

## Getting started with student assessment

### Basic advice for people new to university teaching

This section is for people with little or no experience in assessing student learning. Often people new to university teaching are not yet in a position to determine the nature of assessment in the courses in which they are involved. However this should not stop consideration of the twelve principles below.

### The fundamentals of effective assessment: Twelve principles

The twelve principles below address practical assessment issues. They are united by a single idea: assessment is at the heart of the whole teaching and learning process.

- 1) Assessment should help students to learn.
- 2) Assessment must be consistent with the objectives of the course and what is taught and learnt.
- 3) Variety in types of assessment allows a range of different learning outcomes to be assessed. It also keeps students interested.
- 4) Students need to understand clearly what is expected of them in assessed tasks.
- 5) Criteria for assessment should be detailed, transparent and justifiable.
- 6) Students need specific and timely feedback on their work – not just a grade.
- 7) Too much assessment is unnecessary and may be counter-productive.
- 8) Assessment should be undertaken with an awareness that an assessor may be called upon to justify a student's result.
- 9) The best starting point for countering plagiarism is in the design of the assessment tasks.
- 10) Group assessment needs to be carefully planned and structured.
- 11) When planning and wording assignments or questions, it is vital to mentally check their appropriateness to all students in the class, whatever their cultural differences.
- 12) Systematic analysis of students' performance on assessed tasks can help identify areas of the curriculum which need improvement.

## An explanation of the principles

### 1. Assessment should help students to learn.

Educational assessment has at least two main functions: it is part of a system of accreditation and it fosters student learning. These functions are generally described as 'summative' and 'formative' respectively. It is a useful theoretical distinction, although in practice the two purposes tend to be intertwined. Too often, the former function dominates discussion at the expense of the latter. Yet formative assessment is crucial to effective learning. In its broadest sense, it refers to the whole process of learners testing their understandings with and against others, especially the experts – their teachers. On the basis of feedback, learners modify and develop those understandings. This feedback can be given in different forms: in responses to students' contributions in class, as well as written or oral commentary on their work. Some of these views will also form the basis for a summative judgement and the generation of marks and grades. A good deal of it will not. If assessment is conceptualised in this way, it is not an irksome 'add on' to teaching and learning, but is understood to be an integral part of the process.

### 2. Assessment must be consistent with the objectives of the course and what is taught and learnt.

The stated objectives of any given course of study in a university cover a wide range of understandings, higher order intellectual skills and values. If the assessment tasks do not test these outcomes, the statements remain empty pieties. Students behave in a quite rational way in 'reading' the true objectives of a program from the nature of the assessment. If an exam tests rote learning, that is apparently what is valued by assessors. Even if classes have encouraged more interesting and probing thought, students will judge that to be peripheral if it is not reflected in the nature of the required tasks. Assessment, then, is very powerful in driving students' learning behaviours. Assessment tasks must be designed to foster a more demanding and challenging approach to learning, so that valued outcomes, such as the capacity to analyse and synthesise, are in fact rewarded.

### 3. Variety in types of assessment allows a range of different learning outcomes to be assessed. It also keeps students interested.

Until recently, there has tended to be a predictable uniformity in university assessment – if not across, then certainly within disciplines. The 3,000 word essay, the lab report, the multiple-choice or short essay exam, have been standard in different fields. A long tradition suggests that such forms have been quite valid for the assessment of certain outcomes but, as increasing emphasis has fallen on the development of skills (generic as well as subject-specific), some gaps have become obvious. To take the most obvious examples, as oral communication and teamwork skills are increasingly defined as important outcomes in many courses, these skills have to be assessed by new means. Teachers have started to question how often a student needs to show that he/she can write a 3,000 word analytical essay, for instance. Innovative and creative approaches to assessment are increasingly in evidence – often the result of probing thought about what a course is really trying to achieve. As long as they are clearly explained, such tasks can enhance student interest and motivation – and are usually a lot more interesting and rewarded for academics to assess.

