

# Is Assessment For Learning In A High-Stakes Environment A Reasonable Expectation?

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## Introduction

In order to provide an answer to the question of whether assessment for learning is feasible in a high-stakes environment, it is important to have a clear, shared understanding of the terms *assessment for learning* and *high-stakes environment*. Only if we have a common understanding of what these terms mean, and are able to relate them to programs and initiatives we understand, can we consider whether the two are compatible.

This paper begins by explaining *assessment for learning* and the practices associated with it. It compares *assessment for learning* with *assessment of learning*. The paper then describes a particular high-stakes environment, namely the New South Wales Higher School Certificate (HSC). It explains the nature and organisation of the HSC with a particular focus on the approaches used to assess and report student achievement and on the purposes for which the results are used. The paper then goes on to show how the approaches used in *assessment for learning* can be used comfortably with the materials developed as part of the *assessment of learning* approach used in the determination of students' HSC achievement.

In the second part of the paper the focus turns to the application of assessment for learning in the context of the NSW Years 7-10 curriculum. It explains what has already been put in place for the School Certificate (SC) and discusses the current developments.

## What is assessment for learning?

Although there are several slightly different definitions of assessment for learning, the most common one has been proposed by the Assessment Reform Group. This definition states that :

*“Assessment for Learning is the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how best to get there.”*

(Assessment Reform Group 2002)

That is, assessment for learning has the purpose of collecting information on a student's achievement that can be used to improve and progress their learning.

When looking at this definition one might well ask “how is assessment for learning different from *formative assessment*?” The answer is that these terms are often used interchangeably. “Formative assessment is taken to refer to all those activities, undertaken by both teachers and students, that provide the information used as feedback to modify the teaching and learning.” (Harrison and Swaffield, 2003) The use of the term *assessment for learning* and the principles and practices underlying it

send a clear message that assessment can be an integral part of the teaching and learning process, not just something ‘tacked on’ at the end.

The recent work conceptualising assessment for learning identifies ten related principles. These state that assessment for learning:

- is part of effective planning
- focuses on how students learn
- is central to classroom practice
- is a key professional skill
- is sensitive and constructive
- fosters motivation
- promotes understanding of goals and criteria
- helps learners know how to improve
- develops the capacity for self-assessment
- recognises all educational achievement.

(Assessment Reform Group 2002)

This list raises some important implications for classroom practice. It identifies the importance of assessment as part of normal classroom practice, it emphasises the importance of feedback aimed at motivating students and leading to improvement, and it indicates the importance of showing students how to realistically assess the value of their own work.

One might ask the question “isn’t this just good classroom practice?” Given that the answer is obviously “yes”, it leads us to the following questions :

- “How can we ensure that assessment for learning becomes common practice?” and
- “How can it operate in a high-stakes situation when the focus of learning seems to be maximising the end of course results in order to impress potential employers or gain a place in a highly competitive university course?”

The answer to the first of these questions is that the majority of assessment good teachers undertake actually occurs during the teaching process and forms an integral part of teaching. Assessment is not just the test or assignment given at the end of the topic or course. Whenever teachers question their students, note their responses or make observations about their work they are collecting assessment information. Such information gathered informally can be placed side by side with information collected from more formal assessment activities to gain an understanding of where the student is in their learning and what they need to do to improve and progress. This approach provides a more natural link between what is taught, how it is taught and how well students have learnt it. Once this is understood, pre-service and in-service professional development activities for teachers can be directed at activities that develop these skills by modelling good practice.

The answer to the question “how can assessment for learning operate in a high-stakes environment?” is addressed later, following the description of a particular high-stakes environment.

The term *assessment of learning* is synonymous with *summative assessment*, that is, judgments made about students' achievement at some key point such as the end of the course or unit of work. Such assessment is usually focused on reporting students' achievements at the end of the program of study, not only to the student, but to other parties such as employers, the next year's teacher, and so on.

The point can be made, however, that *assessment for learning* is not something completely divorced from *assessment of learning*. The assessment activities conducted and the information collected during the teaching of a course that are used to improve student learning can in most cases be used to provide a measure of the standard of student achievement at the end of a course. This claim is explored further below.

### **The NSW Higher School Certificate**

The NSW Higher School Certificate (HSC) is the credential awarded at the end of secondary school to those students who meet the requirements. During Years 11 and 12 students typically study courses in five or six subjects. Most courses are of two units in duration signifying 120 hours of study in one year. In Year 11 students study courses totalling a minimum of 12 units and in Year 12 study courses totalling a minimum of 10 units.

