HOW DO BOYS LEARN BEST?


At a broad level, various researchers have identified gender differences in learning styles. For example, Ludowyke and Scanlon (1997) suggest that boys perform better on tasks and assessment that are:

- Shorter
- Closed
- Focused on single concepts at a time
- Task and action based
- Experiential
- Information dense.

In contrast, they argue that boys have more difficulty on tasks and assessment that are:

- Extended
- Open-ended
- Multi-concept
- Reflective
- Text based
- Interpersonal.

This report proposes that these preferences will also vary from boy to boy as well as amongst girls. Given this, it is considered important that diverse modes of learning are accommodated in the classroom. The reality is that the need for lifelong learning and an ability to adapt to the changing world of work requires that all students be exposed to diverse modes of learning. As Hawkes reports, “there are clear educational imperatives to use short answer responses, just as there are clear educational imperatives to use longer answers. It is entirely possible to increase the number of short answer tasks, ‘closed’ tasks, and analytical tasks . . . without compromising the integrity of the learning experience” (2001, p. 111).
This need to effectively deal with diversity brings into consideration other techniques, including:

- Specific profiling of students with early intervention for skill deficits
- Balance of individual, group, cooperative, and competitive activities
- Balance between open-, reflective-, language-centred and closed-, process-, action-centred learning
- Range of assessment methods
- Range of personal and public strategies to acknowledge and validate achievement (Ludowyke & Scanlon, 1997).

Promoting active learning

There is support in the research and school community for the view that active learning suits boys best. Active learning has merits – it engages quickly, is energising, and can sustain attention. For these reasons, it can benefit all students.

Some useful strategies that are action-oriented include:

- The ‘Take 5’ approach – beginning a lesson by asking students to list five things learned from the previous lesson and then comparing the list with the next student
- Ending a lesson with an activity that sums up a key learning idea – for example, telling a partner the most important thing learned from the lesson
- Learning through debates, role plays, and research projects
- Visual construction of concepts – for example, mind maps, spidergrams
- Asking students for input into their assessment tasks and criteria (Noble & Bradford, 2000; West, 2001).

Active learning also requires the student to act on content delivered in class or through other mediums. Research shows that acting on information leads to better recall because it requires the individual to understand that information first (Fitz-Gibbon, 1996). Transforming a chapter into a spidergram is one example of students acting on information they have received. Other examples are summaries in students’ own words and notes in text margins.
Primacy Effect

Research into the primacy effect shows that students learn best in the first part of a lesson (Lazear, 1994). This holds two implications for teaching. First, it is critical not to lose valuable time at the start of a lesson on tasks that are not central to the lesson objectives. Too often tasks such as housekeeping (role call, handing back assignments) absorb the most critical part of the lesson. Second, it is important for the lesson to be ‘reinvented’ every twenty minutes or so to simulate conditions needed for taking maximum advantage of the primacy effect (Hawkes, 2001).

Developing higher order thinking

A common criticism of boys is that school and learning within it lack relevance and are not useful in their lives. Often this happens at times when there is an imbalance between content and skills with excessive content being seen by boys to be unrelated to their lives and not enough emphasis on skills. The role of schools is not simply to impart content but to develop students who can solve problems, make decisions, and adapt to an ever-changing world of work and relationships. These all require students to develop higher order thinking skills. Sousa (1995) has conceptualised a continuum along which thinking skills can be mapped. Figure 1 shows details.

Figure 1. Continuum of thinking skills
At a practical level, there are many ways to stimulate higher order thinking. **Use of questions in the classroom is one effective method.** Hawkes (2001) suggests that the following types of questions used strategically in the lesson can stimulate higher order thinking:

- What would you have done?
- Can we trust the source of this material?
- What do you think caused this?
- What other ways can this be done?

**Creating effective learning zones**

If there are 25 students in the classroom, there are at least 25 learning zones. A student’s learning zone is his/her desk and the three students around him/her. Students tend to choose learning zones that are comfortable. **Comfortable zones are those with which the student identifies or has some affinity.** Underachievers, for example, can choose learning zones with other underachievers and “these will naturally support each other’s lack of effort, initiate each other into the anti-swot club and be unchallenged by any competing values – save that of the teacher” (Noble & Bradford, 2000, p. 95).

