as a group with the assistance of a teacher’s aide and receiving intensive teaching about a new topic with the class teacher. All centres involved ‘e’ classroom strategies of active, varied tasks, high on the affective and operative dimensions, and high on student control. Students working with the teacher received personal time and attention meeting their explicit learning needs. This ‘M’ strategy aimed to promote adaptive thoughts and behaviours.
2.3.2 Projects involving primary and secondary schools

**Jennings Public School** and **Tenterfield High School** combined to implement a mathematics project. Jennings Public School is a small rural school on the Queensland border with a 2008 school population of 24 (4% Indigenous students). Key programs addressing boys’ educational needs had focused on literacy, ADHD and managing behaviour. Tenterfield High School had 320 students in 2007 (6% Indigenous). Most Year 7 and Year 8 students were showing strong results and growth in state-wide English and mathematics testing. However, in the School Certificate students were below state averages in Mathematics, Australian History and Civics and Citizenship. Priority areas included Aboriginal education, literacy and numeracy, school leadership and boys and their schooling.

It is worth noting that boys accounted for 52 out of 58 suspensions in 2007. The combined project brought together, at the high school, a group of Year 6 Jennings students with Tenterfield High Year 7 boys. The project consisted of lessons in a Year 5–8 unit designed by the Mathematics Teachers Association of NSW. It involved students in high ‘e’ engagement strategies: the simulation of a forensic science task using mathematical skills and concepts.

Jennings also conducted another project constructing birdhouses using the research question: “How can we help our native bird life?” This authentic ‘e’ project aimed at integrating Environmental Education, Mathematics, HSIE, Science and Visual Arts for Years 3–6. In a complementary ‘M’ strategy students were assisted and advised on the construction of the birdhouses by two students’ fathers.

**Wagga Wagga High School** and **South Wagga Public School** worked together on a middle years’ project involving technology, active problem-based learning and mentoring. The high school has a student population of nearly 1000 students and enjoys a reputation for academic achievement, student welfare and extra-curricular activities (including sport and music). The integration of technology is seen to be central to its programs. There are just over 300 students at the primary school and it had also developed a strong ICT focus. As with any large city, Wagga Wagga has suburbs of people with low SES backgrounds, though these two schools are in comparatively better-off areas. Both schools have groups of boys who have difficulties negotiating the Year 6 to Year 7 transition period.

The primary school decided to include a group of Year 5 and Year 6 boys with no apparent social or academic problems at school but who were not among the leaders or those with the greatest motivation or educational aspirations – they needed a “boost” to enhance levels of engagement.

The high school chose Year 7 boys who were already displaying signs of disengagement and were working at low academic levels. The project brought these boys together to develop a computer-assisted animation with the secondary school students acting as mentors. Learning experiences predominantly targeted ‘e’ strategies aiming to promote autonomy, problem-based learning and the use of sophisticated ICTs. There was also an ‘M’ focus on encouraging adaptive thoughts and actions through out-of-classroom activities and mentoring.

2.3.3 A central school project

**Boorowa Central School** is located in a rural agricultural area of southern inland NSW. In 2008 its enrolment was approximately 220 students, with half of the students in the high school. The school is part of the Country Areas Program. There is a school view that the ongoing drought has significantly impacted on the self-confidence and aspirations of the entire community, with this affecting the boys’ educational and school relationships. Priority areas for the school’s teachers included turning around the attitudes of the young male students and encouraging them to take greater responsibility for their personal actions.
In particular, the school was concerned with the ineffective ways with which the boys dealt with anger and frustration. They also wanted to reverse boys’ disengagement from the educational process, especially in key areas such as literacy. They planned and implemented a project that included both ‘M’ and ‘e’ strategies. The ‘M’ strategies involved Year 9 boys mentoring Year 5 boys in a practical construction project overseen by the Industrial Arts teacher.

This project’s ‘e’ focus related to the expectation that changes made to the boys’ structured learning environments within an authentic task would offer students greater opportunities for increasing voice in their learning processes and increasing control over their decision-making. This would be achieved through opening up the planning of activities to both groups of students. Their project also had Year 9 and Year 5 boys keeping reflective journals about the content and processes of their learning.

2.3.4 Projects in secondary schools

*Bega High School* is located in the far south coast of New South Wales. It is a comprehensive co-educational high school with a student enrolment of 1050 students. Over 600 students travel to school each day from outlying rural and coastal villages. There are approximately 4% Indigenous students and one full-time Indigenous support person employed on staff.

The demographic of the Bega area is wide-ranging. There are professional, middle class and low socio-economic status people, and the region has town and rural dwellers. This social mix is reflected in the make-up of the student population. The school implemented three projects to address the lack of whole school ‘E’ engagement and the lack of positive male role models for identified groups of Year 7 boys. The first was *Boys’ Bikes*, a mentor-based program to enhance the resilience of at-risk boys. Primarily an ‘M’ strategy, this project was also designed to support the leadership capabilities of the Year 10 mentors.

In the second project there was both a geographical literacy approach with Year 7 students and a literacy strategy for Year 8 boys who achieved no growth or regression in literacy assessments. This project employed the ‘e’ strategies of using computer software to promote a high affective learning environment while also offering greater opportunities for voice and control. The third project, an ‘M’ strategy, involved the participation of male students from the Year 9 Physical Activity and Sports Studies class coaching small groups of middle school students in AFL. They also used computers to produce a coaching guide.

*Bombala High School* is located in the south east corner of NSW. It is an area of farming communities and old growth forests and its economy relies heavily on grazing and the timber industry. The school had a 2008 enrolment of 200 students. The priorities of the teaching staff were to foster quality teaching through cooperative learning and meta-cognition. *Habits of Mind* were also used to encourage students to develop stronger thinking skills. Despite these initiatives, the school was concerned about the poor retention of boys from Years 10 to 12 and the gap in achievement between boys and girls.

To address these, a “Boot Camp” project was planned. This was an ‘M’ strategy aimed to encourage adaptive thoughts and actions. There was to be a mentoring focus with Year 10 boys taking responsibility for Year 8 students. Prior to working with the Year 8 students, the Year 10 boys participated in a modified version of the *Seven Habits of Effective Teens* course.

The ‘e’ pedagogical focus of the project was on curriculum integration. This comprised a unit on the human body including science, nutrition in Personal Development, Health and Physical Education (PDHPE), graphing and statistics in mathematics and reporting in English. The project at Bombala showed a lot of promise at its design stage. The project was later changed to emphasise a connection between student welfare, physical activity and improved learning.
outcomes. The overall aim of the project was to increase student engagement and retention into Year 11.

**Farrer Memorial Agricultural High School** is the sole public agricultural high school for boys only in Australia. Situated in the large inland city of Tamworth, it is both a boarding and day school and is also partially selective. Boys in a particular Year 7 class had been identified as disengaged, and characterised by their teachers as having low self-esteem. Not surprisingly, the class was the “lowest” in a streamed Year 7. The boys in the class came from a variety of social and cultural backgrounds. Problems were compounded, it was believed, by the fact that high school classes had too many class changes during the day and this was fragmenting their school and classroom experiences.

The teachers felt that the boys would gain a stronger sense of identity if they were able to have a homeroom over which they themselves had some measure of control. The homeroom itself became the school project. This is an interesting example of the interplay of ‘M’ and ‘e’ strategies. It gave them greater access to technology, a measure of control over their physical space and helped facilitate greater communication between the teachers of the class, so that where possible, teachers could also share teaching strategies. The units of work designed for the class during their period in the homeroom aimed at raising expectations and working on higher order thinking skills.

**Glen Innes High School** is a co-educational high school of 570 students serving Glen Innes and the surrounding district. Most of the students are Anglo-Australians, though there are a significant number of Indigenous students. The students are aware of the difficulties that many families on the land face, and receive negative messages about the local economy and lack of employment opportunities. Whilst lack of motivation and engagement with schooling, low literacy achievements in ELLA and retention of students through the latter years, are significant issues for the school, the transition period from primary to secondary schooling was identified as a critical focal point for the action research project.

The project had groups of Year 7 boys and Year 7 girls developing e-books to be shared with Year 6 students from Glen Innes Public School. Each book would contain a narrative that included information about an aspect of secondary schooling and addressed one or more of the transition needs identified through a survey of the Year 6 students. The project had three aims. The first was to create an authentic task with high cognitive, affective and operative dimensions and greater student control, engaging the students whilst increasing literacy and ICT skills. The second was to better prepare the Year 6 students for their transition to secondary school by providing information and establishing peer relationships. The third was to develop the ICT skills and confidence of the teaching staff so they could guide the students in the project.

**Goulburn High School** is a rural comprehensive school located in the Southern Highlands. The 580 students come from mixed socio-economic backgrounds with a small number of Indigenous students and refugees predominantly from West Africa and Burma. In 2008, the teachers decided to engage Year 7 boys and girls at the school in the Rock and Water project, which aimed to improve their educational and social outcomes. It was run as one hour fortnightly sessions for three Year 7 classes of varying academic ability within the Pastoral Care Program.

