



**WHAT WORKS IN INNOVATION IN EDUCATION**

**CASE STUDY: QUEENSLAND, AUSTRALIA**

**By**

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**NOT FOR CITATION**

## **BACKGROUND: THE CONTEXT IN THE STATE OF QUEENSLAND, AUSTRALIA**

Australia is a federation of six states and two territories (also referred to as the Commonwealth of Australia). Under the Australian Constitution, education is a state/territory responsibility and this autonomy is strongly defended on the basis of the need for responsiveness to geographical size and population dispersion, different histories and contexts, and regional needs and circumstances.

Most public expenditure on education is sourced from direct or indirect taxation collected at country level and distributed through the states. Schools are government (public/state) or non-government with the latter made up of Catholic and Independent sectors. Approximately one-third of all school students are enrolled in non-government schools. Non-government schools are supported through state and federal government funding. Government school funding is mainly a state/territory matter though some funds also flow from the federal government. Most non-government schools also charge fees.

Indigenous students comprise 3.4 per cent of all Australian school students. The percentage of Indigenous students enrolled in Queensland (5.3 per cent) is higher than the national average because of higher concentrations of Indigenous peoples in the north, especially Cape York and the Torres Strait Islands. Most Indigenous students in Queensland, (88 per cent) are enrolled in government schools.

Currently, there is compulsory schooling in Queensland for 6-15 year olds (school years 1-10) with the two years of post-compulsory schooling for 16-17 year olds (school years 11-12). From 2006, as part of the Education and Training Reforms for the Future (ETRF) program recently adopted by the Queensland Government, the compulsory age will rise to 16 years but young people under 17 years will have to show that they are 'learning or earning'. The aim is for all young people to gain a Senior Certificate or a Vocational Certificate Level 3.

There are approximately 1750 schools in Queensland. About 71 per cent of students are in state schools, 17 per cent in Catholic schools and 12 per cent in Independent schools. At the senior secondary school level (school years 11-12), the distribution of students is about 60 per cent state, 20 per cent Catholic and 20 per cent Independent. State schools are run by Education Queensland (the Queensland Department of Education). Open enrolment operates for state schools (except for a few schools with defined enrolments areas). Some non-state secondary schools are selective.

### **Curriculum and assessment in Queensland**

In 1989 all Australian State and Commonwealth Ministers of Education adopted a national curriculum framework to ensure that Australia's school education, based on agreed national goals, would provide young Australians with the knowledge, skills, attitudes and values relevant to present and emerging social, cultural and economic needs in local, national and international settings. This agreement included a commitment to eight key learning areas (KLAs) for school years 1-10: English; Mathematics; Science; Health & Physical Education; Languages other than English; Studies of Society & Environment; Technology; and The Arts. Each state and territory has developed its own way of implementing this agreement, although there is general acceptance of an outcomes approach.

Years 1-10 deliberately span the traditional primary-secondary divide (years 1-7 versus years 8-12 in Queensland) which is increasingly being replaced by other patterns such as P-12 schools and/or a pattern of early (P-4), middle (5-9) and senior (10-12) phases. In this sense, years 8-10 might be seen as 'lower secondary' or 'upper middle'. Year 10 is increasingly seen as a transition year when some students consolidate and others move on.

In Queensland, syllabuses and support materials have been developed for each of the KLAs by the Queensland Studies Authority (QSA). Learning outcomes, defining what students should know and be able to do within each key learning area, have been expressed for different levels of performance along a developmental continuum. The organising structure for these learning outcomes is strands and sub-strands within each KLA. In Queensland, there are eight developmental levels covering years 1-10 and these levels are labelled foundation, levels 1-6, and beyond level 6. KLA core learning outcomes are considered essential for all students. There are also some cross-curriculum priorities and an emphasis on developing lifelong learners.

Development of the current syllabuses and support materials for the KLAs began in Queensland in 1996 and will be completed in 2004. KLAs were developed in pairs, the first pair being Science and Health & Physical Education. Full implementation in schools of all KLAs is not expected until 2007.

KLA syllabus development in Queensland was begun by an inter-systemic statutory authority, the Queensland Schools Curriculum Council (QSCC), and taken over by its replacement, the Queensland Studies Authority (QSA), in 2002. The QSA's functions include syllabus accreditation and development, moderation, testing, assessment, certification, vocational education and training in schools, tertiary entrance processes and research. The QSA defines assessment for KLA syllabuses as '... the purposeful, systematic and ongoing collection of evidence and its use in making judgments about students' demonstrations of learning outcomes.' (<http://www.qsa.qld.edu.au/publications/1to10/index.html>)

QSA principles of assessment and reporting for KLA syllabuses emphasise that assessing students is an integral part of the teaching and learning process and that opportunities should be provided for students to take responsibility for their own learning and self-monitoring. The KLA syllabus documents recommend that assessment be continuous and on-going and be integrated into the learning cycle — that is, provide the basis for planning appropriate learning targets and learning experiences, for monitoring student progress while teaching, and for providing feedback to make appropriate adjustments and set new learning targets.

