2009 Sabbatical Term 3 Summary Report – Philip Mahoney, St Patrick’s College Silverstream.

International Boy’s Schools Coalition Conference. At the beginning of the Sabbatical I attended the above conference hosted by Lindisfarne College, Hastings NZ in July. Conference delegates came from Boys Schools in New Zealand, Australia, South Africa, USA, Canada and the UK. Delegates numbered about 320. Keynote speakers included (from New Zealand), Nigel Latta and Celia Lashlie, Steve Biddulph (Australia) and Richard Hawley (USA). There were many workshops available covering a wide range of interests. Reports on Action Research projects undertaken under the auspices of the Coalition were presented. These included a large study on Effective Classroom Practice for Boys and a smaller study on Changing Perceptions of Masculinity.

My study focus was a Literature Review of Issues in Boys’ Achievement between 2000 and 2009.

I reviewed reports and studies from Australia, the UK, USA and New Zealand. These are listed in the Bibliography. In the Appendix I have included an edited version of each of reports or studies listed in the Bibliography. I have edited out the scope, method and conclusions and combined them into a summary. The text is taken directly from the reports and studies themselves. I am currently using these summaries as professional reading for members of my staff who are engaged in a professional learning group looking at Boy’s Achievement. I would be willing to make the summaries and original articles available to anyone who wanted them.

Key Findings

There is an unresolved debate around Boys Achievement. One side of the debate highlights the fact that boys are disproportionately represented in the wrong end of social statistics compared to girls. These include failure to complete schooling, lower levels of qualifications, higher suicide rates, higher suspension rates, more behavioural and learning difficulties, lower literacy rates, lower enrolments in tertiary courses etc. This side of the debate is divided over whether, over the last 3 decades boys have got worse than their predecessors, or they have remained the same and girls are simply achieving better than before and leaving boys behind. Either way, this side claims that boys are in crisis and urgent action must be taken to help boys begin to succeed. The Australian Federal Government spent millions of dollars funding Boys Education Lighthouse Programmes between 2002 and 2006 to address the issue. In Australia, authors such as Steve Biddulph and Ian Lillico have written extensively about boy’s needs, and the Family Action Centre at the University of Newcastle NSW has run a series of bi-annual conferences focused on issues involving boys and their growth to manhood. In the UK, USA and here in NZ, Government education agencies have attempted to document best practice to help
raise boys’ achievement. The feminisation of the curriculum and less emphasis on practical skills are seen as factors mitigating against boys in the last two decades.

The other side of the debate disputes that there is a significant gender issue. They claim that many boys are succeeding and achieving, as they always have. The issue is not about boys as such, but some boys who underachieve as do some girls. The documented differences between boys and girls in many studies in various countries fail to show significantly large differences in most areas with the exception of writing. What is much more significant is the differences within genders and between different ethnic groups and different decile schools. In New Zealand the underachievement of both Maori boys and girls is much more significant than the differences between all boys and girls. Some on this side would say the so-called boy crisis is a reaction against the improved achievement of girls resulting from the feminist movement of the 80’s. If boys are in crisis then why are women still under-paid in comparison to men, and under-represented in the top echelon of the most highly paid?

As the first decade of the 21st century comes to a close, interest in the debate seems to be waning, with the focus moving on to what constitutes effective teaching and learning for both boys and girls. Much of the research and study into boy’s achievement in the decade 2000 to 2009 has confirmed that certain conditions and approaches are more effective with most boys. Some of these approaches work well also for girls, but seem to be more important for boys to achieve well.

From my review of the literature, and my own personal reflection on 25 years teaching in boys’ schools I would group these “boy friendly” conditions under three broad headings. For me, they are the three “R”s of success in teaching boys – Relationships, Relevance and Rituals.

**Relationships**

For boys in particular, and for most boys, a personal relationship with the teacher is a prerequisite for learning from that teacher. It has been said that boys learn teachers before they learn subjects. Boys like to know things about their teachers and like their teachers to know things about them. Boys will learn because of their teacher, whereas girls will learn despite their teacher. Boys enjoy teachers who display a sense of humour and can laugh at themselves and with rather than at their students. Boys will try to achieve in a subject they find difficult for a teacher who shows a personal interest in their progress. Teachers who engage with their students outside of the classroom in cultural and sporting activities earn respect from their students and also get to know their students better. It is important for a boy that he feels the teacher knows more about him than just that he is in their class. Comments and questions about his life outside of class promote greater engagement and interest within class. Teachers who are willing to share their own life experiences through stories and examples are seen as more human and less remote, despite
age and generational differences. Research shows that the gender of the teacher is not the determining factor for success in teaching boys. Rather it is the ability of the teacher to build personal relationships with each student that is a prerequisite to engage boys.

Relevance

Arguably the most important key to motivate boys to learn is when they can see the relevance of what they are learning and doing. The quickest way boys lose interest is when they cannot see any relevance in what they are learning or doing. The question that seems to be constantly in the front of boys’ minds is “Why do we need to learn this?” They will often accept seemingly facile answers such as “You are going to be tested on this”, and get on with their learning. However, boys respond with enthusiasm and high levels of engagement once they see the relevance of what they are doing to achieving goals they desire. Games and competition can be used successfully with boys to increase the relevance of the learning. Concrete examples and immediate applications of learning increase its relevance and motivate boys. If boys view what they are being asked to learn as irrelevant, they quickly lose concentration and their behaviour rapidly becomes off-task.

Rituals

Boys only schools make much of rituals and traditions. Boys in such schools learn and are inducted into these rituals and traditions upon entry. In New Zealand, these include hakas and school songs, crests and mottos, uniform modifications such as different ties, blazer pockets and caps to recognise achievement in different areas, sporting exchanges in which schools have competed over many years, trophies and awards, Anzac Day ceremonies that recall deceased Old Boys, banners and house competitions, historical photos, links with successful Old Boys and so on. To the outsider, many of these aspects of school life may seem trivial in comparison to the importance of academic success. However, for most boys they have an important symbolic value contributing to the intangible spirit of the school. Boys strive to emulate the success of those who precede them, and wait for their turn to assume key roles in leading these rituals. As time moves on and the interests of each generation changes, some rituals may disappear. A successful boys’ school will continue to look for new rituals in which boys can participate and create its particular identity.
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G U I D I N G P R I N C I P L E S
for success in educating boys

Stage One of the programme resulted in a wide range of activity to advance the educational achievement of boys. What is clear from this stage of the programme is that school-based initiatives can be enhanced by:

- developing an even stronger relationship between local school or cluster activities and the research evidence of what works;
- creating more coherent programmes of activity to improve the education of boys by linking the various categories of school-based activity outlined in this report; and
- focusing on professional development for teachers as a priority to enable them to confidently expand the range of teaching and learning experiences in their classrooms.

A common set of guiding principles has been identified from good educational practice which has emerged from this programme and key research in the area of boys’ education. The following set comprises 10 interrelated core propositions which ought inform the development and implementation of ongoing programmes to improve the education of boys in schools.

1 Collect evidence and undertake ongoing inquiry on the issue, recognising that schools can do something about it.

Boys’ education is an issue of concern within schools in Australia as evidenced by a significant body of research and the experience of the 110 project schools and clusters. It also is an issue that schools can do something to address. This requires the school to gather and analyse its own student achievement and other data (eg attendance, behaviour incidents, student opinion survey data) on a gender basis and identify the needs of specific boys and students ‘at risk’. Such inquiry should involve sustained data collection, reflection and evaluation at the local level, informed by research in this area. The school then can develop, implement and continue to evaluate and amend appropriate strategies and targets tailored to the unique and specific needs of students.

2 Adopt a flexible, whole school approach with a person and team responsible.

Improving the educational outcomes of boys requires a whole school approach based on a common vision and a coherent, integrated set of programmes across the broad range of activity noted in this report (ie pedagogy, curriculum and assessment; literacy and communication skills; student engagement and motivation; behaviour management programmes; and positive role models for students). Such a whole school approach is more effective with the identification of a leader in the school who is responsible for its implementation, and the establishment of an appropriate team to support the leader. It also requires a degree of flexibility on the part of the school when needed in relation to structural and other arrangements to support the programmes adopted (eg single-sex classes and activities, withdrawal programmes). This approach should be integrated with existing school improvement strategies and should engage the broader school community.

3 Ensure good teaching for boys, and all students in all classes.
Improved education for boys depends, just as it does for girls, upon good teaching of all students in all classes. While there are many recipes for good teaching in schools, teachers demonstrating good practices all have the following features in common.

Having high expectations for all students, knowing their students well and listening to their students.

Reflecting on current teaching practice in terms of the information collected by the school and an informed evidence base of research.

Using a range of teaching techniques – if all a teacher does is talk at the students and writes things on a board, they are unlikely to learn very much. All learners require variety and teachers need to vary the ways in which they pass on information to, and engage, students.

Structuring their teaching so it supports student learning – the teacher is the trained, professional adult in the class, so must ensure that the key messages and lessons are learned. This means they need to make sure that students understand the main points as they proceed, make connections to other things that have been learned, build on what students already know and keep reinforcing key messages.

Involving students in learning activities and encouraging their participation – learning requires that students do things, as well as having them explained or shown to them. Teachers need to actively involve students in solving problems for themselves and get students working together in groups so they learn social and cooperative skills.

Providing positive feedback and praise – an important part of teaching young people is providing them with feedback on their work. Teachers need to let students know how they are going in general, what their strengths and weaknesses are and how they can continue to improve.

Being open, flexible, fair and consistent in dealing with students, having a ready sense of humour and being prepared to negotiate and discuss teaching and learning with students.

Making connections with the community – involving the students’ parents and other important community members helps demonstrate to students the importance the teacher attaches to the programme and their work.

4 Be clear about the kinds of support particular boys require.
Boys are not a homogeneous group and not all boys can be treated the same. Gender intersects with a range of other factors, including developmental and sub-cultural factors, to affect each student’s experience of school. Some boys may experience a tension between being masculine and engaging with and being good at school; with the result that demonstrating their masculinity can inhibit participation and performance in class, making school a negative experience. Not all boys, however, experience or identify with aspects of masculinity that conflict with educational engagement, and there are many boys who do successfully integrate success in schooling and growing up as adult males. Hence the school needs to clarify how best to support each boy in his learning at school.

5 Cater for different learning styles preferred by boys.
Students learn in different ways. There is, in this context, substantial research as well as school and cluster experience through these projects to suggest that boys (as well as many girls, of course) commonly respond more positively to learning experiences that:

- have a practical focus and physical or hands-on dimension;
- they see as relevant and having a real world connection;
- use thinking skills focused on actual problems;
- challenge them by requiring higher order and conceptual thinking;
- have clear instructions and structured sessions in manageable chunks;
- enable them to work with others as well as individually;
- provide for a range of ways in which work can be presented; and
- provide them with a degree of involvement in decisions about content and opportunities to negotiate their learning as a valued stakeholder.
That said, good practice in boys’ education also seeks to broaden the range of ways in which boys view themselves as learners and the strategies they adopt, while strengthening their capacity to develop responsibility and self-awareness, and to value success at school.

6 **Recognise that gender matters and stereotypes should be challenged.**
Acceptance of gender identity is important for all students. Boys should be encouraged to value being male and the positive virtues this entails. Equally, the negative aspects of stereotypical views of masculinity, often manifest in bullying, aggressive and physical responses to conflict and difference, or a conscious disengagement from school, need to be challenged. Schools and teachers are well placed to promote and model values and behaviours that are fundamental to people learning and working together. Schools can enable boys to broaden the ways in which they relate to others as they develop and grow, and exercise power, control, competition, cooperation, freedom, responsibility and choice; thereby enhancing their development as adult males in modern Australian society. Schools should, in this context, seek to establish a culture where achievement is seen as ‘cool’ and desirable for all students and is accepted as something to be celebrated.

7 **Develop positive relationships, as they are critical to success.**
Relationships are crucial in any young person’s schooling, especially the teacher–student relationship within the classroom and in the broader learning environment of the school. Particularly important for success at school is that each and every boy should know and feel that there are people in the school who care about him and his development. Beyond this, boys will benefit where there is consistency of approach between the home and the school, and parents are actively engaged in the education of their children and in developing ‘shared values’ with the school. The experience of clusters in this programme also has demonstrated the benefits to be gained from increased cooperation between schools and, in particular, sharing of strategies and resources to improve the education of boys.

8 **Provide opportunities for boys to benefit from positive male role models from within and beyond the school.**
Boys in school want and need to develop positive relationships with significant males within and beyond the school, most obviously their fathers and teachers, but also older male students and members of the wider community. Such role models provide inspiration and support for young boys seeking to develop their own understanding of how to become an effective adult male in the community, and also can assist in the development of clear goals and pathways to future learning and personal development.

9 **Focus on literacy in particular.**
There is little doubt that boys’ relatively weaker performance in literacy than girls has been one of the threshold factors leading to the focus on improving education for boys. Literacy, especially in the early years of school, is critical for educational success at school and subsequent successful participation in the community and its economy. There is substantial evidence to show that effective literacy for boys requires a balanced approach which includes some whole language teaching, but also direct instruction of phonics and phonemic awareness to improve outcomes across the board. Effective teaching and assessment should incorporate a recognition of the range of literacies students require today, including multimedia and emerging literacies in which young people, and particularly boys, are achieving success. This is a strength that can be built on. Beyond this, there is a clear need to ensure that processes are in place to identify students at risk of under-performance (primarily but not only in literacy) as early as possible, so they can be provided with appropriate, targeted support (eg one-to-one or small group tutoring).

10 **Use information and communication technologies (ICTs) as a valuable tool.**
It is well documented that boys, and especially boys who are under-achieving at school, respond favourably to the use of ICTs as a means of engaging them in learning activities.
Many of the schools and clusters involved in this programme have drawn on the motivational and educational powers of ICTs. The interactive nature of many new technologies helps create learning environments where boys can learn by doing, receive immediate feedback and continually build new knowledge and enhance their level of understanding. This enables students to develop a richer and deeper understanding of core knowledge and skills and to lead their teachers in an area where they are often experts and adults are learners. ICTs that include an emphasis on application and tailoring education to the needs of individual learners are also supportive of a shift in practice to more learner-centred approaches, which encourage the active participation of boys in the learning process, rather than the passive absorption of knowledge.
EDUCATIONAL & SOCIAL CONTEXT OF THE BELS PROJECT
The BELS project followed almost a decade of public enquiries into issues associated with boys’ learning in Australian schools. Further, many advocates of the need to focus on boys argued that there was a growing body of evidence about differences in boys’ and girls’ learning achievements and participation in schooling (Collins et al., 2000; Collins et al., 1996; Cortis & Newmarch, 2000; Cresswell et al., 2002; Hyde, 2005; Rowe, 2000). Research and public debate over the previous decade had identified the following key issues in relation to boys’ participation in schooling and their educational outcomes:
- there are more boys than girls identified as ‘at-risk’ in literacy (Rowe & Rowe, 1999; Rowe, 2000). A lower proportion of boys are achieving the national literacy benchmarks, compared to girls (Commonwealth Government, 2002);
- recent studies had indicated that boys reported less positive experiences and enjoyment of schooling (Trent & Slade, 2001; Rowe & Rowe, 1999);
- other studies indicated that boys are less engaged in their schooling, more easily distracted, and less motivated (Collins et al., 1996);
- behavioural issues are more likely to be associated with boys, as and is risk-taking, and depression and suicide is more prevalent among boys than girls (Collins et al., 1996);
- the school retention rate for boys is lower than that for girls (Collins et al., 2000); and
- the gap between boys’ and girls’ tertiary entrance scores has widened over the past two decades (Commonwealth Government, 2002).

The implications of the above for the BELS Project included the need to:
- identify and respond to individual learning styles;
- foster an effective school culture based on quality teaching practices;
- make learning relevant and connected;
- establish positive relationships with students; and
- build supportive classroom environments in which students feel valued and are encouraged to take risks.

PROFESSIONAL LEARNING
In the case of improving learning for boys, this means, to take literacy as an example, that teachers need access to knowledge about teaching the fundamentals of literacy (reading, writing, oral, aural, and critical elements of literacy) that are relevant at each stage of boys’ educational development. To support this, teachers need diagnostic tools that enable assessment of where each student is up to in terms of their literacy development, so they can provide the learning environment and address the skills and knowledge that the student requires at whatever stage of development they have reached at that time.

The first step in this process is to provide teachers with access to the content, methodology for developing the learning environment, the knowledge of the skills and knowledge appropriate at each stage of development and the strategies that enhance student learning, in this case, for boys who may be reluctant learners or developmentally delayed. The significance of the task of providing this knowledge becomes clear when it is recognised that many secondary teachers claim to know relatively little about literacy.
**POPULAR MYTHS**

The main findings from the research into brain-based approaches to learning indicated that the educational implications at this stage should be treated with considerable caution:

This field is still in its infancy; much of the data, in cognitive science, neuroscience, and genetics is incomplete. Far too often new findings are misunderstood and disseminated by the press and other media—setting in motion a series of chain reactions and the establishment of myths that are sometimes both entertaining and damaging...otherwise intelligent school administrators have said that they need to repaint classrooms in pastel colours because brain-based research indicated that children learn better in a pastel environment. That's nonsense. (Fisher, 2004).

The number of discoveries from brain research that have been exploited by the learning sciences is still slim...Current research methods in cognitive science necessarily limit the types of questions that are addressed...the type of educational tasks favoured by society will remain more complex than the ones that might suit cognitive neuroscience (OECD, 2002: 48).

There is a gulf between current science and direct classroom applications. Most scientists would argue that filling the gulf is premature. Nevertheless, at present, teachers are at the receiving end of numerous ‘brain-based learning’ packages. Some of these contain alarming amounts of misinformation, yet such packages are being used in many schools. (Goswami, 2006).

Many professional learning programmes provided to teachers focused on the supposed higher levels of structure that boys require in learning to write, read and learn appropriate behaviour. UK research has been interpreted as supporting this position (Frater, 1997, 2002).

The key point is that the need for structure in the teaching and learning process is not driven by the learner’s gender. Boys (and girls) in the lower tail of the learning distribution need a high level of structure to learn, but this is not because they are boys, it is because they are novice learners with an underdeveloped capacity to manage their own learning. For this reason, teachers need to provide a much higher level of attention and input for these boys than that required by their classmates.

**DIFFERENT DISTRIBUTIONS FOR BOYS & GIRLS**

A key characteristic of data on a range of male and female characteristics is that the male distribution is often wider spread than that for females. Floor and ceiling effects in many assessments and tests truncate the full range of learning achievement. As a result, there is sometimes evidence of some ‘clumping’ for boys in the lower ‘tail’ of the distribution.

This fits with the finding that a higher proportion of boys, than girls, do not meet national benchmarks at Year 3 and 5 in literacy. Further, it provides an explanation as to why we often find that there are more boys than girls in early-years and other primary school remedial reading programmes. However, the evidence that there are more boys in the lower tail of the distribution does not in any way warrant the interpretation that, overall, boys are achieving at a lower level than girls.

This supports the arguments of Martino, Lingard & Mills (2004) and others that the role of programmes to support boys’ learning should be to support those who are at-risk, because it is these boys who are over-represented in the lower tail of the achievement distribution.

**EFFECTIVE TEACHING**

Very few of the professional learning programmes provided to or accessed by clusters were principally focused on the core knowledge about effective teaching and learning. It was as if boys need totally new and different teaching, rather than tuning known effective teaching strategies to the specific learning capacities and preferences of boys at all points.
in the spectrum of learners. Research in progress by Professor John Hattie based on meta analyses of thousands of original research studies and dozens of different teaching strategies is marked by the very low incidence of statistically significant gender interactions—indicating that in most cases teaching strategies have similar impacts for both boys and girls.

The most powerful factors influencing learning are:
- critical innovations;
- feedback to students about their learning; and
- setting appropriate and specific challenging goals.

Critical innovation is “a constant and deliberate attempt to improve the quality of learning on behalf of the system, principal and teacher” (Hattie, 1999: 10).

Feedback to students is infrequent and often of poor quality in many schools. Of the 1,800 or so minutes that students are in formal learning environments each week, less than 5 minutes individualised feedback is provided by teachers to each individual student. Strategies that increase the level and quality of feedback can substantially improve learning outcomes. Quality feedback means “providing information about how and why the child understands and misunderstands, and what directions the student must take to improve” (Hattie, 1999: 10).

Setting appropriate and specific challenging goals means going beyond encouraging the student to ‘do their best’—the magnitude of challenge set by goals is the most critical component of goal setting (Locke & Latham, 1990). Students need to be informed “as to what type or level of performance is to be attained so that they can direct and evaluate their actions accordingly…feedback allows them to set reasonable goals…track their performance…[and make] adjustments [to] effort, direction and strategy…as needed” (Locke & Latham, 1990).

It follows from the above that school-based innovation projects that focus on feedback and setting challenging goals have very high potential to improve learning outcomes. Further, the most effective strategies apply across most areas of learning and at all stages of educational development. Boys who are at-risk have not reached the same level of educational development as their peers, but the principles of teaching and learning are the same for them as for all other students.

A pre-requisite to closing any gender gap in learning is the adoption by schools of a hard edge evidence-based approach to innovation. The dominant professional paradigm based on ‘I reckon’ assessments of whether particular strategies have worked can never provide the basis for making progress in terms of improving learning outcomes for students — because, it grossly overestimates the effectiveness of most strategies. As a result, the profession does not know which practices need to be disestablished—because they are ineffective or only marginally effective—and lacks the resources to refocus effort on the search for practices that can make a real change.

These key areas of strategic development were targeted towards improvement in the following five areas.

**STUDENT ENGAGEMENT**
- daily purposeful writing
- emphasising fun & humour in poetry
- clear objectives
- clear limits and set lengths for writing
- short tasks, such as five-minute writing exercises
- learning to take risks with ideas
- modelling good writing
- sharing published writing

**STUDENT LEARNING SKILLS**
- breaking tasks into smaller pieces
- use of graphic organisers
incorporating graphics into published work
personal writing records
learning to rework own writing

**STUDENT SELF-ESTEEM & SELF-CONFIDENCE**
- weekly school student/staff presentations and discussions of writing at assembly
- awards to recognise quality writing
- friendly, inter-class competition
- recognition of class and individual effort
- publication of class writing books and poetry collections
- celebration of achievements

**TEACHING SKILLS**
- constructive feedback to students on their writing skills development
- active, orally-based teaching style
- explicit teaching of writing skills
- development of a teacher toolkit of writing strategies
- workshops by visiting children’s authors
- weekly monitoring of student progress and feedback to class teachers by school leaders
- written feedback and discussion at year-level teacher meetings

The data highlights a key issue in the development of strategies for enhancing the learning environment for boys. The classroom based practices for improving learning directly target specific literacy skills and knowledge. However, practices that are located outside of normal classrooms are likely to tackle the improvement of boys learning more indirectly — for example, improving boys engagement and behaviour is achieved not by targeting specific skills or knowledge, but by providing a more relevant and interesting context for learning, that is, the out-of-classroom practices were able to adapt more specifically to the needs of boys, and provided them with much higher levels of scaffolding in their learning, through mentoring, role modelling and tutoring.

**AN INTEGRATED APPROACH**
The first of the four frames indicates the lessons for structuring and creating effective school, social and learning environments for boys. Such environments include:
- *high expectations* for student’s to take *responsibility* for their own actions;
- opportunities for boys to engage in a sufficient level of *regulated physical activity*;
- clear playground *rules* and *behavioural boundaries*—but with some flexibility—
- *engaging all students* in the formulation of the expected rules and norms of behaviour, including agreement about latitude to be provided and the discipline to be effected in cases where the rules are transgressed; and
- *engaging with the community*, including employers, so that boys of all ages can develop a grounded perspective of their potential futures, and through this to understand the *relevance* of schooling. (Cuttance, 2006)

The second frame provides an overlay of effective pedagogical approaches, including a core of the following practices:
- *classroom rules* that create boundaries of acceptable behaviour and incorporate some *physical activity in the learning environment*;
- appropriate *scaffolding of learning*, with high levels of scaffolding for students with underdeveloped learning skills and those below expected levels in the acquisition of specific knowledge; and reduced levels of structure in contexts where students can benefit from it;
- leveraging boys’ *spatial and mechanical abilities* by providing opportunities to engage them in learning — for example, by allowing them to build models to demonstrate what they know; and
- classroom learning environments that are *less dependent on language skills,*
particularly the written word, as their primary medium of communication through the use of ICT and multi-media technologies and alternative types of assessment, such as building models. (Cuttance, 2006)

The third frame provides an overlay of activity-based learning for boys who are not fully catered for in the standard classroom learning environment. Such environments need to provide opportunities for boys to:

- learn about relationships in male orientated contexts;
- engage in hands-on learning;
- engage in learning skills and knowledge that are relevant to each boys’ future;
- engage in learning in workplace contexts that integrate literacy activities and appropriate behavioural rules — many boys are prepared to accept tighter discipline in such environments, particularly, if they can understand the reasons for it, eg. workplace safety when using tools; and
- learn cognitive and affective skills and understandings to build resilience and self-esteem (Cuttance, 2006).

The fourth frame adds an overlay of additional external components to the learning environment. The broader school environment, the classroom environment, and activity-based learning — can be further enhanced through the use of adult-to-boy role modelling strategies and boy-to-boy mentoring strategies. These strategies are effective when they provide:

- opportunities for boys to develop mutual respect and caring for each other through boy-to-boy mentoring;
- appropriate male role models so that boys can learn about rules for working together, which may involve the supervision of boys by the role model as a co-worker;
- opportunities for boys to learn about relationships in contexts where they are required to engage with adult males;
- social environments for boys to learn about appropriate behaviour in a male environment; and
- a structure of expectations and norms that support boys to engage in learning.

The BELS projects have substantially added to the knowledge-base for the boys who are ‘struggling’ with their schooling or are otherwise disengaged capable boys who are putting just sufficient effort to get over the hurdles — the challenge is to build this knowledge into the everyday practices of schools and classrooms. In most cases, the BELS projects provided an opportunity for boys to engage in the project for up to half a day a week in a context that integrated core elements of their main programme—literacy and behavioural development, in particular.

It is not necessary that all aspects of the above model of support for boys learning be incorporated into all aspects of boys learning environments. A large proportion of boys thrive in normal school learning environments—although most environments will be even more productive if they include strategies embedded in the model. It is critical that the lessons from the BELS project be interpreted in the context of the broader research knowledge about differences in learning between boys and girls. Contrary to popular belief, there is no broad evidence that boys are substantially poorer readers than girls. The main area of difference in literacy achievements between boys and girls is in writing, rather than reading.

The BELS projects clearly indicate that students who are ‘disengaged’ in their normal classrooms can be intensely engaged in learning environments that have different boundaries for behaviour, expectations, feedback, rewards and relevance to their perceived futures. Further, the success of the BELS projects that developed activity-based learning environments for specific groups of boys indicates that normal classroom
learning environments need to be supplemented by external activities for some boys’, and for that matter for some girls, also.

BELS schools were correct to target specific sub-groups of boys as the focus of their projects. Not all boys are performing badly, indeed most are achieving at levels equivalent to most girls. It is important that this message be disseminated as we currently run the risk of boys, teachers and parents believing that boys are not learning as well as girls and indeed, that perhaps they cannot learn as well as girls. It is salient to reflect on the findings from the international literature, and New Zealand and Australian educational studies. First, in terms of education, gender differentials of any significance are not the prevailing reality, rather gender differentials appear to be specific to aspects of cognitive skills and to particular areas of the curriculum. Further, the most significant gender differences are in non-cognitive areas — physical strength, aggression and levels of physical activity. Environments for learning will be more accommodating for boys if they explicitly recognise these differences between males and females. This information from international studies of gender differentials provides some pointers that can be used to inform educational practice and a context by reflecting on changes in schooling over the last half century.