**Seating can be used to promote more adaptive learning zones.** Against a backdrop of a supportive and non-threatening learning environment a verbally confident student can be paired with a reflective student, a student strong in maths can be paired with a student less confident in maths, and a student who presents work well can be paired with a student who is not so careful or creative with presentation. Having said this, there are **four key rules to observe when developing seating policy.**

- First, it must be emphasised to students at the outset that the policy is designed to enhance learning (not to manage the class, or separate friends etc.).
- Second, seating must be arranged in the context of a supportive classroom that is not excessively competitive.
- Third, seating arrangements must be very flexible and changed if they do not work.
- Fourth, excessively incongruent pairings must not be made (eg. do not pair the wild boy with the reflective girl). Ultimately, teachers are the best judges as to whether seating policy is appropriate and if so, which pairings to pursue.
Promoting success

All students enjoy and thrive on success. Success is one of the most motivating outcomes a student can experience. There are many ways to enhance success experiences in the classroom (see Martin, 2001b, in press). Here the focus will be on two. Both revolve around the central notion that the most potent source of self-belief and which lays the soundest foundations for its sustainability is real experience of success. To provide every student with an opportunity to experience real success requires two things.

• First, educators and students must learn how to break tasks into components and see each component as an opportunity for success – referred to as ‘chunking’ (Hawkes, 2001; McInerney, 2000; Noble & Bradford, 2000). This not only provides ongoing motivation to complete the task but also increases opportunities for success. That is, rather than the outcome being the only indicant of success – yielding a zero-sum game in which a student either succeeds or does not – the student has multiple opportunities to succeed. In terms of the lesson, this would reflect the need for lessons to be ‘chunked’ into distinct tasks with regular milestones to meet. In doing so, “the horizon is shortened and the work becomes manageable” (Noble & Bradford, 2000, p. 28). Importantly, delivering lessons in this way is not inimical to the success of girls.

• A second way to provide every student with the opportunity to experience real success is to have students expand (or even rework) their definitions of success. Definitions of success that make success accessible to every student cast success in terms of personal bests, skill development, and improvement. This is in stark contrast to the very limited and relatively inaccessible definition that many students hold of success that is cast in terms of topping the class, beating others, and being the smartest (Martin, 1998, 2001b, in review a; Martin & Debus, 1998; Martin, Marsh & Debus, 2001a, 2001b, in press). When students see success in more personal terms rather than relative terms, success immediately becomes accessible to them. Importantly, defining success in this way and academic achievement are not mutually exclusive.
McInerney (2000) has identified nine core steps for teachers in promoting success in students' work, as follows:

- Begin lesson with quick review of previous learning and outline goals
- Present material in small steps and allow application after each step
- Provide clear and detailed instructions and explanations
- Ask a large number of questions and check for student understanding
- Guide students in initial phases of learning and application
- Provide systematic feedback that is task-based (not performance-based)
- Monitor students as they work
- Provide ample time for completing tasks
- Identify in advance what material/concepts might be difficult.

To promote success in the classroom, Ludowyke and Scanlon (1997) recommend that greater clarity be injected into the classroom and classroom tasks. This involves showing students examples of quality work in their complete form and providing very clear and detailed instructions to students regarding the quality and quantity of work expected.

Providing effective feedback to students

According to Noble and Bradford, “unfortunately [feedback] has often played the role of confirming students’ more negative suspicions about their abilities . . . the general rule should be that students need to be moved from where they are, not bogged down by repeated failure” (2000, p. 103).

Feedback to students is enhanced through:

- Very clear expectations when the assignment or test is administered
- Very clear marking criteria
- Greater focus on content and skill than presentation
- Showing students previously completed examples of good work – eg. assign homework that asks students to review this quality work (“find five good things about this essay”).

According to Hawkes (2001), report cards are an important opportunity for teachers to launch students into future learning. Reports should not solely be a snapshot of past performance. They should also focus on recommendations for further improvement. Reports should also address the ‘so what?’ question – why
it is important to learn given material in a particular subject and how the student will benefit from further improvement.

Recognising and creating learning windows

There are particular times in a lesson or moments in class or at school or on excursion that are more conducive to engagement and learning than others. These are referred to as ‘learning windows’ (Hawkes, 2001). **Learning windows are opportunities where students are fully attentive, interested in learning, and ready to learn.** These moments pass and before they pass effective teachers do not miss the opportunity to seize them, expand on them, and explore them to the student’s maximum advantage.

The more teachers are able to recognise and seize learning windows the more students are hooked into the lesson or learning activity. Once the ability to recognised learning windows is developed, the teacher is then in a strong position to create learning windows – this is when teaching and learning becomes truly exciting.

Developing good relationships

“Teachers who are able to effectively relate to students, accept student individuality, and teach in an inclusive and democratic environment are more effective as teachers of young adults” (ACT Department of Education and Community Services, 2001, p. 10).