**Rock and Water** is an ‘M’ strategy and it was used in this school to address inappropriate social behaviour, such as bullying and sexual harassment. These issues were identified as a focus with reference to the school’s welfare data and low academic results. Two of the core project teachers regularly team-taught so as to increase quality control and collegiality in terms of managing the project. *Rock and Water* sessions emphasised self-control techniques, self-awareness and leadership skills with the aim of building boys’ roles and responsibilities
in the community.

The program provides a pedagogical approach and is often used in schools to address negative behaviours in boys and their lack of motivation at school. Prior to implementing the project, teachers participated in a three-day *Rock and Water* training course. The students recorded their reflections and learning about their experiences in a dedicated *Rock and Water* diary.

**Griffith High School** had a 2008 student population of just under 600 students. Most people who live in the Riverina city of Griffith are employed in the agricultural, retail and manufacturing industries. Griffith High School is part of the Priority Schools Programs (PSP) and thus serves a significant number of the community’s families from low socio-economic status (SES) backgrounds. There are also students from more advantaged backgrounds.

The staff decided to concentrate its research on a Year 10 Geography class. This class was made up of 21 students (17 boys) who were performing at a low academic standard. The boys in the class were dealing with a number of issues that were making their school and classroom relationships very difficult. Not the least of these issues was tensions between the boys’ different cultural backgrounds (Pacific Islander, Indigenous, Anglo, Italian and Afghani), with the class divided along racial lines and often involved in fights with each other. Fights happened both inside and outside of the classroom. Though divided racially, they were united in their resistance to school.

The boys were highly disengaged and this had a major physical, emotional and pedagogical impact on their school and classroom. Drawing on ‘e’ classroom strategies, the teacher explored how changes to the nature of the learning experiences and his pedagogy might encourage improved levels of student engagement. Classroom changes particularly focused on student ownership, active learning and the nature of the personal-pedagogical relationship between the teacher and his students.

**Mulwaree High School** is one of two state high schools in the Goulburn area and had a 2008 population of about 740 students. The school has an agricultural facility with livestock and crops and also a field studies centre that is available to Mulwaree students and students from other local schools. The school had high suspension rates for a particular group of students.

In order to re-engage these students, the staff made a collective decision to create a special class to help them with their classroom behaviour, help them address social problems and help them see more clearly the value of schooling. The students had a homeroom for the majority of their classes and staff went to this room to teach them. The project had an ‘M’ and an ‘e’ focus and centred on engaging the students through connecting with the local community.

The project involved the students in a series of excursions with the intention of producing a tourist brochure: to the Steam Museum, the War Memorial, the Race Track, the Court House and the hospital. This was an ‘M’ strategy. The ‘e’ focus was developed on the expectation that school changes could contextualise and individualise literacy learning for the boys in this class. Almost half of the twelve students also attended the Industrial Arts program in the school, although the Industrial Arts teacher was not specifically involved in the project team. The duration of the project is one of its successes and this has implications for school planning.

**Yass High School** is located in the Southern Highlands and serves a town and rural community. The school had a 2008 population of 405 students. The school had been working on the disengagement of boys, reflected in time out of class, suspension and absenteeism.

The school wanted to address two issues. The first was whether they could increase boys’ engagement in the classroom using ICT. The second was whether increased engagement would improve boys’ literacy. Staff members devised separate ‘e’ strategy projects, two for
Year 8 students and one for Year 9–10 students. The fourth member of the team was a very committed Deputy, who provided strong executive support. The first Year 8 project in Visual Arts was to make a *Monsters Myth and Magic* unit more relevant by supporting the program with the learning of electronic literacies, using the *Photostory®* program.

The second project in Media introduced students to *Website Creation®* software, and focused on the students’ interests, with planned and edited text. The third project involved a Year 9–10 class of students in a *Small Motors Program*, using ICT to produce a manual on motorcycle restoration. The projects focused on increasing opportunities for student voice and control, quality teaching and productive pedagogical relationships. The success of the projects related to the way in which the teachers worked collaboratively so that each of the separate projects reinforced the other and the resulting changes in pedagogy in each project influenced the other members of the team.

**Summary**

This section of the report has hopefully provided a picture of the variety of projects undertaken by the schools. As can be seen, the majority of these focused on changes to classroom teaching and learning and thus fall within the small ‘e’ engagement perspective of the MeE framework. In some cases these were supported by ‘M’ strategies designed to offer individual support for specific individuals and groups.

The *MeE Framework* is designed to help educators comprehend the complex individual and group processes they need to consider when they are trying to develop strong positive student relationships with their classes, their schools and with education. It highlights the strong interplay between the three perspectives (‘M’, ‘e’ and ‘E’). However, to re-emphasise a point made in the opening section, what happens in classrooms (‘e’) is the critical perspective here. ‘E’ngagement does need the anchor of ‘e’ngaging classroom experiences and processes if schools are to encourage and sustain enduring levels of ‘E’ngagement with school as a place and education as a resource. It is to this classroom ‘e’ focus that this report now turns, first exploring some of the processes taken up by the teachers-as-researchers, and then examining in greater detail the classroom changes highlighted in this section.
Section 3

Research findings: Classroom pedagogy and ‘e’ngagement

At the beginning of the project, it was suggested that the teachers focus on the following aspects of pedagogy in designing their individual projects (these arose from previous research by Munns et al, 2006):

- Structure learning environments that offer student voice and control
- Promote self-regulatory and autonomous learners
- Focus on quality teaching and productive pedagogical relationships
- Offer projects and problem-based learning
- Develop collaborative learning communities
- Offer access to sophisticated ICTs
- Integrate literacy across all aspects of the curriculum
- Introduce a variety of texts that widely appeal to the interests of boys
- Contextualise and individualise literacy learning
- Provide feedback that is explicit about task criteria, processes for learning and self-regulation of learning.

Teachers focused on these aspects of middle years boys pedagogy in the role of researchers.

3.1 Teacher-as-researcher

From the beginning of the project, a central plank of implementation was that teachers would engage in research. A key part of the planning days for each region was training in action research using the cycles:

Plan ⇒ Act ⇒ Observe ⇒ Reflect ⇒ Revise

Plan ⇒ Act ⇒ Observe ⇒ Reflect

At the conclusion of the planning days schools were set the task of formulating:

- A research question
- A plan for gathering data about boys’ engagement from multiple sources in order to drive the various steps of their project and their action research
- A plan for collaborative implementation – collaborating with teachers within the school as well as, for some projects, across schools, and with the regional project officer and regional consultant.

Thus all the projects worked strongly on a model of teacher-as-researcher – one who collects and uses data to drive pedagogy. Several significant outcomes for the project arose from the implementation of this model, including:

- Teachers reporting genuine encouragement and permission for re-thinking pedagogy
- Consensus on the high quality of projects in each region and that a high impact on the engagement of boys was achieved when teachers used data to drive changes to their pedagogy
- Action research methodology as an implementation frame for the research projects in driving successful learning strategies for the boys, especially through giving them greater control and voice
- Inclusion of planned, multiple data collections and purposive reflection genuinely encouraging a focus on boys’ relationships with schooling
• Agreement on the importance of strong support from the project team, with the role and support of the Regional Equity Coordinator, in particular, central to the success of the projects
• Positive collegiality between schools in most regions – which was seen as worth sustaining.

Whilst these outcomes were in evidence in nearly all projects, each is explained and elaborated in the following sections through projects that serve as exemplars.

3.1.1 Encouragement and permission for re-thinking pedagogy

The project at Griffith High School provided an interesting example of a teacher who found that being involved in an action research project of this type offered genuine encouragement, permission and rationale for re-thinking. Faced with the lone responsibility of running the project for his school, the teacher focused his attention on the nature of the relationships that a group of highly disengaged boys in his Year 10 class were having with education, the school and his classroom. The teacher was particularly interested in understanding how changes to the structure, curriculum and pedagogy in his classroom would impact on levels of student engagement. From this analysis a number of key themes could then be shared more widely across the school.

Changes to the classroom involved an intricate alignment between what the students brought to the context and what previous research had shown about student engagement. An interplay of ‘M’ and ‘e’ strategies from the MeE Framework was used as the teacher continually observed, reflected on and “tweaked” his classroom. At the ‘M’ perspective he wanted each boy to become more adaptive in his thoughts and actions. He wanted each boy to take some kind of control of his learning and to persist with work rather than give up in frustration and anger when faced with challenges. He also wanted boys to lose some of their maladaptive behaviours like failure avoidance and self-handicapping. These are significant changes for many students, and particularly challenging for disengaged boys.

Furthermore, the way forward had to be forged across different individual personalities in an often tense and divided classroom environment. Here is where the group processes of the ‘e’ perspective came into play. Following the theoretical line that classrooms send out powerful messages to learners about who they are and who they might become through curriculum, pedagogy and assessment, it seems reasonable to conclude that these disengaged, low-academic-standard and marginalised boys would have received negative messages throughout their schooling. Classroom changes had to reverse these messages – specifically:

• Content had to connect with the students
• Students had to believe they would be helped towards success in their tasks
• Classroom struggles had to be lessened or alleviated
• Students had to feel valued individually and learn to value each other – as learners, as individuals and as members of their cultural group
• Students had to have a voice in the operation of the classroom.