Student achievement in courses studied in Year 11 (referred to as Preliminary courses) is assessed by the school. Students are judged to have satisfactorily studied the course or not based on their performances in assessment programs conducted by the school.

Study of the HSC courses generally begins at the start of Term 4 when students are in Year 11. Student achievement in the courses studied in Year 12 (referred to as HSC courses) is assessed through two components – a school-based assessment and an external examination. The school assessment mark determined by schools is based on a program of assessment activities developed and administered by the school over several terms according to requirements and guidelines provided by the Board of Studies.

The external examinations administered for many courses have multiple components. Courses that have practical or performance components typically have an externally marked major work, project or performance as well as a written examination.

Student achievement in the Higher School Certificate is reported in terms of an examination mark and a statistically moderated school assessment mark.

Since 2001 the initial mark from the examination and the assessment mark submitted by the school after statistical moderation have been 'aligned' to a standards-based performance scale in order to obtain the marks reported to the students. The alignment process consists of the application of a structured, multi-stage Angoff-based standards-setting procedure involving teams of highly experienced teachers, referred to as 'judges'. The judges determine what examination marks each year correspond to the borderlines between the different levels of achievement, which are referred to as 'performance bands'. A multilinear mapping process, which adjusts

these cut-off marks to the borderline marks of 50, 60, . . . , 90 used as part of the reporting scale is then applied to all the examination marks for a course. In this way students' HSC results are related to the knowledge, skills and understandings they have achieved in each course.

Students' performances in the HSC are also used in the calculation of the students' Universities Admission Index (UAI). Their initial examination marks and initial school assessment marks, after the statistical moderation is applied to the assessments (that is, before the alignment to the performance scales), are re-scaled by the Universities Admissions Centre in the creation of the UAI rank used in the selection of students for tertiary courses.

Following the 2001 and 2002 examinations, HSC standards packages have been produced. These packages consist of a CD-ROM containing the descriptions of the levels of achievement or standards that are part of the performance scale, the examination paper and marking guidelines, and the responses or works of several students who received the mark for a question the judges believed would be scored by students at the borderline of each pair of levels of achievement.

These standards packages encapsulate the standards of performance that have been created for each course. They are used by the teams of judges each year when they are determining what examination marks represent the cut-off mark between the different levels of achievement (or performance bands) each year. In this way, although the examination paper may vary in difficulty from year to year, the marking schemes may vary from year to year and student rates of achievement may vary from year to year; we can be confident that those charged with the responsibility of establishing the cut-off marks each year will be basing their decisions on the *same* standards of performance.

Copies of the standards packages are also provided to each school to assist teachers to understand the standards created for the courses they teach. There is strong evidence that teachers are engaging with the contents of the packages and are internalising the standards. Many schools put the packages on their computer file servers and make them available to students as well as teachers. Students and members of the public can purchase the packages.

Some professional development activities have been conducted in 2002 and 2003 to provide teachers with a structured method for using the packages to become familiar with the standards themselves and to incorporate them into activities involving their students.

### **How Can Assessment for Learning Operate in this Context?**

While many tend to focus on the summative assessment of achievement (assessment of learning) that is an important aspect of the HSC, it is quite feasible to incorporate assessment for learning approaches into this high-stakes program. Given that the approaches espoused as part of assessment for learning are good teaching practice, there is nothing to prevent the effective use of such approaches through the senior secondary years. Teaching techniques that are aimed at:

- identifying the goals of learning;

- observing learning and analysing and interpreting evidence of learning and giving meaningful feedback and guidance to students; and
  - motivating students by providing a supportive environment,
- are applicable in any learning context.

The changes that were made to the Higher School Certificate in 2001 to assess and report student achievement in terms of standards, together with some of the materials that were developed to support this initiative, have provided some significant opportunities in relation to assessment for learning.

It is a requirement of the HSC school assessment programs that, for each course they teach, schools must establish a program of assessment tasks. These tasks are conducted throughout Year 12 and each has a weighting determined by the school within guidelines provided by the Board. Each task enables teachers to collect information about students' achievement in relation to several outcomes, award marks in accordance with structured marking guidelines, and provide constructive feedback to students on their performances that high-lights their strengths and where they could make improvements.