A central theme around which this report revolves is that the student-teacher relationship is one of the most critical factors influencing students’ engagement, behaviour, and achievement at school, a theme consistent with national projects carried out in recent years (eg. Successful Interventions Project by DETYA). Slade (2001) found that boys (explicitly or implicitly) were primarily interested in relationships. In the context of strategies and initiatives revolving around policy, programs, guidelines, and accountability, boys “emphasize people (through personalities) and the importance of establishing and maintaining relationships of trust and respect” (p. 18).

Connell (1998) suggests that good human relationships are critical when targeting constructions of masculinity. Students need to develop a critical understanding of their own culture with an appreciation of other people’s and
communities’ experiences. To do this, he emphasises the need for good human relationships. **Good human relationships, according to Connell, are built through developing students’ communication skills, conflict resolution skills, and gender awareness.**

A safe environment in which students are not fearful of making mistakes is an important foundation for developing good relationships with teachers. Making mistakes is humanising and breaks down barriers between student and teacher. It is critical for the teacher and the student to feel safe to make mistakes. A safe environment in which mistakes can be made and learnt from significantly reduces students’ fear of failure. When students do not fear failure they are prepared to ‘have a go’, persist in the face of challenge, and are less likely to engage in self-protective behaviour that can be inimical to success (Martin, 2001b; Martin & Marsh, in press; Martin et al, 2001b).

**Developing productive pedagogy**

Research has identified some core characteristics of teachers that enhance student engagement and learning:

- Viewed all students as capable of learning
- Saw themselves as facilitators of learning
- Saw student learning very much as a teacher’s responsibility
- Focused on skill development more than transmitting content
- Worked more innovatively with curriculum to create learning windows
- Had higher extra-curricular involvement
- Engaged in professional conversations with colleagues
- Were willing to talk about their failings and made changes to respond to these.

In contrast, teachers low in productive pedagogy:

- Saw students as solely responsible for their own learning
- Believed that factors outside teachers’ control determined student outcomes
- Aimed instruction at the middle level and accepted that some students could not learn
- Focused on content more than skills
- Were guarded about their work and tended not to recognise their shortcomings.
Lingard and Ladwig (2001) argue that schools should give much greater emphasis to leadership in pedagogy – not simply leadership in management.

Of particular relevance to the teaching community and the classroom, three areas were identified by Lingard and Ladwig (2001) as requiring action.

- The first relates to increasing productive pedagogy through challenging work and social support. They found that intellectual demand and social support were linked significantly with improved student outcomes.
- The second relates to enhancing productive assessment. They found that teachers often set assessment that was low in demand, disconnected from the world and intellectually unchallenging. Instead, assessment must capture varied skills, be challenging, and be perceived as relevant.
- The third relates to professional development that needs to revolve around productive pedagogy, how to use assessment, and how to teach and set appropriate work for students.

**Incorporating boys’ perspectives**

Increasingly, researchers are building into their recommendations the need for educators to take account of the perspectives of boys (and all students) when developing programs and pedagogy. Researchers are agreed that it is critical to have ‘boys on side’ if strategies aimed at enhancing their educational outcomes are to be successful.

Slade (2001) interviewed a large sample of secondary school boys. They valued credentials more than learning something they can use in life. They believed that work in middle school is boring, repetitive, and irrelevant. They saw the transition between Years 10 and 11 as an enormous one with Year 11 seen as extremely difficult. They also believed that girls got a better deal from teachers with more positive attention, better marks for similar work, more help, and more freedom and respect. Significantly, most boys saw low achievement as due to “bad teachers”.

Slade went on to discuss boys’ views on good teachers: “A uniformly repeated view is that a ‘good teacher’ can make a bad lot tolerable and make achievement both desirable and possible” (2001, p. 14).

Boys’ views on the features of good teachers are that such teachers:
- Listen
- Respect them
- Are relaxed, enjoy the day, and can laugh at their own mistakes
- Are flexible, adjusting rules and expectations to meet the needs of individuals and their circumstances
- Explain work carefully and make it interesting
- Do not humiliate them in front of the class
- Show no favouritism
- Give them a chance to make mistakes and learn from them
- Affirm all students.

It is important that any critiques of gender and masculinity in the classroom are interesting and relevant to boys. For this reason, then, it is also important to know and understand their views. An analysis of gender construction with boys must also make clear how it will benefit their lives and the way they view themselves. According to Gilbert and Gilbert, “we will need to be able to present a critique of masculinity in terms which will not only interest boys, but which will also appeal to their social commitments and their sense of personal welfare . . . this commitment will be most effective if it is incorporated into their sense of who they are, and if they can see how it might be applied in a way that makes their lives more rewarding” (1998, p. 247).