The research project gave the teacher permission to change his pedagogy to send more positive messages. The MeE Framework gave him a rationale to make these changes in a theoretically informed way. The results of his investigation brought important insights into ways to make pedagogical connections with disengaged boys (see 3.2 Classroom pedagogy and ’e’ngagement).
3.1.2 Teacher as researcher: a framework for planning a high quality project and impacting the engagement of boys

The model of teacher-as-researcher was readily accepted and implemented as a planning frame in all the New England projects. An example can be gained from the collaborative project, *The case of the mystery bone*, undertaken by Tenterfield High School and Jennings Public School. A group of Year 7 boys at Tenterfield had been identified as disengaged from mathematics and the teacher at Jennings wanted to address issues of transition from primary to high school mathematics.

An initial, joint research question for formulating this project therefore became, “How do students (primary and secondary) want to be taught mathematics?” Accordingly, data that would inform the project planning was collected from the student groups at both schools through a survey about attitudes to mathematics. Responses showed that most of the primary school students thought that mathematics was relevant to them and their learning of mathematics was interesting and engaging. In contrast, the high school students reported mathematics as irrelevant to their lives and of little interest; they wanted more practical, hands-on activities.

In response to the survey data, the second set of research questions for planning this project became: “How can we make mathematics more interesting and relevant, especially for the secondary students?” and “Will working with high school students on a middle-years project help primary students in their introduction to high school?” The Jennings and Tenterfield teachers jointly sought, planned and implemented a more “engaging” mathematics unit, *The case of the mystery bone*.

The unit was taught at the high school location, and involved the students in hands-on activities, independent and pair tasks, problem-based learning and extensive use of ICT – all ‘e’ strategies emphasising the high operative and affective dimensions of learning. The template for planning and monitoring the Jennings/Tenterfield project, shown in Table 3.1, identifies a Task/activity column that represents the ‘e’njoying strategies discussed at training days; the Likert scale assesses the degree of implementation (1 = weak feature, minor focus area, not important, incidental in nature; 5 = strong feature, major focus area, very important to project) and the Evidence column, evaluates the manifestation of the strategy in the unit. Sharing templates provided a common frame for valuable professional conversations.

Throughout, the students also formally evaluated the unit using a Plus-Minus-Interesting (PMI) inventory, followed by discussions of how the unit and learning could be improved. Interestingly, there were no minuses recorded on the PMI inventories by the students at either school throughout the unit, nor at the conclusion. The boys expressed appreciation of the more active learning experiences and opportunities to voice their evaluations and suggestions for learning.

The teachers also completed a formal evaluation of their observations and impressions of the unit and the project, with their evaluations focussing on the research questions. These purposive evaluations, observations and reflections led the teachers to important pedagogical insights about the engagement of the boys and their relationship with schooling. As one of the teacher’s evaluation statements declared:

Students prefer a direct, ‘hands on’ approach to learning, they like to be able to talk, interact, ‘bounce off’ each other and explore… They want fun, they want to explore, they want to be treated with respect, they want to be able to talk to each other and have a go.
The dual aims of the project at Glen Innes High School were to create an authentic, engaging task through which the Year 7 students would develop their literacy and ICT skills; and to better prepare the Year 6 students from Glen Innes Public for their transition to secondary school. To these ends, the Glen Innes High School project was designed to include all Year 7 students, boys and girls, in creating e-books with narratives about “going to high school”, to be shared with the Year 6 students in relationship-building visits to the high school during Terms 2 and 3.

In implementing the project, the teachers from Glen Innes High School drew on the action research framework at two levels. They used it as a frame to shape their research about the
engagement and literacy outcomes for boys when more engaging ICT-based pedagogies are used, and they implemented it as a learning strategy for the students to use to give their e-book task more authenticity.

With the research question, “What information is useful for students who are going into high school?”, the Year 7 students designed and completed a survey about their transition from primary to secondary school, then teamed with a Year 6 student to ask them to complete a similar survey.

Data from the two sets of surveys were collated by the secondary students and used to identify a list of relevant topics for their e-books. Before selecting topics from the list, the students also completed an ICT skills survey and participated in technology-based lessons on writing narratives about social issues, creating storyboards, using film techniques to convey social issues and constructing meaningful PowerPoint® presentations.

Whilst the intentions here had been to give the students skills and confidence in using the technologies, alleviating any impeding thoughts and behaviours in the task (‘M’ strategies), and to convey positive messages about the students’ abilities for the task (‘e’ strategy), the lessons played out differently for the boys and girls.

The boys professed initial proficiency with the technologies and were reluctant to share their skills in the lessons. They also claimed that working in pairs was disadvantageous to completing the e-book task. In contrast, the girls reported their needs for developing ICT skills and enjoyed working in pairs. They felt that the teamwork helped them to maintain focus on the product. These findings served as critical reminders of the ingrained thoughts that the boys held, about themselves as learners and members of a peer group, and how these thoughts interacted with their classroom engagement.

With topics selected, the students planned and developed their e-books over a number of weeks, with the aid of two teachers, one acting as the teacher of the class and the second as a teacher and observer. Observation and reflection sheets were completed four times by both the students and the teachers, before the e-book products and the project outcomes were evaluated.

In terms of the aims of this project, there were mixed successes for the teachers and the boys. The e-book products were of varying standards, rendering only a small number suitable for sharing with the Year 6 students. Whilst initially disappointing, student reflection data showed that the action research pedagogy, in particular the survey process, had been influential in engaging the Year 7 boys and opening positive relationships with the Year 6 students.

The strategy had given the task authenticity, as intended, but also provided the boys with a voice in the design of the task and a greater sense of control in their learning. Observation data showed that fewer boys were “off task” or “in trouble” during the project and, when asked to apply their newly acquired narrative and ICT skills in a later English assessment task, they were more confident in doing so.

For the teachers, the two most resounding successes were the rich data they collected about the ICT and social skills of the boys in comparison to the girls, and the changes that occurred in their understandings and attitudes to working with ICTs in their classrooms. Initially lacking confidence in the reliability of the school’s computers and their own pedagogical skills with ICTs, the project methodology afforded opportunities for team-teaching arrangements, fostering pedagogical dialogues, reflections, evaluations and ICT skill development. Final evaluations recommended that action research training around ICT use in classrooms be extended to other faculties within the school in order to build the ICT skill capacity amongst the whole staff and create further opportunities for engaging all students in
3.1.4 Planned, multiple data collections and purposive reflection encouraged a focus on boys’ relationships with schooling

Collecting and using data from multiple sources was a strong feature of the Illawarra and South East projects as demonstrated by the three projects that formed the focus of the action research at Yass High School. Together, the three projects aimed to increase boys’ engagement and enhance literacy outcomes through greater use of sophisticated ICTs in literacy lessons – an ‘e’ strategy that would draw on the high affective and operative dimensions to promote high cognitive engagement in literacy.

Teachers of the Year 8 Visual Arts class planned to make a *Monsters Myth and Magic* unit more relevant for the boys by using the *Photostory*® program for creating storyboards and developing the students’ electronic literacy skills. A second Year 8 project in Media introduced students to *Website Creation*® software, through which the boys and girls created web pages about themselves and their interests, with planned and edited text. In the third project, a Year 9–10 class of students in a *Small Motors Program* used sophisticated ICTs to produce an instruction manual for motorcycle restoration.

Across all three projects multiple data sources were used for gathering information pre- and post-project, including: *Quality of School Life* survey responses; RISC data showing numbers of school suspensions, and students’ results in meta-language tasks and reading comprehension tests.

While each project was relatively short term, *Quality of School Life* surveys showed varying degrees of improvement in the three groups of students pre- and post-project, with the general trend being towards more positive attitudes and greater engagement with literacy lessons.

Similar trends were observed also in the RISC data, reading comprehension tests and meta-language tasks, with the latter showing that students had expanded their understanding and application of specific vocabulary.

With strong support from the Deputy Principal, the teachers at Yass also met regularly to engage in purposive reflection, discussing project outcomes, directions, and ways of supporting and learning from each other. They collegially worked towards enhancing the boys’ literacy outcomes, improving the boys’ relationships with schooling and developing their own professional relationships.

Again, while the teachers recognised that improving literacy outcomes is a long-term issue, they were encouraged by indications that the boys were more involved and engaged in the literacy lessons. They felt strongly that the use of ICTs and more authentic tasks were contributing to enhanced engagement.

Similarly, the teachers at Bega High School planned and implemented several action research projects with each drawing on multiple sources of data to frame the planning, drive pedagogical changes and cross-check the outcomes. In one project, eight Year 8 boys were identified from the school’s 2007 *English Language and Literacy Assessment* (ELLA) results as appropriate to participate in a literacy intervention program. Post-intervention, the 2008 *National Assessment Program* (NAPLAN) data for overall literacy, reading and writing, was used to compare the growth results for the intervention group with the average growth results for NSW students, NSW boys, Bega High School students and finally Bega High School boys.

This deep cross-analysis of the data showed that the intervention group achieved a 31-point advantage over the State average and a 41-point advantage over boys in NSW in spelling. Likewise, the *Boys’ Bikes* project at Bega was planned from several consistent data trends. School-based welfare data had shown that Year 7 and 8 boys were over-represented in
discipline interventions.