Assessment also contributes to building a record of evidence about student progress. From time-to-time, typically each semester, it is anticipated that the record of evidence will be summarised in the form of a report to parents. Emphasis is placed on recording and reporting progress along the levels of the developmental continuum. This differs from the 'grades' approach taken in the past and still used in reporting results on the Senior Certificate. The advantage is that it allows progress to be recorded along a single scale. Work is proceeding on how best to reconcile the detailed sequences of core learning outcomes at strand and sub-strand levels (about 100 sequences in all) with the need for more general reporting to parents.

There is no whole-cohort external testing or examining in secondary schools in Queensland. In 1972, Queensland abolished external examinations and replaced them with a system of moderated internal assessments. Initially, there were two certificates, the Junior certificate at the end of year 10 and the Senior Certificate at the end of year 12. Moderation for the Junior Certificate was gradually phased out and the certificate itself was abolished in 1993 when it became apparent that the certificate was no longer sufficient for worthwhile employment and that all students needed to be encouraged to undertake further post-compulsory education or training. Reporting in years 1-10 is currently a school responsibility and is unmoderated.

Standardised tests in aspects of literacy and numeracy are taken by all students in years 3, 5 and 7 and these provide some information to schools and parents on relative performance on these aspects of the curriculum in primary schools. There is a school-based 'Diagnostic Net' assessment in year 2, based on moderated and verified teacher judgments and used to identify students at risk of falling behind in literacy and numeracy.

School-based assessments for the Senior Certificate (year 12) are currently moderated for those subjects that count towards university entrance. Moderation aims to ensure consistency, comparability and equity of teacher judgments of student performance standards. The moderation processes for the Senior Certificate involve subject-based panels of expert teachers providing advice to schools on the quality of their assessment program and their judgments of quality of student performance based on sample portfolios. The system involves follow-up where panels identify difficulties. There is negotiation of the final results to be recorded on the Senior Certificate. Results are expressed in terms of five relative grades or 'levels of achievement' expressed in terms of standards descriptors (referred to as 'exit standards').

The roll-out of KLA syllabuses for years 1-10 in pairs over several years was thought to allow teachers to adapt gradually to the new style of syllabus. The disadvantage was that schools have been unable so far to develop whole-school strategies and there is an inevitable tension and confusion between the old approach and the new. These difficulties may be resolved now that all KLA syllabuses are coming on stream. As well, the QSA is providing additional support to schools for implementing the complete set of syllabuses and realising their potential for transformation of practice.

Education Queensland has also been undertaking a trial of an alternative set of cross-curriculum organisers referred to as the New Basics. Assessment in this program is organised in terms of Rich Tasks. Education Queensland also has been providing professional development for teachers in state schools on principles and practices of student assessment. Discussions are occurring on how to reconcile New Basics and KLA syllabuses and how to develop a statewide common reporting framework.

For this case study, two secondary schools were identified where implementation of the first two KLA syllabuses (Science; Health & Physical Education) was progressing and where there was commitment to the principles underlying the syllabuses. One government and one non-government school were invited to participate and agreed to do so. The non-government school is one of the schools of the Brisbane Catholic Education Office, a part of the Brisbane Diocese. It was expected that these case studies would reveal both a degree of sophistication by teachers in managing school-based assessment and in using classroom assessment formatively due to the within-school effects of the school-based processes adopted for the Senior certificate in years 11-12. But, it was also expected that they would reveal some difficulties in implementing new syllabuses for years 8-10 where assessment is focussed on providing for each student a detailed profile of 'milestones reached along a learning journey' (level or stage) rather than an overall summary of the 'relative quality of achievement on course completion' (grade or rating).

## **EVIDENCE BASE FOR THIS CASE STUDY**

The study took place in Brisbane over the period of one week in early November 2003. Two schools were the main focus of the study but interviews were also held with the QSA, Brisbane Catholic Education and 'experts' in formative assessment and teacher education from Griffith University and the University of Queensland.

