

# Putting it into practice: Curriculum and pedagogy 

4.1 Curriculum, from the Latin for 'course', is the content or subject matter that is taught. Pedagogy, from the Greek words for 'boy' and 'guide', refers to the art or science of teaching or the techniques used to teach students. The notion of a teacher guiding students through a course of study has more contemporary relevance than the content driven, 'drill and skill', approaches that characterised schooling until the last few decades of the 1900s.
4.2 Good teachers have always, through sound and supportive teacher/student relationships, guided students through what they need and want to learn. This chapter considers the importance of relevant curricula and engaging pedagogy in promoting learning as well as the methods used to assess student achievement.

## Curriculum and pedagogy

4.3 If the definitions of curriculum and pedagogy are clear, the separation of the two in classrooms is not. While the curriculum is the content that education departments mandate must be taught, classroom teachers have significant responsibility for, and control over, how the curriculum is presented and delivered. In practice, an inspired and talented teacher can energise dull content and find ways to link it to real life while a mediocre or unmotivated teacher can compromise the appeal of the most relevant and imaginative curriculum by poor delivery.
4.4 The research at Flinders University by Slade and Trent indicates that boys are aware of and reactive to what they view to be irrelevant curriculum and poor teaching. Boys see curriculum and pedagogy as inseparable from each other and from other aspects of schooling.

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 lessons, the day, the school week, the term, and so on, as well as homework, uniforms, attendance and behaviour expectations of teachers. ${ }^{1}$
4.5 Boys like to be able to see how what they are learning relates to life outside or beyond school and may find it difficult to engage with what appears to irrelevant subject matter.

The curriculum has to be relevant. The idea of teaching some of the things that we have learned, and maybe have never used since school, is very difficult to get across to kids these days who want to see how it applies to their lives. Boys, in particular, cannot make the connection between what they are doing and how they can use it. ${ }^{2}$
4.6 There is a group of boys who, when they are bored by the subject matter or its presentation, are more likely than girls to react in a challenging way.

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. ${ }^{3}$
4.7 Of course, having a relevant and interesting curriculum that is taught well is just as important for girls as it is for boys. However, boys are more likely than girls to respond to dull subject matter or uninspiring teaching in an overt and challenging way that will disrupt their own and others' learning.

## Curriculum

4.8 The school curriculum in each State and Territory is unique but they are generally structured on several levels. Usually, an overall framework sets

1 Trent, F. and Slade, M., Declining Rates of Achievement and Retention: The perceptions of adolescent males, June 2001, p. 33.
2 Mr Ian Lillico, Principal, City Beach High School, Perth, WA, Transcript of Evidence, p. 931.
3 Trent, F. and Slade, M., Declining Rates of Achievement and Retention: The perceptions of adolescent males, June 2001, p. 31.
the values, purposes, and principles underpinning the curriculum and the learning outcomes that students are expected to achieve in the Key Learning Areas (KLAs). The syllabi for particular courses of study within each KLA fit under these umbrella documents.
4.9 The States and Territories have been very active in the area of curriculum redesign and review in recent years. The direction of change is towards outcomes-based education, that is, more explicitly stated expectations of what students should know and what students should be able to do. Unlike content-based approaches, outcomes-based learning recognises that not all students commence their learning at the same point or progress at the same rate and it allows teachers more flexibility to adopt approaches to suit their students and circumstances. ${ }^{4}$
4.10 Another feature common to outcomes-based curriculum frameworks is a focus on the knowledge and skills students will need to succeed throughout life. ${ }^{5}$ The knowledge and skills are trans-disciplinary ${ }^{6}$, cutting across the eight KLAs which are used to organise the curriculum. Outcomes-based approaches aim to embed the necessary transdisciplinary knowledge and skills within the teaching and assessment of all subjects. After a trial involving 160 government and Catholic schools, South Australia implemented a new curriculum based on these principles in $2001 .{ }^{7}$
...what we have incorporated in our curriculum is a recognition that just learning science, maths, studies of society, geography, history, whatever we might call subjects, is no longer enough for kids to be able to learn effectively, interact effectively with their peers, with adults and then as a preparation for post-school life. We have centred, to a large extent, our curriculum around what we are calling essential learnings. It is those five things that are absolutely key to, we think, the ability to succeed in schooling and the ability to continue learning throughout life.
...we are looking at issues of identity, we are looking at issues of communication, we are looking at issues of interdependence, even if boys continue with the narrow cluster of subject choices, that if

4 A number of curriculum framework documents can be accessed on State and Territory education and curriculum authority websites.
5 see for example, SA Government, Submission No. 154, pp. 18-19, and see, Education Queensland, Submission No. 168.1, p. 7.
6 Queensland calls them New Basics, South Australia and Tasmania call them Essential Learnings, Western Australia calls them Learning Area Outcomes.
7 SA Government, Submission No. 154, p. 19, 120 government schools and 40 Catholic schools.
these are attended to within the way that we teach science and the way that we teach mathematics, then we will start to address some of the issues that are of concern. ${ }^{8}$
4.11 Education Queensland is conducting a five year trial of its New Basics Framework in 59 schools throughout Queensland. The project is similar in concept to the new South Australian curriculum.