#### **4. Students need to understand clearly what is expected of them in assessed tasks.**

This issue has two dimensions, one intellectual, the other practical. Confusion in either can make students very anxious and lead to unproductive work. The second is the easiest to address. Students have the right to a clear statement of the assessment schedule in any subject, preferably in the first class, with topics, dates, weightings, submission procedures, penalties for late submission, etc. They should also have a strong, specific statement about the nature of plagiarism and its consequences (this can perhaps be dealt with at the course level, early in first year). Any variation of these requirements during a program could have legal implications and should be approached very carefully (and probably with the advice of a head of department).

The second dimension requires a delicate balance, which is perhaps part of the 'art' of teaching. Understandably, students want to know exactly what they have to do to gain good marks or grades. Teachers can do a lot to assist them with this – and a great deal more than has usually been done in the past. They can set out criteria by which each task will be judged (see below), they can discuss the task in class before submission (and afterwards, with a view to the next task), they can provide sample answers, offer examples of good writing in the discipline, and so on. What they cannot do is reduce success to a formula that is easy to follow. To do so would be to discourage some of the higher order skills that university study attempts to develop. These skills require some room for individuality, originality, creativity, the unexpected. A graduated approach may be part of the answer, with strong direction provided in the early years and increasing encouragement of individual approaches as students progress.

#### **5. Criteria for assessment should be detailed, transparent and justifiable.**

In recent years, many academic teachers have provided students with statements of criteria against which their work is assessed. Many students coming straight from secondary school are used to working with such statements and may expect them. The question of how detailed these should be is a matter of judgement. It seems that students find very general statements about 'advanced analytical skills' and the like of little use. On the other hand, as discussed above, it is reductive and counter-productive to try to pin everything down. Probably such statements can never be more than a guide, but in certain ways their usefulness is clear. They can indicate, for instance, that grammar and spelling will be taken into account, or that a certain range of reference to sources is expected. It is probably helpful to look at some examples from colleagues. In drafting these statements, it is important to keep checking against the subject and course objectives and to give some thought to how the criteria – and the balance between them – can be justified to students and perhaps others.

#### **6. Students need specific and timely feedback on their work – not just a grade.**

As argued above, an important (and arguably the primary) function of assessment is helping students to learn. A mark or a grade tells students something about the effectiveness of their learning, but not very much. They will know that they have succeeded or failed by the assessor's standards, but often will have little idea of why. If they are to recover from failure, or deepen their understanding, they need to have explanations – and suggestions for improvement. This means that blanket statements about the general quality of analysis, say, may be of little use. Really conscientious marking involves pointing out each individual flaw in logic or inadequacy of treatment. The reality of academics' workloads means that a strategically selective approach is required, particularly if one considers the second aspect of this issue – that feedback needs to be relatively quick to be effective. A guiding principle is that students should get feedback on one piece of work in time for this to be of benefit for the next. A useful strategy for overwhelmed markers is to comment intensively on one section of a piece of work, as an example of how the student should go about addressing any problems. This is particularly useful when dealing with poor expression.

## **7. Too much assessment is unnecessary and may be counter-productive.**

In setting an assessment regime for any subject, academic staff need to be aware of students' overall workload – and, as far as possible, the deadlines for other subjects they may be doing. A very heavy assessment load does not allow students time to comprehend and explore material: it tends to push them into shallow, rote approaches to study, where they try to find shortcuts and formulae for tasks, without really understanding underlying principles. If students are faced with too much 'busywork', particularly if this involves a repetitive approach, they are likely to lose interest and motivation. As suggested above, there is no need to keep asking students to demonstrate a particular skill. Academic staff often worry about ensuring that students 'cover' a given body of knowledge. This concern can dominate thinking about how a course should be taught and assessed. Given the rapid expansion of knowledge in all fields, it is increasingly accepted that students cannot be expected to retain everything in working memory, and that greater emphasis should be placed on their learning *how* to access information when they need it – and how to use it when they do. If this approach is accepted, it is possible to define the important principles and concepts that need to be understood and to ensure that students cover these by strategic structuring of assessment tasks. Apart from the benefits to students of carefully targeted assessment, it is obviously in the interests of staff to avoid an oppressive assessment workload.