The evidence base included:

### *School 1: Our Lady's College*

- 6 lesson observations involving 5 teachers with classes from years 8, 9 and 10;
- 3 teacher interviews including one with the guidance officer;
- 1 group teacher/senior management interview with the heads of department for Health & Physical Education (HPE), Studies of Society & Environment (SOSE) and Science;

- 1 senior management interview with the deputy principal;
- 1 group student interview with 4 year 10 students;
- Analysis of documentation including:
  - Curricular documentation and subject modules
  - Teachers' files of marked students' work
  - Student self-evaluation sheets

*School 2: Woodridge State High School*

- 3 lesson observations involving 3 teachers with classes from years 8 and 10;
- 3 teacher interviews including 2 interviewed together;
- 1 group senior management interview with the principal and two deputy principals;
- 2 group student interviews, one with 6 students (5 girls and 1 boy) and the other with 7 students (5 girls and 2 boys), all from year 8;
- 1 group parent interview with 3 parents of students in years 9 and 10, one of whom is also a support teacher for special educational needs in the school;
- Analysis of documentation including:
  - Curricular documentation – subject modules and a document submitted for a national scheme that show-cases the work of particular schools
  - Teachers' files of marked students' work
  - Student self-reflection sheets

Documentation from the QSA, Catholic Education Service and the universities was analysed, in particular on formative assessment, professional standards and moderation issues.

## **BRIEF DESCRIPTION OF THE TWO SCHOOLS**

**Our Lady's College (OLC)** is a non-government Archdiocesan, suburban girls' school with 360 students and 35 staff (of whom 23 are teachers), run by Brisbane Catholic Education. Its mission statement, like many Catholic schools, makes reference to the spirit of the Christian Gospel, love and justice. It also suggests that the College will encourage "skills that students can use to critique their environment and be active members who contribute to their own welfare and that of others".

The students are mainly from middle class families although fees are waived or adjusted to enable students whose families have lower income to attend. Only one per cent of the students have identified special educational needs. For nearly one-third of students English is a second language with a wide range of ethnic backgrounds represented including Vietnamese, Chinese, Italian, Greek and Aboriginal. There also is a substantial percentage of Pacific Islanders. The local area population has an average income for

Queensland, with higher education levels, smaller household size although slightly higher unemployment but being a Catholic school, OLC does attract a significant proportion of students from outside the immediate area. The lower secondary curriculum offers most of the KLAs as a core with 'electives' in the performing arts, languages, home economics and business. The formative assessment approaches are better developed in the social sciences, health and physical education and less developed in mathematics and science.

**Woodridge State High School (WSHS)** is a government suburban school with 820 students and around 80 staff (60 of whom are teachers) run by Education Queensland. There is a wide range of administrative and support staff, such as a school-based police officer, nurse and community development officer, providing an inter-disciplinary service. The school also has a childcare facility enabling young parents to complete their schooling. The pastoral-care system in the school allocates a teacher to each student who provides support and meets each term with the student and parent to discuss progress. The mission of the school is to develop confident, enterprising, lifelong learners through a social outcomes strategy. The strategy involves integrating cognitive, emotional and behavioural areas in order to establish, maintain and develop constructive social relationships.

The area has higher unemployment than average, with lower incomes and lower educational standards but household size is average. Due to the nature of the housing in the area there is high student mobility. The student population is diverse with 46 nationalities and 14 per cent of students whose first language is not English. WSHS is the only school in that district with a unit to support students with English language needs to enable them to transfer into mainstream classes. Support is also provided for the 41 students identified as having special educational needs with a strong emphasis on transition to work programmes.

The school has reformed the pedagogy and curriculum since 1999. An integrated curriculum is provided in year 8 covering modules such as 'Ecotourism' and the outcomes and key learning areas specified in the Education Queensland guidance are linked within this module. There is negotiation between students and teachers about the criteria and standards used to assess work. Assessment is a continuous process and there is a strong commitment to cooperative group work.

## **WHAT STRATEGIES DID THE SCHOOLS USE?**

### ***Responding to the move to outcomes-based assessment***

When the new outcomes approach for KLAs was introduced at state level, OLC had not had any discussion about the lower secondary curriculum for some time. One teacher at OLC suggested that there was lots of resentment and scepticism about the outcomes-based initiative because the profession and the unions were not properly consulted. The heads of department, who in OLC were seen as leading these developments, reported that these initiatives were imposed, and did have to be done, but that the state level administration are dependent on teachers for implementation as the administrators don't actually know how to do it. They are visiting schools looking for examples of how it might be done to use in the state level guidance. At WSHS a senior manager suggested that teachers had found it difficult to clarify the links between what they teach and what the outcomes statements are saying students will learn.

