Principles of Assessment

Teaching Development | Wāhanga Whakapakari Ako

Dorothy Spiller
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Introduction

Assessment is the single most important determinant of student learning. Teachers communicate to students their values, priorities and expectations through assessment. According to Rowntree (1987), “The spirit and style of student assessment defines the de facto curriculum” (p.1). As Dunn, Morgan and O’Reilly (2004) observe “researchers have placed student assessment at the peak of the pyramid as regards its importance in determining student approaches to learning” (p.3). For example, if the assessment emphasises the reproduction of large volumes of detailed information, students will learn in order to reproduce and not necessarily to understand. Boud and Falchikov (2003) remind us that the consequences of superficial assessment tasks, which focus on testing current knowledge or information recall, are long term. Assessments of this kind are not preparing the students for appropriate participation in work and life after university. They contend that “we are
failing to prepare them for the rest of their lives" (p.3). Not only do assessments send students messages about what we value, but also as Ramsden (2003) observes, students will concentrate their energies on assessment tasks because assessment is the currency of the tertiary environment. We therefore need to ensure that assessment tasks support, nurture and develop the kind of learning that teachers want.

Many lecturers bemoan students’ preoccupation with assessment possibly because it seems to represent a strategic, minimalist approach rather than an engagement with learning for its own sake. This attitude to assessment perhaps also springs from a fairly limited perception of the purposes and nature of assessment, a view which is primarily focused on notions of testing and grading. By contrast with this narrow conception, assessment tasks can offer rich teaching and learning opportunities for both teachers and learners. The simple oppositions of assessment-driven learning and the vision of learning for its own sake are unhelpful and limit our potential to maximize the learning opportunities offered by assessment. Consider the following:

- For many students, the initial process of engagement with an assessment task may be strategic, but a carefully designed assessment task that is linked to course learning outcomes can engage students more deeply than previously and in unexpected ways.

- Teachers can develop assessment tasks to help students practise core course learning skills.
Teachers can use assessment tasks to give the students an opportunity to manage and apply course concepts.

Teachers can use assessment tasks to develop other important learning attributes, such as collaborative learning, self-evaluation and communication skills.

Assessment also provides important ongoing feedback to the lecturer on the progress of students’ learning in relation to course learning outcomes. The lecturer can then provide appropriate feedback, help and support or adjust the teaching accordingly.

Students can learn from teachers’ feedback and feed-forward on formative assessment as to what they need to do to bring their performance closer to paper expectations.

Correspondingly, assessment tasks provide lecturers with the opportunity to coach and guide students towards the attainment of paper learning outcomes. Additionally teachers can use feedback and feed-forward to encourage students to evaluate their own performance in relation to course learning outcomes.

Ramsden argues that:
“Assessment that is the servant rather than the master of the educational process will necessarily be viewed as an integral part of teaching and the practice of improving teaching. A sophisticated theory of teaching leads directly to the
proposition that the assessment of students is above all about understanding the processes and outcomes of student learning, and understanding the students who have done the learning. In the application of these understandings, we aim to make both student learning and our teaching better” (2003, p.180).

However, the teacher also uses assessment to evaluate and measure students’ performance and may be influenced by beliefs about power, authority and relationships in the classroom. Additionally, the teacher has to evaluate student performance on behalf of the institution. Assessment is simultaneously a core teaching and learning tool and a way of meeting institutional requirements. The challenge for teachers is to make sure that the goal of promoting quality learning always has primacy in assessment decisions and that the assessment process becomes more of a collaborative process between teachers and learners than an institutional imposition.

The purposes of assessment
It is helpful to summarise the different functions of assessment:
For students:
• **Diagnostic** - to enable students to find out their level of competency/knowledge/understanding at the beginning of a course.

• **Feedback** - for students to ascertain their progress in relation to the learning outcomes of a course.

• **Learning opportunities** - to provide students with the opportunities to develop their mastery of ideas or/and practise skills and competencies through articulating them in writing/oral work or other forms of expression.