Curriculum delivery focuses on the New Basics, four clusters of practices that are essential for survival in the worlds that students have to deal with. These four areas of trans-disciplinary learning include: Life Pathways and Social Futures; Communications Media, Active Citizenship and, Environments and Technologies. ${ }^{9}$
4.12 These new approaches have the potential to offer a much wider range of learning experiences in both primary and secondary schooling than has traditionally been the case. By creating tasks that cross a range of KLAs and that are related to real world issues, more realistic and relevant learning and assessment tasks are possible. ${ }^{10}$ One of the schools the Committee visited, Eagleby State School in Queensland, was benefiting in this way from its participation in the New Basics Project.

Because we are a trial school for the New Basics we are looking at trans-disciplinary work. We try to find what we want to do and then what disciplines of knowledge will help to support children develop something in which they will be able to share through some form of exhibition of their knowledge. That is also great for the boys. They know that there is that end point and they know that, in time, they will be able to tell everyone what they know and what they have learned. It is also great for the girls. So it is very purposeful. I think boys, in general, need those strong purposes and reasons behind what they are doing. ${ }^{11}$
4.13 The Committee believes that outcomes-based approaches to curriculum and pedagogy, if implemented well, have the potential to significantly enrich the learning experiences of all children as well as improve boys' interest and engagement. However, change at the curriculum framework level must be supported by a significant commitment to in-service training

[^0]for teachers to support them in the implementation if it is to have any significant impact on students' achievement.
4.14 Appropriate curriculum is necessary to motivate boys and to engage them with learning. The curriculum frameworks generally provide classroom teachers with opportunities to vary the content and delivery to suit the particular needs of their students but these opportunities have not always been used to select content and activities that suit particular groups of boys or girls. The opportunities and flexibilities available to classroom teachers may include: the choice of texts studied; the application of technologies to learning; modes of instruction; the selection of the topic used to illustrate a concept or theme; and assignment and project topics and modes of presentation. This flexibility can be used by teachers to negotiate content and methods of instruction that appeal to the boys and girls and maximise the engagement and motivation of all students. Some illustrative examples are outlined below.

## Pedagogy

4.15 The outcomes-based curriculum frameworks pay particular attention to pedagogy by emphasising that teachers need to adapt what they do in classrooms to meet the needs of their particular students and their school community. Again the New Basics Project in Queensland is illustrative:
...a big issue for boys from lower socioeconomic groups, for example, is that they have literacies when they come to school, but they are not necessarily the skills based literacies. We need to acknowledge, value and build on some of those literacies. So part of that project is going to be for teachers to become familiar with some of the home/community literacies that the boys are interested in. But that sort of thing is really important for girls as well. ${ }^{12}$
4.16 In practice, at Eagleby State School, valuing the home-based and community literacies that are part of their students' experiences meant including a range of non-traditional materials in the literacy program.

They have had rich experiences, but that has not necessarily given them the literacy skills that they require to ensure their success at school. So we need to look at those students coming in and use what they have. If they have been exposed to junk mail, bills, show bags and other sorts of texts, we need to include them because

12 Ms Maree Hedemann, Senior Education Officer, Education Queensland, Transcript of Evidence, p. 573.
they may be the only texts that they have seen in the past. So we include those texts within our program to help make that link to book literacy...

It is about valuing what is there; not seeing these children as having a deficit. If you look at it as though they have a deficit, you then have expectations about what they are capable of doing. ${ }^{13}$
4.17 South Australia reported improvements in student engagement and a positive response from boys during the trials of its new curriculum framework.

One of the schools... focused on the middle schooling project where they were trialing and focusing on the essential learnings with the draft SACSA framework materials. There was a glowing report from the school about the engagement of those middle schooling students when the focus was on things like identity and futures. It energised and excited the students, so there was a really good relationship with the subject, and the big focus for the school is the relationships and supporting the boys to be able to hang on in there and conduct themselves with others more fruitfully in the classroom. ${ }^{14}$
4.18 The Committee supports this focus on more relevant learning tasks and a better connection with the world outside school as ways to improve student engagement and boys' learning. It seems to be a contemporary revival of some basic pedagogical principles that have not been as widely practiced as they could have been.

Historically, dealing with boys' underperformance has involved focusing on remedial classes and at risk students. Preferred teaching methods with these groups have long been known; hands-on, varied, real life tasks, core teachers with good relating skills, humour, negotiation and a sense that somebody actually cares about them. ${ }^{15}$
4.19 It is curious that education has continued to stress these qualities in remedial and special education while seeming to forget or overlook their importance in the mainstream:
...the progressiveness of the 1970s, while it was quite good in many ways, led to a style of teaching that became more or less

13 Mr Kevin Leathwaite, Principal, Eagleby State School, Qld, Transcript of Evidence, pp. 528-529.
14 Ms Shirley Dally, Manager, Gender Equity Curriculum Policy Directorate, South Australian Department of Education, Training and Employment, Transcript of Evidence, p. 825.
15 Mr Rollo Browne, Consultant, Submission No. 153, p. 6.
process permissive. Now the researchers are saying, 'Direct
instruction, clear instruction, limit your curriculum, don't try to do
too much,'... ${ }^{16}$
This is particularly important for boys.