One head of department at OLC suggested that as the outcomes-based assessment gets rolled out to all subjects and students become more familiar with the statements, it may be possible to 'drop the grades' and focus more on the outcomes and the levels associated with them. But for the moment she felt that they were not meaningful to students and were therefore of limited use in the feedback. Another suggested that some revisions to the outcomes were likely since the responsible officers in her subject areas (history and geography) were currently working in schools and realising that some of the statements needed adjusting. Furthermore, the heads of department noted that outcomes are more easily defined and observed in some

subjects than in others; in English, for example, critical analysis is encouraged; the outcomes may be more difficult to judge.

At WSHS the Integrated Studies curriculum in year 8 is related to the outcome statements. One senior teacher reported that teachers in general found it hard to make the link between the statements of learning outcomes that define what pupils should learn and what they as teachers need to do to make this happen. But the teachers working in year 8 with the integrated curriculum were the more recently qualified and were enthusiastic about relating the integrated curriculum to the learning outcomes.

OLC felt that the outcomes approach was not as useful as the previous criteria-based system because the previous system had been working effectively in their department. The head of department made clear that the outcomes statements and their associated levels are too broad to show day-to-day student progress, so she had broken them down into components which were similar to the criteria that they had previously used. Furthermore, at OLC the heads of department in the key learning areas that are being implemented have agreed to qualify the levels with an additional judgement about whether the outcome has been demonstrated consistently or at a very high standard. Similarly at WSHS e they have adopted a system for classifying student outcomes as 'beginning', 'working towards' or 'achieved'. One teacher at OLC suggested that they still give grades on some social studies assignments assessed and have not yet moved over fully to the outcomes approach.

### ***Strategies which support learning***

Students at OLC suggested that active lessons with plenty of variety of activities and in which teachers stick to the point, help them to learn. One student suggested that a good teacher is one that 'doesn't put you to sleep' while they all agreed that copying off the board or out of books was least likely to help learning. No copying off the board was observed in lessons in either school and students were observed to be most attentive in the lessons in which activities were varied, tight timescales were given and reiterated and classroom management was tight. Two teachers were observed to use a routine of announcing '3,2,1' every time they wanted the whole class's attention back which seemed to be very effective even in very large groups.

Year 8 students at WSHS thought that learning occurred most when explanations are given in full, illustrated with examples, when the teacher talks less and there is less writing and when teachers use humour and get along well with each other. This final comment may reflect the relatively unusual experience that these students have of frequent team teaching. They compared the teaching strategies very favourably to those used in other schools attended by their friends and suggested that other schools relied more heavily on worksheets and pupils received less full explanations from teachers.

The students commented that if they don't understand something they just ask a friend or the teacher and that getting the wrong answer was not embarrassing. They also gave examples of opportunities in which a teacher had encouraged another pupil to give an explanation as an alternative to their own. If they get behind in a subject, have difficulties with a piece of homework or do not understand an area, teachers are available in the library after school to address any difficulties. When a task gets difficult, students at OLC reported that they ask a friend or the teacher for help and would persist with it if it was something that they could see they needed in the future.

Examples given at OLC of the most interesting things they had learned recently included reading Japanese, a home economics lesson on learning how to handle people and a unit in home economics on child development. One group of year 8 students interviewed at WSHS claimed they learned something interesting every day. They thought that many of the skills they learned at school would be useful in their future work. An example of recent learning that had been particularly interesting was negative numbers.

The learning environment at OLC was seen by heads of department as promoting the skills needed for students to work together such as listening, communication and respect for others.

At WSHS a head of department described the review of the curriculum that had taken place over the previous few years and noted a much greater emphasis on investigative work built into the integrated studies curriculum. Teaching now involved much more activities and less 'chalk and talk'. A senior member of staff described the major reforms that had been going on in WSHS for the previous two years as focusing mainly on higher order questioning, multiple intelligences and thinking skills.

### ***Strategies that support diversity/individual needs***

Students at OLC reported that teachers give more time to those that need help but more advanced students are still given time and made to think. A head of department at OLC commented that given the range of abilities in the school, more use needs to be made of fast-tracking and peer tutoring to ensure that diverse needs are met.

At WSHS, the head of student support had been at the school two and a half years. When she started there were 32 students identified as needing learning support and they spent most of their time in a separate unit. Now most of them are supported in mainstream lessons. Approaches based on multiple intelligences have been used to support students with learning difficulties, for example, through a kinaesthetic session in the playground on the concept of negative numbers.