## **8. Assessment should be undertaken with an awareness that an assessor may be called upon to justify a student's result.**

It is important for universities that their assessment practices are transparent and demonstrably fair and reasonable, especially when assessment is associated with professional accreditation. Staff need to be careful about assessment procedures and records, without becoming paranoid about possible dangers. They should be able to demonstrate that students have been given adequate information and notice about assessment and that uniform procedures have been followed in grading them. There will always be room for 'professional judgement' but this should be arguable in terms of standards generally recognised within a field or profession. In areas where a high level of subjectivity is involved (such as some of the humanities and arts) it is highly advisable that an individual assessor's judgement is confirmed by others. Some areas require panel assessments (of artistic performance, for instance); in others, key pieces of work are double-marked or, minimally, failing marks are referred to a second examiner. Practice in this area varies considerably according to discipline. It is vital that new academics are thoroughly acquainted with their departmental or faculty policies relating to marking. It is a good idea to consult with colleagues to moderate the assessment of student performance, especially when there is a high level of subjectivity involved.

## **9. The best starting point for countering plagiarism is in the design of the assessment tasks.**

Plagiarism can be a problem in many areas of university teaching. A wide range of strategies for countering plagiarism is set out in another section of this website. Many university teachers believe that the most effective plagiarism minimisation strategy lies in the design of the tasks set for assessment. This involves not only avoiding the practice of repeating a few well-worn questions from year to year, but also requiring the kinds of analysis and/or creativity that preclude the direct use of others' thinking. In some areas, students can be required to base their reflection on a context specific to the course. They can be asked to critique others' work, such as journal articles. While not solving all problems associated with plagiarism, such measures can go a long way towards making it pointless.

#### **10. Group assessment needs to be carefully planned and structured.**

More and more courses are incorporating group projects into their assessment regimes. In response to an increasing emphasis on the need for students to be able to learn and work together. This development opens up many opportunities for innovative thinking about assessment, but it is fraught with dangers. At the moment, many students dislike group work and group assessment, particularly when the assessment is of the group as a whole (that is, when all members receive the same mark). Certainly there seem to be students, and academic staff, who have had bad experiences with this form of assessment. Nevertheless, group work is a valuable component of the higher education curriculum. It needs to be planned and structured very carefully, and students have to be systematically prepared to undertake group tasks. Another section of this website offers suggestions about how to make this important form of assessment effective and rewarding.

#### **11. When planning and wording assignments or questions, it is vital to mentally check their appropriateness to all students in the class, whatever their cultural differences.**

Staff working with students of non-English speaking backgrounds point to the fact that the phrasing of many assessment tasks often needlessly exacerbates difficulties for these students. They also argue, however, that simpler, clearer wording would benefit *all* students. Sometimes essay topics, for instance, seem to be aimed more at a teacher's colleagues than at undergraduate students. Beyond the issues associated with language, there are many ways in which tasks can be unintentionally biased against some student groups – if references are quite specific to a particular culture, for instance, or if a task, such as oral presentation, may be more difficult for women for some countries. The important thing is for teachers to be sensitive to such implications. This does not necessarily mean that tasks such as the latter example should be eliminated, but it may mean that students disadvantaged in such ways should be given special assistance. Many universities or faculties have special provisions relating to assessment for disadvantaged students. Disabled students, for example, may be allowed extra time for examinations or the use of special equipment. New staff should acquaint themselves with all policies in this area. The Equal Opportunity office, or its equivalent, is a good starting point.

#### **12. Systematic analysis of students' performance on assessed tasks can help identify areas of the curriculum which need improvement.**

The work submitted by students for assessment is a valuable source of feedback for staff on the effectiveness of their teaching. If certain areas are clearly not understood by significant numbers of students, this signals the need for urgent attention. It can be very helpful to approach the analysis somewhat formally — perhaps in the form of a regular review by all staff involved in the subject or course. Such a review can also monitor the effectiveness of assessment procedures in testing the desired outcomes of the program.