First, curriculum and examination systems have generally become more language focused (Rowe, 2002). Second, school playgrounds have been systematically cleared of all equipment and other objects that allow substantial levels of physical exertion — particularly, anything a child might have the disposition to climb. Third, there has been a systematic shift in policy away from organised contact sports during school hours. Straw polls taken during the BELS project visits to clusters of schools suggest that less than a quarter of all primary schools now provide organised and supervised sports opportunities at play-break, lunch time or after school. Fourth, the behaviour rules and disciplinary structures of schools have over a long period of time moved towards favouring non-physical engagement and ‘cooling out’ all forms of aggression—including most components of competitive behaviour. Schools have also developed a ‘thou shalt not physically interact with other students’ culture in terms of the rules and expectations of what is permissible and what is not permissible at school. There are sound reasons for many of these developments, although few, if any, of the reasons make sense in terms of supporting learning and the development of young people. Most often cited by schools is the necessity of removing ‘risks’ to reduce the possibility of litigation in cases where a child is injured or molested.

The boundaries that are set for acceptable behaviour in schools define what is misbehaviour — in many schools acceptable behaviour excludes physical contact in the classroom. During lunch hours and breaks, students are expected to engage in largely passive—or at least non-contact—activities. Students who engage in physically active games do so mostly without direct supervision, as for example would be exercised by a ‘referee’ — in such contexts some students are unwilling to take part because of the enhanced risk of being hurt or injured. A key role of a referee in enforcing the rules in organised games is to provide the controls and regulation necessary for safe play.

One factor in relation to the latter is that by focusing on small groups of boys, schools were able to provide a level of resourcing per student that was sufficient to achieve an impact on outcomes. If, instead, these projects had focused on all boys in the school, it is unlikely that the project would have impacted on the sub-group of boys who were struggling, and the impact on all boys would have been small. This is simply a consequence of the necessity to move above a threshold level of resource intensity if significant gains are to be made by students who are in the lower tail of the outcomes distribution.

In addition, the educational research literature clearly identifies practices that set
**challenging goals** and provide **critical feedback** to a student’s learning as the most powerful practice that can be used to improve learning outcomes (Hattie, 1987, 1999). A major dimension of the potential benefits of a high level of resource intensity, therefore, can be realised when the amount of time allocated to these two instructional practices is substantially increased, as it can be when the learning environment is focused on a small number of students.

The concept of activity-based learning that has emerged from the BELS project could benefit from further exploration about how to make it even more effective, particularly for boys who are struggling with their learning or disengaged from schooling. The *adventure education* and the *work experience* literature provide two starting points for this further inquiry.

Overall, the practical lessons from BELS are as follows:

- the clearest overall impact was on boys’ behaviour;
- projects that were able to clearly articulate their strategies had the greatest impact — clusters that undertook a trial as part of the planning and development of their project used this as a way of clarifying how specific strategies may work in practice;
- projects that had a primary focus on professional learning had minimal impact — professional learning has an impact only if it is translated into changed practice; and
- the most successful projects focused on specific small groups of boys.

Factors that impeded projects included:

- the failure to turn professional learning into changed practice;
- mobility of teachers and principals who were the drivers of the project—a factor that is of much greater significance and prevalence than generally acknowledged—there was evidence that some schools were in a constant state of disequilibrium and flux as a result of staff movement;
- difficulties of collaborating across schools, particularly when timetabling issues arose;
- a lack of efficient processes to collect and analyse evidence and a lack of the required skills and knowledge to make sense of data — this was true of all forms of evidence, including learning outcomes data;
- over-reliance on informal (“I reckon”) teacher assessments of impact, without direct supporting evidence from students—teachers were more likely to claim a higher level of success for their projects than was warranted by the evidence from more rigorous data gathering and analysis strategies;
- a cargo-cult mentality and an unwillingness to accept standard accountability processes by a small number of schools;
- a lack of facilities to accommodate activity-based learning at school; and
- the issue of implementing an externally funded project when the timeline is not synchronised with the cycle of planning activities in schools.

The BELS projects have substantially added to the knowledge-base for boys who are struggling with their schooling or are otherwise disengaged but capable boys who are putting just sufficient effort to get over the hurdles — the challenge now is to build this knowledge into the everyday practices of schools and classrooms.
The results from national and international assessment surveys show that gender gaps in favour of girls are present in reading in New Zealand (and throughout the world). There is also evidence that boys do less well in writing. These skills are fundamental to full participation in a knowledge based society and thus the relative underperformance of boys is of concern. In other areas, such as mathematics and science, the results for boys and girls are similar and, in some cases, boys out-perform girls overall.

Even when boys perform less well overall than girls in a subject like reading, it is not true to say that boys are under-achieving across the board. International and national student achievement studies indicate that the achievement difference within a given gender is greater than the difference between genders. Thus a focus on a range of desired outcomes that recognises the diversity of all learners is more appropriate than one that focuses on a specific group.

Key Findings
The data from New Zealand and international studies show that many boys are succeeding at school. In New Zealand this includes boys from all ethnic backgrounds. There has also been no marked decline in the performance of either boys or girls over the last five years. The findings from this report are summarised below:

Boys participate in Early Childhood Education to the same extent as girls.

From year 1 to 10 the proportion of boys in school is consistent with the proportion in the general population but from year 11 boys are leaving school at a faster rate than girls.

There is no difference in the rate of truancy for boys and girls, but significantly more boys, Māori and Pasifika boys in particular, are stood-down and suspended; are excluded or expelled; and gain early leaving exemptions.

Reading Recovery is a programme designed to assist those who remain poor readers after a year of classroom instruction with learning to read and write. At six years old boys are twice as likely as girls to be entered into this programme, with Māori and Pasifika boys most likely to be entered. The outcomes of this programme are relatively similar for boys and girls.

There are no systematic gender differences in mathematics and science achievement.

There is converging evidence that girls perform better than boys, across all ethnic groupings, on all measures of reading and writing at all levels of schooling. However, a number of boys in New Zealand read and write well and are advanced readers and writers.

There is evidence that the reading gender gap reduces over time but increases for writing.
New Zealand students are found to perform very credibly in reading in international surveys. In most other countries girls also significantly outperform boys in reading, so this is not just an issue for New Zealand.

The percentage of students gaining NCEA qualifications has increased from 2004 to 2006 but females are more likely than males to gain an NCEA qualification at all levels.

Scholarship attainment is similar for males and females.

Females tend to stay at school longer and leave school with higher attainment levels than males.

Males are more likely than females to leave school with little or no formal qualification but this difference has decreased over recent years.

Females are more likely than males to leave school with University Entrance or higher qualifications and this gender difference has grown. Māori and Pasifika males are least likely to leave school with University Entrance or higher qualifications.

The above finding impacts on tertiary education participation with females more likely than males to participate in degree level study, and of those participating, males are less likely than females to attain a degree level qualification.

Synthesis across the data has revealed clear and consistent issues for boys. Generally these relate to the over-representation of boys in statistics relating to:

- early problems in reading;
- disengagement with school;
- lower achievement in reading and writing; and
- lower qualification attainment.

As a first step to improve boys’ achievement we need to ensure that they are engaged in, and excited by, their learning, and able to achieve to their full potential.

- Girls perform better than boys in all literacy measures across all years of schooling. However, gender differences in reading tend to decrease during secondary schooling whereas gender differences in writing increase through schooling.

- Literacy differences are also observed in qualification attainment where girls are more likely than boys to gain the literacy requirements for NCEA level 1 and to gain English as a subject at all NCEA levels and scholarship.

- Gender differences in mathematics and science are narrower than those observed in English measures.

- National and international assessment studies show that there are no significant mathematics gender differences in primary schooling. During the early years of secondary schooling differences are still small but girls slightly outperform boys,
however, this slight advantage is reversed to boys during the last years of compulsory schooling.

• There are gender differences in mathematics qualification attainment where girls are slightly more likely than boys to gain the numeracy requirements for NCEA level 1 and since the introduction of the NCEA girls are slightly more likely to gain mathematics as a subject at all NCEA levels. Even though the gender gap increases with increasing NCEA level, males are more likely to gain a mathematics scholarship.

• Gender differences in science are very small. In general boys slightly outperform girls across all years of schooling but girls are slightly more likely to gain science as a subject at all NCEA levels. The gender gap increases with increasing NCEA level but males are more likely to gain a science scholarship.

• In literacy, mathematics and science New Zealand has considerable variation in student performance but students from both genders and each ethnic group are found in the highest and lowest achieving group.

• Boys tend to have a wider spread of scores than girls and tend to be over-represented in the lowest achieving group. This is especially true for Māori and Pasifika boys but the proportions of Māori and Pasifika girls are also a concern. Gender differences are smaller in the high achieving group with boys tending to be under-represented in this group in literacy but over-represented in mathematics and science.

• Higher proportions of male candidates, across all ethnic groupings, receive 'not achieved' grades in English, mathematics and science NCEA externally assessed achievement standards.

• There is evidence that students who have more positive attitudes or higher self-concept towards English measures, mathematics and science tend to score higher than those with negative attitudes or lower self-concept.

• The percentage of students, both male and female, gaining NCEA qualifications has increased from 2004 to 2006.

• In years 11 and 12 females are 10 percentage points more likely to gain an NCEA level 1 and 2 qualification respectively. This gender difference increases to 13 percentage points in year 13 for NCEA level 3.

• Female students are more likely than males to gain University Entrance. The proportion of Māori and Pasifika students, especially males, gaining University Entrance is particularly concerning.

• Scholarship attainment is similar for males and females. Males gain 58 % of their total scholarships in science and mathematics.

• Gender differences in the participation rates of students in English, mathematics and science are greater in year 12 and 13 than year 11 qualifications.

• Since 1993 the range of attainment gender differences for mathematics (from 3 percentage points in favour of males to 3 percentage points in females favour) and science (3 percentage points in favour of females) are much smaller than that found for English (where it is in the range 14 to 19 percentage points in favour of females).
• Females tend to stay at school longer and have better attainment than males across all ethnic groups.

• The proportion of students leaving school with little or no formal attainment has decreased since the introduction of the NCEA. However, across all years males are more likely than females to leave school with little or no formal attainment but this difference has decreased over recent years.

• In 2006, over 20 % of Māori males, and females, left school with little or no formal attainment.

• Historically females are more likely to gain University Entrance or higher qualifications than males. Since 1993 the gender difference has grown and in 2006 females were 31 % more likely than males to gain University Entrance or higher qualifications.

• Māori and Pasifika males are least likely to gain University Entrance or higher qualifications, but the proportion of Māori and Pasifika females is also low and of concern.
  • Overall, males are less likely than females to participate and attain qualifications in tertiary study; however this does vary depending on the field of study.

• In 2006, 20 percentage points more females than males participated in degree level (level 7) courses and 26 percentage points more females than males attained qualifications at degree level.

• The participation of Māori and Pasifika males in tertiary education, especially at higher levels, is very low.

• Males and females with tertiary qualifications, even sub-degree qualifications, have greater labour force participation and, on average, earn higher incomes.

• New Zealand males with an upper secondary qualification are 43 % less likely to be unemployed than males without an upper secondary qualification.

**Discussion/Conclusions**

The data presented on New Zealand boys’ achievement in this report has shown that many boys are achieving at school, including Māori and Pasifika boys, and that there has been no marked decline in the performance of either boys or girls over the last five years. However, it has highlighted some issues in the area of boy’s educational engagement and achievement. The most striking achievement issue is in literacy where a literacy gender gap in favour of females develops after the start of schooling and persists throughout the education system. In general, boys perform less well in reading and, in particular, in writing than girls. Boys are also over-represented in the lowest performing literacy group of students and under-represented in the highest achieving group. Of particular concern is the proportion of Māori and Pasifika boys in these groups.

Regular school attendance is essential to encourage all young people to stay at school until at least the age of 16 and benefit from being there. The school leaving patterns of boys’ and their over-representation in stand-downs, suspensions and exclusions is a serious issue. Males account for over 70 % of stand-downs and suspensions and their over-representation increases in the formal removal of students from school (exclusions and expulsions). Early leaving exemptions are also more frequently granted to male students, but the rate for Māori males (20 %) is of key concern.
In addition, females tend to stay at school longer and attain higher formal qualifications than males. Higher proportions of males than females leave school with little or no formal attainment but this gender difference has decreased over time. Males are also less likely to leave school with an NCEA level 2 qualification or higher, or University Entrance or higher. In 2006 females were 31% more likely than males to gain University Entrance or higher qualifications. Of particular concern is the very low level of Māori and Pasifika males attaining University Entrance.

These gender differences in qualification attainment also impact on tertiary education participation. Even though males and females are equally likely to transition straight to tertiary education, the higher proportion of females with University Entrance results in higher proportions of females enrolled in degree (level 7) level courses, whereas more males enrol in lower level certificate courses. As well as having lower participation rates in tertiary education males are also less likely to attain a tertiary qualification.

Males and females with tertiary qualifications, even sub-degree qualifications, have greater labour force participation and, on average, earn higher incomes. For males in particular, if they do not have an upper secondary qualification they are much more likely to be unemployed than males with at least an upper secondary qualification. So, addressing low educational attainment will have long term benefits for the individual and society.

The Ministry of Education is committed to ensuring that all children achieve to their full potential in the education system. Even though this report shows that many boys are succeeding at school, it also highlights some issues in the area of boys’ literacy, engagement and qualification attainment. In order to fully understand these gender differences it is important to draw on the literature on early childhood, biological and cognitive differences, cultural differences, pedagogical approaches, assessment methods and socio-economic factors such as family income or parental education.

This report should sit alongside the research literature to put the gender debate in context. The literature reports a number of research studies and initiatives that focus on raising achievement and these have built a knowledge base of effective practice and innovation in teaching boys. The challenge now is for schools and their communities to engage with some of the issues faced by boys and to build this knowledge base into school and classroom practice.
This Education Review Office report provides schools and policy makers with examples of how 10 New Zealand secondary schools successfully support boys’ education. The schools in this study were selected on the basis of their good overall levels of student achievement, previous positive ERO reports and their well developed pastoral care and support strategies. Five boys’ schools and five coeducational schools are used as case studies.

The key strengths found at schools in this study were: high quality staff and student leadership; a positive school culture with a strong focus on positive image; relevant teaching and learning contexts; and constructive relationships. The schools all dealt positively with potentially negative images of boys’ education, including: the bullying image that affects some boys’ schools; the support structures that existed particularly for boys’ literacy; and the various ways that schools had engaged different groups of boys.

The key challenges for the schools were: meeting the needs of a small percentage of disengaged boys, many of whom are from disadvantaged backgrounds; supporting Māori and Pacific boys; strengthening some aspects of literacy teaching; and undertaking useful analyses of the ongoing and complex gap between girls’ and boys’ achievement. It is also important to remember that, although an achievement gap exists between boys and girls, there are still high numbers of girls who do not succeed at secondary school, and any analysis of achievement should include issues associated with both genders.

Which boys are not succeeding?

International research on the achievement gap between boys and girls most often points to issues of literacy, especially writing, as being a key area of difference between boys’ and girls’ achievement. While some research indicates that girls are also slightly ahead in arts education, the differences between boys and girls in mathematics and science are not particularly marked.

Despite the relatively high numbers of boys who underachieve research shows that just as many boys perform well in education as girls. Many researchers emphasise that care is needed in discussing which groups of boys are not succeeding at school, and that the achievement differences between boys and girls are not seen as an educational problem for all boys.

International and New Zealand research evidence also draws attention to the effect of background on the performance of boys. For example, internationally, there is some evidence to suggest that there are larger gaps for boys from lower socio-economic backgrounds. There is also evidence that there is a larger gap in achievement between schools in rural settings and those in urban areas. In New Zealand the performance of Māori and Pacific boys (and girls) is a cause for concern.

It should be pointed out however, that although boys from lower socio-economic backgrounds, and Māori and Pacific boys, are among the lowest performing groups of students in New Zealand, NCEA data shows that the gap between the achievement of boys and girls actually increased with school decile. For example, in 2007 the results for Year 11 students doing NCEA Level 1 showed that there was a 6.6 percent gap.
between boys and girls in low decile schools, an 8.4 percent gap in mid decile schools and a 13.3 percent gap in high decile schools (see also Appendix 1 attached to this report). More research is needed to understand these trends and why certain groups of boys, in various educational contexts, do not achieve as well as girls.

**Factors in boys’ underachievement**

A wide range of factors may influence the relative underachievement of boys. These include behavioural, biological, cultural, pedagogical and environmental factors. The complexity of the way these factors interact, and how they specifically relate to boys’ education have made it difficult for researchers to provide definitive evidence on the causes of boys’ underachievement and therefore develop advice for teachers. The dominant research perspective is that connected to issues of male identity formation - specifically how boys see themselves as learners. Much of the research suggests that issues of gender identity are the most significant area to understand and address in boys’ education issues. In this approach, consideration is given to how boys perceive themselves as learners in contemporary classrooms and how this translates into educational achievement.

It is also claimed in some research that aspects of education are ‘feminised’ and inherently biased towards the achievement of girls. In other research, issues of how boys approach the literacy areas of reading, writing and speaking form a significant part of the discussion about boys’ learning.

**Responding to the educational needs of boys**

The diverse range of factors influencing boys’ underachievement has resulted in a range of different perspectives and approaches on the educational needs of boys and the ways to respond. Many are based on anecdotal or observational data and, while they may be effective in a particular setting, the collection of evidence has not yet reached the point where teachers can be confident about what will work in their class. These approaches include:

- the use of goals and targets;
- practical, hands-on activities;
- giving boys responsibility for their learning and allowing them to make choices;
- providing high levels of structure and teacher-led activities;
- positive reinforcement;
- using competition in the classroom;
- incorporating physical activity into learning;
- mentoring and peer support programmes;
- the use of outdoor education programmes;
- developing relevant learning activities and contexts;
- importing popular culture texts into classroom reading;
- daily silent reading times;
- using computers and other electronic media to support writing;
- developing critical literacy approaches, including those that help boys understand how masculinity is created through texts; and
- making school fun for boys and avoiding repetitive learning.

As can be seen, the above list includes aspects that are somewhat contradictory. These education strategies for boys should not be divorced from the types of teaching and learning activities that have a more established evidence base regarding their effectiveness for both boys and girls, (the approach to teaching and learning in the Ministry of Education’s *Quality Teaching for Diverse Students* and Professor John Hattie’s research on the *Influences on Student Learning*).

**Key strengths found across the case study schools**

While not all the schools were highly effective in each of the following areas, the
strengths of these schools represent the aspects that ERO found to be important overall.

- Leadership
- School culture
- Relationships
- Engaging boys
- Relevant teaching and learning
- Literacy and numeracy support for boys.

**Leadership**

A notable feature in each of the 10 schools was the way leadership supported boys’ education. Leadership was well articulated at board, principal and senior management level through vision or values statements. The school’s vision statement often underpinned the staff’s approach to leadership and the structures operating for student leadership.

Several schools, particularly the boys-only schools, had defined their aspirations in statements emphasising holistic development and all-round achievement. These statements were axiomatic bywords for expectations and values including such notions as *boys can do everything*, *21st century men*, *big brother-little brother* and *boys to men*. Some had more symbolic precepts such as the notion of *rock and water*, guiding expectations for decision-making and personal conduct about the appropriateness of reactions and actions.

The most important feature was not the statements themselves, but the extent to which these were promulgated at all levels of the school. They were embedded in school culture, relationships and the school’s approach to teaching and learning for boys. In discussion with students, it was evident that the boys themselves not only knew the catchwords or phrases, but could also talk about the practical implications and activities underpinning them.

Principals drove each school’s approach to boys’ education. Their professional leadership influenced curriculum developments and particular initiatives supporting boys’ learning. Principals or other senior staff had taken an evidence-based approach to improving boys’ achievement. Through their professional direction and expertise they raised staff awareness and understanding of ways to improve the quality of teaching for boys. Principals were visible in their school, demonstrating through their own actions the participatory and holistic ideas being espoused.

Principals were able to build distributed networks that enabled their staff to assume leadership responsibility. Staff often demonstrated considerable professional commitment and leadership in the way they promoted a wide range of achievement opportunities for boys by actively participating in classroom and co-curricular activities. Boys spoke positively about the various chances they had to work alongside their teachers in cultural, sporting and outdoor activities. These different contexts provided boys with role models and helped to strengthen positive and constructive relationships.

In many of the schools, leaders had a strong focus on professional learning. The principal and senior staff were seen as leading learning in teaching practice, curriculum design and organisation. Their staff considered the learning needs of boys, either as part of a whole student cohort or as a separate group. They took active steps to develop curriculum management and delivery strategies that were appropriate for the boys. This often involved consideration of systemic and organisational aspects such as timetabling, course development and professional mentoring to make teaching more effective and relevant for boys.

Senior students provided leadership for junior students. Schools expected that senior
students would act as leaders and mentors to junior students and they gave them opportunities to acquire the skills necessary to undertake leadership roles. There are several examples of senior boys taking various leadership roles to support junior students. These included inducting junior students at the beginning of the year, acting as support leaders on junior school camps, peer mentoring throughout the year, operating as reading and classroom tutors, and coaching sports or cultural groups. Although such activities are not uncommon in most secondary schools, the schools in this study gave senior students training and support so they could undertake these roles effectively. These leadership roles were considered important for the tone of the school because they helped develop a supportive culture between senior and junior boys, one that was safe and welcoming, and conducive to learning.

Questions for your school – School leadership
1. How well do your school leaders draw attention to the teaching and learning issues affecting different groups of students?
2. What student leadership opportunities exist across your school?
3. How well do the student leadership positions across your school support a safe and welcoming culture?

School culture
A school’s culture is about what is valued and what actions people take to enact those values. It reflects the quality of the relationships in the school and is manifest in a school’s day-to-day activities. Each school has a different reality of ‘how things are’ (Stoll, 1999). In the 10 schools in ERO’s study, staff and students understood how the values and expectations worked in their context and what they had to do to contribute to and maintain the culture.

Some staff and students at the boys’ schools noted that boys’ education, or boys’ schools were often perceived as having a harsh or ‘bullying’ environment. The traditional sporting emphasis and success orientation of some boys’ schools may have contributed to this image of boys’ education. ERO found that all the schools, including the five boys’ schools, had safe and supportive school cultures. Most of the schools put high proportions of senior boys in peer support roles with junior students. For these schools, a nurturing rather than a bullying culture was the norm.

Certain aspects of a school’s culture were considered especially important for the boys. These included the emphasis on all-round success, the importance of developing good relationships between staff and students and the extent to which boys felt that they belonged at the school. Boys were often involved in discussions about the values and beliefs underpinning the school goals and objectives, and considering how their own actions reflected these aspirations.

Such discussions and school activities promoting values and positive relationships underpinned the concept of ‘belonging’ - found to be important for boys across the schools. Belonging involved creating an atmosphere where boys felt connected to the traditions, events, staff and students of the school. In turn, a sense of belonging enabled boys to commit to life at the school and to value their involvement in learning, sporting and cultural activities. In several of the schools, staff had returned to teach at the school they themselves had attended as students, thereby maintaining the sense of belonging.

Questions for your school – School culture
1. To what extent do boys feel welcome and supported at your school?
2. What messages does your school give to boys about being a successful student and/or young man?
3. How well do students understand and apply the values of your school?

**Relationships**

Strong and positive relationships were emphasised as integral to developing a successful learning environment for boys in all schools in this study. The development and maintenance of good quality relationships had links to the quality of leadership decisions, the quality and relevance of teaching and learning, and the school’s espoused and enacted values. Good quality relationships were an intrinsic component of matters such as classroom and co-curricular learning, developing self-management skills and self-image, students’ mentoring programmes and approaches to behaviour management and discipline.

In many of the 10 schools there was evidence of senior students mentoring and supporting junior students. Younger boys talked about maintaining the relationship with an older boy throughout their first year at school, and how this had helped them get to know routines, expectations and become part of the school culture. These relationships included cultural activities, sports activities and academic activities such as study or tutoring support.

Several of the schools had established specific programmes or approaches that encouraged boys to consider matters of male identity and the quality of their own relationships and decision-making. These schools had provided training in developing positive self-image and self-management. Some of the boys and staff also reported the importance of letting boys make decisions for themselves about their learning and having some choice about how to approach some of their objectives. Boys responded well to being treated as adults and had strong views about fair treatment. Linked to this, some boys and staff also emphasised the importance of not embarrassing boys, or escalating situations where a boy may ‘lose face’ or social status.

The quality of student-teacher relationships was critical. Staff and students who talked to ERO reported that boys benefited from the development of positive and constructive relationships with their teachers. An aspect that was considered important was the teacher’s ability to develop connections with boys based on life outside the classroom. Boys and teachers stated that better classroom relationships were developed when a teacher understood the wider interests of boys, and where they might also have worked with boys in situations other than the classroom, such as involvement in a cultural event, with a sports team or working on a project.

Both students and staff emphasised the place of humour in developing relationships with boys. Having a sense of humour is often seen as a desirable quality in any vocation, but for teachers of boys, a sense of humour is regarded as essential. There were various justifications for why a sense of humour was considered particularly important in developing relationships with boys. These included the role played by humour in the everyday conversation of boys; the common use of humour by boys to mediate topics that might be ‘too serious’ without levity; the use of humour by boys to build relationships outside the classroom; and, for teachers, having an ability, where necessary, to laugh with boys (at what might be a juvenile act or comment) but then quickly move them on to more productive activities.

**Questions for your school – Relationships**

1. What is the quality of relationships between all staff members and boys?
2. What encouragement can your school offer staff members who need support in developing constructive relationships with boys?
3. To what extent do staff understand the importance of humour in working with
Engaging boys through rich experiences

A key to boys’ achievement is having them attending and engaged in learning while at school. In part, the schools were chosen for this study because they had good processes for dealing with attendance and truancy, and their rates of suspension and stand-downs were low compared to national data. However, boys were not simply present; their engagement and achievement was most influenced by the opportunities available to them while at school.

Most schools placed emphasis on having boys engaged in a wide variety of activities. The options altered for different groups of boys, although a well-rounded education was one of the primary considerations. This holistic approach was especially so in the boys’ schools where academic, cultural, leadership and sporting success was generally celebrated.

Several schools in this study had managed to retain boys at school longer than might have been expected, by providing classes and experiences that kept them motivated and involved in learning. Principals and senior staff had thought carefully about the immediate learning needs and interests of boys, as well as their educational and vocational potential. In response they had developed courses and strategies designed to further boys’ immediate and long-term goals. In some cases this involved systemic initiatives such as curriculum and vocational design, timetabling or class organisation. In other instances the development of strong external relationships, for example, with local businesses and employers strengthened the options available and the imperative to retain and engage boys.

Boys talked enthusiastically to ERO about the different sorts of activities they had engaged in at their school. They often acknowledged the encouraging attitude of staff at their school as a factor in their decision to take up a wide range of activities both in school and outside. The emphasis, in this sense, was not on closing the educational ‘gap’ in the achievement data between boys and girls, but instead ensuring that boys were given rich and interesting experiences at school.

Questions for your school – Engaging boys

1. To what extent are boys engaging in a variety of academic, cultural, sporting and leadership roles at your school?
2. What processes does your school use to recognise and celebrate all forms of success by boys?
3. Are there boys at your school who are not engaged in curricular or co-curricular life of the school? What processes can be used to support the level of engagement shown by these boys?
4. What processes does your school have for identifying and addressing the social and pastoral issues of disadvantaged boys and their families?

Relevant teaching and learning

Relevant teaching and learning was a common strength in the schools. Many schools emphasised the importance of teachers knowing students well and being able to personalise programmes and differentiate lessons accordingly. In these schools, recognition of individual learning needs was underpinned by, for example, increasing teachers’ capability in the analysis and use of assessment data to develop focused teaching programmes. Several schools had also drawn on research studies to help develop specific teaching approaches aimed at enhancing boys’ learning. This
led to a greater focus on pedagogy that worked for boys and, in turn, encouraged innovative teaching approaches.