• **Self-evaluation** - to encourage students to make judgments about the quality of their own work.

• **Motivation** - assessment tasks can enhance student motivation by providing frameworks for developing, reviewing or extending their understanding (for example, in a piece of research or a collaborative investigation). For some students a series of manageable deadlines can also help them to keep engaged with the subject.

• **Preparation for longer term learning** - formative assessment can be used to help students develop the capacity to self-evaluate, an important component for any future occupation (Boud & Falchikov, 2007). However these authors argue that assessment
is infrequently thought of in terms of preparation for lifelong learning. Most university undergraduate assessment is about performance on tasks designed by others. Moreover, Boud and Falchikov (2007) contend that assessment often emphasizes “problem solution rather than problem formulation” (p.403). In order to provide learning that is more sustainable, it is suggested that higher education assessment practices should more closely resemble the demands of the workplace.

For teachers

- **Diagnostic** - teachers can use assessment tasks to ascertain what students bring into a course so as to make the teaching and learning responsive to students’ needs and build on existing knowledge.

- **Feedback** - teachers can gain feedback on students’ learning, detect misunderstandings, assess the effectiveness of their teaching and make appropriate modifications and adaptations.

- **Teaching and learning** - teachers can use assessment tasks as teaching and learning tools both through the nature of the tasks themselves and through formative feedback.

- **Promoting self-evaluation** - teachers can give feedback which encourages students to make judgments about the quality of their own work and prepare them for future participation in the workforce.
Institutional and professional purposes
Assessment is used to for the following institutional and professional purposes:

- To pass or fail
- To select for entry
- To select for future courses and programmes
- To grade
- To demonstrate institutional standards
- To select for employment
- To license for practice
- To accredit for professional occupations

What do you think?
Kvale (2006) believes that the learning aspects of assessment have traditionally played a very minor role in the making of assessments in institutions, observing that “there exists a contradiction between the designated purposes of higher education to promote learning and the minor role that assessment for learning has played in these institutions” (p.57).

Do you agree with this view and if you do what can we do to change this?
Assessment and teacher beliefs

Assessment practices and attitudes provide insights into actual teacher beliefs as opposed to those we espouse. Many of the features of our assessments that do not match our espoused beliefs may reflect a mechanical and ritualistic approach to assessment and a failure to examine our underlying assumptions. Sometimes, it is just time pressures that lead us to use a quick and familiar assessment. Boud and Falchikov (2007) observe “it is such a commonplace matter that we often make assumptions on the basis of what we have experienced in the past rather than in terms of the new circumstances that confront us. Assessment has also influenced our own path as learners and has contributed to the positions we now hold. This means that we have a considerable investment in what has appeared to work in the past” (p.3). Additionally, we are often resort to assessment tasks that seem relatively easy to measure. It is not only the tasks themselves that convey our beliefs about teaching and learning and our relationship with our students, it is also what we say and do in relation to assessment. Consider the following and suggest the beliefs that underpin these assessment approaches and beliefs:

- I do not tell my students where to focus their attention in preparing for exams. If I do this they will just ‘spot’ and not learn everything.

- I devote class time to going through the assessment tasks with students and talking about them.
I don’t like group work because I don’t believe it is a real test of a student’s performance.

I break up an assessment into a number of small parts and give formative feedback.

Students have to submit a self evaluation of each assessment task using the criteria.

I give students the departmental criteria, but they ignore them.

I don’t believe in giving exemplars of past work because students will just copy them.

I coach my students in editing before they write their first extended assessment.

I give students the opportunity to mark samples of assessments using the criteria.

I will not engage in discussion on assessment tasks—working them out is part of the test for the students.

I give my students written instructions on plagiarism and treat it very seriously if they get referencing wrong.

Many assessments types are superficial and cater to students’ low standards and lack the academic rigour of essays and exams.

The teacher needs to be in control of all aspects of assessment.

I incorporate peer assessment tasks wherever possible.
Students are incapable of making judgments about their own work.