A cross-reference with academic achievements showed that this same group of boys received only 35% of scholastic awards. Accordingly, the Boys’ Bikes project was designed as a mentor-based program to enhance the resilience of the Year 7 at-risk boys, whilst simultaneously building the leadership capabilities of the Year 10 mentors, providing ‘M’ strategies to enhance the engagement of both groups.

In a final example, the teachers at Boorowa Central School collected data about the Year 5 and Year 9 students in the project from several sources, including BST, SNAP, ELLA and NAPLAN. As well, they surveyed students, teachers and parents pre- and post-project, and involved students in completing self-reflective journals about their learning. Journal entries comprised responses to probe questions from the Real Framework (Munns & Woodward, 2006) encouraging the students to look at their learning in a variety of different ways (Munns & Woodward, 2006).

Inclusion of self-reflection on learning is an ‘e’ strategy that gives students positive messages about their ability, voice and place. The teachers, as researchers, found that the students showed enhanced awareness of their learning behaviours and attitudes to learning in both their survey responses and journal entries. They linked this data to noticeable improvements in the attendance rates for some of the boys during 2008.

We believe that many of the projects showed evidence of high impact when the teachers used data from multiple sources to plan and drive their pedagogical changes. Data, and purposive reflection on them, encouraged the teachers to focus on the boys’ relationships with schooling and in most instances led to salient insights about pedagogies that can make a difference in classrooms and schools.

3.1.5 Strong support from the project team was important and the role and support of the regional equity coordinator, in particular, was central to the success of the projects

It was agreed that the project provided a new frame for looking at pedagogy and for schools and teachers interacting with each other. Simply being involved in a project of this quality for what are in some cases isolated schools has been a good professional learning opportunity. For example, the collaborative project between Bonshaw and Mingoola culminated in a Let’s build together day involving students, teachers and community members from both schools, as well as the regional consultant.

The teacher at Bonshaw described the day as “one of the best days I’ve had in schools. It opened my eyes to what they (the students) can do”. The profiles of the students and the teachers in the schools, the schools’ profiles in their respective communities and across the Region were supported and enhanced through the project.

Like other schools in the project, they found it empowering to feel part of a bigger process, since teachers are usually too enmeshed in their own classroom or Stage or town and can lose sight of what’s happening outside. Integral in linking schools within and across the regions, were the regional equity coordinators. Schools resoundingly acknowledged the critical professional development role of the consultants and appreciated their assistance in: focussing individual projects; supporting the action research cycles; establishing and maintaining communication networks amongst schools, and measuring the outcomes of individual projects against the MeE strategies discussed at the training days.

3.1.6 Positive collegiality within and between schools, worth sustaining

Being involved in an action research project gives teachers opportunities to re-think pedagogical approaches in a collegial, professional environment. There were quite a few examples of projects in which teachers collaborated within a school, as at Goulburn High
School, and several in which teachers collaborated across schools, including across secondary and primary schools. For example, Wagga Wagga High School and South Wagga Wagga Public School collaborated extensively in a project focusing on transition.

Teachers drew on ‘e’ strategies to devise a student project aimed to help Year 5 and 6 students overcome anxiety about moving to secondary school, whilst building a sense of community in the Year 7 boys. The teachers jointly planned the project that had an emphasis on the use of sophisticated ICTs and students being active as they worked on problem-based learning in a mentoring environment. It was an ambitious and well-devised plan and reflected a high level of professional communication between the primary and secondary teams.

As the project was put in place, the teachers had to co-operate in a team-teaching environment and work with both primary and secondary students. This certainly threw up a number of issues with regard to pedagogical style. On one hand, there was a belief in the value of highly scaffolded explicit teaching approaches. On the other, there was a view that a more open, negotiated space was needed. The reality was perhaps that both approaches were needed at different times and this certainly could have been the focus for subsequent professional discussions.

A number of other issues around student selection and grouping, mentoring, the use of technology and the nature of the content, emerged as the project proceeded, and this resulted in the project not meeting its hoped-for outcomes. While this was disappointing for the teachers given the initial enthusiasm for what looked a very promising project, there was still much that was learned about boys and student engagement.

Perhaps the most important research lesson was that when pedagogical frameworks are taken up as ways of changing classrooms for improved student outcomes, we can’t always assume that students will respond in hoped-for ways. As discussed in the opening section of this report, frameworks are not “outcomes guarantees”. Rather, they are professional and collegial starting points, offering tangible ways for teachers to consider local solutions for the issues in their own community, teaching and learning contexts.

This section has recounted that at the commencement of the project, the schools and teachers participated in professional learning days that encouraged them to think about the specific needs of the boys in their schools and to make informed pedagogical changes. Throughout the project they were encouraged and supported in sustaining their projects, analysing their successes and rethinking their plans and strategies.

Common across all the schools and regions was a concluding desire, and request, for continuing the high level of collegiality, support and professional growth afforded through the project. Further details of the particular pedagogical changes implemented through the individual projects, and their varying impacts, are provided in the following section.

3.2 Classroom pedagogy and ‘e’ngagement

3.2.1 Student voice and control encouraging self-regulatory and autonomous learners

This issue was very strong in the projects in New England. In fact, the regional consultant saw it as the aspect that made the most difference to teachers on the projects. At Farrer, boys were given choices and a “voice” about the physical layout of the classroom, which helped define their ownership of a teaching space. They had responsibilities and choices were seen to have consequences.

The ways in which they chose to present project material around the room was itself seen as beneficial to their engagement. Interestingly, the project acted as a catalyst to focus professional dialogue among some of the teachers about disengaged boys. Such a seemingly small change as provision of a homeroom was seen by the project consultant in the region as
driving something as complex as pedagogical change. She talked enthusiastically of teachers empowering students to engage in high-level thinking, (“What are the ways in which this problem could be solved?” “How would you think about the solution to this?”) simply as a result of their feeling comfortable in their own space. She saw the project at Farrer as “a particularly heartening example of where kids started to see that they were valued again”.

The project teachers at Farrer also reported that self-esteem was boosted, as evidenced by the boys’ writing in learning journals kept for the duration of the project.

In the Jennings—Tenterfield project discussed further below, focus on control and voice manifested in the first decision to have the boys’ view of mathematics - and what they believed would engage them in mathematics - drive what was to happen in the unit. In fact, the teachers responded in their questionnaire to this aspect of pedagogy as a “strong focus” or “major feature” of the project.

The project targeted three features of the boys’ schooling experience - transition to high school, poor behaviour in mathematics and low self-esteem- and it was felt that student voice was a central ingredient in addressing these issues. The boys responded well to being given this voice in the beginning, but also throughout the unit. After each session, they discussed what they had just done and learnt and what could be done in the next session in order to advance that learning.

The students were self-regulated, self-directed and involved because they were engaged in the kinds of hands-on activities they had asked for. Similarly, the project at Glen Innes High School, described in detail in Section 3.1.3 of this report, commenced with a survey of the students’ feelings and views about their own transitions from primary to secondary school - acknowledging the importance of their voices at the outset. Throughout the project, the boys shared control of the literacy-learning task, making group and individual decisions about the topics, content and designs of their e-books.

In the Riverina, at Griffith East PS, acknowledgement of student voice and control was apparent. Through the use of the Real Framework (Munns & Woodward, 2006), students were able to provide feedback to their teachers about their learning and the project they were undertaking. One example was the kite task undertaken by students as a homework project, to introduce them to being autonomous learners and making decisions. At home they were to investigate how to make a kite and bring in the necessary materials to make it in class.

The two teachers set aside a day in order for students to be able to construct, test and write up their work. Students had control over their design, the timing of the construction and testing. Students were encouraged to discuss the reasons for a design’s success or failure and there were no ‘delays’ or interruptions to the learning process. One of the teachers commented, “The best design was simply brown paper and wood and it was the boy with Asperger’s Syndrome. The other boys looked at him differently after that”.

Another example from Griffith East PS was the design and construction of an eco-system by small groups of boys. The boys made decisions about plants, containers (such as a fish tank), the location in classroom, maintenance and recording of observations. Not all boys could cope with the sharing of responsibility or the ‘failure’ of their habitat, perceiving that the material outcome of the project was more important than the learning about why things had occurred or not worked. For others it provided the opportunity to learn without the fear of failure, as they had the responsibility of working together, sharing their ideas and working at their own pace. This was further achieved by placing boys with special needs into two small groups who worked together under the supervision of the Support Teacher Learning Assistance STLA. For these students, the experience was particularly positive.

The boys in these groups would not usually be asked to share their work, but once the teacher
gave them an opportunity, she realised what a difference it made: “They were able to remain focused even when working back with the rest of us, without STLA support, because they had a purpose. They knew what they wanted to achieve and were proud of their ideas. They really took ownership of their whole project. They were always thrilled when things worked out, especially their computer work and their Photostory®. Even though they did not always agree with each other, they overcame these problems without too many arguments. This was a big achievement for all of them. At the end, they were able to stand up and report about their project in front of everyone without fear of judgment.”

3.2.2 Focus on quality teaching and productive pedagogical relationships

The project at Griffith High School drew on the first initial five ‘e’ strategies outlined in section 1.5 of this report. However, it best exemplifies the significance of the development of productive relationships with students. Research has shown that a productive teacher-student relationship is particularly important for boys, and becomes even more critical for boys from poor, minority and marginalised backgrounds.