ERO found examples where particular courses, activities or teaching approaches worked with different boys to make their learning relevant and more meaningful. For example, many enjoyed the opportunity to take on the additional physical exercise offered in some initiatives (see for example the all-boys class in school E) and the hands-on activity offered at many of the schools. Many boys also enjoyed the opportunity to exercise their competitiveness through classroom activities such as quizzes and races. Long-term career goals implicit in the technology courses of some schools, with their links to industry standards and apprenticeships, gave meaning and relevance to boys' learning.

Teachers, and the boys ERO talked with, frequently expressed the importance of boys' understanding why a particular classroom focus was important. Boys, even more so than girls, were reported to benefit from 'knowing why they were doing something'. Both groups also agreed that boys tended to have lower boredom thresholds than girls, especially for an activity that they perceived as irrelevant. In this sense it was also said to be important for teachers to develop situations that appealed to boys, such as using sports data to form part of a mathematics investigation or using 'boy friendly' mnemonics to remember key information.

**Questions for your school – Relevant teaching and learning**
1. How does your school reflect boys’ interests and goals in the curriculum?
2. What processes do teachers at your school use to make sure that students understand the point of each lesson?
3. How do you make your classroom activities relevant and engaging for diverse groups of boys?

**Literacy and numeracy support for boys**
Literacy and numeracy support was found to be intrinsically important to boys’ success at school. Schools recognised at entry level where they focused on identifying students who had not developed the same reading writing and numeracy skills as the peers in their cohort. They put specific specialist literacy and numeracy teachers in place to help reduce disparities in these basic learning areas. Moreover, where schools had provided high quality support for the development of literacy and numeracy skills, there was usually a marked increase in the results of students in NCEA.

Many of the schools had well-developed reading programmes for boys, drawing on peer reading processes, reading mileage practices and specific instructional reading strategies. These reading skill sessions, often taught by specialists, were important for boys who had not developed the reading abilities that might be assumed by secondary teachers. In some of the schools, teachers’ professional learning had resulted in the implementation of literacy strategies across the curriculum. In these instances teachers in different departments placed a strong focus on boys, in particular, having the necessary vocabulary to be able to take an active part in learning, and they made sure that students understood the literacy components of the learning before proceeding further with lessons.

ERO found that improving boys’ writing skills was critical to success. Teachers emphasised the need for some boys to be given specific teaching and support to develop basic writing skills, especially transactional writing skills. Boys, it is argued, often need additional support in learning how to take their key ideas and build these into paragraphs, arguments and essays. Despite this recognition, overall the schools had not generally developed the same level of support for boys’ writing as for reading,
although most agreed that this was an important area for future development. Intensive numeracy programmes found in some of the schools were aimed at improving boys' skills. Schools helped students by giving them extra tutoring and by tailoring programmes to suit those who had difficulty with components numeracy, although these programmes mostly involved teaching basic skills, and supporting students in achieving the required NCEA numeracy credits. In keeping with the need to develop literacy skills some teachers noted boys’ difficulty in dealing with mathematical language and word problems.

Boys’ reading and writing was a matter of concern for all the schools in this study. Although many of the schools had considerably improved aspects of student literacy in recent years, it was clear that this needed the ongoing attention of staff. Writing remained a key issue for the schools in this study.

**Questions for your school – Literacy and numeracy support**

1. What processes does your school have for identifying and addressing the literacy and numeracy problems of new students?
2. To what extent are Years 9 and 10 subject teachers able to help students develop reading strategies?
3. To what extent does your school give students useful strategies to develop writing skills?
4. How does your school model the worth of reading and writing to boys?

**Key challenges for the schools in this study**

Although the schools in this study were able to demonstrate good practice in many areas of their operation, each school also faced its own challenges in maintaining and improving some boys' learning. In this section five ongoing challenges facing the study schools are discussed.

- Literacy and achievement
- Disengaged boys
- Māori and Pacific boys
- Analysing the ongoing and complex gap between girls and boys achievement
- Approaching NCEA strategically.

**Literacy and achievement**

As noted in the previous section, the development of good quality literacy programmes is important if boys are to achieve. Both reading and writing were areas of concern raised by all schools in this study. In particular ERO found that writing was a key concern and, although schools were trying different ways to tackle this problem, they felt that they needed to maintain this impetus for boys in particular. In ERO’s discussions, staff in some of the schools raised questions about the possible barrier presented by the amount of writing and theoretical preparation needed to pass some achievement standards. While understanding the need to prepare students as thoroughly as possible, teachers felt that some achievement standards favoured those students who had good writing and presentation skills. These questions were raised particularly in relation to technology, drama and physical education achievement standards where there is a significant literacy component.

**Questions for your school – Challenges for Literacy and achievement**

1. To what extent are boys helped to develop their skills in writing across different curriculum areas?
2. Where written literacy skills form a significant part of achievement standards’ requirements, what support is given to boys who are finding this a barrier to achieving.
Disengaged boys
All the schools in this study acknowledged that a small percentage of boys did not meaningfully ‘engage.’ This group of boys, variously estimated at between three and 10 percent, were unable to find curricular or co-curricular ways into successful school life. As a result they tended to be academic underachievers and outsiders in the day-to-day activities of the school. School staff reported that high proportions of these boys had problematic home lives, including, in some cases, issues related to drugs, alcohol and abuse. Staff noted that some of these boys simply did not respond to what was offered at the school.

Questions for your school – Disengaged boys
1. Are there boys in your school who are not engaged in curricular or co-curricular life of the school? What processes can be used to support the level of engagement shown by these boys?
2. What processes does your school have for identifying and addressing the social and pastoral issues of disadvantaged boys and their families?

Māori and Pacific boys
ERO found many examples of Māori and Pacific boys succeeding at the 10 schools, as well as many positive initiatives for these boys. However, the performance of Māori and Pacific boys overall remains not as high as that of European/Pākehā or Asian boys.

There are complex issues of male identity and role modelling connected to educational issues for Māori and Pacific boys. For example, while the schools in the study were developing particular approaches to all their boys becoming ‘young men’, they were at the introductory stages of articulating what similarities and differences there were in becoming a young Māori or Pacific man and becoming a young European/Pākehā man.

Many of the schools in the study were, nevertheless, developing some useful approaches to specifically support the education of Māori and Pacific boys. For example schools used capable Māori and Pacific students as peer leaders and role models in their school. They had also employed Māori and Pacific staff, who could not only teach subjects relevant to Māori and Pacific boys, but also operate as role models for students and conduits between whānau and families and the school. The challenge for these schools, and most others in New Zealand, is to build on these approaches to support the achievement of Māori and Pacific boys.

Questions for your school – Māori and Pacific boys
1. Who are the role models for the Māori and Pacific boys at your school?
2. How can the school make even greater use of positive role models for Māori and Pacific boys?
3. How well do Māori and Pacific boys achieve in relation to other groups in the school?
4. What links does your school have with the families and whānau of Māori and Pacific boys?

Approaching NCEA strategically
During ERO’s discussions with staff some concerns emerged about the extent to which boys were using strategic approaches to NCEA. For instance, some staff thought that boys were less motivated to gain merit and excellence awards, given that they were satisfied in reaching the standard. Other boys might be satisfied once they had achieved their Level 1, 2 or 3 NCEA certificate or their in-school pre-requisites or their necessary credits for university entrance. The most positive response to this was where school leaders such as the principal, heads of departments or other key teachers
directly challenged their students, particularly their boys, to strive for better than the mere requisite.

Planning an achievement pathway that is both challenging and achievable is an important part of a school’s culture of learning. However it requires more than notions of school ethos. It has much more to do with carefully planned and structured teaching, learning and assessment strategies that encourage and motivate boys to go that one step further. It helps if key school leaders take the initiative in raising their levels of acceptance, but there are also key challenges in providing those options that make possible relevant learning pathways for boys. The matter of boys taking a strategic approach to NCEA is worthy of further investigation as part of future research on boys’ achievement.

**Conclusion**

This report acknowledges that boys’ achievement is a complex area. Nevertheless, the central issue surrounding boys’ education is the ongoing achievement gap between boys and girls. In New Zealand NCEA results show that there is approximately a 10 percent gap in favour of girls across Levels 1, 2 and 3. There are also some important trends in these data, such as the low achievement of certain groups of boys, such as Māori and Pacific boys, and the increasing gap that is found between boys and girls as school decile becomes higher.

The overall complexity of the statistics and research on boys’ education means that there are very few definitive answers that would enable schools to address the achievement gap between boys and girls easily. Outside the more highly verified research on high quality teaching (for both genders), the research on boys’ education provides a collection of anecdotal, somewhat accepted and ‘proven by personal experience’ accounts of what works for boys.

Part of the reason why there are not clear answers for improving boys’ education rests with the fact that issues of male underachievement are linked to particular groups of boys, rather than all boys. In this manner, a variety of different strategies is needed to support and promote improved achievement among these diverse groups. The case studies in this report reflect a variety of strategies implemented by the schools for boys who might otherwise underachieve. The key strengths across these schools reflect the extent to which good relationships and relevant teaching and learning characterise many of the initiatives. Many of these schools also have strong, positive school cultures in which boys can feel safe, take leadership roles, and be expected to achieve in a range of academic, sporting and cultural contexts.

These approaches can and do work well at other schools. Indeed schools can reflect on the initiatives described here to understand their own approach and consider how they might continue to improve educational outcomes for all boys.
Addressing the Educational Needs of Boys
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Key Findings
The research indicates that there are indeed problems for some boys in terms of their engagement and involvement in schooling. However, this report emphasises the need to go beyond viewing boys as a homogenous group. The research also found that good teaching and teacher threshold knowledges impact significantly on positive learning experiences for both boys and girls. In summary, the research revealed a number of important findings:
• The quality of pedagogies experienced by students was a significant determinant in the educational experiences of both boys and girls;
• There were significant differences between the genders in peer group influences, with some boys indicating that they were subject to more negative peer pressures and were more likely to adopt anti-school attitudes and more limited subject choices;
• Girls and boys as groups had significantly different extra-curricula activities, with many girls favouring more sociable pursuits and many boys preferring to socialise via specific activities, such as sport and technological games;
• Boys were generally identified by teachers as being more disruptive than girls, this perhaps led to a phenomena that was suggested by a few students and teachers that boys were treated more harshly than girls for the same offence;
• More boys than girls admitted to bullying other students, although the difference was small; and
• Girls were more likely to be supported in their academic work by their peers and reported more interest in reading books than boys.

Gender of the teacher
The gender of the teacher did not emerge as a significant factor in determining positive learning outcomes for students. The issue was more whether there was evidence or not of productive teaching practices. When students talked about their idea of the ideal teacher, they stressed the significance of the type of person the teacher was and their teaching styles, rather than the gender of the teacher. Students saw the gender of the teacher as only significant in relation to being able to talk to them about personal problems, with some boys and some girls saying that they would prefer to talk to a teacher of the same sex about personal matters.

Generally teachers did not express a strong preference for teaching boys or girls. Some male and some female teachers agreed that boys' behavioural difficulties could partially be attributed to a lack of positive male role models. There was no significant difference between male and female teachers' views on this. There appeared to be more compatibility between stereotypically female behaviour and the conception of the ideal student than between the latter and stereotypical male behaviour. The research also seemed to indicate that boys' behaviour was more difficult to control, that is, that boys 'played up' more in class than girls. The first imperative of some teachers when teaching boys appears to be 'controlling' rather than teaching them. While it was generally found that
boys were as a whole more disruptive, there was a suggestion from a few teachers, parents and students that boys were treated more harshly than girls for the same offence.

However, what appeared to be the most significant factors for boys in relation to their engagement with schooling were the nature of the relationship established between the teacher and students and the quality of the pedagogies. The ideal pedagogies were akin to those described below as ‘productive pedagogies’ pedagogies that are intellectually demanding, connected to students’ lives and worlds with purchase beyond the classroom, socially supportive and encouraging of risk-taking (in the positive sense) and which recognise and engage with difference between students.

**Influence of gender concepts on attitudes and behaviour**

Attitudes and engagement with schooling were influenced by boys’ conceptions of what was ‘acceptable’ masculine behaviour. In general, boys exhibited more negative attitudes and behaviours than girls towards school, the opposite sex and even each other. The views of some boys as to what was acceptable masculine behaviour were linked to the anti-school behaviours of many boys and to the harassment of girls. Some girls expressed a preference for all girls’ classes because this meant a better learning environment. Although the survey research found that girls had higher aspirations than boys, this difference was not significant. There were no significant gender differences in students’ perceptions of their own ability. Boys were more likely than girls to think that English is a difficult subject and that English is a subject better suited for girls. More boys than girls agreed with the proposition that mathematics is an easier subject than English because there is less writing, although in general students disagreed with this proposition. Boys were more likely than girls to agree with the proposition that they would work harder if they could use computers more. Boys were also more likely to think that they knew more about computers than their teachers.

Boys were constrained in their subject choices, perhaps more so than what girls were. Evidence from many of the Case Study Schools indicated that acceptable masculine behaviours were a central factor in boys’ selections of subjects. This phenomenon worked across SES categories, except in the middle SES, all boys’ school which ‘forced’ subject choices in the post-compulsory years. The whole idea of being ‘cool’ also had particular gender effects that were linked to exhibiting desirable ways of being a boy or a girl. This social dynamic of gender was tied to gaining a particular status and position at the top of the social ladder. This in turn had consequences for all students in terms of their experiences of schooling.

**The importance of the teacher and their classroom practices**

Teachers and their practices are central to good outcomes for students. The influence and role of teacher knowledges, values and pedagogies, combined with the influence of school environment in terms of developing professional learning communities, emerge as important influences in terms of their impact on the educational outcomes of all students.

Students liked those teachers who were firm, friendly, made learning fun, related well to their students, made the work interesting and had a sound knowledge of their subject. Such teachers felt a real sense of responsibility for their students’ learning and also a sense of efficacy in achieving desirable outcomes. Good schools seemed to have similar senses of responsibility and efficacy within their cultures.

From our qualitative and quantitative research, the following themes emerged as
important in students’ conceptions of the ideal teacher:
• A ‘caring’ attitude and spending time with students;
• A commitment to teaching;
• A sense of responsibility to students (eg. returning assessments promptly);
• A teacher who makes the work interesting and relevant;
• A relationship of mutual respect;
• Taking an interest in the students’ lives beyond the classroom;
• Connecting the curriculum to the world of the student;
• Recognising and supporting difference amongst students;
• Ability to control the classroom, balanced with fairness and enjoyment;
• A broad knowledge base.

The alignment of high quality teaching practices (referred to in the report as ‘productive pedagogies’), with assessment practices and curriculum purposes is crucial to the achievement of best outcomes for both boys and girls.

5.3 Productive pedagogies
We refer to high quality teaching practices as ‘productive pedagogies’. Productive pedagogies are considered necessary for producing improved and more equitable outcomes for all students, and are characterised by:
• a high degree of intellectual quality
• high levels of connectedness in terms of curriculum content and its application to the students’ lives outside of school;
• supportive classroom environments where students feel valued and are encouraged to take risks in their learning; and
• a strong recognition and celebration of difference.

The research suggested that improving outcomes for boys would be better addressed by a comprehensive approach based on these productive pedagogies. More simplistic strategies or approaches based on under-theorised tips for teachers or common sense assumptions about the way boys are or learn did not always lead to improved educational outcomes for all boys and can have the disadvantage of sometimes treating boys and girls as homogeneous groups. Productive pedagogies, based on effective and broad teacher threshold knowledges, proved to be an informed and effective approach that had a positive impact on improving educational outcomes for all students. Professional development around teacher threshold knowledges is an important strategy so that the educational needs of boys can be better addressed. The research suggests that productive pedagogies are particularly important for disengaged boys.

5.4 Teacher threshold knowledges
Productive pedagogies need to be underpinned by appropriate teacher threshold knowledges, which are necessary to execute such pedagogies. These are:
• subject discipline knowledge;
• knowledge of student development;
• understanding of the purposes of schooling; and
• knowledge of gender concepts and their impact on students’ attitudes and learning.

More research is required to ascertain the required teacher threshold knowledges (about disciplines, gender) necessary to complement productive pedagogies.

5.5 Teacher professional learning communities
Schools need to become learning organisations, through the creation of teacher professional learning communities within schools. This is linked to creating a school culture and structure that enhances the spread of good pedagogies, and critical reflection on teaching practice in light of informed research and
knowledge of educational policy. This leads to the alignment of high quality curriculum with pedagogies and assessment practices in classrooms. Schools with effective teacher professional learning communities, which focus on the relationship between on-going teacher learning and enhanced student learning, appear to achieve the best outcomes for both boys and girls.

Such a learning community is also important in evaluating through action research and in other ways the efficacy of strategies adopted to address the educational needs of boys. The research also points to the need for the provision of professional development forums for teachers that would entail teachers engaging with soundly theorised and researched accounts of the influences impacting on the educational outcomes of both boys and girls. This is better than ‘gut feelings’ on what is best for boys. This would involve discussion on factors influencing boys’ and girls’ educational participation, engagement and outcomes, which move beyond seeing boys’ behaviours as predetermined by either culture or biology. The professional development requirements are to build individual teacher capacity, as well as school organisational capacity. The former is important, because as with much other research, this project has confirmed the overwhelming significance of individual teachers in addressing effectively the educational needs of all students. School organisational capacity building would see professional development geared towards considerations of issues within specific schools and the implementation and evaluation of strategies established to address these issues.

5.6 **Fostering effective school cultures**

The research showed that school environment and culture, as determined by the specific role of teachers and their teaching practices and relationships with students, were major influences on students’ learning and attitudes towards school work. The research indicated that effective school environments need to support the following:

- whole school culture that explicitly values student engagement with a broad range of curricular and extra-curricular activities;
- the creation of safe and supportive classroom and school environments for all boys and all girls to achieve good academic and social outcomes from school;
- a recognition that SES factors are related to boys’ attitudes to school and the academic curriculum. However, good pedagogies aligned with appropriate assessment practices and curriculum purposes can to some extent ameliorate negative SES effects and enhance positive ones;
- a school culture that can mediate negative effects of certain peer group cultures and traditional and narrow gender identities.

**Conclusion**

Overall, the research indicates that there are problems for some boys in terms of their engagement and involvement in schooling and that gender was clearly a factor impacting on their experiences and educational outcomes. The report examines the various ways in which boys view and express themselves and how this impacts on their engagement with school. This analysis is directed towards identifying appropriate points for policy intervention and strategies which schools can adopt to address issues from the research. Certain ‘common sense’ or ‘taken for granted’ beliefs about the way boys behave and learn informed and drove many of the programs designed to address their educational needs in schools. The research also confirmed that boys and schooling is indeed an issue around which opinion and practice are divided. This was reflected across the different
strategies adopted by the 19 schools, but also at times in disagreements within the schools about appropriate strategies.

The research has demonstrated that we need to recognise diversity amongst the category of boys when considering boys and schooling. Furthermore, we also need to ensure that such a focus does not lead to a neglect of girls. Schools which adopted programs and policies which had a ‘which boys/which girls?’ approach appeared to be most successful for all students. These approaches recognise that there are several background factors beyond gender affecting students’ outcomes, factors such as SES, Indigeneity and geographic status. Overall, the research report stresses the need for a focus in schools on high quality pedagogies in an attempt to address the educational and social needs of both boys and girls. At this stage, the research suggests that good pedagogies work with all students and that teachers’ classroom practices are the central educational variable in achieving good academic and social outcomes for all students. Further research is required to ascertain the optimum teacher threshold knowledges to complement such pedagogies and to ‘complexify’ the pedagogical model to take account of student differences, including gender. While the research did reveal that boys were experiencing and creating certain problems at school, particularly with regards to the influence of the peer group, bullying and anti-school attitudes, there were dimensions to their behaviour that cannot be reduced to their innate capacities as certain types of boys, but are best explained as the social construction of masculinity.

A supportive school culture is also necessary to complement quality classroom practices. Such a culture needs to be supportive of all boys and all girls and to work to counter the negative features of hierarchies of value established within student playground cultures. Furthermore, schools need to establish learning communities where good classroom practices and issues of gender become part of the ongoing and substantive professional conversations within the school. The way forward for schools, it is argued, is to create professional learning communities for staff which are committed to the provision of enhancing teacher threshold knowledges and broader understandings about the impact and effects of gender concepts, family, school and community environment, peer culture, student-teacher relationships on both boys’ and girls’ attitudes, expectations and engagement with schooling. These threshold knowledges then need to underpin good teaching practices and their alignment with demanding curriculum and assessment practices. The construction of gender also needs to be a focus of some curriculum areas in the school. The research has clearly demonstrated how the attitudes of some boys as to what is acceptable or ‘cool’ behaviours often frame boys’ negatives attitudes to schooling, academic work, and to extracurricular activities.
For some time there has been concern expressed about the educational performance of males in relation to females. The symposium was funded by the Commonwealth Department of Education, Training and Youth Affairs and organized by the Australian Institute of Political Science to provide an opportunity to examine such concerns. As well as a focus on the educational performance and attainment of males the symposium also covered broader labour market outcomes and the pedagogy of educating males. Around one hundred participants and presenters were invited to attend the symposium. They were chosen on the basis of their expertise, experience and interest in boys’ education and represented a wide range of perspectives and views on the topic.

One of the main purposes of the symposium was to examine the empirical evidence of the differences and similarities in the educational performance of boys and girls in school, in TAFE and universities and how these differences and similarities have changed over time. The symposium was also asked to examine how the educational performance of males and females impacts on their ability to gain employment and the nature of that employment. Given the significant changes that have occurred in recent times it was also important to examine the implications of structural changes in the labour market on the prospects of young men and women. A major purpose of the symposium was to consider whether there were any special challenges involved in the education of boys and to focus on boys and their needs rather than on a comparison between boys and girls. Participants were also asked to consider the relationship between boys’ educational performance, their labour market outcomes and life opportunities and their experiences once they have completed their education.

**Dimensions of the problem**

The symposium was opened by the Commonwealth Minister for Education, Training and Youth Affairs, the Hon Dr David Kemp. In his opening address, the Minister encapsulated the issue for participants when he remarked that, although problems experienced by boys were not unique to them, it was clear that boys were not doing as well as they should and according to a number of benchmarks they were doing poorly relative to girls. He highlighted the need to understand the underlying issues that pertain to boys that adversely affect their educational outcomes, to examine ways of dealing with these issues, to suggest some answers to the problems faced by boys and to develop some testable hypotheses that can be followed through with future research.

A wide range of issues, opinions and evidence was presented at the symposium. One overarching notion that clearly emerged was the importance of balance when dealing with this topic. Understanding the issues involved in the education of boys requires an understanding of complex behaviour during the period when young people are going through their most rapid development. It also requires an understanding of the far-reaching transitions affecting the fundamental structures of our social life and an acknowledgement that the key elements that provide people with identity and meaning, such as family and work, have changed radically.

The discussion at the symposium covered both the implications of such changes for the motivations, expectations and capabilities of young people and for the organisation of education and training institutions. More than ever before, both individuals within schools and schools within society must adapt to an environment of rapid social change.
The discussion at the symposium focussed on the importance of meeting the needs of boys as well as girls rather than on replacing the 'girls' agenda' with a 'boys' agenda'. The concerns about sexism and discrimination against women that were raised quite properly some 25 years ago now need to be widened to ask some questions about boys. It was felt that if these questions were dealt with properly then outcomes for girls would also be enhanced.

Differences between genders
Speakers at the symposium described gender differences in educational participation and retention, educational experiences, the range of courses undertaken and other activities in which young people engage. They also indicated that there were differences in educational success, literacy outcomes, to some degree numeracy outcomes, information technology, tertiary education rankings and in wider outcomes in terms of a sense of worth and personal esteem. Gender differences were also identified in labour market participation and success that appeared inversely related to differences in education. It was pointed out during the course of the symposium that factors such as race, Aboriginality, socio-economic status or class and rurality have a significant impact on educational performance and participation. In fact, it appears that differences within a gender group are greater than the differences between gender groups.

Nonetheless, the gender gap is significant, particularly, in the crucial area of writing performance, which is such a critical foundation for lifelong education. Its importance was illustrated by the results of a survey of employers that indicated that their greatest concern was with the inadequate written communication skills of graduates.

Factors associated with gender differences
Mr Robert Horne identified sociological, physiological and pedagogical factors as being associated with gender differences to which Professor Faith Trent added perceptual factors. Professor Jane Kenway described a number of sociological factors such as the profound changes in the labour market; the global emergence of a knowledge economy; changes to family structures, family responsibilities, family behaviours and relationships; the emergence of individualism and material values; and the increased numbers of young people going on to upper secondary and tertiary education which has exposed gender differences in performance and destinations.

There was some discussion at the symposium of the significance of physiological gender differences such as different patterns of physical maturation and hormonal influences. There was also some discussion about factors such as nutrition, health, drugs, lifestyle choices that interact with performance. Professor Faith Trent’s research indicated that the some boys felt they were not being treated fairly, causing a degree of resentment and disquiet. Professor Robert Gilbert pointed out that there are no outcome measures which show a dichotomy between the performance of boys and girls. Rather, distributions for the same outcome measures for boys and girls significantly overlap. It is the mean values for boys and girls that are different. This indicates that boys are not all the same and do not necessarily have difficulties with school. He suggested that attempts to address the problems in the education of boys must not act against the interests of any boys or girls.

Gilbert described how an understanding of ‘the culture of masculinity’ was crucial to understanding how boys respond to school and their educational achievements. Such a focus provides insights into how boys define and position themselves. People’s ideas of what it means to be a successful male determines their expectations of boys and the sorts of experiences that are provided for them. Boys' beliefs about masculinity influence their willingness to participate in the activities of their school and their attitudes to teachers, subjects, and what is considered worth knowing. Gilbert went on to suggest that given the overlap between boys and girls on school outcome measures, the educational problems of boys could be first tackled by promoting good teaching practices and addressing the
curriculum so that the range of interests and learning styles of all students could be accommodated. Separate strategies for teaching boys may be appropriate in some cases, although it needed to be recognised that such strategies would not necessarily suit all boys. Furthermore, boys needed to be assisted to reflect on the restrictive effects of narrow views of what it means to be male; such as stereotypical subject choices, a rejection of reading and other forms of literacy, devaluing of educational achievements and disruptive school behaviours.

Other speakers also commented on pedagogical factors affecting some gender differences. It was generally felt that good teachers make a critical difference. Participants suggested that varied, practical, experientially based learning was more appropriate for some boys than passive, verbal tasks and the teacher-talk method of classroom management and activity which still seem to persist. It was felt that there was some tension between what schools offer and what students actually want to do and between the curriculum and the skills and understandings that students required. The issue of sport was given some prominence in the symposium but there was some ambivalence about its contribution to boys’ education. While sport was seen as a way to widen students’ experiences, to enable them to achieve success outside the academic sphere and ‘let off some steam’, it was not necessarily seen as providing appropriate role models. On the other hand, one of the more successful interventions has been in Queensland where rugby league training camps have been deliberately used to attract Indigenous boys into school and to keep them there.

Professor Bruce Chapman pointed out that private returns to education are relatively high for girls. A possible explanation consistent with this is that boys are able to find at least some employment at lower levels of education attainment whereas girls don’t have as many employment options. This partly explains why girls remain at school longer. Rather than focus on gender differences in participation rates and retention to Year 12 the focus should be on young people who are potentially at risk. The real emerging social problem is the young people who are entering the labour market, or in a school system just before they go into the labour market, who have inadequate self-esteem or an inadequate set of understandings and skills. Another point put forward at the symposium that seems to explain some gender differences is the insecurity about identity that some people, especially adolescent males, experience as a result of the ambiguity resulting from rapid change. It seems that this insecurity reveals itself in a variety of behaviours.