A good spread of marks is an indication of effective teaching.

There are only a few students who can get an A grade in this paper because it is very challenging.

What do you think?
Leach, Neutze and Zepke (2001) see traditional assessment practices as teacher-controlled activities in which “The teacher is central to the decision making in the conduct of this process, an authority acting on behalf of society and a discipline. The learner is the object of the exercise, reacting to an imposed process” (p.294).

You have been invited by your department to give a short presentation on good principles for assessment, as the University now requires all departments to show that their assessment procedures are based on sound pedagogical principles. You are restricted to five principles. Work in groups to plan your presentation to the department. Note that many of your colleagues are sceptical about the merits of devoting time and energy to teaching and assessment.
Key terms
These are some terms you may encounter in the assessment literature:

Validity
A valid assessment task measures the learning that it purports to evaluate. The correlation between the learning outcomes, the teaching strategies and the assessment task is exact.

Reliability
According to Crooks (1993), “if the assessment information obtained is so unstable that a very different picture could emerge if the assessment process were repeated soon afterwards”, then the assessment can be seen as unreliable (p.1).

Formative Assessment
Formative assessment is used primarily for developmental purposes. The students have a chance to learn from the assessment and improve on their performance.

Summative Assessment
Summative assessment involves a final grading of student learning; students do not have the opportunity to improve on their performance (the sum of the performance is measured).

There are ways of combining formative and summative assessment. One example is to require
students to complete a series of tasks which receive formative feedback and a percentage for completion and the final task is graded (such as an essay broken up into a series of steps).

**Diagnostic Assessment**
This is a piece of assessment usually done at the beginning of a course to evaluate what students bring into a course so that their development can be charted. Initial diagnostic assessment also enables the teacher to make the learning more responsive to student needs.

**Learning outcomes**
*Learning outcomes for a paper* indicate the attributes a student may be expected to acquire by the end of the paper. Learning outcomes will usually describe a combination of paper content and particular ways of engaging with the content. Learning outcomes for a paper are generally written at the level of learning expected from papers at a particular stage within a discipline and in keeping with university guidelines.

*Learning outcomes for qualifications* describe the general and specific competencies expected from graduates who have completed a qualification or programme. These will include more general attributes which will vary with academic disciplines and include competencies such as research skills, problem-solving abilities, communication and critical thinking. Qualification outcomes should also incorporate reference to the unique content elements of the programme and particular modes of inquiry. In
professional schools, the graduate outcomes, both in terms of content and process will be influenced by the requirements of the relevant professional bodies.

**Norm referenced assessment**
A student’s learning performance is measured in relation to the performance of the group as a whole.

**Criteria-referenced assessment**
A student’s learning performance is measured in relation to a set of clearly defined criteria which have been designed in advance of the assessment and which are explicitly linked to course learning outcomes.

**Threshold Assessment Criteria**
These criteria designate the minimum level at which learning outcomes need to be achieved to ensure a pass.

**Grading Assessment Criteria**
Grading criteria indicate the level of learning above the base level that a student has attained.
Assessment to promote learning

*Aligning learning outcomes, teaching and assessment*

Course

Writing learning outcomes
The primary relationship between assessment and learning means that assessment needs to be thought about concurrently with decisions about

Adapted from Moon, J. (2002). *The Module and Programme Design Handbook*
learning outcomes and teaching strategies. The relationship between these elements is cyclical, rather than linear. The first step is writing precisely defined learning outcomes as it is these outcomes that will give structure and coherence to the entire course, including the teaching and assessment. Ideally, course learning outcomes should have a clearly identifiable link to programme outcomes in terms of content, competencies and level of learning required. Course outcomes should also have a complementary relationship with other papers at the same level of the programme.

When writing course outcomes, keep in mind the broad framework of the programme outcomes, the level of study and the outcomes of other papers at the same level. Then try to write a set of learning outcomes that identify as precisely as possible the learning that you hope students will be able to achieve by the end of the course. Moon (2002) summarises they key components of a learning outcome. Each learning outcome should have:

- **A verb** to demonstrate as precisely as possible what the learner is expected to be able to do at the end of a period of learning.