The effectiveness of this feedback can be significantly improved now in the standards-based system used for the HSC. Teachers can work through some of the materials in the HSC standards packages with their students. For example, when teaching a topic they might identify the questions that were related to that topic in the 2001 or 2002 HSC examination. They can discuss the requirements of that question with their students, show them the marking guidelines that were used to allocate marks and then show them a number of student responses that represent different levels of achievement. By working through these responses the teacher can highlight the important features of the responses, including their strengths and any shortcomings. This approach could be even more effective if the teacher gives a student the opportunity to compare a piece of work they have produced on the same topic with the works in the standards packages. While initially such an approach would be best undertaken with the involvement of the teacher, at a later point it is quite likely that many students would be capable of undertaking such an activity as part of their self-assessment.

While not being of the same order, the feedback provided to schools on the performance of their students following the HSC examinations will further consolidate teachers' understanding of the performance standards. A consequence of this is that they will be in a better position to apply the principles of assessment for learning with the next cohort of students. In this way teachers' feedback to students can be targeted and focused on helping students to improve.

### **How is Assessment for Learning being addressed in the middle years in NSW?**

Before answering this question it is worth considering what is 'high-stakes' about the environment in the middle years. In NSW there is an external testing and school-based assessment program resulting in a credential at the end of Year 10 that marks the end of compulsory schooling. It would be fair to say that this School Certificate (SC) credential is not generally seen as 'high stakes', however data from the tests is

used by some education systems for accountability purposes, which can raise the stakes for teachers.

It could be argued that educators view the middle years as high stakes because we win or lose the hearts and minds of many of our students in junior secondary school. The challenge is to develop a curriculum, including assessment, that will engage, challenge and motivate students intellectually, emotionally and spiritually at this period in their development.

The NSW curriculum is undergoing major revision that began in 1998, with reforms to the HSC implemented in 2001. The Years 7-10 curriculum is currently under revision with the majority of 'new' syllabuses released in July 2003 and due for implementation in 2005. The revision has been guided by a framework document that sets out the broad learning outcomes for students in Years K-10. The first School Certificate credential based on the revised syllabuses will be issued in 2006.

A key feature of the new Years 7-10 curriculum is a focus on *assessment for learning*. This approach to assessment advocated in the new syllabuses is drawn from the work of the Assessment Reform Group in the UK, and the work of Rick Stiggins and Grant Wiggins in the USA. At the heart of this work is the belief that when teachers plan for teaching, learning and assessment as concurrent, integrated classroom activities, this can lead to significant gains in learning for students. In turn, learning gains improve self-esteem and motivate students to take on greater challenges. In this way, *assessment for learning* plays a key role in engaging and retaining the interest of students in the middle years.

To plan effective teaching and learning activities, teachers and students need to be clear on what students are expected to know and be able to do as a result of engaging with the curriculum. The new 7-10 curriculum in NSW contains *syllabus standards* that make explicit expectations of what is to be taught and learnt, and *performance standards* that describe levels of expected achievement. Together, these standards ensure that students and teachers understand the goals they are working towards.

This approach recognises and emphasises that much of what students and teachers do in everyday classroom activities can be described as assessment. Lessons typically involve tasks and questions that encourage students to demonstrate their knowledge, understanding and skills. Observations and judgements are made about how learning can be improved. These assessment processes can be formal or informal and are an essential part of everyday classroom practice.

The use of formative assessment strategies to support and improve teaching and learning is at the centre of the general assessment advice in Years 7-10 syllabuses. Support materials developed for each subject show how, in planning units of work, teachers can ensure there are opportunities for the teacher and students to collect and use information about progress towards learning goals.

The nature and importance of feedback in generating confidence and enthusiasm in students is emphasised in support materials. Feedback is modelled for teachers in annotated samples of student work. It is as constructive as possible and aimed at helping students learn better, rather than just achieve a better mark. Such feedback

helps students to understand that mistakes are a part of learning and can lead to improvement. It is directed to the achievement of standards and away from comparisons with peers by using language from the performance standards written for each subject.

Although the assessment literature differentiates formative and summative assessment and their respective purposes, it is not helpful to set up a view of formative assessment aimed at improving learning and summative assessment that certifies learning outcomes. The intention is to provide advice about the dual function of assessment of syllabus standards to support learning, (assessment *for* learning) which, at the same time, provides evidence that teachers can use to report student achievement against the performance standards (assessment *of* learning). There are some tensions to be resolved in this approach that are apparent when considering the purposes and types of assessment that have traditionally existed, and the place of the School Certificate tests.