The Year 10 Geography class with 17 disengaged boys provided a number of real challenges to the school and its teacher. Under these circumstances compliance and control often seem the only options. The project gave the teacher an opportunity and the sanction to make a difference for these boys within his own classroom. The content at the time of the investigation was Australia in its Regional and Global Contexts (Stage 5).

Faced with indifference and/or resistance from the class to the content area, but wanting the students to take ownership of the unit and to explore the characteristics of real countries, the teacher devised a simulation. In his own words he “wanted to open up their thought lines”, provide them with “a mental game of football”. He began by drawing a rough diagram of an imaginary set of neighbouring countries and then allocated different countries to the boys in the class and told them to rule the countries as they wanted.

At the same time he re-arranged the classroom furniture so that all the boys could sit around a large table. The idea was the classroom was to operate as a forum. With the students in “control” of their own country they proceeded to try to dominate through warfare. The simulation soon began to show them that continually waging war might not be the solution to dominating the continent. The teacher constantly threw in historical facts to explain how different strategies had previously failed. Intriguingly, the students drew on their own individual and family circumstances to understand wider issues of oppression and marginalisation.

On one occasion one of the more dominant students decided he would give up his country and settle on one of the islands as a political refugee. The idea that one of the dominant members of the class had been “defeated” caused a great amount of engagement within the classroom. Team building and ownership began to replace arguments and bullying.

The boys talked to each other about the content and there was a “constant chatter in the classroom”. They surprised the teacher with their ability. As he commented, “they just work in this class”. This outline of the unit does not fully capture the dynamics, processes and discourses in operation in the classroom. It does, however, give some valuable pointers to the way classroom practices influence student engagement. In this classroom during this project, engaging messages were emerging in terms of:

- Knowledge (they were involved in and felt ownership over the content)
- Ability (they were achieving success and demonstrating that success to their teacher)
- Control (the classroom became less of a struggle between students and between students and their teacher)
- Place (they began to value each other as learners and individuals)
• Voice (they had a say in how the classroom operated).

It is difficult given the short time frame of this investigation to suggest that there might have been long-term changes to the school and classroom relationships of these boys. Indeed, there didn’t seem to be a strong carry-over to their other classroom work and their responses to other teachers. Nevertheless, it does point out that when classrooms change, there are opportunities for students to find more rewarding and engaging pedagogical spaces.

As a result of the research, the teacher was able to draw the following conclusions about strategies that would work to engage this particular group:

• The use of ICTs allows the students to engage with the content
• Students can produce quality work if the task is constantly explained and scaffolded. On the other hand there are problems when students feel lost – they require continual support and instruction
• Students work well when they have a sense of ownership over the content or the task – they resent being told but can be “steered” in the right direction
• Active learning works best for these students – they would rather be doing than listening and watching
• Language is critical. They work better when the language is informal and has lots of stories and examples.

These strategies are quite consistent with the ‘e’ strategies listed in the opening section of this report.

The projects in general seemed to supply genuine encouragement, permission and a rationale for re-thinking pedagogy. Teachers engaged in more practices such as: giving more choice; doing more group work and engaging in more hands-on activities. Sometimes a project like this needs to be in existence to give teachers who may be inclined to do so anyway, an opportunity to try different approaches to pedagogy. Similarly, teachers reported that the project gave encouragement, permission and a rationale to their noting aspects of their boys’ engagement more closely, such as how boys functioned in groups.

Further, individual projects were engaged with each of the high cognitive, affective and operational aspects of the MeE framework. Teachers were thinking about pedagogy in each of these areas as significantly affecting ‘e’ngagement. In New England, the regional consultant commented that, “People were noticing how their boys and girls were learning more often. They were actually having professional discussions with me and with each other about how the particular students were reacting and how they changed over time”.

3.2.3 Projects and problem-based learning

The unit The case of the mystery bone at Jennings/Tenterfield was adapted from a publication by the Mathematical Association of NSW (Clarke, 1996). It is a simulation that involves students playing the role of a forensic scientist and reading about the discovery of a mystery radius bone of a specific length. They then have to determine from experiments with classmates a ratio between the length of the radius and height.

These experiments are repeated after the “discovery” of a tibia. Students then use a table from a “real” forensic scientist to compare their measurements, discuss whether the bones belong to the same person and consider the consequences of minor errors of measurement. Students repeat the experiments with classmates using the femur and then predict which bone measurement gives the most accurate prediction of height. They then construct tables for predicting height and test these on family members. Using tables, students are next asked to predict the heights of other given people and to develop ratios of the predictive validity between different bones. Students are also required to evaluate evidence from known results
and to hypothesise about why some evidence has greater predictive validity than other evidence.

Students are asked to find patterns relating different body measurements: height, circumferences of head, neck and wrist, head height, distances from shoulder to waist and waist to floor. In addition, ratios such as arm span to height are calculated. Students also learn ways of calculating the surface area of their body, the use of this information in medicine and the use of a hospital nomogram for calculating surface area.

More information on the mystery bones then arrives and students must determine whether newspaper reports accurately predict the ownership of the bones. An extra factor introduced into the mystery is that the dead person is believed to have been burnt – information for which surface area becomes important.

From this, students make predictions about the chances of survival of burns victims of various ages. Finally, given three possible “suspects”, students are asked to predict to whom the bone is most likely to belong. The planning sequence for the unit is contained in Table 3.2, *The case of the mystery bone* unit plan.

Students in the project responded very well. The topic was engaging and their being at the centre of decisions was central to their engagement. They saw the unit as relevant and fun and became strongly involved in mathematics. Apart from the problem-based, hands-on approach, the use of ICT and a mix of independent and pair tasks were also key to the boys’ involvement.
<table>
<thead>
<tr>
<th>Phase</th>
<th>What (outcome)</th>
<th>How (action sequence)</th>
<th>When</th>
<th>Who</th>
<th>Completion Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1 Identify</td>
<td>Transition issues between P.S. and H.S.</td>
<td>Students in Yrs 5/6 and Years 7/8 are selected to participate using Best Practice Survey on mathematics. Generally all Year 5 and 6 students involved due to nature of small schools. 5/6 students also selected using Counting On testing.</td>
<td>End of Term 1.</td>
<td>JH Primary Teacher/Principal. SW-High School mathematics Teacher</td>
<td>Tests and surveys completed and High School students identified. Teachers organised a planning day ready to implement program in Term 2.</td>
</tr>
<tr>
<td>Phase 2 Plan and Develop</td>
<td>Relevance and interest in mathematics promoted. Smoother transition between P.S. and H.S. Permanent partnerships developed between P.S. and H.S.</td>
<td>Develop teaching program based on <em>The Case of the mystery bone</em>. Graph pre-survey results. Interview &amp; tape students and gain their opinion of Maths, teachers, learning and the relevance of each.</td>
<td>Pre-program and post-program.</td>
<td>SW-H/S. JH-P/S.</td>
<td>Relevant program designed. Teacher/student rapport and trust established.</td>
</tr>
<tr>
<td>Phase 3 Implement</td>
<td>Contextualised knowledge. High expectations. Student ownership. Environment of mutual trust and respect developed.</td>
<td>Weekly lessons at the H/S. Constant DVD and still photography used as a recording tool to capture student engagement, collaboration, shared voice and ownership over learning.</td>
<td>Once a week at THS. 1-hour lessons. 5/6 visiting H/S.</td>
<td>Students JH SW KC-Learning Tutor for P/S.</td>
<td>Student work samples DVD evidence Students actively involved Students actively integrating and interacting with others.</td>
</tr>
<tr>
<td>Phase 4 Evaluation</td>
<td>Student interest growth Students engaged in learning. Students seeing relevance in mathematics Students engaged Increase student/teacher respect and rapport</td>
<td>Re-survey students. Re-interview and ask how their perception of Maths has changed, what was good about this unit and the teaching. Can students now see the relevance of mathematics?</td>
<td>End of program</td>
<td>Teachers and students</td>
<td>Student engagement and interest increase. H/S and P/S partnerships firmly established.</td>
</tr>
<tr>
<td>Phase 5 Reflect</td>
<td>Continual partnership between H/S and P/S in future Smoother transition for P/S students.</td>
<td>Gather data and evidence of program improvement. Graph evidence. Show DVD/photos to H/S and P/S staff and students.</td>
<td>Last lesson or combined/individual staff meetings.</td>
<td>Teachers and students.</td>
<td>Increased awareness between staff of student engagement, Quality Teaching and student/teacher partnerships.</td>
</tr>
</tbody>
</table>

Table 3.2: *The case of the mystery bone* unit plan
3.2.4 Collaborative learning communities

Collegiality between schools, between classes within schools and between schools and outside communities was noted in New England as a positive outcome. This was especially true of collegiality between schools, both in terms of planning and in the implementation of project-based units. Mingoola and Bonshaw schools worked together on planning and implementation, as did the Jennings and Tenterfield schools. In each case, there was a strong reason for doing so – addressing collaboration with peers for isolated schools or addressing transition to high school.

The projects in which Mingoola and Bonshaw sought to add to the role models available to the primary school boys and to engage a larger community with the school were regarded as “outstanding successes” – based on the level of engagement of the primary students and feedback from the high school boys used as mentors.