**Possible interventions**

Concern focused on a small group of young men, largely from low socio-economic status backgrounds, rural and isolated locations or from Indigenous backgrounds likely to leave school early and not take up apprenticeships, traineeships, or employment. Participants were also concerned about those boys who stayed on at school but who were clearly disaffected with the school environment and at risk of not making successful transitions to further education or employment. Students’ conceptualisation of masculinity, teachers’ approach to teaching and learning, the school environment and other factors were identified as having an effect on boys’ performance at school.

The changing nature of the labour market was found to have a major influence on post-school pathways. There was particular concern about the apparent decline in the reading skills of boys and their lower levels of literacy overall compared to girls. A number of Commonwealth Government initiatives address some of the concerns raised about the educational outcomes of males although not specifically directed toward them. They include efforts:

- to improve the literacy skills of all students;
- to provide support for students at risk of leaving school early, especially Indigenous students and those from rural areas;
- to develop career pathways for the majority of students who do not go on to university; and to improve teacher quality.
A critical point identified by Dr Ken Rowe from his research was that good teaching improves the performance of boys. Qualitative research shows that boys value competence, genuine caring and honesty in teachers, and that the teachers actually made a difference to the performance of boys.

The discussion on possible interventions raised a number of fundamental questions. When should the interventions occur? Is intervention best at the pre-schooling, early schooling, middle schooling or later schooling stages? Where should interventions occur? Should there be more VET in schools? Should post-school VET provide a more rounded education? Should the setting of schools be broadened so they can have more flexible interactions with the community and the world of work or should the interventions focus on the home? Or should interventions cover all of the above? A question that was an undertone in the discussions at the symposium was – to what extent should these interventions be gender specific? Would gender inclusive interventions that deal with educational disadvantage on a case-by-case or needs basis be a better approach?

Possible areas for future action
From the discussion at the symposium it seems that there are three main areas where intervention may be particularly desirable:

- Raising the quality of teaching and curricula
- Developing a better understanding of boys; and
- Addressing school climate factors

Raising the quality of teaching would involve helping teachers to improve their understanding of what does and does not motivate boys. This may prove different from the factors that motivate girls. It would involve helping teachers to improve the range of activities and techniques that they use. Such activities and techniques may need to be more varied and differently structured for boys than for girls. It would also involve helping teachers improve the feedback that they get from their students. It was felt that teachers needed assistance to understand the appropriateness of the curriculum in terms of where the boys are coming from and what their aspirations are.

A better understanding of boys needs to be developed while avoiding stereotyping which can lead to a polarisation of the differences between boys and girls. Likewise, it is important to avoid both ‘problematising’ boys and romanticising them. A focus on understanding boys should lead to a better understanding of which boys are at greatest risk.

Addressing the school climate is an important issue. It appears the dominant learning experience still involves passive sitting and listening to people as it did a hundred years ago or more. This approach has persisted and seems increasingly inappropriate. The conformity of behaviour expected of students in school settings and the formality of schooling seem somewhat out of step with some of the changes in social mores and general social behaviour. Changing the school climate is not an uncontroversial proposition as there are clearly some people, parents particularly, who are voting with their feet for more disciplined environments, but it is a debate that needs to be had.

A better understanding of boys and improvements in the teaching and the learning environment and the school climate should lead to better outcomes for boys, especially those most at risk.
Boys’ achievement
in secondary schools
July 2003 HMI 1659
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Main findings
- When boys enter secondary school they are already well behind girls in English, although they achieve marginally better than girls in mathematics. Except in a small number of schools, the gap does not close during the secondary years. Boys continue to achieve less well than girls in Key Stage 3 tests and General Certificate of Secondary Education (GCSE) examinations.

Improving achievement
- Improving the achievement of boys is a complex matter in which interlinked factors play important parts. They include a positive learning ethos, good teaching and classroom management, close monitoring of individuals and effective support for learning.
- These factors are significant in all schools, whether mixed or single-sex, maintained or independent, and are relevant to girls as well as boys. Senior managers play a crucial role in determining the most appropriate strategy for school improvement, based on close examination of the school situation and identification of the barriers to improving boys’ achievement.

Ethos
- The relationship between the ethos of a school and the achievement of its pupils is close. Boys tend to respond well to an ethos that encourages and stimulates high standards, that engages their interest and commitment, and that insists on good behaviour and close partnership with parents.
- Boys perform better in schools which have a strong learning culture and sense of community, and which demonstrably value all pupils by celebrating their achievements and by treating them fairly and with respect. Extra-curricular activities make a significant contribution to boys’ views of school.
- The importance of a clearly defined disciplinary framework is especially marked for boys. Boys respond best when there is a consistent and fair-minded approach to discipline, backed up by effective pastoral systems and learning support.

Teaching and classroom management
- Good teaching and classroom management are major factors in all pupils’ achievement. Features of good teaching include clear objectives, careful planning that builds on earlier learning, a variety of activities, a sprightly pace, materials that engage all pupils, questioning that promotes understanding, and the appropriate use of praise.
- Boys tend to respond well to teachers who set clear limits and high expectations, direct work strongly, show enthusiasm for their subjects, use humour and reward good work. There is evidence that boys are rather less inclined than girls to learn from indifferent teaching.
- Many of the schools visited in the survey have improved pupils’ performance through a whole-school focus on teaching and learning. The focus tends to involve greater use of formative assessment, attention to different learning styles, and structured teaching approaches or a mixed approach. The Key Stage 3 Strategy has been a catalyst for developments in these respects.
Although there is nothing as clear-cut as a boys’ learning style, many schools have found certain approaches to be particularly helpful. For example, although many boys are willing to contribute orally, they can be helped to become more reflective in their replies. Their motivation can be enhanced by giving them greater access to computers for interactive learning or to help them improve the presentation of their work. Boys often respond better to lessons that have a clear structure and a variety of activities, including practical and activity-based learning, applications to real-life situations and an element of fun and competition. Many boys find it helpful to be given short-term targets and feedback that focuses on how they can improve.

**Strategies focusing on literacy**
- In many schools, boys’ underachievement is associated with poor skills in the use of language, which is reflected in their performance in GCSE examinations in modern foreign languages, religious education and drama, as well as in English language and literature. Boys achieve notably worse results than girls in National Curriculum English tests at Key Stages 2 and 3.
- Strategies involving intensive support on reading and writing, work on literacy across the curriculum and the careful selection of materials to include those that appeal to boys as well as girls, have often been effective in raising standards.

**Alternative curricula**
- Disaffection is an issue in many maintained schools. There is evidence that some students can be re-engaged in education through an alternative – generally vocational – curriculum. However, the benefits of vocational learning extend to many pupils and not just the disaffected.
- Inspections of work-based learning suggest that many boys respond well to the environment of a college or workplace, and that the benefits can sometimes spread to school work.

**Tracking and supporting pupils’ performance**
- Effective schools gather and analyse pupil-level data, paying attention to gender and other dimensions. They make use of external benchmarks to compare the performance of pupils and groups with other schools and use internal benchmarks to compare pupil performance with that of previous cohorts. They use baseline data to set targets for pupils and departments that raise expectations, have tracking systems that quickly identify pupils and groups that are underperforming, and make timely interventions.
- Boys in particular seem to value individual attention and tend to work harder when they know they are being monitored closely. They respond well when given help to organise their coursework and to plan their revision. In schools where anti-learning peer pressure is a major barrier to boys’ achievement, close monitoring can give boys ‘an excuse to succeed’.
- Examples of effective support seen by inspectors include academic reviews by tutors, learning mentors, learning support units, study centres, homework clubs, revision classes, programmes of study skills, access to information and communication technology (ICT), residential programmes and opportunities for work-related learning.

**Single-sex schools**
- Boys and girls tend to achieve better GCSE results in single-sex schools than in mixed schools, but research suggests that factors such as school type, reputation, history and ethos are also significant.

**Organisation in mixed schools**
- The effect of single-sex grouping in mixed schools is variable, with some marginal gains reported but other unsuccessful examples.
Benefits arise from teachers’ deliberate control of seating and grouping arrangements and the planning of activities that encourage boys and girls to learn from each other.

In recent years, Ofsted has reported on other aspects of underachievement. The strategies identified for raising the achievement of particular groups of pupils have many features in common with this report and with each other. For example, reports about Black Caribbean pupils (see annex F), attendance and behaviour (see annex F), and effective city schools (see annex F) draw similar conclusions. They identify the importance of:
- clear leadership and planning, with a well-focused curriculum and reliable systems which work across the school
- valuing and including pupils and setting them the challenge of high expectations
- intensively tracking pupils’ progress and providing strong personal support, generous extra-curricular activities and additional teaching
- clear communication with parents
- good teaching and classroom management, clear outcomes for the work and well defined classroom routines including control of pupils’ entry to the classroom and who they sit with.

Ethos
The most effective schools had created a positive learning environment where peer pressure worked for them. Pupils responded positively to an ethos that encouraged and stimulated high standards. Effective schools engaged the interests and commitment of pupils, insisted on good behaviour and worked in close partnership with parents. Such schools demonstrably valued all pupils by celebrating their achievements and by treating them fairly and with respect.

An ethos in which learning was expected and encouraged was a common feature of schools where boys were achieving well. In schools where boys achieved well in relation to girls, there was often a strong sense of belonging to a school community with a well established culture of learning. In some cases, including all the independent schools, the positive ethos was long established and taken for granted by the pupils and staff.

Inspectors found a number of common features that helped schools to establish or maintain a positive ethos:
- high expectations of work and behaviour
- an emphasis on learning, including links to higher education.
- strong pastoral and learning support systems that ensured that pupils were valued and given good support or learning
- a wide range of extra-curricular and subject-related activities
- a good classroom atmosphere, based on cordial relationships between teachers and pupils, with humour often used to good effect so that learning was fun
- parental support and good communication with parents
- the celebration of all forms of success, through praise, newsletters and prize evenings and by using past pupils as role models
- the creation of a climate where intellectual endeavour was not second to sport – for example, boys responded particularly well to the national mathematics challenges, which offer non-standard, multiple-choice questions that encourage deeper thought and risk-taking.

The connection between academic success and the breadth of the school's range of
activities was frequently commented upon by pupils and staff. Boys in particular felt there was more to school than just lessons, and talked of the positive effects of a wide range of extra-curricular activities. Such activities help create a sense of belonging to the school, enhancing boys’ motivation and attitudes to work.

A feature of the schools where boys were doing well was the consistent approach to behaviour, which was very clear to staff and pupils alike. These schools took positive steps to increase the motivation and ambition of pupils and provided a secure environment welcomed particularly, but not only, by boys.

The emphasis was on high expectations and learning rather than just behaviour management. The boys understood their schools’ values and knew what was expected of them in terms of behaviour and the standard of their work. Discipline codes were known to all and applied rigorously and fairly. Many schools used praise and rewards to good effect.

**Teaching and classroom management**

Good teaching and management of learning were the strongest influences on achievement and improvement in the schools visited. Inspectors found evidence that the quality of teaching was a stronger factor for boys than for girls. While girls often manage to learn despite lacklustre teaching, the matter may be more critical for boys. There is some evidence that boys are more likely than girls to become disruptive or to give up when faced with a teacher they do not respect.

Boys in particular responded well to carefully structured work in lessons. Their responses were strongest when the work had clear objectives, when it was set in real-life contexts, and when it involved well-focused short-term tasks on which there was quick feedback. They also reacted very favourably when the work had an element of fun and competition. Girls appreciated and responded to these features as well, but, in the lessons seen, girls responded better than boys when these features were not prominent.

Inspectors noted a number of features that helped to motivate boys in particular:

- lessons were well planned and organised, often with clear achievable aims and short-term targets
- lessons included a variety of activities including practical work, activity-based learning, the positive use of competition and good use of ICT
- lessons were made interesting and relevant by the use of ‘real’ situations
- teachers set high expectations and taught pupils to think for themselves and work independently, putting an emphasis on study skills
- teachers directed work strongly, but without stifling creativity and imagination
- questioning was quick-fire, lively and varied with the teacher ensuring that all pupils had a chance to participate
- pupils understood how current work built on earlier learning
- humour was used to good effect
- behaviour was well managed, discipline was fair and rewards and praise were used frequently
- teachers directed the seating arrangements
- writing frames, templates and discussion frames were used well
- teachers selected a fair proportion of texts, both fiction and non-fiction, that were likely to appeal to boys
- feedback focused on how work could be improved by specific steps.
Although there is nothing as clear-cut as a boys' learning style, many schools have found certain approaches to be particularly helpful. For example, although many boys are willing to contribute orally, they can also be helped to become more reflective in their replies. Their motivation can be enhanced by giving them greater access to computers for interactive learning or to help them improve their presentation for coursework. However, caution is necessary as popular conceptions that 'boy-friendly' texts and ICT help boys to produce better writing can be over-generalised. Effective teachers were able to encourage independent thinking, problem-solving and creativity while providing a secure structure for learning and giving clear guidance on the time-scales and standards expected.

Pupils said they valued individual attention above all, whether it was provided during lessons or by other means such as mentor sessions, lunchtime clinics, revision classes or help with homework. Underachieving pupils responded positively to the follow-up steps taken by their teachers and learning mentors: boys and girls regarded the individual interest that staff took in their progress as a positive feature that strengthened their motivation, not just a potential sanction. Overwhelmingly, boys felt that the teacher and the relationships were important. In interviews, many said that they appreciated the personal support given by teachers, often one-to-one or in small groups.

Conclusions

Boys continue to achieve less than girls in terms of GCSE and National Curriculum results. When boys enter secondary school they are already well behind girls in English, although they achieve marginally better than girls in mathematics. This has an effect on the majority of GCSE subjects. The narrowing of the 'gender gap' among younger pupils offers some encouragement, but few secondary schools can claim to have solved the problem of boys' underachievement.

However, inspection evidence and research both suggest a number of promising strategies for tackling the issue. Although an interpretation in terms of boys' achievement has been offered, in many respects the strategies are not gender-specific, and differ little from implementing what is commonly agreed to be best practice. Their messages may be summarised as follows:

@ understanding the barriers to achievement in the school context and raising the expectations of staff, pupils and parents – this includes determining the factors leading to boys' underachievement;
@ making sure the school has a strong ethos where pupils and staff show respect for each other and offer plenty of extra-curricular activities, thereby making the school a place where boys feel they belong;
@ implementing behaviour and discipline policies firmly but equitably, with good pastoral support, so the school is a place where boys feel comfortable with learning;
@ using staff development to raise awareness of pupils' different learning styles and helping boys to organise their independent work by giving more frequent, shorter deadlines;
@ improving the quality of teaching and classroom management, thus helping teachers to gain the respect and attention of boys;
@ ensuring that assessment is followed by feedback that tells pupils what they have to do to improve standards, showing boys, in particular, specific ways to improve their work;
monitoring pupils’ progress against benchmarks and targets, and intervening early so boys’ problems are addressed before they cause demotivation;

increasing the range and extent of learning support available for pupils and tackling low self-esteem among boys by helping them with organisation;

improving the standards of literacy, particularly among low-attainers;

considering the match between pupils’ interests and aspirations, and offering courses that appeal to different types of learners, so catering for those boys who prefer practical to written work;

encouraging teachers to organise pupil seating arrangements in ways that improve learning, recognising that some boys, particularly, find it difficult to concentrate when sitting with their friends.
• boys exhibit significantly greater externalising behaviour problems in the classroom and at home – i.e., anti-social, inattention, restlessness (Barkley, 1996; Collins et al., 1996; Rowe & Hill, 1998);
• in the early years of schooling, boys constitute between 75–85 per cent of those children (usually in Grades 1 or 2) identified ‘at-risk’ of poor achievement progress in literacy, and selected for participation in a Reading Recovery intervention program (Rowe, 1999a, 2000c);
• boys report significantly less positive experiences of schooling in terms of enjoyment of school, perceived curriculum usefulness and teacher responsiveness (Rowe & Rowe, 1999);
• boys are more likely to ‘drop out’ of schooling prematurely. Recent Australian national estimates indicate that between 1994 and 1998, 30 per cent of boys failed to complete their secondary schooling (cf. 20 per cent of girls – Marks et al., 2000). This results in reduced employment opportunities and general quality of life chances;
• boys are subject to more disciplinary actions during schooling (including bullying behaviours and expulsions), are more likely to participate in subsequent delinquent behaviours, alcohol and substance abuse, and during adolescence, are 4–5 times more likely than girls to suffer from depression and commit suicide (Collins et al., 1996; Zubrick et al., 1997, Sawyer et al., 2000);
• fifty per cent of consultations to paediatricians at tertiary referral hospitals relate to behavioural problems, including Attention-Deficit Disorder (ADD) and Attention-Deficit/Hyperactivity Disorder (AD/HD), with a ratio of boys 9: girls 1. Further, 20 per cent of referrals relate to learning difficulties – being made up of predominantly boys demonstrating poor achievement progress in literacy (Rowe & Rowe, 2000a); and
• boys have a higher prevalence of auditory processing problems. Unless appropriate classroom management strategies are put in place, these problems impact negatively on their early literacy achievement and subsequent progress, as well as their behaviours (Rowe, Pollard, Tan & Rowe, 2000; Rowe & Rowe, 2000a).

In reporting key findings from this study in terms of students’ achievement progress in literacy, Hill and Rowe (1998) note:

Of the predictors of student Literacy Achievement, the most salient was students’ attentiveness in the classroom. By far the major proportion of the variance in student Attentiveness was found to be at the student-level and the most influential predictor of Attentiveness was Gender, with female students being significantly more attentive than male students. Whereas the higher attentiveness levels of girls is familiar to most teachers, the implications for literacy curriculum and its assessment may not always be recognised. In recent years, there has been a greater emphasis within Australian elementary schools, both in approaches to teaching and learning and to assessment of student achievement, on activities that require high levels of sustained attention. Such activities include on-task-demanding behaviours such as the production of written portfolios, the writing of extended pieces of prose, and the completion of written research projects. There has been a corresponding move away from short answer and ‘check the box’ type activities to tasks requiring increasingly higher levels of verbal reasoning skills – activities in which girls have a well established achievement and maturational advantage. It is possible that these changes in pedagogy may have placed, albeit inadvertently, a greater premium on attentiveness that have contributed to the phenomenon of substantial gender differences in students’ literacy progress, mediated especially through Attentiveness.

In brief, the research evidence suggests that throughout their schooling for a large proportion of boys, the verbal reasoning requirements and general literacy demands of school curricula and assessment are beyond both their developmental capacity and normative socialization experiences to cope successfully. Bray et al. (1997) suggest that a key socialization factor contributing to boys’ literacy underachievement compared with girls is their relative
reluctance to read. They identify the increasing prevalence of video and computer use by boys as being particularly erosive to boys' propensity to read, and note that there are major differences between adolescent girls and boys in their patterns and quality of interpersonal communication among their peers. That is, girls are more likely to have social lives that revolve around verbal discussion and communication, whereas, at this developmental stage, boys were more likely to have socialization experiences that revolve around play. In commenting on these phenomena, MacDonald et al. (1999) record:

The increasing use of solitary computer games, more favoured by boys than girls, can only exacerbate these differences. Patterns of behaviour outside school could either contribute to girls' greater ease with language, or be a reflection of it. Whatever the case, large numbers of boys can be said to fall into the category of 'underachieving readers', in the sense that they can decode print but cannot read in a sustained and flexible way, using a variety of contextual clues to extract meaning in the fullest possible sense.

It is possible that a key reason for the observed gender differences in performance, attitudes and behaviours, is that since the early 1990s there has been a notable increase in the demand for higher levels of operational literacy and especially, verbal reasoning and written communication skills in school education – areas in which girls, on average, have distinct maturational and socialisation advantages (Rowe & Rowe, 1999). This demand is reflected in curriculum design and content, as well as the way it is taught and assessed – at all stages of primary and secondary schooling. It is evident in school-based assessment and standardised, statewide testing in the early and middle years of schooling, as well as in certifying examination programs at Year 12. For example, MacDonald et al. (1999) observe: “…recent changes in curricular design and assessment practices tend to favour the traditional strengths of girls”. The case of changes to some mathematics curricula and their assessment since the early 1990s is illustrative. Due to shifts in pedagogical emphasis, there is an increasing demand for verbal reasoning and written communication skills in curricular content and assessment in mathematics. For Year 12 4-Unit Mathematics in NSW or Specialist Mathematics in Victoria, for example, there is a requirement for students to demonstrate extremely high levels of such skills. That is, the verbally presented, 'in-context' problems require to be read, understood, translated into relevant algorithms, solved, then explained and justified. Such a process requires sophisticated levels of both verbal reasoning and written communication skills – which appear to be more ably handled by girls.

IMPLICATIONS AND STRATEGIES

The fact that teacher-factors have strong positive effects on students’ attitudes, behaviours in the classroom and achievement outcomes is very significant – for the education of both boys and girls. As Slavin et al. (1997) found in their evaluation of the “Success for All” program among low socioeconomic status schools in Baltimore and Philadelphia, students who, regardless of their gender, socioeconomic or ethnic backgrounds, are taught by well-trained, strategically focussed, energetic and enthusiastic teachers, are fortunate. The fact that teachers and schools make a difference should provide impetus and encouragement to those concerned with the crucial issues of educational effectiveness.

Slade (2002) emphasised the importance of having good teachers in a school and how important it is that they are willing to establish relationships with their students based on mutual respect and understanding. At the very basis of the notion of educational effectiveness, however, operational literacy, verbal reasoning and written communication skills are crucial, and need to be emphasised as keys to improving the achievements and experiences of boys throughout their primary and secondary schooling. MacDonald et al. (1999, pp. 18–19) outlined the following as being effective strategies that support the learning needs of boys:

• Focus on support for literacy across the curriculum;
• Early diagnosis and intervention for those ‘at-risk’ of literacy underachievement;
• Highly structured instructions and lessons;
• Greater emphasis on teacher-directed work in the classroom in preference to ‘group’ work;
• Clear objectives and detailed instructions; explicit criteria for presentation of work;
• Short-term, challenging tasks and targets with frequent changes of activity;
• Establishment of assessment and monitoring systems designed to identify underachievement in key skills across the curriculum, as well as in individual subjects;
• Regular personal interviews for the purposes of target-setting;
• Positive reinforcement: immediate and credible awards for quality work, increased effort and/or improved behaviour;
• Providing opportunities for extra tuition/revision;
• Planned program of differentiated personal and social development;
• Meaningful work experience placement aimed at informing students about changing roles in adult and working life.

Bleach (1998) suggests:
• to have highly public and well-supported expectations;
• to explain carefully to parents the importance of their role as listeners and readers;
• to set reading challenges for boys that are realistic and that stretch them;
• to use phrases and techniques like ‘word attack skills’ which appeal to boys’ sense of competition.

What should boys read?
• focus on the quality of reading—both what is read, and how well it is read—in classroom, library and elsewhere;
• focus on the fact that boys do read print matter such as newspapers and computer messages, and establish the need to introduce other sorts of text into schools;
• focus on boys’ preference for factual and informative reading and writing, at the expense of writing about feelings;
• focus on stories being important for entering into others’ lives and see how they deal with problems, relationships, and generally assist people to manage their lives;
• emphasise narrative as a powerful text in working out what our lives mean;
• relate reading to the more general need for boys to be connected;
• recognise that non-fiction, which many boys prefer, is valuable but is not generally read in as much volume, and is therefore weak in terms of developing reading stamina.

Declining Rates of Achievement and Retention
The perceptions of adolescent males
Professor Faith Trent
Malcolm Slade
The Flinders University of South Australia, June 2001

The research summarises the views of 1800 adolescent males, one-third of whom were identified as ‘at risk of not completing year 12’, in Years 9 to 11, drawn from 60 secondary schools in South Australia. The schools were drawn from State, Catholic and Independent sectors and were located in rural and urban sites. The views expressed are clear and largely uniform across the schools, year levels and levels of achievement.

It is evident from the literature review undertaken as part of this study, and from media reports, that the issues and problems are being reported as single factors and more in terms
of ‘problem boys’ who are not coping, than problems that boys more generally face while trying to fulfil their learning needs. Some of the strategies employed currently reflect these approaches. Several popularly held views are that the problems start in the primary years, and that the issues are reducible to matters of gender difference, gender equity or literacy and numeracy. These were discussed in the literature but were not perceived by the boys as being significant factors in the choice to remain at school. Issues about masculinity did not feature at all, with occasionally some irritation being expressed by the boys about others defining ‘what they [the boys] ought to be’. The views of the boys to emerge included:

1. The adult world is not listening, or not ‘genuinely listening’.
2. Most boys don’t value school; it’s more about getting credentials than learning, and these don’t operate usefully as short term motives to do the work.
3. Most girls get treated better, but so do boys who find it easy or necessary to comply and conform, and who quietly get the work done.
4. School work is boring, repetitive and irrelevant.
5. School doesn’t offer the courses that most boys want to do, namely courses and coursework that prepare them for employment.
6. Most boys neglect or reject homework because it is too intrusive, destructive and ultimately unachievable without sacrificing more valued aspects of their lives.
7. Years 8, 9 and 10 waste too much time. The Year 11 workload is excessive.
8. School pushes most boys into a downward spiral of disaffection, resistance, resentment, anger and retaliation that, for many, is just too hard to stop.
9. School poses too many contradictions and debilitating paradoxes:
   • School expects adult behaviour but doesn’t deliver an adult environment.
   • School pushes the rhetoric of education (e.g. fairness, respect, flexibility, a celebration of difference, etc.) but produces the opposite in practice.
   • School is about getting most boys out of education.
10. The primary factor, and the most troublesome paradox for boys, is that there are too many unsuitable teachers who either create or exacerbate their problems. Good teachers change everything but there are not enough good teachers.
11. For most boys, school is focused on preserving the status-quo, which makes it culturally out of date and unable to respond to change. It remains detached from the real world, distant from the rest of their lives, and neither convincingly forward looking, nor plausibly concerned with the need to prepare them for a place within the emerging society.

The experience of good teachers creates a paradoxical dilemma: good teaching is less present than desired, but is demonstrably better for everyone. ‘Teaching’ appeared to be synonymous with all that happens—the boys did not separate out school climate, organisation, curriculum matters and classroom interactions. The compounding impact of this, and the other paradoxes they face, seem to produce stress (both acute and chronic) and a rational commitment to objective despair, which may help to explain the growing incidence of a broad range of self-destructive and often anti-social practices. Although most Year 9 boys say they would like to finish Year 12, many have given up on secondary schooling before they reach Year 11. Apart from ‘hanging on’ at school, they see themselves pursuing one of three options; employment (preferably an apprenticeship), TAFE, or a senior college. These appear to offer the chance to pursue more relevant, interesting work, with realisable goals and rewards, in a more up to date adult environment and away from unsuitable teachers.
In order to see whether trends continued post school, the retention and achievement rates of 1st year students at Flinders University were examined. These results show that adolescent males leave university in higher numbers than females, and that the rate of retention is declining for both over the last four years.

There appears to be a need for teachers, teacher training, curriculum, school organisation and all other aspects of schooling, genuinely to recognize students as young adults, preparing to live in the world of the twenty first century. To the boys it appears that the gap between schooling and their other lives is huge and growing and many opt for other lives, despite recognising the cost. Further research is needed to establish what optimal learning environments which lead to boys achievement and retention are and how ‘good teaching’ might be measured.

The challenges and issues
In summary, some of the issues which emerged which need further consideration are:
• A need for understanding ‘good teaching’, and how it relates to the perceptions of the boys.
• A need for systemic change in schooling which brings schooling closer to the ‘outside world’ as perceived by adolescent males.
• Research into the nature of learning environments, which would address the issues raised by the boys, and provide opportunities for them to succeed.
• A focus in pre-service teacher education on understanding the perceptions, lifestyles, views and aspirations of adolescent males and how these impact on schooling, retention and achievement.
• The design and delivery of in-service education for teachers which focuses on understanding the impact of lifestyles, views, aspirations and perceptions of the current generation of adolescent males and the impact on schooling, retention and achievement.
• Examination of and action on the relationship between years 8, 9, 10 and years 11 and 12, noting the perceptions of the boys.