## Learning styles and gender

4.20 The discussion around appropriate curriculum and pedagogy for boys often assumes an acceptance that boys and girls prefer different learning styles. However, it is important to qualify this generalisation. Some boys will be comfortable with, and favour the learning styles preferred by most girls while some girls will favour learning styles more commonly associated with boys. While good teachers exploit students' preferred learning styles to engage and motivate them, they also aim at developing the full range of capacities in each student.
4.21 For example, using Howard Gardiner's theory of multiple intelligences it is possible to describe learning styles and some general gender preferences for each as follows:

- Verbal linguistic learning styles are usually preferred by girls as girls tend to talk more and have larger vocabularies than boys.
- Mathematical logical learning styles are preferred by most boys who like a logical approach to instruction and opportunities to think logically to solve problems.
- Musical rythmic intelligence is generally evident in both boys and girls and most young boys enjoy musical activities.
- Spatial intelligence is thought to be a boys' strength with their ability to mentally rotate objects and excel in target directed activities being strong 'boys zone' activities.
- Kinaesthetic learning or physical learning is popular with boys as many boys like to be able to move as they learn. While boys develop fine motor skills later than girls, boys tend to develop better gross motor skills early.
- Naturalistic intelligence is the ability to understand the environment. Boys enjoy activities related to the natural environment and tasks using sorting and classifying skills.
- Interpersonal and Intrapersonal skills are areas that girls are generally more comfortable with than boys and boys will benefit from activities that develop these skills. ${ }^{17}$
4.22 It is important to recognise that even where boys and girls exhibit a preference for the same learning style there are likely to be individual and gender based differences.

An example may be male and female students exhibiting similar verbal linguistic preference. The girls would probably exhibit better ideational fluency, have better verbal memory, have quick verbal responses under pressure, use longer sentences, have a better vocabulary, verbalise thoughts and feelings, use intonation to express ideas and take poetic licence, talk more about relationships and people and read fiction. While the boys with a similar learning style will tend to write and speak in shorter sentences, ask more questions of their teachers, talk more about sport and politics, read to follow instructions rather than listening to follow, use vocabulary competitively and will read more nonfiction. ${ }^{18}$

### 4.23 In practice:

- boys tend to need more explicit teaching than girls and tend to prefer active, hands-on methods of instruction; ${ }^{19}$
- structured programs are better for boys because they like to know what is expected and they like to be shown the steps along the way to achieve success;; ${ }^{20}$
- while girls will more readily respond to content, boys respond more to their relationships with their teachers; ${ }^{21}$
- activities help boys establish rapport with their teachers ${ }^{22}$; and
- boys respond better to teachers who are attuned to boys' sense of justice and fairness and who are consistent in their application of rules. ${ }^{23}$

17 See Ms Jenni Griffith, Teaching Boys, Developing Fine Men, 21-22 August 2000, Conference Papers, "Workshop 1, Learning Styles", Family Action Centre, University of Newcastle, p. 97.
18 Mr Greg Griffith, Submission No. 126, p. 4.
19 Early Childhood Education Council of NSW, Submission No. 123, p. 3.
20 Ms Maree Rix, Head Teacher, English, James Cook Boys Technology High School, Transcript of Evidence, p. 717.
21 Mrs Carol Richmond, Principal, Roseville Primary School, Sydney, NSW, Transcript of Evidence, p. 671.
22 Mr Ian Lillico, Principal, City Beach High School, Perth, WA, Transcript of Evidence, p. 940.
23 Mr Ian Lillico, Principal, City Beach High School, Perth, WA, Transcript of Evidence, p. 929.
4.24 Effective schools and good teachers respond to the different learning styles of their students. The Committee agrees that traditional schooling, whether primary or secondary, tends to favour passive learning and often does not cater well enough for those students who prefer interactive and experiential learning styles. ${ }^{24}$ Traditional secondary schooling frequently does not offer enough variety or stimulation to engage the large cohort of boys and girls who 20 years ago would have left school at Years 9 or 10 to seek employment.

## What works in practice

4.25 Just as curriculum and pedagogy merge in practice, good pedagogy is absolutely dependent on the establishment of effective teacher/pupil relationships. The Committee visited and took evidence in a range of schools as well as receiving a great deal of information in submissions and publications on effective classroom strategies for boys. Without exception, these strategies are about establishing effective teacher/student relationships and promoting trust and communication between teachers and students.
4.26 A number of researchers, including Dr Peter West, Dr Ken Rowe and Dr Katherine Rowe, endorse the following as a list of strategies that work and support the learning needs of boys:

- Focus on support for literacy across the curriculum, and especially professional development for teachers
- Early diagnosis and intervention for those 'at-risk' of literacy under-achievement
- Highly structured instructions and lessons, with an emphasis on challenge and frequent changes of activity,
- Greater emphasis on teacher-directed work in the classroom in preference to 'group' work
- Clear objectives and detailed instructions but simple instructions; provide 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 under-achievement 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. ${ }^{25}$
4.27 The Committee was presented with numerous examples of successful strategies to engage boys which are consistent with this list. Some of these are outlined in this section of the report to stimulate further thought and discussion by teachers and parents. However, it is important to remember that every child is an individual and that general statements here about boys and girls should not be read to apply to every boy or every girl. At the general level, research supports three major principles that work for boys and girls:
- Focus on support for literacy across the curriculum, remembering that girls typically respond to the personal, whereas boys are more likely to respond to the physical;
- Provide frequent changes in structured activity; verbal for girls, visual for boys;
- Boys respond positively to structured challenges and encouragement, while girls respond positively to encouragement and popularity. ${ }^{26}$
4.28 The practical instructions established in the Victorian study on auditory processing difficulties referred to in the consideration of literacy in Chapter 5, are applicable in every classroom: attract attention, use short clear sentences, pause between sentences and monitor for compliance. ${ }^{27}$ With boys it also helps to explain the purpose of the work, how long it should take, the standard expected and how it will be assessed.

We had very short lessons-boys have to have very short lessons, I have found. The girls class would have four, maybe five, lessons in the two-hour morning block we have in our school. I would have anything from 12 to 20 lessons-very short sharp lessons where there was bang, bang, bang, one thing after the other....

25 Drs Ken and Katherine Rowe, Submission No. 111.1, p. 18; Dr Peter West, Report on Best Practice in Boys' Education, April 2001; others who supported more emphasis on explicit teaching and catering to a broader range of learning styles include: Mr Richard Fletcher, Manager, Men and Boys Program, University of Newcastle; Transcript of Evidence, p. 1050; and Professor Lyn Yates, Professor of Teacher Education, University ofn Technology, Sydney, Transcript of Evidence, p. 326.
26 Drs Ken and Katherine Rowe, Submission No. 111.1, p. 18.
27 Drs Ken and Katherine Rowe, Auditory Processing Effects on Early Literacy and Behaviour, Background paper on address to a Students with Disabilities Conference, Melbourne, August 2000, Exhibit No. 36, Appendix 3, p. 2, and see Chapter 5, Hearing and Auditory Processing Difficulties.
...The boys had to have very short-term, very achievable goals. They had to know what they were going to achieve immediately, not in a week's time, not in two days time, but straight there and then. Everything was a lot more hands-on; the things they did were a lot more 'get out and do it'... Everything was made 'real life': I tried to explain why they needed to learn this and where they would use it in the future when they left school. ${ }^{28}$

I find it is very important with boys in particular, to really explain the sequence of activities that they're going to be involved in, the purpose of them, why they're doing them and how they are going to be assessed on part of it... the boys want to know, how are you judging me on this? What are the components you're looking for? What competencies do I have to demonstrate? And, for boys in particular, you have to link that assessment back to the original planning with the kids about what the purpose of the whole thing was in the first place. ${ }^{29}$
4.29 Genuine praise, challenge and positive reinforcement for effort, achievement and appropriate behaviour are effective motivators for boys.

I reckon that if you do something good and they say, 'Yes, that's good but see if you can do better next time,' that sort of helps you along because they are giving you a kind of challenge. I reckon people respond better if they are being put under a bit of pressure of challenge. But if you do something good and they just say, 'Oh, yes, you should have done better than that,' it is just negative reinforcement. I reckon that is not good. ${ }^{30}$

The boys loved to have their work displayed and praised. Just because they are 13-year-old boys who like football and go outside and push and shove each other does not mean that they do not like praise. They like to show their work and take it up to the office to admin and have it rewarded and praised. ${ }^{31}$

What was important was the recognition of competency, and developing people so that they were competent in social interactions and competent in what they did so that the praise, when it was given, could be actually taken on. Otherwise, with

28 Mr Graeme Townsend, Senior Teacher, Year 6, Elanora State School, Qld, Transcript of Evidence, pp. 1231-1232.
29 "What works for boys", Boys in Schools Bulletin, Vol. 3, No. 4, 2000, p. 27.
30 David Richardson, Student, Trinity College, Evanston South, SA, Transcript of Evidence, p. 784.
31 Mr Graeme Townsend, Senior Teacher, Year 6, Elanora State School, Qld, Transcript of Evidence, p. 1232.
praise or any kind of recognition-we went through that feely thing that even if kids smiled you would say, ‘That was really good'—the child would know intrinsically if it was not good and the praise was false. ${ }^{32}$
4.30 All students, boys in particular, require clear rules and stated expectations about appropriate behaviour. Ideally, expectations and the operation of the rules and punishments should be negotiated with the students.

> Always give 'a way out' for the boy who has done something wrong. They must do some sort of penance but know after their punishment they will be again treated fairly. I use the word 'penance' deliberately. The dictionary meaning of the word being 'a punishment agreed to, or offered to show you are sorry for doing wrong' ${ }^{33}$
4.31 The Committee has the view that both competition and cooperation can play a productive role in boys' education. The use of competition, in particular, is an area where teachers tend to have strong views for and against ${ }^{34}$ but it can be used productively in ways that don't harm children's confidence. Also, specific strategies can be used to encourage some boys who are less inclined to work cooperatively.