In fact, mentoring was a common way in which collaborative communities were built in the different projects. Mentoring is an ‘M’ strategy that has been used consistently and successfully by schools that have been successful in engaging boys (Munns et al., 2006). The ICT project developed by Wagga Wagga High School and South Wagga Public School used mentoring as one of its key methods.

The plan was for the primary and secondary students to work together in small groups to produce a short animation on a topic of their own choice and interest. Both groups of students attended a series of teacher-led workshops during which they developed knowledge of technologies associated with animation (PIVOT®), experimented with the use of these technologies and were involved in activities designed to promote team-building, problem-solving, reflection about learning and cooperative learning. This was a promising project that employed many of the successful strategies identified in the literature. Unfortunately, it became increasingly apparent that the composition of the groups from the respective primary and secondary schools was having a negative impact on the project.

The primary school had chosen boys who they felt needed a “boost”: they were not among those boys recognised as school leaders because of their academic and/or sporting achievements and potential. The secondary school chose boys who had behavioural needs and were achieving low academic outcomes. These were boys in danger of future disengagement. Both schools had very good reasons for their selection of boys for the project, and both groups of boys had much to gain from being involved. Given their already tenuous relationship with education and the school, the secondary boys seemed to have most to gain. But, as far as their self-concept as learners was concerned, they also had most to lose. On analysis, this was arguably the principal reason why the mentoring failed.

The secondary boys soon discovered that they had little to offer their primary school group members. In quite a few cases, the younger boys were much more technologically adept. Many of the secondary boys resorted to resistant behaviour in the workshops and this had the opposite to the intended outcome for both groups of boys. Under pressure, the project faltered and did not achieve anticipated outcomes. From a research point of view, however, there were some very important lessons that were learnt about mentoring.

The decision by the secondary school to select the potentially disengaged boys appeared to be sound. Research (Rhodes, 2008) has shown that involvement in a mentoring program can have positive effects for both mentors and those being mentored. With the benefit of hindsight, what arguably would have benefited these boys was an intensive program of skill development and co-operative learning strategies before they entered the
program. Teachers or older students in the school could have helped with this development and this process alone would quite likely have improved their view of themselves and their standing in the school. Then, when they entered their relationship with the primary-aged boys, they would have had important skills and attitudes to bring to the project.

Other schools in this program also fostered motivation by combining the skills and enthusiasms of boys at different ages. This was evident at Berinba, Yass and Boorowa. At the outset at Boorowa, the Year 9 students developed sporting activities that they could engage in with the Year 5 boys, such as *Frisbee soccer*. The students developed the rules and ran training sessions.

Through the process of establishing rapport by playing together, they began to mentor the younger boys. Guided by an Industrial Arts teacher, the mentoring became a building project (*Building billycarts*), which involved practical applications of mathematics and design and in which the older boys led safety instructions and set goals for each day (for example, working as a team member, being safe, looking after equipment, behaving well). Both groups of boys improved attendance.

Teachers identified a “big shift” for the Year 9 boys, one of whom reflected: “I believe we made good progress and were able to teach the (younger) boys some valuable skills in the woodwork room”. Additionally, there was a growth in confidence among the Year 5 boys. The Industrial Arts teacher said of the Year 9 boys, “I’ve never seen the boys work as well together and been as consistently on-task”. Another teacher explained, “A lot of the time we underestimate the boys. They were able to design a rewards system and a ballot for the billycarts. They’ve obviously taken on a lot of things we’ve told them in the past about being role models for younger students. They’ve internalised that and demonstrated they can now put it to use”.

Another added, “Some of our more reserved students have really taken leadership roles and stood up when the situation called for that”. From the Year 5 perspective, a teacher reported that reflections in weekly learning journals were often about what happened in the boys’ group.

Collectively, the teachers who worked on the project saw it as successful because the boys enjoyed it so much. They have not seen the level of engagement in the project continue into other classes in the school yet but have seen improved attendance. This may be a powerful realisation of the notion within the MeE Framework of the relationship between self-esteem, shared control and “school is for me”. But the teachers also shifted pedagogy:

> It’s [about] making things practical and putting them in the boys’ context, showing them how to do Maths and measuring in a practical context. I think I’ve constructed more tasks with a choice of individual or group work. In the literacy session I’ve run a lot of research, taking different themes and presenting research to the class. I’ve reflected on my own pedagogy and have changed tasks that I’m setting for the boys.

The Yass High School staff view the school community as working to foster the social and academic development of its students, in line with the school’s mission statement about excellence, relevance and participation. In terms of male role models, the staff members were very aware that there is one male who teaches in the neighbouring primary schools and very few men teach in their own school. They discussed the fact that they had tried to develop leadership in the boys by talking about it and by modelling it. In this project, they came to the realisation that boys need the opportunity to demonstrate
leadership. When that chance was offered, the boys took it to a high level.

The project at Berinba Public School involved encouraging disengaged Year 5-6 students to mentor Stage 1 students. As with projects at Yass High School, Berinba’s project involved students using a range of ICT programs to enhance learning. The project used Photostory®, software to produce mini-movies in buddy class groups over a period of two terms.

The students in each class (26 pairs) worked in the computer lab on mathematics and writing. Year 5-6 students chose their younger buddy according to the needs of the younger students and what they felt they could offer. The students were responsible for maintaining a self-reflection journal and were encouraged to negotiate group work problems before enlisting the support of the teachers.

The teachers noticed the older students loved watching the younger students learn. They engaged with them in playing maths games and writing stories. The effect on the self-esteem of the older students was noticeable, giving students whose disengagement had caused them to fall behind in their own work a chance to be successful.

Students who had been problematic in the playground were now seen as positive role models for younger children. A significant further benefit from this project, linking with other ICT initiatives in the school, was that teachers were encouraged to become familiar with, and use, a range of software with students. Another positive outcome was the shared planning between Stage 1 and Stage 3 teachers.

3.2.5 Access to sophisticated ICTs

A whole school concern about engagement levels, and accuracy and achievement in mathematics drove the initial design of the mathematics project for Stage 3 boys, and girls, at The Sir Henry Parkes Memorial Public School. One of the teachers wrote, “Our school… had consistently poor results in BST for most boys. To engage our boys… we decided to use more hands-on activities, technology, that is, interactive whiteboard, computers (Mathletics), and small group activities”. Drawing on several ‘e’ strategies in the MeE Framework and working closely with the regional consultant who had a strong ICT focus, the two Stage 3 teachers totally redesigned the way in which they taught mathematics for two sessions a week.

Four mathematics activity centres were organised, each with a focus on content from the Patterns and algebra strand and using the process of Working mathematically, each designed for small group, collaborative learning for approximately 10-12 minutes, and two of which employed ICT, namely the interactive whiteboard and bank of approximately 8 classroom computers. Groups rotated around each centre during the one-hour mathematics session. All centres involved active, varied tasks, high on affective and operative dimensions, but the pedagogical twist employed in the project was that the two ICT-based centres were those that operated independently of the teacher and the teacher’s aide.

Rather than having adults monitoring the ways in which the ICTs were used, the students were given technical instructions on how to use the technologies and were also given task criteria, then trusted and given control of their learning. Students stayed focused and engaged on their tasks, freeing the teacher to give personal time and explicit instruction as needed in one of the other two small groups.

Pre- and post-project student surveys, parent surveys and students’ reflective journals recorded remarkable changes in attitudes and confidence in mathematics amongst the Stage 3 boys. As one boy recorded in his reflective journal, “last year and before we
started the groups I didn’t realy (sic) understand Maths but now we do the groups I’m slowly getting more comfortable”; and another “… if I am stuck on a question I can get help (from others in the group) …”. Responding to probes from the Real Framework (Munns & Woodward, 2006), boys saw themselves improving in mathematics, identified specific areas of improvement, and consistently drew attention to using the ICTs, “… going on Mathletics, Smartboards, games and small groups … fun and learning at the same time”.

The teachers found that they were better able to focus on the planning, teaching, observing and assessing cycle within the small group structures, employing ‘M’ strategies where needed, and achieving positive outcomes for the boys and the girls. As one of the teachers noted throughout the data gathering, “I’m getting to know all my kids better, which is good for the boys … and the girls.” The teachers felt reinvigorated in their teaching and were looking to transfer ICT strategies into other Key Learning Areas.

They were particularly pleased when one of the supervising staff came into their room and asked “How do you get them all involved and on task?”, to which one of them responded, ‘The old way of doing maths, handing out lots of sheets, was boring for the students and me”.

This project at The Sir Henry Parkes Memorial Public School provides a good example of how sophisticated ICTs - as classroom tools with affective benefits - can be employed with cognitively engaging content, within a pedagogical environment that is active and varied and high on the operative dimensions, to give positive messages to students about: how knowledge is constructed, their abilities, their voice and their control of learning. The class teacher concluded:

Our boys have become more engaged in their learning and [during the project] took control of their learning, that is, became leaders of groups, timekeepers and recorders. Their concentration improved … They now look forward to maths each day … This has been an excellent project … which has helped me to rethink my own pedagogy and has resulted in improved results in the Patterns and algebra strand of maths that we were teaching.

In completing the unit The case of the mystery bone, students at Jennings and Tenterfield not only made use of rulers, tape measures and calculators, but also of mobile phones and computers. Dragon Naturally Speaking® voice recognition software was used for students with learning difficulties and computers were used in the classroom for recording and research, as were DVDs and still cameras for recording the project.