Most crucially, there is a need to develop and foster environments in which adolescent males are not seen as a problem and are recognised as young adults who have views which need to inform the educative process.

Teachers and schooling
There are definitely good teachers and bad teachers. If we could get rid of the bad teachers, we’d know who to get rid of. (Year 9)

Despite the broad and complex association of factors, the boys consistently and emphatically see their retention and achievement problems primarily in terms of their relationship with teachers and what they see to be a proliferation of ‘bad’ teachers who are given too much power. A uniformly repeated view is that a ‘good’ teacher changes everything. One good teacher, alone, is enough to make a bad lot tolerable and achievement, in an otherwise repressive, oppressive environment, seem possible. However, it is clear in the boys’ responses that they believe ‘the teacher’ implements and directs the system and the culture of the school.

The participants in this study have been clear, constructive and detailed in defining the constituting features of good teaching, from their perspective; providing more than 60 defining features of a ‘good teacher’. Interestingly, their emphasis is always placed on the skills of teachers; their ability and willingness to establish relationships of mutual respect and friendship with their students. A good teacher is one who:
• listens to what you have to say;
• respects you as a person; treats you like a friend; treats you as an adult;
• is relaxed, enjoys their day, and is able to laugh, especially at mistakes;
• is flexible, adjusting rules and expectations to meet the needs of individuals
and particular circumstances;
• explains the work; makes the work interesting; finds interesting things to do;
• doesn’t humiliate you in front of the class; doesn’t try to destroy you so that you’ll leave
school, or tell you you’re no good and that you should leave school;
• doesn’t write slabs of work on the board to be copied;
• lets you talk and move about in the classroom;
• doesn’t favour girls, or the boys who do what they’re told;
• doesn’t keep picking on people who have a reputation, pushing them to retaliate;
• doesn’t mark you down because of your behaviour; and
• gives you a chance to muck up and learn from it.

The downward spiral of disaffection

Once they have experienced one or two good teachers, the boys want to know why the rest

can’t be ‘trained properly’ and why the material they teach can’t be made more interesting
and more relevant. To them, the logic is straightforward, i.e., good teachers and good

teaching are demonstrably better for all, ‘so why don’t they just do it’: Because our teacher
treated us well and everything, then everyone treated him well back. He didn’t have to say
be quiet all the time. Because he was so good to us we were just good back to him and we
just shut up and did our work. He respected us. (Year 9)

Given that the boys are unable to fault their own logic, they seem left with the unwanted

conclusion that the teachers, schools (and perhaps most of the adult world) can’t see the
need for change and remain insensitive to their plight, can’t change when they need to,
despite the seriousness and urgency of the task, or simply don’t want to change. The
response from the boys to each of these is similar, namely disaffection, making resistance
seem necessary, which compounds the problem, leading to resentment, anger and
retaliation. The display of their response seems to be all that differs from boy to boy. For a
few it is a minor irritation that is easily dealt with through compliance, but for many, the
compulsion to respond, directly or indirectly, becomes an obstacle to achievement:
We get them back and muck up with teachers that don’t respect us. (Year 9)

Despite the immediate satisfaction of being heard by way of causing disruption, the spiral of
disaffection, resentment and anger is not considered by the boys to be a response that is
likely to achieve a great deal. It appears to be a last resort, and perhaps a cry for help or a
response driven by despair. Put simply, this is the reasoned, rational conviction that what
must be changed cannot be changed; that due rational process leads to this conclusion
and without ‘fiddling the books’ it can lead to nothing else (Medlin 1989). The cheery
optimism of teachers, counsellors, or perhaps parents, who say that they understand, but
who offer no real solutions, merely confirms the paradox.

Too often the spiral of disaffection is a process that they consider necessary: You can’t just
sit there. You got to fight back, muck up, or somethin’. What else can you do? (Year 9)

From what the boys are saying, the prevalence of ‘bad teachers’ and the boys’ inability to
avoid or control the impact that these teachers have on their lives, remains the primary and
most troublesome of the many paradoxes confronting these boys daily. From
epidemiological research findings during the last ten years we have learnt that irresolvable
paradoxes of this kind can have a broad, as well as both immediate and long term, impact
on human health, particularly in the formative years (McEwen 1998).. Interestingly, not being
able to resolve paradoxes of this kind is also thought to influence human behaviour and the
ability to learn.
The curriculum turns out to be what happens in the classroom
For most boys, school work is boring, repetitive and irrelevant. However, from their perspective you cannot change the curriculum unless you change the teachers:
School is, like, boring, and teachers, they are boring. (Year 9)
Are you saying that the teachers are boring, or is it the work itself?
No, the teachers make it boring. They rave on about stuff that is not exactly necessary. (Year 9)
How do you think these ‘boring’ teachers affect your work and your achievement?
They make us sleepy, and then you can’t concentrate properly. (Year 9)
What about the work itself?
It depends on the teacher. Our French teacher doesn’t explain anything. She, like, gives us work sheets, ‘here, do that’. She just goes and sits down. We don’t end up doin’ it and we get duty slips. (Year 9)

When the boys talk about both the work and teachers being boring, irrelevant and repetitive, they do this as though these were inseparable aspects of the one process that they simply call ‘school’. This includes school organisation and its culture; the length of the lessons, the day, the school week, the term, and so on, as well as homework, uniforms, attendance and behaviour expectations by teachers. They include aspects of the built environment, like enclosed classrooms, toilets that can’t be used, as well as gates and fences ‘that make you feel like you’re in prison’. They also include libraries and librarians, who they say, try to keep boys out. For the boys, these are all interdependent and causally interrelated aspects of their attitude to the work.

Interestingly, principals are often talked about positively—so too are many of the deputies/assistant principals whose job it is to deal with the ‘problems’. Nonetheless, the boys’ emphasis consistently and uniformly returns to the teachers as the primary factor; the one that must be changed before any of the others can be changed; the one which by changing will change all of the others. For most boys, the fault primarily lies with the teachers, because from their point of view the power lies with the teachers to make the necessary adjustments, but they don’t. For them, the outcome is that boys learn less because teachers teach badly:
You don’t really learn that well if you can’t concentrate because you’re bored. (Year 9)
Teachers should do more things to make it interesting. They could do creative things instead of just sitting down filling in things on a work sheet kind of stuff. (Year 9)
It’s the same for all lessons pretty much. (Year 9)

It is important to note that the boys refer to the work as being boring in several ways:
1. It is inherently boring because ‘it’s all theory’.
2. The work has been done before, ie, it ‘is too repetitive’.
3. The work is done in the same way, lesson after lesson, day after day, year after year, ie, we read a novel and ‘do a review about it’, then we read another novel and ‘do a review about it’, or we watch a movie and ‘do a review about it’. Sometimes ‘they just get you to do assignments’ one after the other, or you just sit in classrooms and ‘copy out of books or from other people’. That’s ‘all we ever do’.
4. It presents no challenge, since it’s ‘real easy stuff’, and because it is easy it gets boring.
5. The work is not relevant, namely it’s ‘stuff you can’t use’, or ‘you won’t even use in the work you want to do’, by which they mean ‘real work’ outside and beyond school:
We do real easy stuff ... we’ve done it all before ... it’s heaps boring; it’s all theory ... stuff you can’t use. (Year 9)
I think school is too repetitive. Like in English you do the same things over and over again. We watch a movie and then go and do a review about it, then we read a book and do a review about it. That's what I get sick of doing ... (Year 9)
We've been doing that since Year 8 and 9 and 10 ... (Year 11)
I find that Year 11, (and 12 I've been told) ... that it's pointless, because you don't learn anything. They just get you to do assignments. You don't learn anything at all ... When you do assignments, you don't really care what you do, you just write it down so you can finish it ... (Year 9-11)
You only copy out of books or from other people, so you're not learning anything ... (Year 9-11)
And in maths it's just sheets [work sheets] ... (Year 9)
And in maths they give you things you won't even use in the work you want to do. It's pointless. (Year 11)
In lessons like science, languages and maths it's the same stuff rolled off again and again. (Year 9)
My marks in maths have dropped considerably because of the way the teachers teach. (Year 9)
From the Survey of Student Views, it is evident that most boys and girls not only agree strongly with statements like, 'We do the same thing over and over ... its pointless and so repetitive', 'You learn a lot more from doing things', and 'Some subjects aren't hard, they are just not relevant', they are also in agreement that 'The work is boring because the teachers are boring', and 'Teachers could make the work more interesting'. However, 100 per cent of both girls and boys agreed with the statement that 'It’s easier to work hard in subjects you like'.

Although several subjects are talked about as inherently boring, irrelevant and repetitive, the boys consistently believe that a good teacher can make any subject interesting:
My teacher has made a big difference in my work in maths. My mum spoke to the teacher cos she thought I was cheating. (Year 11)
All of the boys either expressed or supported the view that they 'do better', in terms of self-esteem and achievement, with better teachers; they muck around less, they concentrate more, they work harder in class and they usually get the homework done. Basically, the boys believe that by changing the teachers you have already changed the curriculum. In other words, the curriculum turns out to be what actually happens in the classroom, and learning turns out to be what the participants actually take away with them and use.

In understanding their views about the curriculum, stereotypes and other dichotomous distinctions become prohibitive and destructive. All boys say that they learn better when they are 'doing things'; 'interesting', 'hands-on' things. Nonetheless, what constitutes 'doing things', or things that are 'interesting' does not fit into the more traditional dichotomous divisions between 'academic' and 'technical', 'theoretical' and 'practical' or 'abstract' and 'concrete'; in which things academic, theoretical or abstract are necessarily passive and uninteresting, and things technical, practical or concrete are necessarily active, interesting and more 'real'.

Science and maths are regarded by some boys as subjects that involve interesting, active tasks that they enjoy. Some of these are practical, but most are theoretical or abstract. The same boys speak of their interest in sport and in a range of classes involving mechanics, cooking and drama, because they amount to 'doing things'. Significantly, stereotypes, false dichotomies and similar culturally archival concepts, are at their most destructive in information technology, where most traditional distinctions become fuzzy. The boys, for example, fail to understand why computer games and the use of email are excluded from
their academic program, why teachers spend so much time ‘trying to block internet sites’ that are easily accessed from home, why teachers don’t understand computers much, why they ‘force students to ‘learn’ ‘what they already know’, and why teachers and librarians stand guard over computers that have already passed their use by date. In the trial Survey of Student Views, 91 per cent of the boys agreed with the statement, ‘Computers are the way of the future’ and yet around 50 per cent of these boys believe that ‘Computers at school are a waste of time because nothing ever works’, and that ‘There is no point using computers at school because there are too many restrictions’. Although not all boys have access to computing facilities at home, 78 per cent of them find that they ‘mostly use computers at home’. From the views expressed by most boys, it would seem that the idea that boys and computers were ‘born for each other’ needs revision. In our schools, it seems that the two might be experiencing a ‘forced separation’.

Once again, the boys bring the issue back to teachers. At schools where the Information Technology teachers are regarded as ‘good teachers’ the state of the facilities, the speed of the modem, and so on, are not the major issue. In one school, the boys described the ‘Info Tech’ teacher as ‘a legend’ largely because ‘he listens’, ‘he treats you like a friend’, ‘he takes you seriously’, and he ‘lets you do stuff’. From much of what was said, it is evident that this particular teacher has understood that computing is not just a new technology, it is also a new way of life, involving new dimensions of space and time, new expectations and a virtual world in which distinctions between reality and fantasy collapse, and notions like ‘distance’, ‘tomorrow’, ‘limits’, ‘restrictions’, ‘blocked sites’ and even ‘copyright’ make very little sense. Boys who talked about their ability to ‘build computers’ and who have been ‘programming for five years’, or who have found ways of ‘getting into blocked sites’ and so on, also talked about their frustration at being forced to do boring, menial tasks in the classroom like ‘opening and closing files’ and how their resistance had led to ‘withdrawal’ from computing classes and, in one case, a three day suspension. They also talked of being excluded from computing facilities because they refused to take their hats off, or because they ‘used’ email or loaded ‘games’ onto school computers. This general frustration is directed largely at teachers. In the Survey of Student Views, 76 per cent of boys agreed with the statement that ‘Teachers don’t know much about computers and they won’t let you tell them’.

**The paradox of achievement:**

**The unrecognised CV**

From what the boys are saying, it seems that at Year 11 most of them have achieved a great deal. They are very perceptive, intelligent young men who are struggling to believe in themselves. At Year 11, and at about 16 to 17 years of age, these boys have an impressive curriculum vitae; in terms which are important to them. The boys seem to be aware of their achievements, and aware that the adult world, particularly the world of education, affords them little or no recognition. In its place, they find themselves systematically not to be achievers, or have their achievements acknowledged. Although the boys show an awareness that success means different things for different people, they are puzzled, disappointed, and in many cases angry, that the adult world persistently fails to recognize their successes, particularly those that, in contemporary Australian society, are clearly ‘rites of passage’ into adulthood. For example:

- They have found and sustained part time work, and at a time of high unemployment. In excess of 60 per cent of the Year 11 boys say they are working, with the average being around 15 hours—in some groups all the boys were working and some are working 25 to 35 hours a week in low paid jobs with difficult conditions and often have supervisory responsibilities.
- Many Year 11 boys are licensed car drivers.
- They have managed to maintain, for over three years, their involvement in an education process that they believe to be unsuitable and often hostile to their needs and interests.
• They participate in some sort of competitive sport, whether it be in organised team sports or in more individual pursuits like skate-boarding. More than 60 per cent indicated a weekly commitment to organised team sports, in the range of 6 to 12 hours, spread over 2 to 5 days each week.
• They maintain a social life with both male and female friends.
• They make difficult decisions, for example, about drug use.
• They deal with family differences and problems, some of which produce pressure to achieve in particular ways or conditions that shape and direct education options, performance and outcomes.
• They continue to adjust to rapid physiological and psychological changes.
• They cope with the increased responsibilities of adulthood, while being actively denied the accompanying adult freedom and empowerment.
• They sustain a fundamental belief in their culture, expressing this through their individual integrity, their passion for freedom, and their strength to resist perceived injustice against all odds.
• They remain forward looking and largely optimistic, despite being taught about the horrors of converging social and environmental crises which threaten human survival on a global scale.

Despite these and other positive achievements, the boys find that they get very little recognition for their successes; recognition coming mostly from their peers. Few rewards are given and their gains have little or no impact on their school grades. Furthermore, the boys find themselves judged by their teachers, the school, and often parents, as being ‘failures’, ‘poor achievers’ or just not being capable of applying themselves to difficult tasks.

It comes as no surprise to the boys to learn that the focus of the literature and the media, when dealing with the declining rates of retention and achievement, is essentially directed toward ‘fixing up the boys’. The responses on the questionnaire to teachers, who are concerned about the issues, reflects some of the same approach, similarly directed at ‘fixing up the boys’. It would seem that the boys themselves see their problems very differently. The boys see themselves stuck with an unsuitable learning environment that they cannot change, largely because it is constituted by teachers and a system which is unresponsive to their perceived needs. Although they identify the curriculum as irrelevant and unchallenging, their experience with ‘good’ teachers has shown this to be an unnecessary outcome. Furthermore, it is one that is made worse because it is dominated by authoritarian school policies and practices that achieve nothing other than wasting classroom time, making education an unpleasant experience, and creating the pre-conditions for their decisions about retention and achievement. Once again, their experience with ‘good’ teachers has shown them that this is also an unnecessary outcome. The choice, whether or not to correct declining rates of retention and achievement, they believe, lies largely with the teachers and the preparedness of an aging adult world to ‘genuinely listen’, and to ‘catch up’; to bring the culture and focus of schooling up to date so that it might be better placed to keep pace with the economic, social and cultural changes that are already making demands that it cannot meet, and that in the coming decades will be as much dramatic as they are inevitable.
Boys, Literacy and Schooling: Expanding the Repertoires of Practice

Nola Alloway
Peter Freebody
Pam Gilbert
Sandy Muspratt
Commonwealth Department of Education, Science and Training 2002

Boys, Literacy and Schooling: Expanding the Repertoires of Practice describes an inquiry into the bases of the common finding that boys indicate lower literacy scores than girls on literacy tests and assessments. It explores the possible bases for that finding and offers the beginnings of an educational response. The following general
questions guided the design of this inquiry:
• Which boys are underachieving with respect to literacy learning and why?
• What is known about underachieving boys and their literacy development, including:
   – What factors influence underachievement in boys’ literacy performance and development?
   – Which existing practices in teaching educationally underachieving boys are consistent with current research on good literacy teaching?
   – What strategies have proven effective in improving the literacy outcomes of boys?

The report attempts to provide reasonable and educationally productive answers to these questions, through:
• using a repertoire of quantitative and qualitative data collection and analytic techniques;
• employing a method of establishing practices that benefit boys’ learning;
• considering the hypothesis that a range of effective and focused pedagogies assists boys and girls in their literacy learning;
• interrelating and cross-referencing professional and research-based knowledge on the matter of boys and literacy; and
• implementing and evaluating a variety of brief interventions aimed at improving boys’ literacy learning.

During the intervention phase the 24 teachers designed and trialled a variety of intervention strategies. Rather than describe these interventions as a set of 24 minicase studies, for the purposes of reporting and of meaning making, we have clustered the interventions into common themes drawing on an interpretative framework based on three kinds of repertoires of practice, expansions of which were, in one way or another, the aims of all the interventions. These three repertoires we have termed:
• a repertoire for (re)presenting the self. This deals with the ways in which students, with a focus on the boys, can experiment with a range of possibilities for (re)presenting themselves in the classroom, and with acceptable ways of conducting their presence and activity within the school. An understanding of the ways in which masculinity is ‘performed’ and ‘enacted’ through the body is essential here if boys are to extend their repertoires of the self. As detailed in Chapter 6, teachers attempted to expand repertoires for presenting the self by, for example:
  – reconfiguring classroom literacy as active and embodied;
  – capitalising on choice and personal experience; and
  – focusing on boys’ sense of self.

• a repertoire for relating. This covers the social relations of school work, including the extent to which students are allowed to adopt various positions of power, authority and agency in the classroom, including greater latitude in the selection of materials, the forms of tasks, the organisation of the work, and the means of assessment. It means addressing the ways that masculinity endorses and authorises particular relationship modes, and how these modes can be extended and broadened. Inevitably, this repertoire has close links with the expansion of repertoires of culture for boys and with repertoires for (re)presenting the self. As detailed in Chapter 6, teachers attempted to expand repertoires for relating by positioning boys as:
  – ‘learners’ in literacy classrooms; and
  – ‘class participants’ in literacy classrooms.

• a repertoire for engaging with and negotiating the culture. This entails looking beyond standard school to literacy-related materials from other cultural sites and formations, including contemporary commercial youth culture, integrating a wide range of modes of expression (oral, written, electronic, musical, visual, and so on), and cross-cultural or imagined (for example, fantasy) settings. For boys it also entails negotiating the hyper-masculine world, along with what it means to be male in such a world, and the meanings and
ways of being constructed through such a world. As detailed in Chapter 6, teachers attempted to expand repertoires for engaging cultures by focusing on, for example:  
– the ‘real’ and everyday;  
– popular culture materials;  
– electronic technologies; and  
– multimedia and multimodal work.

Most of the teachers appreciated and worked on the inter-relatedness of these repertoires. The general understanding was that, as the classroom broadens one or other of these repertoires, it has consequences for the others.

KEY FINDINGS

From interviews with teachers and school principals

As detailed in Chapter 5, interview materials generated from the 24 schools of Phase 1 of the study produced multi-layered data about the observations and explanations offered by teachers for boys' poor engagement and achievement in literacy.

Teachers observed that:  
• boys were less successful than girls in their ways of negotiating and participating in conventional literacy classrooms and conventional literacy activities;  
• boys showed a general lack of interest in print-based reading and writing activities;  
• boys demonstrated a perceived lack of purpose and relevance in school work;  
• boys made ‘minimalistic’ efforts to complete and present school literacy tasks;  
• boys were disruptive, easily distracted and difficult to motivate within the classroom; and that  
• boys lacked self-esteem and confidence as learners.

However teachers also observed several features of boys' classroom behaviour which made boys far more successful in terms of engaging with the multimodal literacies and literacy contexts of the future. Teachers observed that:  
• boys had a strong interest in electronic and graphic forms of literate practice;  
• boys were willing to ‘do’ literacy in active, public ways (such as debating, drama, public speaking); and that  
• boys were eager to engage with ‘real-life' literacy contexts and ‘reallife’ literacy practices.

Explanations that teachers offered about boys’ lack of engagement and achievement in conventional literacy work drew from a variety of popular discourses and positions, most commonly:  
• biology;  
• the influence of families and close personal networks;  
• cultural differences in orientation to schools and the valuing of school learning;  
• the interactive effects of ability and home environment;  
• the availability of male role-models in young boys’ lives inside and outside school;  
• popular social constructions of gender and the influence of the media; and  
• the influence of teachers and of schools themselves.

RECOMMENDATIONS

Our experiences on this project of working together with teachers and school principals in schools across the three States leads us to make the following recommendations:

Boys are not all the same and cannot be treated as an homogeneous group. They bring different social and cultural backgrounds to the literacy classroom and these need to be given serious consideration. However many boys share some common experiences of ‘being a boy’ in Australian society, and are likely to be influenced by dominant discourses of masculinity. The ways in which these discourses affect the life and learning of a particular boy in a particular classroom and community are always matters for empirical inquiry, calling for ongoing observation and analysis by teachers and researchers.
Recommendation 1:
That, as part of their ongoing community analyses, schools and teachers acknowledge and explore the varied social, cultural and ethnic backgrounds that boys bring with them to the literacy classroom, paying particular attention to the ways that constructions of masculinity influence boys’ behaviour and learning in literacy.

We have taken a practice- and futures-oriented approach to literacy that attempts to take balanced and realistic consideration of the communicative tasks that learners face. To become functional and independent members of literacy-saturated information societies, students must master a variety of forms of communication. The following definition of literacy is compatible with our approach in this study:

Literacy is the flexible and sustainable mastery of a repertoire of practices with the texts of traditional and new communications technologies via spoken language, print, and multimedia.
(Luke, Freebody & Land 2000, p. 20)

Recommendation 2
That schools, teachers, researchers and policy-makers adopt a practice- and futures-oriented approach to literacy in their work to improve boys’ literacy outcomes.

When working to improve boys’ literacy outcomes, teachers need to employ a range of effective pedagogical strategies that will engage students actively, purposefully and democratically in an effort to position them as successful literacy learners.

Recommendation 3
That teachers adopt a range of pedagogical strategies in the literacy classroom that are designed to promote an active, purposeful and democratic learning environment.

Recommendation 4
That teachers construct literacy classrooms as active environments for learning by maximising ‘hands-on’ learning through multiple textual modes; by providing opportunities for students to take control of their own learning; by taking account of students’ backgrounds and experiences; and by focusing on maintaining a productive sense of self among students as literacy learners.

Recommendation 5
That teachers construct literacy classrooms as democratic spaces where authority and agency are shared; where students are treated with dignity and respect; where students’ knowledges, opinions and contributions are valued; and where students learn to work collaboratively and cooperatively.

Recommendation 6
That teachers engage and work with cultural knowledges and meanings by focusing on the cultures of the ‘real’ and the everyday, popular culture, electronic technologies and multimediated texts. In doing this, teachers need to consider systematically the ways in which such activities can connect productively with curricular learning, and ways in which critical, analytic work can be developed in the use of potentially misogynistic and institutionally hostile materials.

Recommendation 7
That, to improve literacy outcomes for boys, schools need school systems’ cooperation to provide increased levels of learning support, professional development and technology infrastructure and support.

Recommendation 8
That future research address the effectiveness of the three repertoires model – repertoires for (re)presenting the self; repertoires for relating; repertoires for engaging with and negotiating cultural knowledges and meanings – for improving literacy outcomes for boys.

Information booklet on boys education issues and steps the Commonwealth is taking to support boys in schools.
The Hon. Dr Brendan Nelson MP
Minister for Education, Science and Training, April 2003

**Educational and Social Indicators**
The evidence that the educational needs of boys require attention is clear across a range of indicators.

**Literacy Scores**
Boys underperform on key literacy measures.
- In 2000, 3.4% fewer Year 3 boys and 4.4% fewer Year 5 boys achieved the national reading benchmarks than girls.
- 15.3% of Australian boys lack the literacy skills to benefit sufficiently from their education opportunities, compared with just 8.7% of girls.
69% of 15-year-old girls scored at or above the OECD mean in reading literacy tests, compared with 55.4% of males. While girls’ performance in literacy results has remained relatively stable over the past 25 years, overall, boys’ results have fallen to a significant degree.

Between 1975 and 1995 the proportion of 14-year-old male students who demonstrated mastery on reading tests declined from 70% to 66%, while the corresponding proportion of female students changed little, from 73% to 74%. From 1975 to 1998, the mean score for male students in reading comprehension decreased significantly, from 50.2 to 49.0. The results of female students did not change significantly during the same period (rising from 51.1 in 1975 to 51.3 in 1998).

**School Engagement and Enjoyment**

Boys are less engaged with their school and enjoy school less than girls.

While male students are more likely to participate in extracurricular sports activities, female students are likely to participate to a greater extent in extracurricular activities than male students and in doing so increase their level of attachment to the school.

Boys report less positive experiences of schooling than girls in terms of ‘enjoyment of school, perceived curriculum usefulness and teacher responsiveness’.

**School Retention**

For the past 25 years more girls than boys have completed schooling.

In 2002, the apparent Year 12 school retention rate was just 69.8% for males, compared with 80.7% for females.

**Higher Education**

More girls than boys go on to study at higher education institutions.

Males made up just 43.1% of domestic higher education students in Australia in 2002, compared with 45.9% in 1992.

**Behavioural and Social Outcomes**

Males make up an overwhelming proportion of students experiencing disciplinary problems and school exclusion.

Teenage boys are more likely than teenage girls to be unemployed, be involved in a car crash, have problems with the law, experience alcohol and substance abuse or commit suicide.

‘By fifteen years of age boys are three times more likely than girls to die from all causes combined - but especially from accidents, violence and suicide’.

In some schools boys account for eight out of every ten suspensions and exclusions.

**International Data**

The relative poor performance of boys is not unique to Australia.

International data show that, in every participating country, boys are doing significantly worse than girls in reading literacy.

Across the Organisation for Economic Cooperation and Development (OECD), boys are generally more likely to be disaffected with school and more likely to truant.

**Why Male Teachers Matter**

The recent House of Representatives Inquiry into the education of boys recognised that women and men can be equally good teachers of both boys and girls and agreed that the quality of the teacher is more important than the gender of the teacher. However, the House of Representatives Committee determined that more male teachers are needed because male teachers as role models matter. The Committee noted that it is desirable to ‘have a balance of men and women teaching and in positions of authority in schools’, and that ‘the role modelling and teaching by males whose relationship and commitment to boys is genuine is the most important factor.’
In its interim report, *Attracting and Retaining Teachers of Science, Technology and Mathematics*, the Committee for the Review of Teaching and Teacher Education noted that ‘it is desirable from the perspective of a diverse society that the numbers of male teachers increase in coming years, particularly in primary school’. Several commentators note that boys need positive male role models to help convey a sense of male identity. Mr Richard Fletcher (University of Newcastle) and Dr Peter West (University of Western Sydney) both argue strongly for the need for more male teachers. Dr West has argued that primary schooling is a largely ‘feminised’ environment, and emphasises the need for quality male teachers:

‘We don’t need ANY male teacher getting boys to be masculine in an unthinking way. We need men guiding boys toward a caring, thoughtful masculinity.’

Steven Biddulph believes that: ‘the six-to-fourteen age range is the period when boys most hunger for male encouragement and example’, and that primary schools need more male teachers with two qualities – a mixture of warmth and sternness, and undefensiveness.