### **The NSW School Certificate**

The NSW School Certificate is awarded to students at the end of Year 10 who have met the curriculum and assessment requirements. The assessment requirements consist of a school-based assessment carried out by teachers in each school during Years 9 and 10 for each course students take, and an external test in each of four (soon to be five) foundation areas, namely English-literacy; Mathematics; Science; Australian History, Geography, Civics and Citizenship; and from 2004, Computing Skills.

The purpose of the school-based assessment is to assess and report on the full range of courses studied in Years 9 and 10 and to include assessment of a broader range of syllabus outcomes than may be covered in the foundation tests. The school-based assessment in most schools typically takes place from the latter part of Year 9 through to the latter part of Year 10.

Procedures for the school-based assessment are not prescribed, however the Board of Studies provides advice to schools on how to carry out their assessment program. In each course, teachers design their own assessment tasks and use evidence from those tasks to assign one of five grades to each student. The Board advises schools to use no more than three to five formal tasks, including tests and examinations, to avoid over-assessing. The school-based assessment program in Years 9 and 10 in most schools serves both formative and summative purposes.

Following the School Certificate foundation tests, standards packages are produced similar to those produced for the HSC that contain samples of student work at the cut-off marks between adjacent levels of achievement. These packages strengthen teachers' understanding of the knowledge, skills, and understandings targeted by the tests and assist them in preparing the next cohort of students to achieve their learning goals. This model of using the results of summative assessment to inform formative approaches can also be used by schools in the earlier years.

## Future Challenges

Clearly the approach taken in NSW aims at providing a consistent message to teachers about the complementary nature of formative and summative assessment irrespective of the stakes attached to the various uses for the information. There are, however, a number of tensions that need to be resolved.

Some of the most obvious of these are:

- **The issue of moderation and the building of consistency of teacher judgement of student achievement against performance standards.** Standards are captured in documentary evidence, however Wolf argues that “the documents themselves do not create the standards – they articulate them to professionals who can understand them because of their prior knowledge” (1993). How do we help teachers share and refine their ‘prior knowledge’ in order to make consistent judgements about student attainment?
- **The tension between assessment for learning with its formative focus, and the importance given traditionally to summative measures like the School Certificate tests.** How can teachers be convinced that better practice in assessment can lead to improved learning outcomes including better test results? Many teachers are convinced that teaching to the test is more effective than a formative approach to assessment.
- **Time for learning.** If summative measures are not carefully defined, they may detract from time for deeper learning, exploratory learning and learning for fun.
- **The impact of accountability measures.** Accountability is an important element in obtaining improvement, however if the information collected is not used carefully it can be counter-productive to encouraging good assessment practices.

### How might these tensions be resolved?

The intention is to help teachers understand how ‘good’ formative assessment (assessment *for* learning) can inform and form strong connections with summative assessment (assessment *of* learning). In this way, formative and summative assessment can be seen as complementary approaches.

There is further work to be done in determining how to measure the impact of assessment for learning approaches in improving learning outcomes for students. Can we replicate in the NSW setting the latest findings of Paul Black et al in *A Successful Intervention – Why Did it Work?* (2003) that describes four main types of classroom activity trialled by teachers involving classroom dialogue, marking and feedback, peer and self assessment and the formative use of summative tests.

Work is currently underway to specify more clearly and precisely the domain of the School Certificate tests to ensure that they do not occupy inordinate amounts of teaching and learning time.

There is further work to be done in educating those responsible for accountability measures and interventions in understanding the unintended consequences of over-reliance on test data.

## Conclusion

The principles and practices of assessment for learning are applicable in any teaching/learning context, whether that context is leading to what is typically regarded as a high-stakes situation or not.

What this paper shows is that assessment for learning should be regarded as sound teaching practice that is equally at home in any situation. Such an approach can exist comfortably in a context such as the NSW Higher School Certificate – the classic high-stakes environment where student results are the most critical element in the selection for further study or employment. Equally, the assessment for learning approach can be an important component of approaches to teaching and learning in the middle school, where quality teaching is a crucial element in motivating students to learn and in positioning them well for their senior secondary school studies.

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