Every week there is an allocated time for year 8 and some year 9 students to reflect on their learning, working with others and experiences and to write comments about it in their learning journals. Teachers are allowed to read them but not allowed to write in them. One student had entered the following comments:

Yesterday my group and I made different shapes of a certain size out of newspaper. I got frustrated when nobody would listen to me. But we finished a square and two rectangles.

Listen. None of our group members listened to each other. We all had ideas but wouldn't explain them. Then it would all end up in a mess.

The parents at WSHS acknowledged that students from more than 40 different cultural groups attend the school and that the approach in the school ensures that this is an enriching and positive experience.

### ***Shared objectives***

Heads of department at OLC commented that sharing objectives is strongly promoted as part of the learning environment. The students at OLC said that objectives of the lesson were shared in most lessons, often based on the feedback about what had been given as a homework task. The students at WSHS described one teacher's practice of sharing the aim of what the students are expected to achieve in the lesson. Other teachers were more likely to give out a worksheet with the aims at the top. In both schools, teachers were observed to share objectives of lessons with the students. They also held up pieces of work from someone in the class currently or from previous years as models of what good work looks like.

In the student interviews at WSHS, students reported that teachers often used an example of a piece of work such as a poem to draw attention to positive aspects but not to suggest that this is exactly what all students should do.

### ***Higher order questioning***

Heads of department at OLC stated that they used open-ended questioning extensively, particularly to extend students' thinking. One of them commented that when using it with the whole class, she tended to target an initial question at a student with higher ability and then use their reply to draw in others from the class. Observation of the same teacher confirmed her extensive use of questioning:

In a year 10 lesson on globalisation, students were working on their individual assignments in the library using books, articles and the Internet to research a company they had chosen such as Nike or McDonalds. The teacher saw individually about half the 25 students in the group to review their progress. She asked challenging open questions encouraging them to extend and deepen their investigations and gave specific feedback on *what they needed to target for improvement*.

At WSHS, higher order questioning was evident in integrated studies lessons. Teachers were observed deliberately to ask students who were less inclined to contribute. Questioning was used extensively to check understanding and in one lesson, at the end of each activity, the students were invited to assess it on difficulty and student feedback determined whether the teacher moved on to the next activity or gave a further explanation of the previous one. Students and other staff interviewed confirmed that reflections of this type were regularly built into lessons. When students worked in small groups, the teachers rotated around the groups questioning them to get further explanations, encouraging experimentation, problem-solving and reasoning. A head of department confirmed that this move towards more active learning was school policy and included assessing students' understanding through this means.

Not all the teachers observed at WSHS made regular use of open questions but it was a strategy evident in some lessons, perhaps linked to individual teachers rather than to specific subjects, in both these schools.

### ***Comment marking and feedback which identifies future targets***

In both schools there were subjects in which there was a strong emphasis on giving effective feedback through comments which indicated how to improve the work. The senior managers at OLC suggested that in maths and science, work is still graded but in other subjects it is not, although some work seen in English and social studies had been graded as well as having constructive comments.

The students interviewed at WSHS said that teachers give them verbal feedback on written work in class which was why their exercise books appeared not to have any marks or comments in them. One produced a history work booklet which was an assessed assignment with a sheet on the front giving the outcomes-based statements marked as either beginning, working towards or achieved. In addition, the teacher had given a comment indicating what would need to be done to improve the work. The year 8 students said that grades or marks were never given and they felt that this helped them work to their own standard and not worry about comparing themselves to other people. They all claimed to read and act upon the comments and suggested that the teacher was always willing to discuss them.

In social studies at OLC, drafts of assessed work receive comments indicating how to improve and the students are given time in class to undertake the revisions. The head of science suggested that this also occurred in science and that students were more likely to read the comments on these assessed drafts than on other work. One teacher reported that when grades were dropped students asked how they were doing in relation to others. Another social studies teacher mentioned that parents wanted to know their daughter's position in the class and how they were doing.

The year 8 & 9 files from one of the teacher's at OLC had a sheet on the front giving grades for each semester based on the formal assessments (2 per year) on each criterion from the previous criteria-based

assessment. These criteria included items such as ‘factual knowledge and understanding’, ‘research skills’ and ‘evaluation’.

Students at OLC stated that they liked grades and found them useful as they ‘show you what you have been doing, make you try for an A’ although one student preferred the new levels as ‘my parents don’t know whether I have been listening or not’. They reported that they do read the comments and that there are always suggestions as to how the work could be improved. The sampling of marked work confirmed this with comments such as:

Good work M. Your assignment was well researched. You gave a clear explanation of the printing press and illustrated it effectively with OHTs . You could have given more emphasis to the effects of the introduction of the printing press.