Two major reports were released by the Commonwealth Department of Education, Science and Training in 2002 on boys' education:

- *Addressing the Educational Needs of Boys, Strategies for Schools and Teachers* – Professor Bob Lingard, Dr Wayne Martino, Dr Martin Mills and Dr Mark Bahr (University of Queensland and Murdoch University); and
- *Boys, Literacy and Schooling: Expanding the Repertoires of Practice* – Associate Professor Nola Alloway, Professor Peter Freebody, Professor Pam Gilbert and Mr Sandy Muspratt (Griffith University, James Cook University and Curriculum Corporation).

The key findings of both reports are:

- there are problems for some boys in terms of their engagement and literacy achievement in schooling;
- teaching and improved, high quality pedagogy is a key determinant in the educational experiences of both boys and girls;
- there is no universal solution to improving boys' outcomes; and
- in addressing a boys and literacy agenda, schools should cater for a range of learning styles in assessment and curriculum.

*Addressing the Educational Needs of Boys, Strategies for Schools and Teachers* argued that the quality of a teacher is more important than his/her gender. However, it did find that students sometimes find it useful to have teachers of the same sex with whom to discuss personal matters.

**Motivation and engagement of boys: Evidence-based teaching practices**

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

Dr Geoff Munns, Dr Leonie Arthur, Professor Toni Downes
Dr Robyn Gregson, Dr Anne Power, Associate Professor Wayne Sawyer,
Professor Michael Singh, Dr Judith Thistleton-Martin Frances
Australia, 2005

**Background**

This report is the outcome of a research project carried out between December 2004 and June 2005 by the University of Western Sydney. The project was commissioned
by the Australian Government Department of Education, Science and Training (DEST) as a quality teacher initiative under the Australian Government Quality Teacher Programme (AGQTP). The aim of the report was to examine the motivation and engagement of boys, in particular those from Indigenous, low socioeconomic, rural and isolated backgrounds. These boys have historically been over-represented among those students who are under-achieving academically and/or experiencing social difficulties.

The objective of this project is to inform teachers’ professional learning, knowledge and practice, and school curriculum development in relation to the education of boys in the early and middle years of schooling. In particular, the project sets out to identify and describe evidence-based teaching practices that have proved effective in improving the motivation, engagement and academic and social outcomes of boys, particularly those boys at risk of disengaging from school-based learning activities.

The conceptual framework for understanding motivation and engagement was the MeE Framework, developed at the University of Western Sydney by Dr Andrew Martin and Dr Geoff Munns (Munns 2004; Munns & Martin 2005). This framework provides the foundation for understanding the project’s analysis of the factors involved in boys’ motivation and engagement. The MeE framework also provides educators and schools with a way to understand and work with the complexity of relationships that students have with school and education. It does this by describing the dynamic to this multifaceted relationship that straddles individual, relational and holistic perspectives. It defines three distinct but closely interrelated ways that schools can work on the more positive and enduring relationships that students need to have with education to achieve successful social, academic and life outcomes.

The first area (Motivation) is informed by the psychology of education and picks up ideas about individual student motivation. The second area (‘e’ngagement) explores, from a sociological position, whole-classroom practices and processes that work towards students becoming meaningfully engaged with their daily learning experiences. The third area (‘E’ngagement) brings together both the psychological and sociological concepts. It highlights the whole-school policies, practices and interventions designed to encourage every student to feel that their school is a place that ‘works for’ them, and that education is opening up opportunities for them to be rewarded and successful, both in the present (in their school lives) and in the future (in their postschool lives, employment and careers).

The synthesis of issues and factors impacting on boys’ educational and social outcomes clearly points to the complex interrelationships between the social, economic, cultural and educational contexts within which boys’ schooling occurs. It reinforces the idea that we need to be asking ourselves continually ‘Which boys?’ and makes plain that there is no simple solution to improving boys’ social and academic outcomes.

**Motivation**

The school strategies that focus on individual support typically target boys who are either already disengaged or showing signs that they are likely to become disengaged. Interventions are generally characterised by their physical and ‘hands on’ nature, their opportunities for reflection, their connections with the local and broader community, and an out-of-classroom or off-campus orientation. Activities in the Motivation perspective of the MeE framework are intended to improve students’ beliefs about themselves, foster positive attitudes towards learning, achievement and school, develop adaptive thoughts and behaviours about schoolwork and enhance students’ study skills. These activities combine to encourage students to believe that there are good reasons for remaining at school and concentrating on their learning.

Motivational strategies detailed in the case studies may be considered within the following four categories:
focus on social outcomes
enterprise focus
teacher-directed technical focus.

*e’ngagement*

When schools decide to concentrate on the relational perspective of the MeE framework, they become as interested in the work of teachers and their pedagogies as they are in the thoughts, feelings and behaviours of students. The aim is to bring into play classroom learning experiences that are purposefully designed to encourage deep understanding and expertise, and genuine enjoyment. They also aim to promote the valuing of what students are doing and active involvement in what is being learned. This *e’ngagement* perspective has a whole-class focus that also takes up a social justice position. This means that classrooms working towards ‘e’ngagement will enhance social and academic outcomes for targeted boys at the same time as they offer advantages to all students.

**‘E’ngagement**

Interventions at a whole-school basis fall into four broad categories, each of which draws attention to the critical ways a school can encourage individual students and particular groups of students (especially those who are disengaged) to feel that: they are valued; they will be supported when they have learning or emotional needs; and they will be offered a wide range of curricular and extracurricular activities. In short, the aim is for each student to feel individually catered for at involvement, emotional and cognitive levels. The four categories are:
- school ethos
- school structure
- mentoring/role models
- productive post-school options.

**The principles**

The principles begin with an overarching principle of using the MeE framework to guide the development of a whole-school approach.

1. **Focus on student outcomes**
   - This entails identifying specific groups of students, specific outcomes and means of collecting evidence. Improvements in student outcomes require explicit attention; first, in identifying the target group of students and the desired outcomes; then the continual collection of outcome data; and the consequential refinement and development of existing and new approaches based on the analysis of these outcomes data.

2. **Select contextually relevant starting points**
   - These starting points should be tailored to the particular needs of the students, informed by research, policy and/or local successes and be consistent with the opportunities afforded by the local context and negotiated with relevant stakeholders. They include staff, students, community, external agencies, systems and sources of funds and other support.

3. **Generate pathways that build a coherent and multifaceted approach**
   - Such pathways need first to be aligned with the broader vision and direction of the school. They also need to respond in sophisticated ways to data collected on student outcomes and feedback from stakeholders. It would be expected that these would evolve over time to meet the changing needs and circumstances of the school and the community, distribute ownership across stakeholders and draw effectively on additional resources.

4. **Develop professional leadership and learning**
   - A critical aspect of improving the socio-academic outcomes for boys is the relationship between school leadership and professional learning. Strategies for change cannot be implemented successfully without the full commitment of the senior management, and this commitment needs to be shared by all staff involved.

**The strategies**
Following the principles, the strategies are divided into three distinct but interrelated groups, each containing ten strategies. These groups fall under the MeE framework perspectives of Motivation, ‘e’ngagement and ‘E’ngagement. Because the three perspectives are themselves interrelated, there is some unavoidable, indeed necessary, conceptual overlap across the groupings of strategies.

1 Individual support strategies highlighting Motivation:
   - Develop positive cultural connections between community, home and school
   - Foster supportive learning environments where students feel valued and respected
   - Promote opportunities for renewed community connections
   - Provide authentic, high-interest and challenging learning experiences
   - Allow negotiation and choice at school and classroom level
   - Connect critical syllabus areas (especially literacy) with all individual motivation strategies
   - Support adaptive attitudes and behaviours
   - Work on managing physical actions and emotional responses
   - Develop a wide range of assessment strategies that support early and ongoing intervention
   - Target students with specific socio-academic needs

2 Strategies that promote ‘e’ngagement:
   - 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

3 Strategies that widely cater for student ‘E’ngagement at involvement, emotional and cognitive levels:
   - Have high but realistic expectations within an ethos of pressure and support
   - Ensure all students feel that they will be supported socially and academically throughout their school lives.
   - Challenge stereotypical views about boys
   - Offer a wide range of intellectual, cultural and aesthetic experiences
   - Work collaboratively with families and communities
   - Use community, cross-age and peer mentoring to support students and to provide positive role models
   - Utilise support staff to cater for all students, particularly for those most ‘at risk’
   - Focus on key transition points
   - Promote different pathways for further study and post-school options
   - Provide alternative settings for the development of socio-academic learning

Conclusion
The case studies presented in this report provide evidence of the interrelated psychological factors and socioeconomic and cultural circumstances that affect the schooling of boys, particularly those from Indigenous, rural, regional and low-SES backgrounds. These boys are not necessarily passive in their schooling – in fact many struggle against its confines. The case study evidence points to the sensitivities, perceptions and evaluations that such boys invest, mentally and physically, in their everyday schooling. This research indicates that knowledge, not only of their behaviours, but also of their interests, aspirations and imaginings, is necessary to understand boys’ motivation and engagement with school. These interdependent factors play a significant part in the confidence and competencies that these boys develop in making their schooling meaningful or otherwise.
This evidence reminds us of the multiple dimensions of the lived experiences of these boys, experiences that are integral to explaining their engagement, motivation and socio-academic achievement. Their cumulative exposure to challenging socioeconomic and cultural conditions instils in them a range of lasting dispositions regarding schooling, education, work and life. However, neither background nor gender is a simple deterministic construct. This report shows that schooling does make a difference.

This report suggests that traditional curricular, pedagogical and assessment practices have failed for some – perhaps many – of these boys. Curricula that connect with boys' interests and experiences can provide rich material through which their existing knowledge is not only acknowledged, but can be extended, deepened and subjected to critical reflection. Developing curriculum, pedagogy and assessment practices that are relevant and give educational value to boys’ existing experiences is not a licence to celebrate insularity or to narrow their horizons. Nor should adapting curriculum to the local context limit boys’ education or their sense of vocational options. Schools in the case studies have taken the opportunity to explore their students’ local and global knowledge networks.

Teachers in the case study schools made connections with the knowledge networks available through their students' lived experiences. The target groups of boys seemed to benefit from schools that acknowledged their out-of-school learning experiences and interests as a source of knowledge acquisition and production. In particular, engaging pedagogies in these case studies embedded key literacy learnings in project based studies. The extension and deepening of students’ language and literacy skills was integral to such projects. Skilled teachers were often able to develop students’ capability to decode, analyse, use and produce multimedia texts through ‘hands on’ and/or investigative projects.

‘Creativity’ was a key issue to emerge from the case study evidence and is a theme running through the discussion of educational principles and strategies. The case studies suggest that, in their ordinary, everyday work, teachers use four key creative processes:

1 Effective teachers and their schools collaborate with other creative, innovative educators in their efforts to view the education of boys in new ways and to find fresh perspectives for framing the issues. Teachers, too, benefit from mentoring schools that build upon the accomplishments of other schools, as well as their own.
2 Schools and teachers benefit from the experiences of renowned leading educators.
3 Schools and teachers build upon their own earlier accomplishments by trialling appropriate educational interventions for boys, evaluating their success by using relevant quantitative and qualitative data and being flexible enough to revise their interventions accordingly.
4 The case study schools and their teachers recognise and accept that developing educational interventions that produce successful socio-academic outcomes for the target groups of boys is a difficult, arduous and time-consuming task. There are no ‘quick fixes’ in education; it may take a decade or more to make a productive difference. Typically, effective teachers do not abandon their projects.
Literacy and Numeracy Innovative Projects Initiative
Developing Boys’ Literacy Through Community Literacy
Victoria Clay and Deborah Hartman: The University of Newcastle
Commonwealth Department of Education, Science and Training 2006

Background
In April 2003 the Grants for National Literacy and Numeracy Strategies and Projects program (Commonwealth Department of Education Science and Training) allocated funds to the Boys in Schools program, Family Action Centre, University of Newcastle for an innovative literacy project.
The project had three aims.
Aim 1: Develop, trial and analyse a capacity inventory for strengths of community members (especially fathers and males) and community resources to support literacy.

Aim 2: Develop, implement and evaluate contextually specific programs using community strengths to enhance boys' literacy.

Aim 3: Produce a resource kit for dissemination of the capacity inventory method.

Capacity inventories and literacy strengths

The project was underpinned by the strengths perspective which incorporates the notion of empowerment, and embraces a number of key ideas. These are: the importance of collaborative partnerships between participants; an emphasis on expansion of participant strengths and capacities; a focus on individuals, family and the environment; active involvement of program participants; and assistance to those most disadvantaged by social and economic structures and changes (Saleebey, 2002).

In addition, a strengths based approach focuses on an individual's competencies rather than deficits. As Henderson and Milstein (1999) noted, looking through the deficit lens only obscures the recognition of an individual's capacities and strengths. The strengths perspective in this project thus operationalised the theory that mobilisation of participants' talents, knowledge, capacities and resources in relation to literacy will deliver better outcomes than a dominant focus on problems and deficits. The project hypothesized that utilization of existing family literacy practices, as well as a boy's interests outside school, can increase the boy's motivation and participation in school literacy programs. The project aimed to develop an instrument that would draw on the expertise of parents as a child's first teachers through utilization of the capacity inventory method.

A capacity inventory is a survey type instrument designed to gather information about an individual's skills and interests in a particular area. The capacity inventory in this study was looking at literacy skills and aimed to draw on family and community literacy strengths. The capacity inventory is also a positive method to develop and strengthen home-school partnerships.

Main findings

Aim 1: Development of capacity inventories

The project has successfully developed a set of strength based capacity inventories designed to elicit the literacy strengths of boys and their families. The capacity inventories have forms for mothers, fathers and primary boys. The inventories asked parents and boys to respond to a range of enquiries regarding their:
- leisure time activities;
- use of technology;
- reading habits and preferred reading material;
- activities shared by the family; and
- literacy activities shared by the family.

Application of the capacity inventories provided data about boys' activities and boys' literacy interests, parental activities and interests and home literacy practices. This data informed the development of contextually specific literacy programs.

Key findings relating to boys' activities and boys' literacy interests

Playing with friends, bike riding and computer-based activities were all very popular and fitted the expectation of boys preferring action-based activities. Of particular interest to the researchers was the finding that parents often reported a wider range of interests and activities for the boys than the boys did for themselves. For instance several mothers reported on their sons' interests in drawing and designing, story writing at home and card making. The boys had not reported such activities. This highlighted the benefit of gathering
information from mothers, fathers and boys in order to gain the most complete picture of literacy practices in the home and community.

In terms of interest in different text types, this project has shown results which follow the general trends of research from Canada, England and the U.S. Results from the boys' interest surveys indicated little novel or fiction reading but a high proportion of non-fiction and other text types. These included:

- joke books;
- "Where's Wally" style books;
- puzzle books;
- choose your own ending type adventure books; and
- text based computer games.

Of interest to note was that self-report and parental report indicated a high level of interest in shopping catalogues and other ephemeral text types (e.g. Book club catalogues from school; football club newsletters). This reinforces the general trend in boys being motivated to read when there is a clear purpose, which may be to secure information rather than for entertainment; which may be linked directly to their interests and is linked to their lives outside school.

**Key findings relating to parents' conceptualization of reading and literacy**

Anecdotal comments gathered during the project indicated that parents may be inadvertently reinforcing traditional attitudes towards activities involving reading and writing and thus widening the gap for the boys between home and school. Some parents were very resistant to the idea of utilizing non-traditional literacy materials for reading practice, such as text based video games, shopping catalogues or even newspaper or magazine articles. In their opinion such activities did not constitute *real reading*. This places the boys in a paradoxical situation, as the parents themselves did not undertake what they regarded as *real reading*. Most would read a newspaper or magazine but only a low percentage reported regularly reading a book - fiction or non-fiction, yet they did expect their sons to do so. Additionally it was generally the mothers who were book readers and they undertook this as a leisure activity when their sons were at school or in bed. So while traditional attitudes towards reading were espoused, non-traditional literacy activities were predominantly modeled for the boys - models the boys in many cases were trying to emulate but which were the source of reported conflicts between parents and boys regarding reading.

**Aim 2: Development of contextually based literacy programs**

The classroom teachers undertook contextualized program implementation based on the capacity inventories with the assistance of the research team. The style and method of program implementation thus varied considerably across the focus schools and according to school and teacher characteristics. All teachers found the information from the capacity inventories interesting and worthwhile. Suggestions for literacy support and programming were layered so that ideas/suggestions could be implemented at an individual, group or class level.

Contextually based program suggestions included:

**Interest boxes**: these were developed around individual boys’ interests and were a collaboration between the class teacher, librarian and parent. Material relating to an area of interest (e.g. Reptiles) was gathered for use in quiet reading time in the classroom. The emphasis in gathering the material was on the use of a variety of text types and materials - traditional and alternate literacy material (books, brochures and pamphlets, newspapers and magazines).

**Units of work**: these were developed by the project officer and class teachers around interests of the boys and utilized alternate literacy materials. Units were around the themes of trucks; MacDonalds; consumerism; a pizza and video night.
**Supporting written work:** ideas to provide scaffolding for written activities were also provided and included - concept maps, graphic organizers, prior knowledge charts. All teachers expressed great interest in the data collected from the mothers', fathers' and boys' capacity inventories. The information enabled a different perspective on the boys' family lives and on the activities undertaken by the families themselves, as well as the mothers and fathers individually. The information also informed an improvement in relationships between parents and teachers and teachers and boys, through sharing of information and resources (e.g. videos of family holidays; alternate literacy materials such as sports newsletters, etc). Most of the boys in the program were underachieving in all areas of school and had a poor opinion of their abilities. This had lead to a degree of social isolation for them and was contributing in some cases to behavioural and social difficulties. The literature indicates that boys use literacy as a point of contact with other boys and like to share their reading experiences (Smith and Wilhelm, 2000; Blair and Sandford, 2001; Love and Hamston, 2003). *Quiet reading time* as practiced in most classes precludes the sharing of information and material a practice valued by most boys. The teachers using the interest packs restructured their *quiet reading times* to allow for a period of either pairs sharing of material or reporting to small groups about what had been read, a piece of learning that had taken place or an interesting piece of information that had been discovered. The teachers reported less behaviour problems in *quiet reading time*, more focussed attention on the reading and an improvement in group discussions. Additional behavioural benefits were that the boys discovered positives ways of gaining attention from their class peers, so less disruptive behaviour was displayed. Being portrayed as experts in a particular area and having their input valued by their peers contributed to an improvement in self-esteem.

**Conclusions**

**Development of the capacity inventories**

The development of a capacity inventory for literacy has been a creative response to an entrenched problem viz. ‘How do we engage boys in literacy?’ A literacy capacity inventory focuses on a diverse range of skills and interests connected with literacy within the families that comprise a school community. After the identification of specific interests and skills it is possible to explore and strengthen the literacy connections between home and school and between a boy's life both in and out of school.

Target boys in this study were reported to be more motivated and engaged in literacy activities as the capacity inventory enabled:

- More explicit connection of learning to real life events.
- Use of alternate literacy materials connected with those events.
- Adaptation of teaching and learning activities to better suit boys' learning styles.

In terms of community building and encouraging community participation in education a capacity inventory approach provides:

- A creative solution to the development and strengthening of school community partnerships.
- An opportunity to use literacy as a focus for the enhancement of family and community interactions.
- A vehicle for empowering families and developing a common purpose.
- A contribution to better educational outcomes for boys by making explicit the connection between literacy practices at home and school.

The tool is suitable for use in multiple settings and contexts as the capacity inventory method focuses on strengths of individuals rather than deficits which enables *asset mapping* rather than *needs assessment* in a community. A literacy capacity inventory for parents in a school community immediately implies that the school values the practices of the parents and the diversity of literacy skills they bring to their parenting and hence their son's education. Acknowledgment of home literacy practices adds value to those practices and encourages parents in their efforts to assist in their sons' learning.

The capacity inventory method enables the process of drawing on *funds of knowledge* that boys and their parents possess by drawing on the different ethnic backgrounds and diverse
racial and gender relationships that exist within any school community. This approach also values the literacies involved in mechanical, technological and interactional activities and hence the materials used in those practices. The development of a literacy capacity inventory has provided a means of operationalising the notion that mismatches between school instructional levels and cultural practices at home are not due to deficits in family functioning but are a function of different practices between two cultures, through exploration and acknowledgment of the home practices and utilization of those practices within the school context. The acknowledgment and incorporation of diversity within the education context creates opportunities for dialogue between schools and parents by enhancing the view of the parent as a valued resource in a son's education. The capacity inventory allows for investigation of the activities associated with literacy undertaken by mothers and fathers separately and the impact that this has on educational outcomes for a boy.

Preliminary results from this project indicated that mothers and fathers not only used literacy differently in their personal lives but also in the way they interacted with their sons around literacy activities. The trend from this small sample was that literacy (i.e. reading in a traditional sense) was an activity supervised and encouraged by the mother. Quiet, non-action oriented activities in general were not readily undertaken by boys who preferred to use their existing literacy skills in other areas such as computer and video games and construction activities. Through the literacy capacity inventories the strengths of community members, especially fathers and males, can be identified by classroom teachers and utilized to encourage and enhance a broader approach to boys' literacy development. The capacity inventories will also identify community resources to support literacy through the surveying of text types and strategies used in the home.

Development of contextually specific literacy programs

Current models of pedagogy come from the constructivist approach to learning which is student centred. Such approaches require students to be active in building their own knowledge through exploration of current knowledge and exploring meaning with others in order to create new knowledge and learning. Through the use of contextually appropriate knowledges, materials and programs, teachers are able to encourage boys to apply their existing knowledge to new situations connected with their lifeworlds.

Several teachers commented that the curriculum has become so segmented that it is often hard to sustain a theme in the classroom. This lead directly to two teachers restructuring their language programs to incorporate a theme that was run for a term. They reported that the class was better able to sustain interest, was more focused on their work and that the practical nature of many of the tasks enabled the boys to take a lead role. Other teachers also noted that the boys were more enthusiastic, engaged and willing to stay on task for a greater length of time. The teachers reported that presenting written tasks in a different format and allowing for scaffolding of activities (e.g. work bank development, concept mapping, prior knowledge charts) helped the boys to view themselves as successful learners and contributed to more positive feelings about literacy activities.

In the context of current pedagogical models, the capacity inventories and the subsequent development of literacy programs have been successful through the:

- Acknowledgement of cultural diversity.
- Incorporation of prior knowledge from school and personal lives of the students.
- Explicit and deliberate attempts to encourage the participation of students from all social and cultural backgrounds.
- Narrative approaches to teaching.
- Creation of positive and supportive relationships within the classroom.
THE EVIDENCE SUGGESTS OTHERWISE
The Truth about Boys and Girls
By Sara Mead, June 2006

It’s a compelling story that seizes public attention with its “man bites dog” characteristics. It touches on Americans’ deepest insecurities, ambivalences, and fears about changing gender roles and the “battle of the sexes.” It troubles not only parents of boys, who fear their sons are falling behind, but also parents of girls, who fear boys’ academic deficits will undermine their daughters’ chances of finding suitable mates. But the truth is far different from what these accounts suggest. The real story is not bad news about boys doing worse; it’s good news about girls doing better. In fact, with a few exceptions, American
boys are scoring higher and achieving more than they ever have before. But girls have just improved their performance on some measures even faster. As a result, girls have narrowed or even closed some academic gaps that previously favored boys, while other long-standing gaps that favored girls have widened, leading to the belief that boys are falling behind.

There’s no doubt that some groups of boys—particularly Hispanic and black boys and boys from low-income homes—are in real trouble. But the predominant issues for them are race and class, not gender. Closing racial and economic gaps would help poor and minority boys more than closing gender gaps, and focusing on gender gaps may distract attention from the bigger problems facing these youngsters.

The hysteria about boys is partly a matter of perspective. While most of society has finally embraced the idea of equality for women, the idea that women might actually surpass men in some areas (even as they remain behind in others) seems hard for many people to swallow. Thus, boys are routinely characterized as “falling behind” even as they improve in absolute terms.

In addition, a dizzying array of so-called experts have seized on the boy crisis as a way to draw attention to their pet educational, cultural, or ideological issues. Some say that contemporary classrooms are too structured, suppressing boys’ energetic natures and tendency to physical expression; others contend that boys need more structure and discipline in school. Some blame “misguided feminism” for boys’ difficulties, while others argue that “myths” of masculinity have a crippling impact on boys. Many of these theories have superficially plausible rationales that make them appealing to some parents, educators, and policymakers. But the evidence suggests that many of these ideas come up short.

Unfortunately, the current boy crisis hype and the debate around it are based more on hopes and fears than on evidence. This debate benefits neither boys nor girls, while distracting attention from more serious educational problems—such as large racial and economic achievement gaps—and practical ways to help both boys and girls succeed in school.

Overall Long-Term Trends
A consistent trend emerges across these subjects: There have been no dramatic changes in the performance of boys in recent years, no evidence to indicate a boy crisis. Elementary-school-age boys are improving their performance; middle school boys are either improving their performance or showing little change, depending on the subject; and high school boys’ achievement is declining in most subjects (although it may be improving in math). These trends seem to be consistent across all racial subgroups of boys, despite the fact that white boys perform much better on these tests than do black and Hispanic boys. The fact that achievement for older students is stagnant or declining for both boys and girls, to about the same degree, points to another important element of the boy crisis. The problem is most likely not that high schools need to be fixed to meet the needs of boys, but rather that they need to be fixed to meet the needs of all students, male and female.

We Should Be Worried About Some Subgroups of Boys
There are groups of boys for whom “crisis” is not too strong a term. When racial and economic gaps combine with gender achievement gaps in reading, the result is disturbingly low achievement for poor, black, and Hispanic boys. But the gaps between students of different races and classes are much larger than those for students of different genders—anywhere from two to five times as big, depending on the grade. The only exception is among 12th-grade boys, where the achievement gap between white girls and white boys in reading is the same size as the gap between white and black boys in reading and is larger than the gap between white and Hispanic boys. Overall, though, poor, black, and Hispanic boys would benefit far more from closing racial and economic achievement gaps than they
would from closing gender gaps. While the gender gap picture is mixed, the racial gap picture is, unfortunately, clear across a wide range of academic subjects.

In addition to disadvantaged and minority boys, there are also reasons to be concerned about the substantial percentage of boys who have been diagnosed with disabilities. Boys make up two thirds of students in special education—including 80 percent of those diagnosed with emotional disturbances or autism—and boys are two and a half times as likely as girls to be diagnosed with attention deficit hyperactivity disorder (ADHD). The number of boys diagnosed with disabilities or ADHD has exploded in the past 30 years, presenting a challenge for schools and causing concern for parents. But the reasons for this growth are complicated, a mix of educational, social, and biological factors. Evidence suggests that school and family factors—such as poor reading instruction, increased awareness of and testing for disabilities, or over-diagnosis—may play a role in the increased rates of boys diagnosed with learning disabilities or emotional disturbance. But boys also have a higher incidence of organic disabilities, such as autism and orthopedic impairments, for which scientists don’t currently have a completely satisfactory explanation. Further, while girls are less likely than boys to be diagnosed with most disabilities, the number of girls with disabilities has also grown rapidly in recent decades, meaning that this is not just a boy issue.