We used a lot of competition. Competition seems to be a thing that people do not like a lot of. We used a lot of self-competition, where the boys plotted their own graphs of how they were doing in class and they would see their own results going up, which was very positive for them. They were not comparing themselves to the others; they knew where they stood with all the other boys in the class. ${ }^{35}$

They love to be involved in competitive sorts of things. I use this in the classroom... In a lot of vocabulary building and spelling, they'll do time trials against themselves and graph their results, so they can see their improvement. ${ }^{36}$

32 Mrs Catherine Williams, Deputy Principal, Roseville Public School, Sydney, NSW, Transcript of Evidence, p. 685.
33 Mr Graeme Townsend, Senior Teacher, Year 6, Elanora State School, Qld, Exhibit No. 156, p. 6.
34 See, for example, Mrs Carol Richmond, Principal, and Mrs Catherine Williams, Deputy Principal, Roseville Public School, Sydney, NSW, Transcript of Evidence, pp. 683-684; and see Mr Brian Debus, Principal, Mrs Patricia Cox, Deputy Principal, Mrs Cheryl Crossingham, Miss Tracey Hopkins, Mr Bobby Willets, Classroom Teachers, Griffith Public School, Griffith, NSW, Transcript of Evidence, pp. 1159, 1165-1168.
35 Mr Graeme Townsend, Senior Teacher, Year 6, Elanora State School, Gold Coast, Qld, Transcript of Evidence, p. 1233.
36 "What works for boys", Boys in Schools Bulletin, Vol. 3, No. 4, 2000, p. 28.

Boys needed to be in a cooperative situation... I had activities for them to go on with. Girls can be told, 'When you have finished your work, go on with something quietly,' and they will find something. With boys, no. So I had jigsaw puzzles, model cars, model trains-things like that that they built. The boys that would normally not associate with each other-the machos, let's say; the boys that are more involved with bullying-were getting with the quieter boys and they were actually helping each other and seeing each other's strengths in these cooperative activities that I had running when they finished their work. So it had a twofold result: they wanted to finish their work quickly so they could get on to these fun activities and it got them to work in a cooperative way. ${ }^{37}$
4.32 A number of teachers and schools make a deliberate effort to provide for boys to be physically active before and/or during lessons. Two schools that the Committee visited, Southwood Boys Grammar School, Melbourne, and City Beach High School, Perth, provide for a short period of activity before the school day commences. ${ }^{38}$ Both these schools also placed emphasis on active learning as means both to develop relationships with teachers and to get boys to engage with learning.

Boys need and want to move and they learn by doing. This must happen in the classroom in as many subject areas as possible. Teaching which allows movement and physical involvement suits boys' learning. We have built into our curriculum specific activities which boys enjoy. They are things like a hands-on approach in music, in art, in information technology, in design technology, in agriculture-we are very fortunate in having a farm attached to Tintern-in science and, of course, in sport and PE. ${ }^{39}$
4.33 Another way to use activity to stimulate boys' interest is to take lessons outside and get boys to act things out.

She did Richard I, I think, or Richard II. She had the [boys] outside acting out certain parts of the play. There was a bit of concern from some teachers that they were out there playing, but the quality of their written literacy because of acting it out and being

[^1] Transcript of Evidence, p. 1232.
38 See Transcript of Evidence, pp. 954 and see Transcript of Evidence, p. 1233.
39 Mrs Lynette Henshall, Vice Principal, Head of Junior Schools, Southwood Boys Grammar School, Tintern Schools, Transcript of Evidence, p. 221 and see City Beach High School, Perth, WA, Transcript of Evidence, p. 940; Elanora State School, Gold Coast, Qld, Exhibit No. 156, p. 6.
in motion and being involved was quite phenomenal. Kids were producing pieces of work that they never produced before. ${ }^{40}$
4.34 Regular personal interviews and discussion to assist students to establish goals, monitor their progress, keep on track and develop a clearer understanding of why they are required to do things will assist some boys. The absence of goals as a factor in a lack of motivation is something that boys recognise and that at least one school the Committee visited, Wade High School in Griffith, NSW, has been attempting to address through student interviews and study skills sessions.

It is really hard for us to decide, within a couple of years of our lives, what we want to do for the rest of our lives. Sometimes people pick subjects that they do not really like and they lose motivation to succeed. They think it is too hard and say, 'What's the point? I don't even know what I want to do.' Do you understand what I'm trying to say? It leads to nothing because they have no idea what they want to do past school. ${ }^{41}$

We made that clear both at general meetings and also in the individual interviews. We feel that the boys-all of the students actually, but the boys particularly-have come in this year knowing that there is going to be a big leap from year 10 to year 11 in terms of the work that they are going to have to do outside school. That does not mean that they are all doing it, but at least when we were talking to them they would say, 'I know what I should be doing, but I can't do it.'...
...I believe the interviews are having an effect. I think some of the good boys now really feel like they are being supported and listened to because, when Jan and I interviewed them, they were able to have a whinge about subjects that they were finding difficult and whatever. Hopefully, when we follow up next term with the small [study skills] groups, that will have some impact. ${ }^{42}$

The Committee believes there is great value in sharing information on, and raising awareness about, effective teaching strategies for boys. Publications such as the University of Newcastle's Boys in Schools Bulletin do an excellent job in this respect but education departments could do more to promote particular teaching strategies that are effective for boys.