Although occasionally, a student may have been left in some doubt about what needed to be addressed:

C, you could have done so much more with this role play.

Similarly, at WSHS comment marking was very specific and helpful even when commenting on a very successful piece of work:

Wonderful work J! Your answers in this booklet are very creative and well written. Your Jirrbal story in particular *was exceptional. Try and label your diagrams in future. Keep up the great work! Well done!*

And on less successful attempts:

Good try J! The rules asked for in Q4 are to do with what happens to the North point when the maps are rotated. Have another think about it.

And written comments signed by two teachers on an oral presentation:

Good eye contact with the audience. Avoid playing with your pencil too much, at times it distracted the audience. Your information was very interesting and you focused mainly on the changes that have occurred during the last 100 years. Well done, it was fantastic. Keep up the good effort we are all very proud of you.

Teachers at OLC share pieces of work and discuss comments they have made on them as well as the work itself. Heads of department saw this as professional behaviour for moderation purposes rather than monitoring of marking for accountability purposes. It is seen as relatively easy to do in a small school in which departments are not isolated.

### ***Self and peer assessment***

Skills in self and peer assessment are an important component of becoming a lifelong learner. A member of staff commented that while students at OLC had well developed targets for their future and were generally very academically competent, some started secondary school taking insufficient responsibility for their own actions, instead finding someone else to blame. Self and peer assessment skills should help to address this.

Self and peer assessment at OLC was reported to be up to the teacher, done more in social studies and health and physical education, where a proforma is sometimes used to structure their feedback, than in

other subjects. One teacher emphasised the basis of trust needed for effective peer assessment. She reported that sometimes she asks a student who has done less well in a piece of work to select another girl they trust and then read each others' work which enables them to see what needs to be improved. One of the lessons observed of her teaching was designed to promote trust.

*In a year 9 lesson on health and physical education, 28 students were seated in pairs, in two circles back to back. One student in each pair was given a map and the other a blank piece of paper. The one with the map was asked to give instructions to her partner to enable her to reproduce the map. This well-known trust exercise was used most effectively to draw out issues about types of communication, listening and relating to others. At the end of the lesson the students were asked to complete a proforma on what they had learned from the task and on how well they had worked with their partner including what they might have done differently to improve the outcome.*

One self-evaluation sheet is completed by each student at the end of each semester at OLC and the focus of comments tends to be work practices (e.g. use of time, completion of homework, note-taking, working with others), rather than subject knowledge, skills or understanding. The sheet includes an item on identifying a target for improvement which is also usually focused on work practices. Written reports to parents at OLC are constructed using 'electronic statement banks', so the self-evaluation sheet is also used by the teacher as an opportunity to add something more personalised. These self-evaluations then form part of the focus, alongside the formal assessed assignments, of the twice yearly meetings between student, parent and teacher to review progress. Similarly at WSHS, there is a report card every term as a basis for a discussion between the student, parent and care manager. The parents interviewed confirmed the value of these discussions which last about 20 minutes each term.

When the answers are given in the textbooks, students at OLC usually check them themselves. Self evaluation sheets are completed and sent home for parents to sign that they have seen them. One senior teacher at WSHS described the emphasis in school on self and peer assessment claiming:

You've got to have the kids analysing their own learning and deciding what they have learned all the way through their schooling if you want them to learn.

Teachers at WSHS are trying to ensure that the pupils are aware of, and understand the outcome-based statements and can assess themselves against the standards. In the student interviews at WSHS they described reflection time as a feature of most lessons, the use of their learning journals in which questions to be addressed included 'what do you understand about...?' They gave examples of marking each others' work and giving each other feedback on written work. One student said he only corrected other people's work and didn't write comments on it indicating how it might be improved but admitted that it might be more helpful if he did so.

### ***Group work/Cooperative learning strategies***

Peer assessment requires students to work together in ways that have sometimes been established through cooperative group work. Teachers mentioned a Queensland initiative on cooperative learning. A teacher at OLC suggested that she had used cooperative learning techniques in a unit of work on human rights. The students were allocated to groups of 4 (to ensure ability mix) and they had to decide which 4 human rights out of the 10 in the UN declaration, were crucial. In the year 9 library based lesson observed on this unit, all students worked individually but this may have reflected the fact that it was a library session.

The students at OLC told me that work in the primary school had been more activity-based and that lessons in the secondary school were more text-based. The lessons I observed were mixed but there were

clear subject differences with health and physical education being activity-based and the social science lessons text-based. The student comments confirmed this suggesting that there was little group work in English or social studies but some in health and physical education and their optional subjects such as Japanese.