**Moving Up and Moving On**

Beyond achievement, there’s the issue of attainment—student success in moving forward along the education pathway and ultimately earning credentials and degrees. There are undeniably some troubling numbers for boys in this area. But as with achievement, the attainment data does not show that boys are doing worse. Elementary-school-age boys are more likely than girls to be held back a grade. In 1999, 8.3 percent of boys ages 5–12 had been held back at least one grade, compared with 5.2 percent of girls. However, the percentage of boys retained a grade has declined since 1996, while the percentage of girls retained has stayed the same. Mirroring the trends in achievement noted above, racial and economic differences in grade retention are as great as or greater than gender differences. For example, white boys are more likely than white girls to be retained a grade, but about equally likely as black and Hispanic girls. Black and Hispanic boys are much more likely to be held back than either white boys or girls from any racial group. Similarly, both boys and girls from low-income homes are much more likely to be held back, while boys from high-income homes are less likely to be held back than are girls from either low- or moderate-income families. Boys are also much more likely than girls to be suspended or expelled from school. According to the U.S. Department of Justice, 24 percent of girls have been suspended from school at least once by age 17, but so have fully 42 percent of boys. This is undeniably cause for concern. Boys are also more likely than girls to drop out of high school. Research by the Manhattan Institute found that only about 65 percent of boys who start high school graduate four years later, compared with 72 percent of girls. This gender gap cuts across all racial and ethnic groups, but it is the smallest for white and Asian students and much larger for black and Hispanic students. Still, the gaps between graduation rates for white and black or Hispanic students are much greater than gaps between rates for boys and girls of any race. These statistics, particularly those for black and Hispanic males, are deeply troubling. There is some good news, though, because both men and women are slightly more likely to graduate from high school today than they were 30 years ago.

While it’s possible to debate whether men’s college attendance is increasing fast enough to keep up with economic changes, it’s simply inaccurate to imply that men are disappearing from college campuses or that they are doing worse than they were 10 or 20 years ago. Men’s higher-education attainment is not declining; it’s increasing, albeit at a slower rate than that of women. In addition, while women have outstripped men in undergraduate enrollment, women still earn fewer than half of first professional degrees, such as law,
medicine, and dentistry, and doctorates. Women do earn more master’s degrees than men, but female graduate students are heavily concentrated in several traditionally female fields, most notably education and psychology.

Outcomes of Education
With women attending and graduating from college at higher rates than men, we might expect young women, on average, to be earning more than men. But the reality is the opposite. Female college degrees are disproportionately in relatively low-paying occupations like teaching. As a result, women ages 25–34 who have earned a bachelor’s degree make barely more money than men of the same age who went to college but didn’t get a bachelor’s degree. Further, recent female college graduates earn less than their male counterparts, even after controlling for choice of field. In other words, the undeniable success of more women graduating from high school, going to college, and finishing college ultimately results in women remaining behind men economically—just by not as much as before. Far from surging ahead of men, women are still working to catch up.

The Source of the Boy Crisis: A Knowledge Deficit and a Surplus of Opportunism
It’s clear that some gender differences in education are real, and there are some groups of disadvantaged boys in desperate need of help. But it’s also clear that boys’ overall educational achievement and attainment are not in decline—in fact, they have never been better. What accounts for the recent hysteria?

The so-called boy crisis also feeds on a lack of solid information. Although there are a host of statistics about how boys and girls perform in school, we actually know very little about why these differences exist or how important they are. There are many things—including biological, developmental, cultural, and educational factors—that affect how boys and girls do in school. But untangling these different influences is incredibly difficult. Research on the causes of gender differences is hobbled by the twin demons of educational research: lack of data and the difficulty of drawing causal connections among multiple, complex influences. Nor do we know what these differences mean for boys’ and girls’ future economic and other opportunities.

The problem, we are told, is that the structured traditional classroom doesn’t accommodate boys’ energetic nature and need for free motion—or it’s that today’s schools don’t provide enough structure or discipline. It’s that feminists have demonized typical boy behavior and focused educational resources on girls—or it’s the “box” boys are placed in by our patriarchal society. It’s that our schools’ focus on collaborative learning fails to stimulate boys’ natural competitiveness—or it’s that the competitive pressures of standardized testing are pushing out the kind of relevant, hands-on work on which boys thrive.

The boy crisis offers a perfect opportunity for those seeking an excuse to advance ideological and educational agendas. Americans’ continued ambivalence about evolving gender roles guarantees that stories of “boys in crisis” will capture public attention. The research base is internally contradictory, making it easy to find superficial support for a wide variety of explanations but difficult for the media and the public to evaluate the quality of evidence cited. Yet there is not sufficient evidence—or the right kind of evidence—to draw firm conclusions. As a result, there is a sort of free market for theories about why boys are underperforming girls in school, with parents, educators, media, and the public choosing to give credence to the explanations that are the best marketed and that most appeal to their pre-existing preferences. Unfortunately, this dynamic is not conducive to a thoughtful public debate about how boys and girls are doing in school or how to improve their performance.
There may be innate, biologically based differences in men and women. But gender research identifying these differences in male and female cognitive abilities does not explain their cause, however. But gender differences may also be the result of culture and socialization that emphasize different skills for men and women and provide both genders different opportunities to develop their abilities. Researchers have investigated a variety of potential biological causes for these differences. There is evidence that sex hormones in the womb, which drive the development of the fetus’s sex organs, also have an impact on the brain. Children who were exposed to abnormal levels of these hormones, for example, may develop cognitive abilities more like those of the opposite sex. Increased hormone levels at puberty may again affect cognitive development. And performance on some types of cognitive tests tends to vary with male and female hormonal cycles. In addition, new technologies that allow researchers to look more closely into the brain and observe its activities have shown that there are differences between the sexes in the size of various brain structures and in the parts of the brain men and women use when performing different tasks.

But while this information is intriguing, it must be interpreted with a great deal of caution. Although our knowledge of the brain and its development has expanded dramatically in recent years, it remains rudimentary. In the future, much of our current thinking about the brain will most likely seem as unsophisticated as the work of the late 19th and early 20th century researchers who sought to prove female intellectual inferiority by comparing the size of men’s and women’s skulls.

In particular, it is notoriously difficult to draw causal links between observations about brain structure or activity and human behavior, a point that scientists reporting the findings of brain research often take great pains to emphasize. Just as correlation does not always signify causation in social science research, correlations between differences in brain structure and observed differences in male and female behavior do not necessarily mean that the former leads to the latter.

**Dubious Theories and Old Agendas**

“Girl behavior becomes the gold standard. Boys are treated like defective girls.”

—Psychologist Michael Thompson, as quoted in *Newsweek*

Thompson is just one of many commentators who argue that today’s schools disadvantage boys by expecting behavior—doing homework, sitting still, working collaboratively, expressing thoughts and feelings verbally and in writing—that comes more naturally to girls. These commentators argue that schools are designed around instructional models that work well with girls’ innate abilities and learning styles but do not provide enough support to boys or engage their interests and strengths. While female skills like organization, empathy, cooperativeness, and verbal agility are highly valued in schools, male strengths like physical vigor and competitiveness are overlooked and may even be treated as problems rather than assets, the argument goes. Building from this analysis, a wealth of books, articles, and training programs endeavor to teach educators how to make schools more “boy friendly.” Many of these suggestions—such as allowing boys to choose reading selections that appeal to their interests—are reasonable enough. But many other recommendations are based on an inappropriate application of brain research on sex differences. Many of these authors draw causal connections between brain research findings and stereotypical male or female personality traits without any evidence that such causality exists, as the sidebar demonstrates. These analyses also tend to ignore the wide variation among individuals of the same sex. Many girls have trouble completing their homework and sitting still, too, and some boys do not.
Members of the growing “boys industry” of researchers, advocates, and pop psychologists include family therapist Michael Gurian, author of *The Minds of Boys, Boys and Girls Learn Differently!,* and numerous other books about education and gender; Harvard psychologist William Pollack, director of the Center for Research on Boys at McLean Hospital and author of *Real Boys;* and Michael Thompson, clinical psychologist and the author of *Raising Cain.* All of these authors are frequently cited in media coverage of the boy crisis. A quick search on Amazon.com also turns up Jeffrey Wilhelm’s *Reading Don’t Fix NoChevys,* Thomas Newkirk’s *Misreading Masculinity: Boys, Literacy and Popular Culture,* Christina Hoff Sommers’ *The War On Boys,* Leonard Sax’s *Why Gender Matters,* and *Hear Our Cry: Boys in Crisis,* by Paul D. Slocumb. A review of these books shows that the boys industry is hardly monolithic. Its practitioners seem to hold a plethora of perspectives and philosophies about both gender and education, and their recommendations often contradict one another. Some focus on boys’ emotions and sense of self-worth, while others are more concerned with implementing pedagogical practices—ranging from direct instruction to project-based learning—that they believe will better suit boys’ learning style. Still others focus on structural solutions, such as smaller class sizes or single-sex learning environments. But all are finding an audience among parents, educators, and policymakers concerned about boys.

It would be unfair to imply that these authors write about boys for purely self-serving motives—most of these men and women seem to be sincerely concerned about the welfare of our nation’s boys. But the work in this field leaves one skeptical of the quality of research, information, and analysis that are shaping educators’ and parents’ beliefs and practices as they educate boys and girls. Perhaps most tellingly, ideas about how to make schools more “boy friendly” align suspiciously well with educational and ideological beliefs the individuals promoting them had long before boys were making national headlines. And some of these prescriptions are diametrically opposed to one another.

A number of conservative authors, think tanks, and journals have published articles arguing that progressive educational pedagogy and misguided feminism are hurting boys. According to these critics, misguided feminists have lavished resources on female students at the expense of males and demonized typical boy behaviors such as rowdy play. At the same time, progressive educational pedagogy is harming boys by replacing strict discipline with permissiveness, teacher-led direct instruction with student-led collaborative learning, and academic content with a focus on developing students’ self-esteem. The boy crisis offers an attractive way for conservative pundits to get in some knocks against feminism and progressive education and also provides another argument for educational policies—such as stricter discipline, more traditional curriculum, increased testing and competition, and single-sex schooling—that conservatives have long supported.

Progressive education thinkers, on the other hand, tend to see boys’ achievement problems as evidence that schools have not gone far enough in adopting progressive tenets and are still forcing all children into a teacher-led pedagogical box that is particularly ill-suited to boys’ interests and learning styles. Similarly, the responses progressive education writers recommend—more project-based and hands-on learning, incorporating kinetic and other learning styles into lessons, making learning “relevant,” and allowing children more self-direction and free movement—simply sound like traditional progressive pedagogy.

**How Should Parents, Educators, and Policymakers Respond?**

To be sure, there are good reasons to be concerned about boys—particularly low-income, urban, rural, and minority boys as well as those with disabilities. Whether or not our schools are to blame for causing these boys’ problems, they need to do a better job of working to address them. In particular, the disproportionate number of boys being identified with learning and emotional disabilities, suspended from school, and dropping out suggests that
what our schools are doing doesn’t work very well for some boys. But with so much ideological baggage and so little real evidence influencing the public debate on boys’ achievement, how are policymakers, educators, and parents to know what to do?

It’s likely that there is at least a grain of truth in all the different explanations being offered. The boy industry would not have the success it does if its arguments did not, to some degree, resonate with the experiences of parents and educators. But the many questions left unanswered by the research on these issues—as well as the ideological agendas of many participants in these discussions—make it difficult to draw practical conclusions about how to respond.

But there are several things parents, educators, and policymakers could and should do. The first is to not panic. Boys’ educational achievement is improving overall, some gender gaps are less significant than press reports make them out to be, and many boys are doing fine despite the averages. Second, we need to realize that many areas in which we see boys struggling are connected to larger educational and social problems and are not just a function of gender. Fortunately, we know more about these larger problems—and some of the steps we can take to address them—than we do about gender gaps. Low-income, black, and Hispanic boys, in the aggregate, are not doing well. Focusing on closing these racial and economic achievement gaps would do more to help poor, black, and Hispanic boys than closing gender gaps, and it would also help girls in these groups.

Similarly, while boys seem to be doing pretty well in elementary school, their achievement in high school appears to be declining. But so is the achievement of high school girls. The past decade of school reform—in which we have seen elementary-school age boys make a lot of progress—focused heavily on the elementary school years and particularly on building early literacy skills. But national policymakers have realized, in the past few years, that America’s public high schools are also in need of significant reforms. It makes sense to expand these reforms—which should help both boys and girls to achieve—and see if they reverse high school boys’ academic achievement declines and narrow gender gaps before we go too far down the boy-crisis road.

In addition, we need to recognize the role that choices play in producing different educational outcomes for men and women. Although some achievement gaps emerge early and appear to have a developmental component, those about which we are the most worried occur later, when the choices young people make have a significant impact on their educational results. Over the past 25 years, economic opportunities for women have increased dramatically, but many require a bachelor’s degree. Families and education systems have been very clear in conveying this message to young women and encouraging them to get the education they need to be economically successful. Less educated men, however, historically have more economic opportunities than less educated women, so their incentives to get a good education are not as strong as those facing women. Many jobs traditionally held by less educated men are disappearing, or now require more education than they did a generation ago, but boys may not understand this. We need to look carefully at the messages that pop culture, peer culture, and the adults who are involved in young people’s lives send to boys about the importance of education to their future opportunities, and make sure that these messages are conveying accurate information to young men about their economic opportunities and the education they need to take advantage of them.

Finally, policymakers should support and fund more research about differences in boys’ and girls’ achievement, brain development, and the culture of schools to help teachers and parents better understand why boys’ achievement is not rising as fast as that of girls. Such research should include studies that use proper methodological and analytic tools to look into the cause of gender achievement gaps, as well as experimental evaluations of different
approaches that seek to close them. To support research, policymakers should make sure that data systems are collecting quality information about boys’ and girls’ school experiences and academic achievement and men’s and women’s educational attainment and workforce outcomes. In addition, policymakers should fund research on some of the specific problems—learning disabilities, autism, and disciplinary or emotional problems—that disproportionately affect boys. These steps can help establish a more reasonable conversation and lead to effective responses to the achievement problems facing some boys, without unfairly undermining the gains that girls have made in recent decades.

TEACHING BOYS
A Global Study of Effective Practices
Michael Reichert, Ph.D. & Richard Hawley, Ph.D.
INTERNATIONAL BOYS’ SCHOOLS COALITION, 2009

Boys’ experience in schools can be looked at in two ways: through the lens of stereotype and easy assumption or more carefully, with a closer-in, more empathic willingness to consider their subjective experience. In the present study commissioned by the International Boys’ Schools Coalition, a world-wide organization of about 200 schools that have long been dedicated to the education of boys, we have had the luxury of listening to over 1500 male
adolescents and nearly 1000 teachers describe their mutual experience of each other in the classroom. In their stories, we hear countless examples of teachers bending and refining their pedagogy, adapting their lessons to fit what they have come to see as boys’ interests and needs. From the boys, we received an outpouring of appreciation for these efforts, stories of male students taking in and cherishing the mentoring, mastery, high expectations and discipline of their teachers. The combined impression, from both boys and teachers, challenges the easy stereotypes that boys are stubbornly resistant to school and leaves us with a hope that, when conditions are right—when pedagogy fits boys’ lives and learning needs, when schools support teachers’ efforts to build responsive relationships with their male students—boys can and do thrive in school.

The stories collected for this study are both rich in voice and personal detail. They reveal how especially effective lessons are designed and delivered. Teaching boys well can be likened to a dance, or any sort of intricate partnership: while someone leads and another follows, the partnership involves both people united in common purpose, finely attuned to each other’s moves. Despite boys’ historic reputation as being school-averse, we have discovered committed teachers who have hit upon demonstrable instructional strategies to reach boys and engage their hearts and minds in learning. Effective teaching develops in a given teacher’s classroom practice. In a number of ways effective practice is elicted by what observably delights, interests and motivates students in a teacher’s charge. In asking a broad sample of practicing teachers to narrate especially effective practices, we were interested in the extent to which this evolutionary process might point to insights and applications which could offer something of value to schools generally.

The classrooms our respondents describe are far from a one-way or top-down pedagogy; the reporting teachers plan and deliver their lessons, but students also shape those lessons in active, obvious ways. As teachers stand before their classes of boys in English or Science or Music lessons, they learn by trial, error and intuition to adjust their instruction to the appetites and learning styles of their pupils. And, as the students responses indicate, boys in turn study their teachers, sizing them up, reading their every gesture and tone. Together, these partners execute a dance that, at its best, can be purposeful, heart-felt and life-changing for both teacher and student.

In this study we asked both students and teachers the same question: *Describe a lesson or classroom activity that “worked”*. There was an abundant overlap in the types of lessons boys and teachers described to us in their responses. But there were also instructive differences that should guide teachers and schools to adjust their teaching to boys’ hearts. Overall, across remarkable cultural, geographic, language and social differences, the researchers were able to map defining features of successful approaches to teaching boys.

The survey was introduced to teachers with the following instructions:

**YOUR TASK: to narrate clearly and objectively an instructional activity that is especially, perhaps unusually, effective in heightening boys’ learning.**

You are not being asked to describe or discuss effective teaching generally, or to describe a whole term-long or year-long course of study. The teaching practices sought here are lessons or units, individual projects or assignments, or instances of classroom process in which boys rise to the material under study with heightened attention, energy and performance, resulting—perhaps measurably, perhaps not—in superior work. This is of course a highly subjective appraisal. Nevertheless, teachers are clearly aware of activities and moments when boys rise to instructional business with heightened interest, energy and performance. Teachers tend to register this awareness in the satisfaction of having had an exceptionally good class, series of classes, or perhaps an exceptional moment in class. Students register the experience in the quality of their attention and of their participation. Students carry their
interest in a good learning experience outside of the classroom, continue to think and talk about the idea, text, or project with peers and family on their own time. What is effective in a practice may lie in the appeal of the subject, topic or text under review. Sometimes it is not the topic or text, but an approach to investigating or discussing the text or to writing about it which elicits the heightened response. Sometimes effective practices seem to derive from the social structure of the learning exercise.

Teachers were then asked to respond to these questions:

1. Please describe an effective practice you have employed. In narrating your observations, take care to avoid evaluative terms like “wonderful” or “inspired.” Instead, show the qualities that evoke those feelings in you with clear narration of what is said and done in the course of the activity. Tell the story of the practice, as if you are explaining it to a colleague in another subject, or perhaps to a younger teacher who is looking for guidance. Be sure to identify the course and grade level for the instruction activity you have chosen.

2. To what do you attribute the special effectiveness of the practice or activity you have chosen? (There is no need to be authoritative or “scientific” in this appraisal.).

3. Is there something about this practice or activity that you believe is specially pitched to boys’ learning, engagement and achievement?

4. Are there measurable outcomes—or outcomes that might conceivably be measured—that could objectively document the effectiveness of this practice?

In response to these survey questions, the project received an outpouring of detailed and obviously well-crafted lessons from teachers, totaling 942 responses. 44% of the responses were from US schools; 22% from Australian; 18% from New Zealand; 7% from Canadian and another 7% from South African; 2% were from the United Kingdom. The study asked teacher respondents to report their gender and teaching experience to gauge the degree to which these factors might influence, in some way, the types of lessons they submitted or their rationale for the lessons. Three quarters of the teachers were male; the remainder female. Respondents ranged rather evenly in years of teaching experience from 1–44 years.

Again, to provide an independent assessment of the lessons narrated by the teachers, we also surveyed a hundred boys from each school with an equally simple questionnaire about memorable lessons. The project was introduced to the boys in the following way:

Thank you for participating in this survey! Your school is participating in a special project, Wisdom of Teaching in Boys’ Schools, sponsored by the International Boys’ Schools Coalition. In a separate survey, teachers in your school are being asked to talk about a lesson or an activity that they find especially memorable, and that they think is very effective in engaging boys in your school. The second component involves a survey of students. Your answers to the questions that follow are very important to the success of the project. It is important for you to know that your report is confidential. The project researchers will read and summarize survey answers, and their report may include comments and quotes, but student names will not be used.

Boys were then asked several demographic questions, including their name, age, grade, school and ratings of their motivation and achievement levels as well as their socioeconomic status and ethnicity. Then they were given the following instructions:

In the box below, tell us the story of a class experience that stands out as being especially memorable for you. By this, we mean that it was especially interesting, engaging or motivating for you. It might be a particular lesson, unit of study, a choice of text or subject matter, a class activity or exercise, or a project or assignment. It doesn’t have to be an occasion when you achieved well in a subject, but simply one in which you found yourself especially engaged, interested or motivated. When you tell this story, please give as many details as you can in describing what took place. Avoid judging or praising with words like
“terrific” or “best”; rather, show what occurred. You do not need to give the name of the teacher, but if it is easier for you to refer directly to the teacher by name, it will be removed later on.

Teacher Responses

Determining Categories

After a preliminary review of all the teacher submissions, they were sorted into a number of categories determined by the kinds of activity the teachers narrated. Again, the convergence of similar practice was pronounced. Although for purposes of clear illustration the following accounts of effective lessons will be assumed under single categorical headings, such as Gaming, Teamwork, Competition, Created Product, nearly every reported practice includes multiple elements—as when a teacher devises a game wherein boys form teams to create a product which will be judged competitively against the products of other teams.

The categories, or elements of effective practice, derived from the totality of teacher submissions are Product, Gaming, Motor Activity, Role Play/Performance, Open Inquiry, Team Work/Competition, Personal Realization, Responsibility For Outcomes, Intrinsic Subject Matter, Interactive Technology, Boy-Specific Pedagogy, Metacognition, and Novelty, Drama, Surprise.

Active Learning Emphasis

Taken together the teacher responses combine to suggest a powerful endorsement of active, project-centered learning: boys on their feet, moving about, working individually, in pairs, and in teams to solve problems, create products, compose presentations to their classmates who are held accountable for the material presented.

The Transitive Factor in Effective Lessons

As many of the teacher narratives make clear, diversion and easy engagement are far from the aim—or the result—of their effective efforts. There is, the researchers maintain, a quality of transitivity running through the effective practices reported. That is, the motor activity or the adrenal boost of competing or the power of an unexpected surprise in the classroom does not merely engage or delight; it is transitive to highly specific learning outcomes. An example of this transitivity is the English teacher’s narrative of teaching Romeo and Juliet to his early adolescent students in the course of which he introduces them to the discipline of stage sword play, to the extent that the boys train, practice, and master some of the conventions of swordsmanship. The activity is highly engaging on a number of counts: it is physically rigorous, it is dramatic, holding even the faint promise of danger, and it is novel. But, as the narrative reveals, it is also transitive to a deeper, more enlivened reading of those scenes in which Tybalt slays Mercutio and Romeo slays Tybalt—and to the play as a whole. The active exertions infuse the experience of tackling a dense, rich text with an altogether different kind of energy, appreciation, and attention. This kind of transitivity from pedagogical approach to learning outcome is widely and variously in evidence in the selected lessons below. Moreover, there is every reason to believe that some forms of this transitive property are especially effective with boys.

Student Responses

From teachers’ comments, we learned of a pedagogy that aims to activate, or prime, boys’ imaginations and willingness to learn. Getting and holding boys’ attention, engaging them in the subject matter and the process of learning, was a critical step in constructing a successful lesson. The transitivity of the pedagogical plan—how approach determined involvement and mastery—seemed to us to be a critical skill developed by practiced teachers. Across so many different schools, with such different histories and traditions, this core feature of their partnership with boys was a remarkable constant. From the boys, we
heard this feature echoed, deeply appreciated and explained from the point of view of the other partner, the learner.

**Playfulness**

Boys—of all ages and from all of the schools—frequently selected times when they had the chance to be active and lighthearted as their most memorable learning experiences. They recounted times when games, team competitions, spectacles and teacher performances, explorations, role plays and movie viewing were part of their lessons. They cited these as instances when they were “carried away” by fun or team spirit and when learning was an organic outcome in an emotionally-charged, collective and transcendent process. In these stories, it was evident that boys can love to learn, especially when the lesson “fits” with this spirit of youthful exuberance, playful exploration and spectacle. So many stories, in fact, validated this notion of boys as high-spirited learners, ever ready to engage when their active, playful hearts are recognized, summoned into learning tasks, that this was our largest and most nuanced thematic category.

**Adventure and Discovery**

Boys seemed often to bridle at confining classrooms, routines, predictable pedagogy. Many remembered times they were allowed to set their own direction—picking a topic for a paper, selecting a project of some personal relevance, experiencing little interference or supervision from their teacher—as special, memorable times. In our survey data, we found many stories of boys feeling joy and excitement when permitted to transcend the predictable bounds of their schools. It seemed that lessons which tapped boys’ personal efficacy evoked their deepest appreciation and eager participation. This theme is quite parallel to the theme, Open Inquiry, described by teachers.

**Centering**

The student respondents reminded us that they are growing adolescents, engaged in the developmental task of defining their distinctive identities. As such, boys seemed to respond especially well to learning opportunities in which they were invited to impose themselves on the subject, relating to it from their personal experience or investing expressive or emotional energy in it. In this sense, they illustrated that learning is a very personal experience, an act of extending themselves—mind, heart, interests, passion—into new realms. Sometimes, teachers crafted assignments designed to reach into boys’ experiences so as to connect curricular lessons to their deepest feelings; other times, they sought to draw out their personal thoughts in more reflective, cerebral ways. Boys appreciated opportunities to make their journey of self-extension explicit and vivid, especially in concrete, tactile and sensual ways. Respondents often mentioned lessons in which they were able to get out of the classroom, move about, have adventures and play, get “hands-on” with their subject. For many, the outdoor education components of their school’s curriculum were occasions for important self-discovery, as well as for bonding with classmates.

**Social Validation**

The boys’ language became especially vivid when describing assignments that required them to present something authoritatively before an audience—most commonly their classmates. Listening to their stories, it seemed there was more to their excitement and investment than worries about how they might look—the public presentation validated their learning, offering them a picture of themselves that they wished to be positive. The power of the social context was even more exciting when boys were members of a team. Our sense was that, in addition to the positive feedback they received at such times about themselves, boys could also feel part of something and could derive meaning and validation from the contribution they had made to the collective effort. In all such ways, teachers take advantage of boys’ responsiveness to social validation, staging opportunities that range from debates, performances, competitions, role modeling among students and so forth.
**Self-Completion**

Occasions in which boys had overcome obstacles and achieved results beyond their expectations were often cited as memorable learning moments. These experiences of success taught them many lessons, including perseverance and importance of nurturance and support. One senses, in these stories, the uncertain and incomplete nature of boys’ self-concepts and their vulnerability to the feedback they receive about their efforts in school. For some, a teacher’s timely or skilful intervention lifted them to success. For others, meeting the challenge of the work fortified their sense of competence and purpose. For still others, a particular achievement opened up an awareness of a previously undeveloped aptitude, even glimmers of future vocations.

**The Relational Context**

Central to the boys’ narratives of their schooling was the importance of relationship—with each other, with their teachers—testimony that supports Chu’s (2000) conclusion from her research that boys are “relationship-ready” when conditions allow. Boys were not asked by us to talk about their teachers or to identify characteristics of teachers that were effective with them. That they included detailed references to specific teachers and to qualities of their relationships with these teachers so often is remarkable testimony to the power of the personal in boys’ lives. In fact, it seemed impossible for boys not to personalize their answers to our survey, so completely interconnected did their teachers and their lessons seem. The warmth and consistency of these students’ accounts stands in some contrast to publicized claims that boys are as disconnected and disengaged from teachers as they can be from schools.

Finally, a brief word about the qualities of teachers who succeed in building such trusted relationships with boys. From boys’ stories, the evidence suggests that it is very much as Raider-Roth (2005) has written: successful learning is a social process, built upon relationships that embody qualities of trust and mutual respect.

Understanding this intersection of students’ capacity to trust what they know and their capacity to trust those around them is of utmost importance for teachers and researchers as we consider and create learning environments in which students can build robust relationships (p. 14).

As we consider strategies to improve boys’ schooling, our results strongly endorse this dynamic of teachers’ relationships with their male students as fundamentally transitive to the success of their learning process. And, judging from boys’ comments in which they mention female teachers with the same gratitude and appreciation as their male teachers, we must conclude that male and female teachers are equally able to build such relationships with boys. Throughout the stories we now turn to, we hear all sorts of teachers—young, veteran, male, female—accomplishing the kind of relationships that work with boys.