[^2]4.36 Teachers benefit from inspiring and empowering professional development that shows how they can make a difference, for boys and for all students. Underlying each of the above examples of successful practice is high quality teaching inspired by a commitment to the students and a belief that what teachers do makes a significant difference to the social and academic outcomes of their students.
4.37 Australian and international research concludes that the influence of classroom teachers on the learning outcomes of students exceeds all other factors including school effects and socio-economic factors. In fact Australian research concluded that effective schools are only effective to the extent that they have effective teachers. ${ }^{43}$
...the key message to be gained from the school effectiveness research..., is that schools and especially teachers and their professional development do make a difference, and that it is not so much what students bring with them that really matters, but what they experience on a day to basis in interaction with teachers and other students in classrooms. ${ }^{44}$
4.38 This research-based evaluation is entirely consistent with the Committee's observation of the characteristics of the highly effective schools it has visited: a balanced educational program, involvement of the community, strong school leadership, and highly skilled and highly committed teachers, all of whom have high expectations of their students. While many schools share these characteristics, the Committee is aware that not all schools are strong in all these areas.

43 See Drs Ken and Katherine Rowe, Submission No. 111.1, pp. 10-14; and see Ms Jennifer Gale, Director, Office for Educational Review, Department of Education, Tasmania, Transcript of Evidence, p. 1105.
44 Drs Ken and Katherine Rowe, Submission No. 111.1, p. 15.

## Recommendation 2

The Committee recommends that the major focus of pre-service and inservice teacher education should be on equipping teachers to meet the needs of all boys and girls. This must include raising teachers' awareness of the differences and commonalities in the learning styles of boys and girls and the teachers' influence on student outcomes and helping them develop balanced, effective and practical teaching strategies.

The Committee also recommends that the Commonwealth, State and Territory governments jointly fund additional professional development for practising teachers for this purpose, particularly targeting strategies that work with boys.

## Single-sex classes

4.39 There has been a lot of media attention focussed on the widespread experiments with single-sex classes during the conduct of this inquiry. The Committee is aware that, in some quarters at least, there is an expectation that it will either endorse or recommend against single-sex education in this report. The Committee's position on this issue is more equivocal but the Committee is encouraged that many schools have experimented thoughtfully with single-sex classes and other approaches in an effort to secure better outcomes for their students. The examples of sound pedagogical approaches above are drawn from both coeducational and single-sex schools and classes.
4.40 Research on Victorian Certificate of Education results between 1994 and 1999 shows that both girls and boys in single-sex schools outperform their counterparts in co-educational schools. ${ }^{45}$ However, the Committee is not convinced that this would justify re-structuring public schooling on single-sex lines. Research has also concluded (see above) that class teachers have much greater influence on student outcomes than other factors. Therefore, additional public expenditure would be better spent on professional development and resources that empower teachers to be as effective as possible.
4.41 The Committee believes that what takes place in a classroom has far more influence on the outcomes of boys or girls than whether it is a single-sex or coeducational classroom. The Committee has visited schools that are achieving excellent educational outcomes for both boys and girls

45 Drs Ken and Katherine Rowe, Submission No. 111.1, p. 4.
irrespective of the sex of the class teacher or whether the classes are singlesex or coeducational. These schools and teachers are successful because they focus on establishing and maintaining sound teacher/student relationships and delivering a high quality educational program that meets the needs of all the children attending that school.
4.42 Single-sex classes have been tried as a means to promote girls' interest and achievement in mathematics and science. Often the trials were abandoned, not because they didn't work for girls but because, in that context, they were not positive for boys.

When I trialled some single-sex classes-when we were promoting girls in maths and science-the results were very good for the girls, but the boys' results went straight down. As soon as we put the boys all in a class together, the results just plummeted. So we had to throw out the single-sex classes for the sake of the boys, because they suffered while the girls' results increased. ${ }^{46}$
4.43 A possible explanation for the poor performance of boys when single-sex classes were trialled in the past is that particular attention was paid to girls' needs in maths and sciences while nothing different was done to meet the needs of the residual group of boys in the boys' classes. This explanation is consistent with the explanations for disappointing outcomes in some trials of single-sex classes intended to support boys where teaching styles were not adapted to take advantage of the single-sex classes.
4.44 The Committee spoke to teachers in several schools about trials of singlesex classes. While most were successful the results were not universally positive and it is instructive to look at the differences between the successful and less than successful examples.