Teachers at WSHS commented that far more use was made of cooperative group work than occurred at other schools in Brisbane and that students initially complained that the teachers weren't giving them the answers. The students at WSHS thought that they worked in small groups in about half of most lessons. Sometimes they worked in mixed-ability groups in which the teachers seated them for the year but they reported that within class grouping arrangements varied which helped them to learn to work in teams. Some of the integrated studies lessons at WSHS are taught in a combined group of two classes with two teachers and several teaching assistants. These lessons tend to involve extensive group work in which students are sometimes grouped on an ability basis and sometimes self select the groups.

*Two year 8 groups were combined for an integrated studies lesson focusing on negative numbers and the Romans. There were 35 students in total although this group is usually larger but some students were involved in another activity elsewhere. Two subject teachers were supported by one qualified teacher for special needs and two teacher aides. Both teachers appeared to have a secure grasp of both the historical and mathematical subject knowledge. The session was introduced and the lesson objectives shared in the whole group and students then worked in the groups of four in which they were sitting. The group activities had been carefully planned using practical materials that maximised explorations of the concepts and minimised use of whole texts. Feedback from the teacher encouraged further exploration. Feedback between students tended to be at the level of whether an outcome was correct or not rather than indicating how to improve it. Students were encouraged to reflect on how effectively they had worked as a group as well as how well they had completed the task.*

When interviewed, the students who had been in this lesson commented that the lesson was typical. They are often asked to reflect on the strategies they used to address the task as well as how well they worked together in their small groups. Another lesson at WSHS involving group work invited students to assign specific roles of chairperson, notetaker and leader within the group. When feeding back they were encouraged to assess each person's contribution, the effectiveness of the roles in supporting their learning and how they might have improved it.

In the student interview the students claimed that working in small groups helped to develop their understanding through testing out their ideas, examples and explanations on others. They suggested that disadvantages of working in groups included having to work with people you don't like, who hold you back or mess about. Overall, they felt that the advantages outweighed the disadvantages and favoured the mixed-ability groups that they usually experienced:

I reckon it's important to have people working together at different levels, then the people at higher levels can teach the people at lower levels in their own way. In the real world you work with different people, you don't always choose who you work with and working with other people you don't know helps you.

## **STAFF DEVELOPMENT TO SUPPORT FORMATIVE ASSESSMENT AND INNOVATIVE STRATEGIES**

There was little evidence of teachers at either schools taking up any specific opportunities for staff development in assessment for learning although WSHS had some in-service work for the whole school planned in the near future. Rather, the implementation of the outcomes approach is being accompanied by extensive staff development opportunities that have elements on assessment for learning. These appear to

have been taken up by a minority of teachers in the two schools. According to the teacher educators in the universities, there was little demand for staff development focused specifically on assessment for learning, the major focus being targeted specifically on the outcomes approach to assessment

The heads of department at OLC reported that there had been extensive staff development associated with the outcomes approach but while there are so few examples of practical implementation, teachers are left to implement it in whatever way they can. The syllabus writers are the main source of information and sessions led by them have been helpful but in some subjects e.g. science, they seem to have avoided assessment issues. The subject associations (especially in history and English) were reported to have made pedagogy a real focus in the last six years – self and peer assessment was being covered in their journals and offered in seminars.

The senior management team at WSHS regarded the transient staffing as a threat to consistency in quality of teaching. Regular monitoring of pupil progress across the school enables weak areas to be identified. They saw giving staff access to communicate and time to work in teams as reflecting the high value ascribed to staff. The head of special needs who has taken a key role in the formative assessment work, goes into lessons to support teachers and encourages them to ‘take risks’. Her policy is to always comment on a least two aspects of the teaching that went well, as well as identifying at least one area for improvement. This type of ‘coaching’ is used by others in the school.

## **WHAT WERE THE BARRIERS TO AND OPPORTUNITIES FOR SCALING UP THESE STRATEGIES?**

The evidence suggests that not all teachers bought into the new state level outcomes approach and that their perception was that this was due to lack of consultation. But from what is known about other large scale reforms (e.g. Earl et al, 2003, *Watching and Learning 3: Final report of the external evaluation of England's National Literacy and Numeracy Strategies*. Nottingham: DfES) it is realistic to assume that some of the teaching profession will either not want or not be willing to implement change, whether or not they are consulted. There does not seem to be an expectation that all teachers will undertake staff development on assessment for learning.

One experienced head of department from WSHS suggested that ‘many teachers believe that kids are learning if you are teaching, whereas most kids learn despite your teaching which then acts as a barrier to development and change’. She suggested that this leads to a resistance to letting go of some of the ‘control’ that teachers think they have. Instead, she argued, they need to focus on controlling the processes that provide the opportunities for learning rather than trying to control the knowledge and content.