**Reading the Teacher**

At the outset, we were struck by boys’ perceptiveness, their attuned hearts, their abilities to fathom their teachers. Many boys told stories that detailed their careful study of their teachers: their awareness of their styles, personalities, preferences and moods. Perhaps teachers generally recognize the extent to which their students read them; for the boys in our sample, it seemed that this reading set the tone of the relationship, sometimes even of schooling itself.

**Drawing Attention**
How teachers capture their students’ attention was an art that boys thoroughly appreciated. Some teachers manage a sort of personal spectacle, especially using their own physical presences to create energy and invite good fun.

**Incorporating Humor**
In similar fashion, boys appreciated teachers’ invitation to amusement and humor. Just as boys appreciated light-hearted moments in their lessons, they valued teachers who seemed to them to grasp the delight and wonder of their lives.

**Offering to Mentor**
One of the more common themes when boys spoke of their relationships with teachers was that of mentoring: of boys finding in their teacher someone who could, patiently and pointedly, bring them along in their learning. These were stories of great kindness and appreciation, gratitude, the sense of lives being changed in relationships.

**Demonstrating Mastery**
Many students registered their appreciation of their teachers’ command of the subjects they taught as well as their masterful delivery. In these accounts boys voiced the combination of safety and inspiration they experience when they feel in the capable hands of teachers who may be, as in this Year 8 Australian boy’s words, “the best teacher”:

**Offering Inspiration**
In addition to boys’ responsiveness to teachers’ mastery of their subject areas, we also heard many stories of students who were inspired by teachers’ passion and enthusiasm. In these cases, it seemed that the students reacted as much to teachers’ emotional investment in the subject as in their mastery of it.

**Friendly Style**
Many boys responded to our question about memorable lessons with general comments about their teachers’ human accessibility, their openness to substantive, friendly relationships that allowed some measure of professionally-boundaried mutuality.

**Structured, Authoritative Style**
Although many boys responded positively to teachers who conveyed a welcoming friendliness, there were at least as many whose memorable experiences grew out of relationships with teachers whose classrooms were more structured, firmly directing and demanding. We were struck by the importance from this fact of schools offering both sorts of teaching styles to boys. These were not stories about teachers who were merely harsh, but rather about teachers who were commanding and whose expectations were unyielding.

**Personal Disclosure and Modeling**
Understanding the human exchange that operated for boys in their relationships with teachers, many of the teachers in boys’ stories exhibited an awareness of themselves in the relationship and had obviously learned how to use themselves, strategically, to further the goals of instruction. One common strategy along these lines was for teachers simply to talk about themselves, to let their students know them as people. Often, these disclosures facilitated the learning by modeling some value or lesson; in any case, they invited boys into a more personal, and thus more powerful, bond with their teachers.

**Reciprocating Care**
Just as boys registered which teachers helped them to achieve and learn, and which teachers cared about them and were willing to mentor them, so they also viewed the relationship reciprocally and offered back qualities of regard, affection and commitment to
them. They wanted to give not just their effort and achievement, but perhaps also to make some contribution to their teachers’ lives.

**Convergences and Divergences**

*Both teachers and students* were asked to recount memorably effective lessons, but in doing so both groups—especially the students—made pointed reference to deadening and unproductive practices in order to underscore the comparative value of lessons they favored. While both teachers and boys identified subject matter they found intrinsically engaging, there were far more accounts of specific pedagogical approaches determining the heightened level of engagement and mastery. With respect both to teaching practices deemed ineffective and those deemed effective, there was a strong correspondence in the teacher and student submissions.

It is perhaps unsurprising that the practices teachers reported as especially effective should also have been found to be so by the boys. Perhaps one of the strongest findings of this study is that *boys tend to elicit the pedagogy they need*. Responses to ineffective teaching—disengagement, inattention, disruption, unsatisfactory performance—are intolerable to a conscientious teacher, so that adjustments to course content, to pedagogy, and to teachers’ relational style are made until student responses improve. Seen this way, student behavior tends over time to elicit comparatively effective teaching approaches; resistant behavior elicits change, positively responsive behavior reinforcing improved practice. From this observation, it would follow that to the extent there are identifiable preferences in how boys learn—whether innate or socially constructed—these too would elicit effective responses from teachers over time. Consciously or not, teachers of boys will tend to modify practice in ways tailored to boys’ learning. Intentionally or not, they may find themselves “experts” on teaching boys.

Chapters Three and Four document a striking convergence in the faculty and student accounts of what comprises effective teaching of boys. The boys’ responses illustrate the claims made in all thirteen categories of effective practice reported by the teachers. There is a mutual endorsement of active learning, of getting up from one’s seat and moving, of manipulating objects manually, of creating things that work or delight, of standing up to speak, of being responsible for the learning of others, of collaborating in teams, of competing with other teams of classmates to be more persuasive, to build a more effective product, to be first to complete a task successfully. There is mutual endorsement of being asked to solve problems to which there are no pre-established solutions, of being invited to devise one’s own method, of being invited to consider not just an object under study but how one’s own understanding of that object is formed. There is a mutual endorsement of the deepening understanding and empathic boost boys get from being asked to assume the role of another character, of the adrenal boost of being required to perform, recite, persuade, exhort. There is mutual endorsement of a variety of classroom experiences in which an emotional climate is established where it feels comfortable and safe to address boys’ most profound and sensitive personal concerns: the nature and meaning of their masculinity, their character, their social place, and their personal prospects. Finally there is mutual endorsement of scholastic experiences that take boys out of standard classroom routines or out of the classroom altogether: experiences that intentionally surprise boys and set them to work or to thinking in unfamiliar circumstances, experiences that invite intellectual and physical risk-taking.

The common feature of the effective practices reported by boys and teachers appears to be the incorporation into an instructional setting of stimulation and challenges that dissolve whatever standing resistance to schooling a particular boy may carry with him to class. Indeed for many of the reporting students schooling at its best is continuous with their lives at their best. In their accounts of favorite lessons boys do not report feeling caged in
classroom settings until released by the bell, nor do they grudgingly acknowledge a mere overlapping of their interests with school’s mandated curricular requirements. In the boys’ accounts of being emotionally and intellectually engaged, they convey a sense of being transported, exploring new territory, feeling newly effective, interested, and powerful. Experienced this way school is not an institution or an imposition of any kind; it is simply the locus of engagement in which the boy can be more fully himself at school.

The kind of engagement and self-realization reported by teachers and boys are not, on the evidence of this study, a simple reduction of schooling to what boys find diverting or merely fun. Again, while the lessons selected by teachers as effective obviously and visibly engaged the boys, that very quality of engagement was transitive to the mastery of both rudimentary and especially challenging course content. Even by the most conventional standards, the effective lessons reported resulted in straightforward advancement of learning and mastery.

As summarized in the previous chapter, there are clear contours to the effective practices reviewed in this study. These include requiring boys to be physically active, to create products, to take roles, to be responsible for classmates’ learning, to collaborate, and to compete. Taken together the categories of effective practice compose a kind of invitation to boys to meet challenges, negotiate successful outcomes in a field of uncertainty, and explore new experiential territory. Moreover, the invitation, as expressed in the tone and substance of the teacher submissions, is extended with warmth, enthusiasm and, where appropriate, a playful lightheartedness.

**Competition and Collaboration**

Collaboration and competition figured more prominently than any other single feature in the lessons submitted for this study, most often in conjunction with one another. In many successful lessons boys in pairs or teams were challenged to create a product or to solve a problem. Their efforts were competitive in that results and solutions were judged and ranked by a designated evaluator or jury. In some cases the competition lay in striving to solve the problem first; in other instances the competitive element lay in meeting or surpassing a standard, such as how far or straight a spring-driven vehicle could go, how high the model rocket could fly. Teachers who incorporated collaborative and competitive elements in their lessons testified warmly as to their efficacy—and not at all to their incompatibility.

**Immediacy**

There were numerous references in both the narrated lessons and in the teachers’ assessments of the lessons’ appropriateness for boys to the effect that “boys are easily distracted” and “boys have short attention spans.” Some of the teachers supported this claim by citing experience teaching girls or teaching mixed classes. In response to this perceived tendency to inattention in boys, two distinctive instructional approaches were reported as especially effective. The first might be summarized as lessons divided into clearly articulated, short segments in which a variety of highly specific tasks were to be achieved in a tightly prescribed time frame. This kind of lesson, which also tended to involve considerable movement from station to station, task to task, was reportedly effective in nearly every scholastic discipline, from science lab work, to humanities, to physical education. The second approach found to engage the full attention of distractible boys was to create a situation in which they would be immediately accountable. The methods teachers devised to achieve this attentive accountability were typically playful and called for movement or some kind of performance or recitation on the boys’ parts. An example is the foreign language class reviewing vocabulary and grammatical usage in which boys leave their desks, form a circle, and the instructor tosses a ball to a boy in the circle—along with a challenge to recall and recite a specific term. Credit is awarded for correct responses, after which the boy reciting tosses the ball to a classmate who is in turn challenged to recall and...
recite. Another teacher conducts vocabulary drills by periodically staging what he calls “line-ups.” In the course of class business during which students are seated at their desks, the teacher suddenly announces a “line up” of boys who share some random characteristic, such as being oldest siblings or who own a certain kind of pet. The boys who fall into the announced category then line up before the class and field a series of rapid fire questions, an energizing break in routine the boys not only apparently enjoy, but which the teacher reports also sharpens their focus and deepens their retention.

Indeed there is a quality of immediacy, of boys being placed on the spot to recite or perform or produce or choose, that runs through many of the reportedly successful lessons. Learning and mastery clearly require more than discharging tasks immediately on demand; opportunities for quiet and unhurried reflection also play a critical part in learning. Nevertheless, it is instructive that an international sampling of teachers whose students span six grade levels and who represent all scholastic disciplines would indicate this quality of immediacy in effective instruction.

The Relational Dimension
As indicated in Chapters Five and Six, the clearest divergence in the student and teacher accounts of effective lessons appeared in the students’ tendency to locate the transformative, positive dimension of the experience in their relationship to their teachers. No single “type” of teacher was celebrated; appreciation was extended to a broad range of qualities: caring, accessibility, rigor, fairness, funniness, trust, command of subject. More than anything else, boys expressed an appreciation that teachers had somehow extended themselves to the extent that the boys felt seen and known. This acknowledgement, or trust, central to many boys’ accounts of favored lessons, suggests that teachers’ capacity to offer a relational dimension to their teaching practice is itself transitive to desired learning outcomes.

Conclusion
We can now return to the questions we discussed at the beginning of this chapter, with the perspective afforded by these teachers’ thoughts on the subjects. Do the patterns revealed in these teacher and student accounts of effective teaching indicate a distinctively male response to certain kinds of instructional stimuli? Are there clearly identifiable best-for-boys approaches?

We have to say, as many of our teacher respondents did, that there are very few lessons cited in this study to which at least some girls would not respond positively and productively. So the better question might be: is there a decidedly male appeal to the kinds of lessons reported as successful in this study? On this question, it is our impression that if the lessons reported under their respective categories were formulated as a general curriculum for working with boys, it is easy to imagine that it would be embraced by teachers, while teachers working with girls would find many elements foreign, even odd, to their experience with their students. There is an unmistakable for-boys cast to the lessons reported here.

What are the implications of this study for teaching boys? The researchers’ previous experience conducting intensive audits of the condition of boys in other schools as part of another project, revealed how keenly interested in these questions those working with boys are. In the design of those audits, teachers were asked to submit a “best lesson” and to speculate on its overall effectiveness as well as its possibly specific appropriateness for boys. These accounts were completely continuous with the accounts included in this study, but in the audited schools, the contributing teachers also convened as a whole and in smaller, mixed-discipline groups to discuss and amplify their preferred lessons. These sessions in which teachers aired their approaches with their colleagues were animated,
probing and, in the teachers’ assessment, extremely stimulating. There was a professed eagerness on the part of teachers to refine certain of their own ideas and approaches and to adapt others, or perhaps elements of others, in their own classrooms. Similarly stimulating discussion was generated by teacher consideration of the specific boy-appropriateness of various favored practices. Some teachers had thought deeply about what they believed or had found distinctive in boy behavior and what such behavior implied for teaching strategy. Others admitted to having directed their efforts into presenting the most effective lessons they could devise, with little thought to their specific boy applicability. In the course of these exchanges, the schools in which the audits were conducted reported a heightened interest on the teachers’ part in better understanding the masculine dimension of their students, an interest both in research findings and also in continuing to observe and to share their own observations in their respective schools.

Obviously, we recommend that schools encourage such discussions and provide forum for teachers to make their observations, experiences and conclusions more conscious, as the best possible way to both cultivate and harvest the wealth of good ideas circulating in their cultures. On a more general level, whatever dissonance, confusion, and hostility may hover in the air as stakeholders assert new and competing claims about the nature and needs of boys and girls and the essential or trivial differences between them with respect to how they learn and how they should be taught, few could reasonably argue with the proposition that many boys are not thriving in the contemporary educational complex. Nor could one possibly argue there is no room or reason to improve. Albert Einstein has famously defined insanity as “doing the same thing over and over and expecting different results.” Einstein might also have considered a corollary: that it is equally insane to do the same thing over and over and blame unsatisfactory results. The effective instruction of boys does not require deep immersion in imponderables or tortured theorizing. Boys—some boys, in some settings—are effectively taught every day of the school year. The teachers responsible are easily located, seen, and heard from. Many of them, as this study has shown, are willing and eager to share what for their colleagues and for boys throughout the world is very good and welcome news.

Raising Boys’ Achievement
Mike Younger and Molly Warrington
With John Gray, Jean Rudduck, Ros McLellan, Eva Bearne, Ruth Kershner and Pat Bricheno
University of Cambridge Faculty of Education, 2005

The ‘Raising Boys’ Achievement Project’ (RBA) was a four-year project (2000-2004) which focused on issues associated with the apparent differential academic achievement of boys and girls at key stage 2 and key stage 4 in schools in England. This report highlights some of the dilemmas which are implicit within the debate, explores different
interpretations and perspectives about boys’ ‘under-achievement’, and challenges some common misconceptions.

Working with over fifty primary, secondary and special schools in England over four years, we have endeavoured to identify strategies which appear to have the potential to make a difference to boys’ (and girls’) learning, motivation and engagement with their schooling, and consequently to raise levels of academic achievement. These strategies have been analysed in different school settings through time, in an attempt to identify their essential characteristics, so that they might be transferred to other schools in similar socioeconomic contexts.

‘Boys’ ‘Under-Achievement’ ?
The debate, about whether, and to what extent, boys under-achieve academically in English schools has been high profile since the early 1990s, and it is clear from national data that there is legitimate concern over the achievement levels of some boys throughout their schooling. Rather more boys than girls fail to achieve level 4 in English national tests at the end of key stage 2; rather more boys than girls fail to achieve the 5A*-C benchmark grades in GCSE examinations taken at 16+. These patterns of academic achievement are evident in most schools in England.

It is crucial, though, to situate the debate carefully:

Achievement levels in primary and secondary schools, as measured by national tests at the end of each key stage, are rising through time. In some schools and LEAs, this has widened the ‘gender gap’, at least in the short term, as girls’ performances have ‘taken off’ at a more dramatic level than those of boys. Overall, however, evidence suggests that the gap has stabilised, against a background of a rising trajectory of achievement for both girls and boys.

There is diversity of gender constructions which indicate that generalisations about ‘boys’ and ‘girls’ conceal as much as they reveal. Many boys continue to achieve extremely well at school, both academically and in community, extra-curricular and sporting fields; equally, there are some girls whose needs are not recognised within schools and who under-achieve. The core of the issue in many schools revolves around a minority of pupils, rather than a majority; the ‘problem’ needs to be carefully contextualised, both in scale and in response.

Although issues of image and status are crucial in impacting upon boys’ notions of masculinity, as they search for acceptability and respectability amongst their peers, there are boys who devise coping strategies that enable them to achieve academically. These boys preserve their positions and their masculinity within the legitimised local cultures whilst at the same time meeting their own high targets. Nevertheless, the continuing gender gap in key stage 2 English results, particularly in writing, where the performance ratio suggests that less than 80% of boys perform at the same level as girls, suggests that a stubborn problem remains to be tackled. The situation is mirrored at key stage 4, where the improved performances of girls in science and mathematics have not been matched by a comparable improvement of boys’ performances in subjects such as Modern Languages, English and the Humanities.

**Intervention Strategies**
Initial research with Originator schools (schools which appeared to have strategies in place which were improving the academic achievement of boys without impacting negatively on girls’ performances) suggested that strategies could be grouped into four different areas:

- Pedagogic: classroom-based approaches centred on teaching and learning
- Individual: essentially a focus on target-setting and mentoring
- Organisational: ways of organising learning at the whole school level
- Socio-cultural: approaches which attempt to create an environment for learning where key boys and girls feel able to work with, rather than against the aims and
aspirations of the school.

Although this classification was a useful device for analysis and identification of the essence of the different strategies, it is clear that these strategies are not self-contained and independent. As our work in special schools suggested, there must be an integration of different approaches if their impact is to be maximised. It is equally clear, however, that socio-cultural approaches are of central importance if schools are to be successful in challenging images of laddish masculinity and ladettesh femininity, and getting peer leaders ‘on side’ and engaged with their schooling.

**Pedagogic approaches**

A main pedagogic approach followed by the RBA project in primary schools focused on literacy, essentially because many boys do less well than girls in reading and particularly in writing. In identifying pedagogy which helps to support pupils’ reading and writing, however, it became self-evident that these strategies are most effective within a holistic approach, which assimilates opportunities for reading, writing, speaking and listening into an integrated whole.

We would suggest that gains can be made in primary literacy, particularly in the levels achieved by apparently under-achieving boys, when:

- a variety of interactive classroom activities are adopted, with a ‘fitness for purpose’, so that both short, specific focused activities and more sustained, ongoing activities are used, as and when appropriate
- acknowledgement is given to the central importance of talk, to speaking and listening as a means of supporting writing.
- the advantages to be gained through companionable writing with response partners and through group work are recognised
- teachers are prepared to risk-take to bring more creativity and variety to literacy
- more integrated use is made of ICT so that quality presentation can be more easily achieved, and drafts amended with more ease.

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The project has also focused, in one primary and two secondary triads, on exploring work related to preferred learning styles, and on associated teaching strategies such as mind mapping, physical and practical activities, role play and creative design activities. A number of caveats about such approaches have emerged from our research. We have found little evidence, for example, to support the notion that the dominant learning style of boys differs from those of girls, and that more boys (than girls) favour kinaesthetic learning. Equally, it is often difficult to analyse classroom activities in terms of specific learning styles because many pedagogic activities engage different modalities.

Nonetheless, this emphasis on teaching and learning styles can be effective when:

- such an approach is implemented carefully and holistically
the emphasis is placed on developing an understanding, with teachers and students, of how learning takes place, through keynote presentations to teachers and students about different modes and styles of learning.

Students understand that, as individuals, they have different learning styles, some of which (e.g. visual, auditory or kinaesthetic) may be more prominent than others, but that to be effective learners, they must be able to access different learning styles at different times.

Teachers are able to plan lessons which encompass different learning styles, and thus become more creative in their teaching, planning and assessing.

**Individual approaches**

Individual approaches, based on a coherent and integrated approach to target-setting and mentoring, have been very important in some schools in transforming and sustaining improvements in achievement.

Our research with two secondary triads suggests that target-setting and mentoring can be successful when there is mutual understanding and shared commitment to all aspects of the process within a school staff, and a common belief and conviction in the system which is held by teachers and students. There are crucial pre-conditions, we suggest, if students' achievements are to be changed in this way:

- **Target-setting** needs to be both realistic and challenging, not simply based on historic data within the school, but based upon higher expectations and detailed analysis of contextualized value-added data at the individual level.
- Teachers within subjects departments need time and support on a regular and frequent basis, to set targets for individuals within their classes, and to engage in professional dialogue about learning at the level of the individual child.
- **Mentoring** needs to be developed within an ethos which accepts that mentors will mediate and negotiate with subject teachers on behalf of ‘their’ student, and subsequently challenge ‘their’ student to achieve more.
- The mentor needs to be credible to individuals, collaborative and supportive on the one hand, offering strategies, advice and encouragement, but crucially, also assertive and demanding on the other, so that disengaged students have the opportunity to protect their own image and use their mentor’s pressure to excuse their own involvement in academic work.

**Whole school organisational approaches**

Within the area of whole school approaches, we have focused on single-sex classes as a mode of organization in co-educational schools. There is emerging evidence, despite the reservations of those who feel that comprehensive schools should be co-educational in all respects, that many girls and boys feel more at ease in such classes, feel more able to interact with learning and to show real interest without inhibition, and often achieve more highly as a result.

Evidence in favour of the development of single-sex classes for some subjects, from both students’ voices and from an analysis of levels of academic achievement, is nonetheless persuasive. Again it has been possible, through an examination of good practice, to identify a series of pre-conditions for successful implementation. These include:

- The use of a proactive and assertive approach in the classroom, which avoids the negative or confrontational, conveys high expectations and a sense of challenge, and uses praise regularly and consistently.
- **The development of a team ethic**, to establish a class identity, supported by humour and informality on the part of both teachers and students, to identify with their interests and enthusiasms, but without reinforcing stereotypes.
- Senior managers who give high profile and active support to single-sex classes, and see them as a central plank within the achievement ethos of the school, rather than
simply allowing them as an ‘experiment’ which might succeed or fail.

Promoting the intervention actively to governors, parents and carers, and all staff, so that single-sex classes can be promoted and sustained through time. Where these pedagogic and organizational pre-conditions have been in place, in selective but carefully targeted subjects for specific students, there has been a positive effect on achievement, particularly in relation to boys' performances in modern languages and English and girls’ performances in sciences and mathematics.

**Socio-cultural approaches**

It is self-evident, not only in secondary, but also in primary schools, that some boys go to considerable lengths to protect their macho image and their sense of self-worth by indulging in a range of non-conformist behaviour which frequently prevents them, and others in the same classes, from achieving well. Such disruptive behaviour, seeming lack of effort and apparent disengagement has the effect, too, of protecting such boys from possible failure. These boys are frequently key players in affecting the tone and engagement of the whole year group, and on occasions they hold considerable sway amongst their peers, both male and female. Schools which have successfully addressed these challenges have adopted a range of socio-cultural strategies to integrate these boys more fully within school life. During the project, we have worked with, and evaluated, a number of such strategies:

- Citizenship initiatives in primary schools, linked to Schools Councils, teambuilding clubs, circle time and a ‘You Can Do It’ programme.
- A central focus on the Arts across primary schools, with artists-in-residence schemes, poetry weeks, dance sessions run by professional dancers, and drama productions which allocated lead roles to disengaged boys.
- Paired reading schemes between year 3 and year 5 pupils, with the explicit rationale of promoting self-esteem amongst the year 5 ‘experts’.
- A key leader and key befriender scheme in secondary schools, targeting and supporting particularly those students (usually more boys than girls) whose physical presence, manner and behaviour exerted considerable power and influence within the peer group.

**Conclusion**

We are confident that these intervention strategies, developed by participating schools in contrasting socio-economic environments across England, can be effective in raising boys’ achievement. Such strategies also have the potential to raise girls’ achievement, and so in many instances the gender gap - at least in the short term - is perpetuated. We are not unduly concerned about this, since we do not find it acceptable to promote intervention strategies which, whilst supporting boys’ learning, are detrimental to girls in either an academic or a social sense.

A recurring theme in these policy initiatives, whether related to pedagogy, forms of organisation or strategies which focus on the individual, is the fundamental importance of context and of whole school approaches. In each case, however, the strategies are no panacea: they cannot be implemented successfully without regard to the necessary preconditions which we have explored in the main report.

In addressing issues of under-achievement it is crucial that intervention strategies address issues linked to students’ attitudes and image, their expectations and aspirations, tackled at the core. To be fully effective, these strategies must be developed systematically through time, and subsequently evaluated and refined in the light of experience. We have no evidence to suggest that short-term strategies are likely to impact positively upon students’ achievements in sustainable and ongoing ways.
Finally, our research does not support the notion that there is a case for boy-friendly pedagogies. Pedagogies which appeal to and engage boys are equally girl-friendly. They characterise quality teaching, and as such are just as suitable and desirable for girls as for boys.

“IT AIN’T COOL TO LIKE SCHOOL”:  
WHY ARE BOYS UNDERACHIEVING AROUND THE WORLD?  
AND WHAT CAN WE DO ABOUT IT?  
PETER WEST, Australia, 2002

Right around the world, boys are worrying educators. Parents of boys are tired of going to speech nights and watching a procession of girls getting academic awards while boys fidget, waiting for the sports awards. And parents are badgering teachers about the problem. Boys’ difficulties are tied to many social issues: the decline of fathering and alienation of many men from families; the fact that jails are at least ninety per cent filled with men; society’s tendency to see men as useless unless they are in paid work; the demonstrably worse health outcomes that men experience. Churches, extended families, and older men. used to help raise children (West,1996a). As they decline, schools are expected to carry the burden. Yet half the school population, males, are disengaged from school. Many more boys than girls find school a complete waste of time.
WHAT CAN BE DONE TO HELP BOYS?
There are no simple answers to boys’ problems. But we are moving towards some directions that should show some results.

USING MENTORING
Mentoring is important because boys are strongly influenced by peers. The arguments about why males need a mate, and what mateship means to males, appear in West (1996). Boys want very much to be accepted by other boys. They are influenced by other boys to go out to play sport, see movies, or work. And they do so much more than girls do, according to Paulin and Dean.

REFLECTING ON GROUPING IN THE SCHOOL
UK research shows that boys often underachieve because of the 'sets' or learning groups they are in (Klein, 1995). Thus the School could:
* Examine the learning sets in the School
* Pinpoint boys who are underachieving, and provide learning support for them in smaller groups.

HARNESSING FATHERS’ INFLUENCE
Fathers have a strong influence on their children. Yet fathers are underplayed in research literature on the family. Buckingham points out that boys deprived of a father (e.g. because of divorce) often suffer academically. The proportion of children with low academic competence was found to be almost twice as high for sole parent families as couple families. Australian sole parent families are mother-headed in approximately ninety per cent of cases.

MORE ACTIVE LEARNING
Teachers could usefully reflect on the need for active learning, and how it could be increased.

THE NEED FOR STRUCTURE
Most boys need structured learning more than girls do. They don’t cope well with long explanations and vague instructions like ‘Discuss’ and ‘Explain’, especially in junior high school.

INCREASING REWARDS
As boys are often disengaged from schooling, they need more incentives than girls to work well at school. Boys seem to need praise as much as girls, but get it less often.

IMPROVING LITERACY
Kowaluk, Martin and others have provided evidence that boys’ imaginations are being captured by sport or computers; but ‘real men don’t read’. The school could work harder to provide support for readers and boys struggling with reading.

REVIEWING THE CULTURE OF THE SCHOOL
As the New Zealand Report noted, there is in many schools an anti-learning culture (Aitken, 1999:40. Boys form strong friendship groups, and the boys may do extreme things to stay in the group.

IMPROVING WRITING AND ASSESSMENT
Most boys feel frustrated by an emphasis on terms like ‘Discuss…’ and perhaps even ‘Account for…’ and Explain…’.

LISTENING TO BOYS’ LEARNING NEEDS
Evidence is provided in this report that more boys than girls feel school is a complete waste of time. The School could improve the enjoyment and satisfaction boys have of school by:
  * Ensuring that boys' learning needs and preferences are listened to and acted upon.

USING INFORMATION TECHNOLOGY
The research shows that boys often favour learning that is related to computers.

RAISING EXPECTATIONS
This is the key to much of the work being done on raising boys’ achievement in the UK. Research suggests that teachers expect less work from boys, especially in English.

USING HUMOUR
Males relate to other males through humour. This can take the form of harmful teasing. But teachers who connect with boys use humour in more positive ways. Jokes are part of the daily lives of males, as many good teachers know.