In terms of their results, it was reasonably successful, and in terms of them being switched on to learning, I think it was quite successful. It depends though on the teacher, I guess. The boys had a good year with me because we were very hands-on. With the English curriculum, I tailored it as much as I could to cater for the interests of boys. I had books where the boys were the heroes, like The Outsiders which is about gangs and so on. When we did films, we went to Movie World and we did hands-on stuff. They wrote film scripts and we got in there....I know that that success was not repeated in all of their classes. Some of the male teachers and some
of the females did not necessarily like the idea and they thought that the classes did not work. ${ }^{47}$
4.45 Other schools reported that the freedom to select content that boys were more likely to engage with was an advantage of single-sex classes and contributed to their success. ${ }^{48}$
4.46 The factors that support success are not necessarily to do with separating the boys and the girls but are related to how well the needs of the resulting classes are analysed and met. Where boys and girls are separated and little else is changed the results tend to be disappointing.
...When people hear that there has been success, they then immediately think, 'Okay, single sex classes, there we go,' and they do nothing else, and nothing else changes. The assessment does not change, the learning style and the teaching style do not change,...
What some schools are disappointed in is, yes, they have gone and done that, and nothing has changed. You walk into that classroom, it is the same teaching, everything is there, so they are wondering why they are not achieving those results. I think people really need to be informed and really thrash out exactly why they are actually going to use these classes in the first place, and then set about finding research, finding what others have done and really being much more informed before they go ahead and actually trial $i t$, and reasons why are you doing it. ${ }^{49}$
4.47 Where single-sex classes and schools are successful it is because the school leadership and the class teachers have set clear objectives and found ways to adapt the content and style of the teaching to meet the needs of the students. This is true whether the single-sex class is a class of boys or girls. For example, Elanora State School in Queensland, established two singlesex Year 7 classes, a boys' class and a girls' class, while maintaining four Year 7 coeducational classes. There was a focus on improving the boys' behaviour and engagement with learning. ${ }^{50}$ Evaluations on student

47 Mr Dion Locke, Year 12 Coordinator, Mabel Park State High School, Brisbane, Qld, Transcript of Evidence, p. 556.
48 See Mr Bobby Willetts, Executive Teacher, Griffith Public School, NSW, Transcript of Evidence, p. 1161; Mr Graeme Townsend, Senior Teacher, Year 6, Elanora State School, Qld, Transcript of Evidence, p. 1235; Mr Dion Locke, Year 12 Coordinator, Mabel Park State High School, Brisbane, Qld, Transcript of Evidence, p. 556; Ms Evelyn Voshege, Manager Student Support Services, Mooroolbark Secondary College, Victoria, Exhibit No. 51.
49 Ms Barbara Watterson, Director of Professional Development and International Projects, Fremantle Education Centre, Transcript of Evidence, p. 977.
50 Mr Graeme Townsend, Senior Teacher, Year 6, Elanora State School, Qld, Transcript of Evidence, p. 1234.
progress were conducted in a number of areas, including reading, spelling, mathematics and behaviour. Positive results were achieved for both the boys' class and the girls' class including a significant improvement in the target area of the boys' behaviour and engagement. ${ }^{51}$
4.48 The school planned the trial carefully and tested the students to establish their preferred learning styles. It found that two-thirds of the boys were kinaesthetic (physical) learners and one-third were visual learners whereas three-quarters of the girls were auditory learners. ${ }^{52}$ This knowledge informed teaching practice which was credited with the improved behaviour, engagement and academic performance of the boys.

As the class teacher, I think it is irrelevant whether it is a male teacher or a female teacher... I very much doubt that the boys being in a class by themselves made the changes. I think it was a change in my attitude, in my teaching strategies and in my expectations of what I did allow them to do, behaviour-wise, and the activities that I structured for them. ${ }^{53}$

Elanora State School believes that the main value of the trial it conducted is in using the knowledge acquired to assist other teachers to develop more effective strategies for teaching boys. ${ }^{54}$

## Assessment and evaluation

4.49 Assessment is the measure of students' success or failure in achieving the objectives of the educational program. Evaluation is the review of the effectiveness of educational programs with a view to improving them to better meet their objectives.
4.50 Assessment is inseparable from curriculum and pedagogy. The curriculum dictates the content that will be assessed and the mode of assessment can influence the pedagogy as the teacher aims to equip the student to succeed at the assessment tasks. Different modes of assessment and assessment tasks will influence the teaching.

In Queensland, one of the reasons why we have had such a good retention rate compared with others is the fact that we have had

51 Mr Barry Love, Deputy Principal, Elanora State School, Qld, Transcript of Evidence, p. 1231 and Exhibit No. 156, p. 7.
52 Mr Graeme Townsend, Senior Teacher, Year 6, Elanora State School, Qld, Transcript of Evidence, p. 1234.
53 Mr Graeme Townsend, Senior Teacher, Year 6, Elanora State School, Qld, Transcript of Evidence, pp. 1231-1232.
54 Mr Michael Kelly, Principal, Elanora State School, Qld, Transcript of Evidence, pp. 1235-1236.