Changes in the senior management teams of schools can cause lack of continuity in initiatives and reduce sustainability – both schools had experienced changes recently in the senior management teams.

## **EVIDENCE OF EFFECTIVENESS IN RAISING STANDARDS**

Evidence of effectiveness in raising standards could not be attributed specifically to the assessment for learning initiatives. At OLC no evidence of significant trends in standards was provided.

At WSHS, there has been a marked improvement in attendance since the curriculum was revised and learning support reorganised. The number of students needing to be withdrawn from lessons due to bad behaviour had halved and outcomes have improved. The students who started in the new integrated studies programme which includes formative assessment, are due to move into year 11, upper secondary schooling next year. Even if the percentage that do so increases from the current 70 per cent continuing in post compulsory education, the addition in each year group of pupils who have moved from other schools makes it difficult to attribute an increase in rate to the reform. However, last year (2002) when students

were given a specified writing task, the year 8s who have had the integrated studies programme with the new care teacher system of support, performed much better than the year 9s who at that stage had not started the programme.

### ***Students' aspirations***

In both schools, students' aspirations seemed fairly high and students were keen to talk about them. In OLC, the guidance officer confirmed that in her experience students aspirations were high. The four year 9 students interviewed all had ideas about future careers which included cartoonist, advertising, early childhood teaching and working with animals. At WSHS, the students mentioned their intentions to become a teacher, two mentioned becoming a lawyer, a prison guard, a dietician, a chef or in one case, any job that earns lots of money.

The three parents interviewed at WSHS felt that the school encouraged high aspirations. One had a daughter in year 9 who wants to become a social worker, one had a year 9 daughter who suffers from asthma and wants to become a policewoman and the third had a son in year 10 with motivation problems who had done work experience in a butcher and was aiming to get an apprenticeship. Two of the three had older daughters who had been through the school and all were at university. The parents felt that the school equipped them to manage themselves through university. The school's track record for students securing university places together with the quality of staff and extent of community involvement were reasons they had chosen to send their sons and daughters to this school.

### **EVIDENCE OF SUSTAINABLE CHANGE**

Sustainability is more likely when a school can use state-wide reform to justify and support developments that they have already prioritised – 'making the reform their own' - e.g. A teacher at OLC suggested that *The Key Learning Areas* initiative had given a process that was already underway another boost in the last few years.

Changes of staff are a potential threat to long-term sustainability and there was evidence that young, innovative staff were attracted to coming to work at WSHS which had no problems with recruitment but were then more likely to be offered promotion elsewhere relatively quickly. This means WSHS has to start again developing new staff. However, in both schools there was evidence of changes to teaching and learning such as the use of self reflection, group work and comment marking, which had become sufficiently embedded to be maintained through some staffing changes.

### **CONCLUSIONS**

Queensland has a state system of assessment of teachers in lower secondary education the results of which are neither moderated nor published, but are used in schools to focus discussion on staff professional development. The state innovation on the key learning areas and outcomes-based assessment is regarded by some teachers to have been introduced with insufficient consultation (although this is a common complaint of teachers in many countries). Any limited optional staff development opportunities specifically addressing assessment for learning had not been widely taken up in the two schools studied. However, both sets of staff had been involved in development activities relating to the outcomes-based assessment reforms that included elements of assessment for learning. To bring about sustainable change, a combination of gradual involvement of a large core of the staff with support from effective staff development in assessment for learning would be needed.

While assessment for learning is a key component of the outcomes-based assessment as articulated in formal documents, it was widely evident in the practice of teachers in one school and limited mainly to a few teachers in the other. This may reflect misunderstandings about what it is, lack of clarity of the

relationship between the components of formative assessment and the outcomes-based model or insufficient targeting of an infrastructure to support it.

Moving from grades to levels was seen as requiring cultural changes and it is unclear as yet whether the new outcomes approach will enable or even encourage teachers to do this. Some sectors of the population e.g. parents who pay for their children's education, may continue to demand grades. Where schools concede to this demand, it is unclear whether necessarily it will inhibit effective formative assessment in the long-term, provided that comments are written properly and the incentives for students to read them and act upon them are high. In both schools, there was evidence of high quality comment marking which seemed to be contributing to learning. Some innovative teaching strategies related to formative assessment were observed in each school and effective group work was seen to occur in both schools. Where this and other effective teaching strategies have been established, it is important to identify the incentives for these strategies to be sustained in the long term.