These teachers also used Inspiration® software not only for the students but as a way of keeping records on the project as research. Bonshaw and Mingoola were dependent on inter-school videoconferencing for collaborative planning of their project - and since the building day, a wiki® has been used for recording, sharing, viewing and reflecting. The regional consultant presented at an international conference in 2009 on innovation and equity in rural education, using Bonshaw and Mingoola as an example of using ICT as a way of overcoming isolation. She herself provided an amount of professional development on ICT across all projects and coordinated the use of a Moodle® site for centralised data collection in the Region.

Access to good ICT was a strong theme in the New England projects and was noted favourably by teachers in evaluating the projects, both in terms of their own learning and in terms of validating students’ skills.

At Yass High School, one teacher worked with Year 8 students on a media module,
creating relevance for the students by designing websites about themselves. The boys approached the task positively and all finished the project – quite an achievement for some. *Quality of School Life* surveys had shown that many did not feel that they were successful as students. However, in this project, the students were happy to engage. The teacher picked up on different learning styles between boys and girls.

The girls were attuned to learning the new skills in stages but the boys wanted to do the completed product at once, without consolidating skills. So the teacher developed a pedagogy that would balance formal direction and self-directed activity. She encouraged the boys to understand the connections between stages without stifling their willingness to explore.

During the year, the teacher at Yass taught this module three times, with different cohorts of Year 8 students, and grew herself in the process. She noticed that the students realised that the skills they were developing went beyond one classroom and impacted on other studies. The skills they learned in the media module were being applied to assignments in other subject areas.

Another teacher had many of the same students in Visual Arts. There, a mask-making unit was carefully scaffolded and required the students to complete a brief written record of their process on *Photostory®*. She badged this as “voicing their ideas” and was delighted with the students’ positive response, becoming completely engaged in the making and photographic recording of the process. The teacher interviewed the boys at the end of the unit and she was struck by their enjoyment of researching.

The teachers at Yass conducted vocabulary tests before and after each of their projects. The pre-project task showed limited ability to apply selected vocabulary, but this improved post-project and provided a measure of progress in student comprehension. Collectively, the teachers found that they had made greater use of group work while giving students opportunities to take some control in decisions. Whenever they saw the need, they modified tasks to suit student interest and scaffolded students’ learning so that new skills could be achieved.

In each project, they allowed students to use skills in which they were ‘expert’ and the boys became more engaged, as measured by the quality of work produced and by their own statements about their achievements.

### 3.2.6 Contextualise literacy learning

Several projects set out to contextualise literacy learning. This occurred at Mulwaree High School, Yass, Berinba and Boorowa. The project at Mulwaree High School involved visiting and writing about community sites. The boys demonstrated interest in the community sites and there was a positive “feel” in the home room after each of the excursions. There are important messages here about changing pedagogy.

The interest displayed by students in community visits could be extended into the classroom. Boorowa also contextualised literacy learning in writing journals about the billycart construction and in writing a letter to the local council seeking permission to access the local tip for parts. Berinba and Yass also involved students in writing tasks that related to the actions of the students.

A key project centred on literacy was that at Glen Innes Public School. The design and implementation of the Stage 3 Boys Literacy Group at this school drew on a number of the strategies in the ‘e’ component of the *MeE Framework*.

Thirty three boys were brought together for an hour each day in a large classroom space, with flexible working areas that allowed them to have control over their working space,
and were provided with routines and pedagogies that: focussed on developing self-organisation, self discipline, confidence and risk taking; promoted positive relationships amongst the boys and the male teacher; developed collaborative working skills; and, most importantly, built the boys’ confidence and skills in literacy.

Whilst overtly tagged as just one of the Stage 3 groups, “no more special than any other group”, the boys were indeed deliberately selected such that there were no “dominant” males. In this group, boys were to be encouraged to take risks and feel success with literacy, without fear of pressure or ridicule from more successful, dominant and confident, male students.

Content and resources for this group were carefully chosen to be of high interest and meaningful for boys. Texts profiling positive male characters, or with plots, plot twists and humour that particularly appeal to boys, were read and shared. Learning tasks incorporated male interest themes, were often problem-based and interactive, and always short and varied - keeping the boys affectively, cognitively and operatively involved in highly contextualised literacy sessions.

In a typical morning literacy session, one could see boys:

- Linking adjectives and nouns to a picture of a motorbike, or HMAS Sydney, and being told “there are no right or wrong answers here, gentlemen … work by yourself on this one, go find yourself a space …”
- Finding those spaces then sharing their successes with the task before placing their completed worksheets in specially marked literacy folders
- Working as a class group to practice reverse thinking, silently reading individually chosen texts, and finally coming together as a group to listen and share in solving a detective story that would be featured later in an ICT-based writing activity.

Throughout, the male teacher acted as teacher, role model and mentor. Aware of the importance of the mentor role, the teacher later in the project arranged for a visit by an Under 20s National Rugby League player to talk with the boys about resilience, getting along with others, persistence with tasks and staying on at school. The visit provided a common experience and something to talk about in the Boys Literacy Group, an incentive for writing, and aspirations for the boys.

The duration of the Boys Literacy Group was just one year but notable improvements in the boys’ literacy and social development encouraged the school to continue with the strategy in 2009. NAPLAN results for 2008 recorded stronger reading growth amongst the boys than amongst the girls.

Parents spontaneously reported changes in the attitudes of their sons towards reading, and teachers noted more settled behaviour both in the playground and when the Stage 3 students returned to their home classrooms creating positive outcomes for both the boys and the girls. In preparing for the continuation of the strategy in 2009, the school is well aware that the establishment of the Boys Literacy Group alone will not continue to bring about these sorts of results. Rather, this project had brought the boys together with an experienced, skilled teacher, who was passionate about adapting and contextualising his content and pedagogy to meet the interests and needs of the boys, planning high cognitive, high affective and high operative experiences, and modelling for, and mentoring, the boys in a classroom space that provided flexibility and structure, group work and individual assistance, and positive messages about knowledge, ability, control, place and voice. Feedback from a parent in a letter showed the impact of this initiative.
The letter spoke of how there was previously a “negative approach” because the work was difficult and caused him to “switch off”, now literacy had become “his favourite subject”. The effect was that the son now willingly sought books to read and talked about his learning at home. In conclusion the parent praised the teacher for “an excellent effort in putting together a great program to make literacy a fun learning experience for boys” Effectively contextualising the literacy learning required an intricate blending of ‘M’ and ‘e’ strategies from the framework outlined in Section 1.
Section 4
Issues, challenges and implications

The summaries of research projects in Section 2 and the discussion of research themes in Section 3 together have presented a picture of the kinds of school and classroom changes that the participating teachers initiated with the hope of improving boys’ engagement with education. This section will highlight some of the issues identified within and across the projects and some future challenges for educators considering what sorts of classrooms will really work for boys and girls. Firstly, the research is framed within the Boys’ and Girls’ Education Strategy (2008).

4.1 Relationship of the Engaging Middle Years Boys in Rural Educational Settings project to the Boys’ and Girls’ Education Strategy

The Boys’ and Girls’ Education Strategy was released by the NSW Department of Education and Training in 2008 to assist NSW government schools to address gender as an educational issue. The Strategy’s purpose is to ensure that no student’s participation, performance or achievement is adversely affected on the basis of gender or limiting expectations about gender roles.

The Boys’ and Girls’ Education Strategy comprises six Objectives, drawn from Australian and international research, which provide strategic directions for schools in relation to gender education. It is intended that these Objectives are to be achieved by schools within three inter-related areas of action: Teaching and Learning; Social Support and Home, School and Community Partnerships.

In developing the Engaging Middle Years Boys in Rural Educational Settings project, every attempt was made to ensure a high level of congruence with the approaches to boys’ education encapsulated in the Strategy’s six Objectives:

Objective 1* Boys and girls are assisted to achieve their potential for full participation in further education, training, work, family and civic life. The project was founded on the belief that every boy had the potential to participate fully both at school and in the ‘outside’ world. In supporting school communities to improve their male students’ engagement with schooling, the project identified the need to reject deficit views in relation to the education of boys, and to focus on gains that could be achieved through the provision of high quality pedagogies.

The project advocated the need for teachers to promote a ‘can do’ approach in relation to boys, and to encourage a positive sense of self if male learners were to remain engaged with learning and to exercise their learning potential.

Objective 2 Teachers, students and parents examine and understand the impact of gender in their school context on boys’ and girls’ decision-making, participation and achievement. One of the key messages underpinning the project’s professional learning program for teachers was the importance of challenging limiting notions about gender. Often boys in rural communities have less exposure to diverse models of masculinity than boys in metropolitan areas due to the smaller size of rural populations. Boys’ perceptions about what constitutes ‘appropriate’ masculine behaviour in relation to their academic and social behaviours may be constrained as
In developing their projects, teachers were encouraged to actively challenge limiting notions about masculinity within their school communities and to provide boys with learning experiences which expanded their understandings about what boys could do in relation to their academic and social practices.