> school based assessment and not external examinations. That form of assessment allows kids to work progressively. It has also meant that teaching pedagogy in practice in Queensland has had to be looked at more carefully. If you have school based assessment, teachers themselves have to be accountable. They are the ones who have to carefully look at what we are asking kids to do. ${ }^{55}$
> Assessment and pedagogy do interact and balance and variety are necessary in both.
4.51 When it was relevant to the discussion of other issues, aspects of assessment have been considered elsewhere in this report. The growing importance of literacy in science and mathematics, and the implications for assessment and student outcomes were considered in Chapter 2. The effects on students of differing modes of assessment are not well understood and in this Chapter and Chapter 6 the Committee recommends that research be done on the influence of assessment systems and other factors on school retention and student attitudes and engagement (see Recommendations 3 \& 15).
4.52 Assessment is an important issue in boys' education for two reasons. First, the methods of assessment, their relevancy and interest, will affect boys' motivation and engagement with learning. Second, assessment needs to be an accurate measure of their achievement in a particular area of study and that measure should not be dependent unnecessarily on knowledge or skills that are more appropriately assessed in another Key Learning Area.
4.53 Assessment structures in Australia range across the spectrum of possibilities from systems that are wholly school-based, systems that combine school-based assessment with external examinations to those that rely solely on external examinations to assess particular subjects.
4.54 Differing modes of assessment advantage and disadvantage groups of boys and girls. It is generally understood that boys do better on tests and examinations and that girls tend to do better on continuous assessment. ${ }^{56}$ However, these general findings are not necessarily constant for all boys or all girls. For example, Victorian data indicates that boys from lower socio-economic backgrounds tend to get better results under continuous assessment than they would achieve in external examinations. Conversely, boys from higher socio-economic backgrounds are likely to achieve better

55 Ms Maree Hedemann, Senior Education Officer, Education Queensland, Transcript of Evidence, p. 573.

56 see Northern Territory Department of Employment, Education and Training, Submission No. 164, p. 4, and Transcript of Evidence, p. 1251.
results in external examinations than they would achieve under continuous assessment. ${ }^{57}$
4.55 The outcomes-based curriculum frameworks are changing the types of tasks that students are being required to undertake for assessment, particularly in those jurisdictions with more flexible school-based systems. An example is the Rich Tasks being trialled in Education Queensland's New Basics Project which is influencing practice in other locations.
[Rich Tasks are] specific activities that students undertake that have real-world value and use and that are significant in terms of students' local communities. Rich Tasks require all students to extend their repertoires of practice to encompass those that are often treated as being more appropriate to one gender the other. Rich Tasks that require mastery of a range of knowledges and skills applied to real life and high relevance situations are considered to suit boys better than do contrived tasks. The Rich Tasks also offer opportunities for more equitable forms of assessment that cater for a more diverse range of learning styles benefiting both boys and girls. ${ }^{58}$

The work in the high school years, with the Exhibitions projects which we started with 20 students in year 9...is really starting to show results. Students are saying things like, ‘Well, I know I don't like sheet work,' 'I like to actually express what I am feeling and thinking,' 'I like to share my views with other students,' 'I like to have control of my learning.' They are comments that we have heard from students that are significantly different from some of the learnings that students have traditionally had. So what we are attempting to do in our high school years is not to bring about structural change but to bring about cultural change in terms of the way learning proceeds. ${ }^{59}$
4.56 The inclusion of assessment tasks developed around relevant real-world learning experiences that are related to students' communities offers a potential partial solution to boys' disengagement from learning. The Committee has one reservation about this approach: the subject content and purpose of the tasks will need to be a significant attraction to induce

57 Mr Jeremy Ludowycke, Spokesperson, Victorian Association of State Secondary Principals, Transcript of Evidence, p. 27.
58 Education Queensland, Submission No. 168.1, p. 8.
59 Mr James Colborne, Executive Director, School Education Division, ACT Department of Education and Community Services, Transcript of Evidence, p. 1331, the Exhibitions projects in the ACT are modelled on the Rich Tasks.
some boys to overcome their reluctance to engage in some of the social and language components.

## Recommendation 3

The Committee recommends that the Commonwealth fund further research into the impact of different assessment methods on the measured relative attainments of boys and girls.

## Conclusion

4.57 The theoretically separate issues of curriculum, pedagogy and assessment merge in classroom practice. This is true in both school-based assessment systems, where teachers are directly involved in all three elements, and in external examination systems where teachers must also direct their teaching to develop their students' examination skills and techniques.
4.58 The Committee believes that whatever assessment systems are used they must accurately measure and report on student achievement in a range of intellectual and social skills they will need throughout life. Sound assessment systems should do so without advantaging particular groups or inadvertently testing competencies they are not primarily intended to assess.
4.59 While quality educational programs and appropriate assessment methods are essential, the quality of teaching is critical. Adequately training and resourcing teachers needs to be the highest priority for education authorities.


[^0]:    8 Ms Jennifer Stehn, Executive Director, Curriculum, South Australian Department of Education, Training and Employment, Transcript of Evidence, p. 824.
    9 Education Queensland, Submission No. 168.1, p. 7.
    10 Ms Maree Hedemann, Senior Education Officer, Education Queensland, Transcript of Evidence, p. 570.

    11 Mr Kevin Leathwaite, Principal, Eagleby State School, Qld, Transcript of Evidence, p. 535.

[^1]:    37 Mr Graeme Townsend, Senior Teacher, Year 6, Elanora State School, Gold Coast, Qld,

[^2]:    40 Mr Wayne Philp, Head of Senior School, North Campus, Trinity College, Evanston South, SA, Transcript of Evidence, p. 807.
    41 Ryan Rodgers, Student, Trinity College, Evanston South, SA, Transcript of Evidence, p. 790.
    42 Ms Jennifer Hill, Deputy Principal, Wade High School, Griffith, NSW, Transcript of Evidence, pp. 1199 \& 1200.