- **A word or word** to indicate the topic or skill level that is required.

- **Words to indicate the context of the learning** or the standard to which a skill is expected to be performed.

(Adapted from Moon, J. (2002). The Module and Programme Design Handbook)
(For more details about writing learning outcomes and factors that need to be considered, see the TDU booklet on Course Design)

Vocabulary List

**Activities giving evidence of knowing**
Define, describe, identify, label, list, name, outline, reproduce, recall, select, state, present, be aware of, extract, organize, recount, write, recognize, measure, underline, repeat, relate, know, match.

**Activities giving evidence of comprehension**
Interpret, translate, estimate, justify, comprehend, convert, clarify, defend, distinguish, explain, extend, generalize, exemplify, give examples of, infer, paraphrase, predict, rewrite, summarize, discuss, perform, report, present, restate, identify, illustrate, indicate, find, select, understand, represent, name, formulate, judge, contrast, translate, classify, express, compare.

**Activities giving evidence of knowledge/understanding**
Apply, solve, construct, demonstrate, change, compute, discover, manipulate, modify, operate, predict, prepare, produce, relate, show, use, give examples, exemplify, draw (up), select, explain how, find, choose, assess, practise, operate, illustrate, verify.
Activities giving evidence of analysis
Recognize, distinguish between, evaluate, analyse, break down, differentiate, identify, illustrate how, infer, outline, point out, relate, select, separate, divide, subdivide, compare, contrast, justify, resolve, devote, examine, conclude, criticize, question, diagnose, identify, categorize, point out, elucidate.

Activities giving evidence of synthesis
Propose, present, structure, integrate, formulate, teach, develop, combine, compile, compose, create, devise, design, explain, generate, modify, organize, plan, rearrange, reconstruct, relate, reorganize, revise, write, summarize, tell, account for, restate, report, alter, argue, order, select, manage, generalize, précis, derive, conclude, build up, engender, synthesize, put together, suggest, enlarge.

Activities giving evidence of evaluation
Judge, appraise, assess, conclude, compare, contrast, describe how, criticize, discriminate, justify, defend, evaluate, rate, determine, choose, value, question.

Moon (p.68 – 69)
Examples of learning outcomes

1. Level 1 English
Students will be expected to be able analyse a passage from a literary text closely and make links between the extract and the rest of the text.

11. Level 3 English
Students will be expected to be able to identify the main features of the historical context in which a text is set and demonstrate the way in which this context influences the particular text.

111. Level 1 Law
Students will be expected to demonstrate elementary skills of legal analysis in the context of an introduction to New Zealand law using simple and accessible cases.

1V. Level 1 into to Chemistry module
Students will be expected to be able to write a concise, clear and tidy report of a laboratory practical that must be laid out in the prescribed format.

(Moon, 2002, p.60)
V. Level I History
Students will be expected to be able to demonstrate that they can perform basic historical research tasks including locating appropriate resources, identifying the pertinence of a particular resource for a research question and organizing evidence to support or oppose a particular position.

V1. Introductory French
Students will be expected converse at an elementary level about everyday topics such as food, weather, clothing, directions and holidays.

V1. Level 3 Managing Conflict and Consensus
Students will be expected to be able to resolve problem scenario using key course concepts such as conflict styles, power, climate and face.

**Designing assessment tasks**
Once you have a first draft of your learning outcomes, you can start thinking about appropriate assessment tasks. You will find that you need to allow for time and reflection to move about between outcomes, assessment tasks and teaching approaches, making adjustments and refinements until you get congruence between them. Some people prefer to start with thinking about assessments; this helps them to clarify what they are planning for students to learn. The TDU booklet on Assessment Tasks gives you ideas on finding appropriate assessment tasks to support, develop and evaluate different kinds of learning.
References