Objective 3 Resources and support are targeted to boys and girls identified as being at risk of achieving NSW syllabus outcomes or of disengaging from school. The project sought to investigate effective teacher practice in boys’ education in rural schools in response to research and data which suggested that boys in rural communities could be more vulnerable with regard to their engagement with schooling than boys in metropolitan areas. Several schools in the project were recipients of Country Areas Program funding due to their geographic isolation.

A number of schools received Priority Schools Programs funding due to many of their students deriving from low socio-economic status backgrounds. Several schools had significant student populations that were either Aboriginal or from Language Backgrounds Other than English (LBOTE). The project sought to investigate how improved teacher practice could mitigate the effects of rural isolation and other, intersecting equity issues upon boys’ engagement with schooling.

Objective 4 Teaching strategies address the diverse learning needs of individual boys and girls. One of the key messages conveyed to teachers during the project’s professional learning planning conference was that successful interventions in boys’ education were premised on the belief that boys are not a homogenous group and that successful interventions recognised, and indeed explicitly catered for, the different learning needs of individual male students.

The need for teachers to actively transcend a ‘one size fits all’ approach in the teaching of boys was identified as a critical element to the school projects achieving successful outcomes. The importance of teachers reflecting upon the learning needs of their individual students and considering the implications of a wide range of qualitative and quantitative data was identified as a critical part of the project planning process.

Objective 5 Respectful relationships among and between boys and girls are promoted through the curriculum and civic life of the school, and procedures are in place to address sex-based discrimination and harassment, including homophobia. The establishment of respectful relationships with boys founded on democratic principles and of learning environments in which boys were positioned as active learners with a voice in the classroom were key strategies identified to teachers during the project’s professional learning program.

In the ensuing school based projects, a number of teachers sought to provide boys with greater agency in the classroom – often through the sophisticated use of ICTs – and to provide boys with authentic situations in which to demonstrate the behaviours underpinning respectful relationships e.g. through a range of peer ‘buddy’ (mentoring) programs.
Objective 6 Partnerships between homes, school and communities are strengthened to support improved learning and social outcomes for boys and girls. The project demonstrated the significant gains for improving boys’ engagement with schooling that can be realised by schools working in collaboration with parents and community members.

A number of projects involved schools drawing upon the skills and talents of parents and adults within the community to enhance boys’ connection to schooling. The capacity for mentoring by older adult males as a powerful tool to provide social support to boys and to enable their connection to schooling was highlighted by projects such as the Griffith’s Men’s Shed at Griffith Public School and Boys’ Bikes at Bega High School.

* Note – Objectives are numbered for the purposes for discussion here only and are not numbered in the actual Strategy.

4.2 Results

The success of these changes has to be read with a degree of caution. From the outset the project teams were working from an understanding that confidently measuring improvement in social and academic outcomes from such a short-term project would be difficult. In most cases the changes took place over one or two school terms. Indeed, the project was initiated on the premise that this was a set of first steps through which teachers would collaborate and reflect on the impact of their pedagogies on the school and classroom relationships that boys were constructing. However, perhaps one of the important strengths of an action research model like this is in the professional learning for the teachers.

As discussed in the previous section, the “teachers-as-researchers” processes can open up important opportunities for theoretically informed considerations about what happens in classrooms. This was the case in the research. Across all of the three regions quality projects were planned and implemented and this underlined the valuable professional work of the teachers.

Drawing on the theory of the MeE Framework and using strategies that had been shown to be successful in other schools, the teachers were able to establish clear directions for projects they hoped would work within each schooling context. They were able to use data to analyse their own needs and seriously consider the relationships that their own boys were having with education, the school and the classroom.

Importantly, being involved in the research afforded teachers genuine encouragement, permission and a rationale for re-thinking pedagogy. Collegial and consultancy support further strengthened this process.

Beyond the positive professional learning experiences of the teachers, there were some encouraging student outcomes noted across the reports. As mentioned above, these are put forward tentatively and there would need to be longer interventions and more longitudinal research before more definitive outcomes could be claimed. Nonetheless, a number of clear trends emerged across the projects. Gains in social outcomes were shown in improved attendance and better classroom behaviour. In some cases behaviour outside the classroom improved.

Improvements in academic outcomes tended to be predictive rather than realised. There were reports of increased engagement as shown through greater and extended interest in learning. Given the established correlation between heightened student engagement and enhanced academic outcomes these trends suggest a continued focus on ‘e’ engaging
strategies would be worthwhile.

Not all projects worked as planned. There were modifications, improvements, failures and abandonments. From a research point of view these less-than-successful initiatives offered important further understandings about the issues and challenges when teachers’ pedagogies become the sites for the reconstruction of students’ engagement with schooling.

4.3 Single-sex classes

A number of schools wanted to trial separate classes for boys and girls (see Glen Innes Public School and Griffith Public School). Others decided to form groups of boys-only for specific projects and times (see Glen Innes Public School). The research literature shows that the jury is very much “still out” on whether there is a clear outcomes advantage for students in single-sex classes and groups (see Munns et al., 2006).

What is clear in previous research, and a critical point arising from the current study, is that it is not so much the male or female composition of the class that is important, but rather the decisions made about the nature of teaching and learning within the classroom. Pedagogies that work for engagement are central and this applies to both boys’ and girls’ classes.

Forming a boys only class might be seen as an opportunity for a stronger focus on evaluating the impact on ‘e’ engaging strategies. However, questions need to be asked about whether such an impact is positively or negatively affected by the all-male learning environment. Similarly, there are important questions to be considered about all-girls’ classes.

When boys are dominating classrooms physically, emotionally and pedagogically it is often tempting to think that removing the boys might provide a teaching and learning sanctuary for the girls. There are dangers that unless there is serious thought about what might happen in such a class that will benefit the girls socially and academically, the learning environment might reinforce stereotypical behaviours that heighten gender influenced inequalities (for example, compliant and passive learning).

4.4 Benefits for girls and boys

Perhaps as an answer to the previous issue, this project has shown (again consistent with the research literature) that when teachers reconstruct their classrooms to improve boys’ engagement, then there are benefits for girls as well as boys. There are a couple of ways that this appears to happen.

First, the ‘e’ engagement strategies listed in Section 1 with the focus on active, reflective, autonomous learners within a quality learning environment are arguably attractive and beneficial to girls as well. Put simply, most students in the end are more likely to be engaged in classrooms where there is activity, energy and self-regulation and where they have a sense of voice and control.

Second, when the pedagogical spaces are opened up in the ways described in this project in classrooms previously dominated by boys, then it is quite possible that girls are also given greater opportunities to focus on their own learning. A future research challenge is to work on the kinds of inclusive classrooms that will equally engage both boys and girls and produce equitable academic outcomes.

4.5 Stereotyping of boys’ and girls’ activities

This is a continuing issue for those contemplating what will interest and engage boys and
girls. It is a complex issue that is not easily solved by simply rejecting the stereotypes of boys’ and girls’ interests. Real dilemmas are presented for teachers as they attempt to develop learning experiences and resources that offer high affective dimensions that are critical for student engagement, but which do not reinforce gender stereotypes.

There is a further complexity in some rural communities in which traditional industries rely heavily on gendered workforces and there are widespread expectations that schools will continue to supply workers for these industries. Challenging what boys and girls are expected to do in school and into future training and employment may well cause conflict within families and communities.

4.6 Motivation or engagement

The project asked schools to make decisions about the kinds of strategies they would develop and implement. While the intended focus was on whole classroom pedagogical changes aiming at ‘e’ engagement, a number of schools decided their starting point should be in supporting individuals and groups identified by their special needs. Withdrawal projects, mentoring, special rooms and self-development programs tend to fall into the ‘M’ component of the MeE Framework. This is not necessarily a problem.

The framework has been developed to help educators decide on the most contextually relevant starting points. But to re-emphasise a point already made several times in this report the belief on which this project was founded is that without classrooms that are consciously designed to engage students, then true big ‘E’ engagement is much more difficult to develop and sustain. We are constantly reminded that teachers’ work is what really makes the difference for students’ compliant and passive learning.

4.7 Change takes time, effort and persistence

While the pedagogical changes that the teachers were encouraged to implement and evaluate were framed around a set of strategies that had been shown to work in a variety of contexts, they were not meant to be easy and instant solutions. That is, the list of ‘e’ngagement strategies introduced to the teachers was not a menu-driven set of “silver bullets”.

Perhaps one of the most important research lessons from the project was that when pedagogical frameworks are taken up as ways of changing classrooms for improved student outcomes we can’t always assume that students will respond in hoped-for ways.

As discussed in the opening section of this report, frameworks are not “outcomes guarantees”. Rather, they are professional starting points, offering tangible ways for teachers to consider local solutions from within the issues and responses of their own community and the local teaching and learning context. This issue is complex. This project reinforced the idea that reconstructing the ways classrooms operate is hardly ever a straightforward process.

For teachers it might mean abandoning years of practice. It is also often met with overt and covert student resistance, especially when they are being offered greater responsibility for their own learning. One of the real challenges for teachers is to modify, persevere and critically evaluate their processes in the face of professional difficulties. Here it is useful again to be reminded that with persistence by teachers they can overcome initial resistance and lead students to see that higher level, authentic and self-regulated learning are they key drivers of their own engagement at ‘M’, ‘e’ and ‘E’ levels.
References


