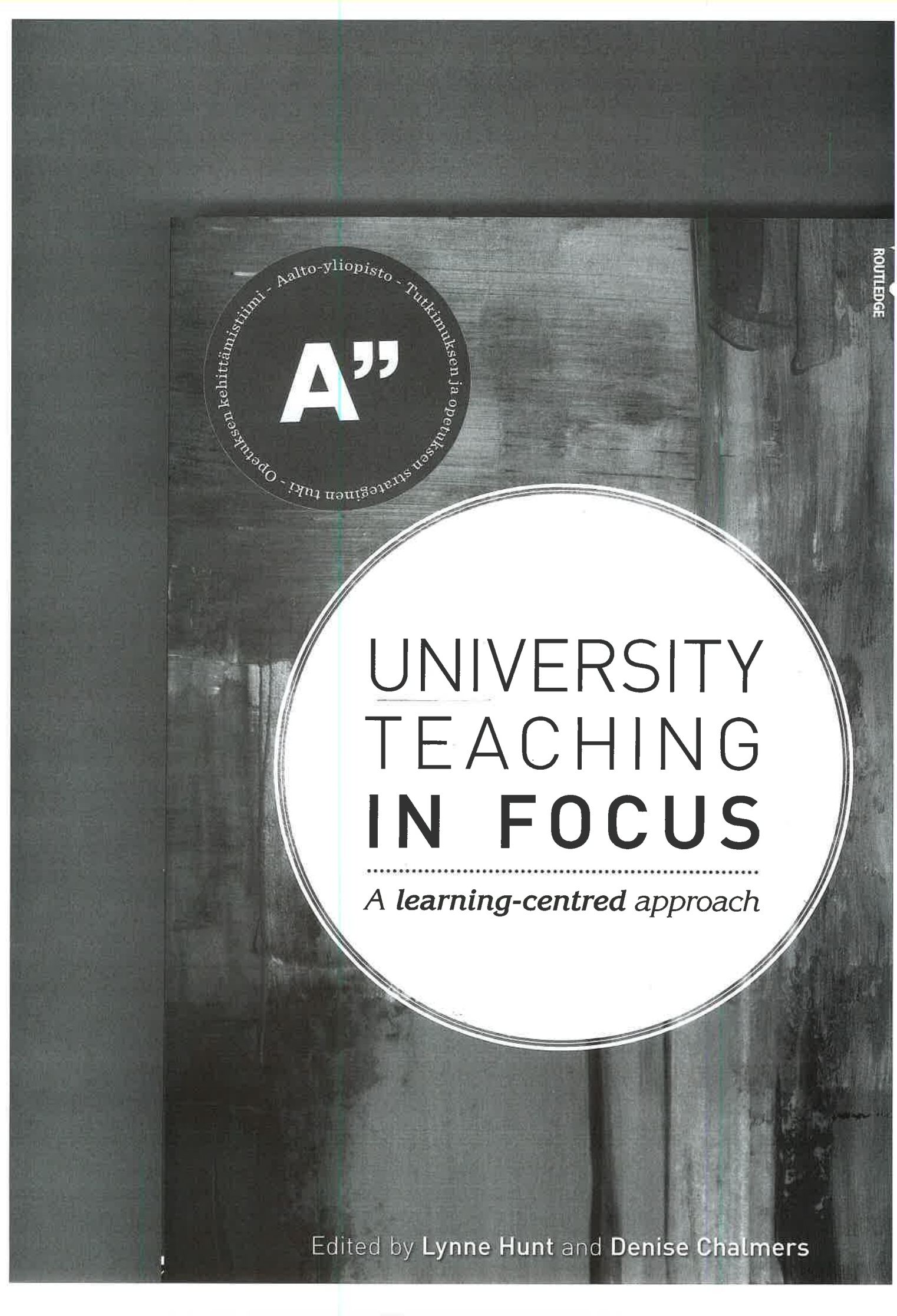

UNIVERSITY TEACHING IN FOCUS

*A **learning-centred** approach*

Edited by **Lynne Hunt** and **Denise Chalmers**

CHAPTER 5

USING EFFECTIVE ASSESSMENT TO PROMOTE LEARNING

Sally Brown and Phil Race

Keywords
assessment for learning, authentic assessment, formative assessment, summative assessment

Assessment is integral to learning

In recent years, there has been a move away from the expectation that assessment is (just) a measurement of the outcomes of learning, towards an acceptance that assessment is an integral part of the process of learning. Even so, there remain issues to address. University teachers still assess too much (Race 2010) and continue to adopt ways of measuring students' achievement that were used when a smaller proportion of the population participated in higher education. For students, there can seem to be so much assessment that they become excessively strategic in their learning – giving time only to those things that will 'count' towards their degrees. So we know what's wrong with assessment and feedback, and what we need to achieve by changing assessment to enhance student learning. The issue is: how best to redesign assessment to make it fit-for-purpose?

Assessment is a complex, nuanced and intricate activity. To make it fit-for-purpose it is necessary to take account of context, level, learning environment, students' background, individual differences and learning content. As Sadler noted:

> The indispensable conditions for improvement are that the student comes to hold a concept of quality roughly similar to that held by the teacher, is able to monitor continuously the quality of what is being produced *during the act of production itself*, and has a repertoire of alternative moves or strategies from which to draw at any given point. In other words, students have to be able to judge the quality of what they are producing and be able to regulate what they are doing *during the doing of it.*
>
> (Sadler 1989, p. 121)

Sadler was a lead contributor to 'Assessment 2020' (Boud & Associates 2010), in which experienced practitioners agreed on seven recommendations at a national level in Australia for making assessment and feedback fit-for-purpose, noting that assessment has most effect when:

1. it is used to engage students in learning that is productive
2. feedback is used to actively improve student learning
3. students and teachers become responsible partners in learning and assessment
4. students are inducted into the assessment practices and cultures of higher education
5. assessment for learning is placed at the centre of subject and program design
6. assessment for learning is a focus for staff and institutional development
7. assessment provides inclusive and trustworthy representation of student achievement.

These chime clearly with Gibbs' (2010b) seven tactics for tuning assessment and feedback to learning, which propose that teachers should:

1. capture student time and effort, distributing that effort appropriately across topics and weeks
2. generate high-quality learning effort, oriented towards clear and high standards
3. provide sufficient feedback, often enough, and in enough detail
4. focus feedback on students performance, on actions under their control, rather than on students themselves or their characteristics
5. make feedback timely, while it still matters to students, in time for them to use it towards further learning, or to receive further assistance
6. link feedback to what students believe they are supposed to be doing
7. ensure that feedback is not only received, but is attended to, so that students act on it to change their future learning and performance.

Race (2010) argues that assessment can be improved dramatically by linking it to seven straightforward factors which underpin successful learning. He argues that we need to:

1. design assessment so that students *want* to learn, rather than assessing in ways that promote anxiety
2. help students to develop ownership of the *need* to learn by making clear to students the intended outcomes and associated evidence of achievement
3. use contact time with students to engage them in learning by doing (practice, trial-and-error, repetition) so that they become well-rehearsed in producing evidence of achievement
4. ensure students get quick and useful feedback – from university teachers and from each other
5. use assessment and feedback to help students to make sense of what they learn

6. get students to deepen their learning by coaching other students, and explaining things to each other, practising to communicate effectively what they have learned back to us in assessment contexts
7. allow students to deepen learning by assessing their own learning and that of others 'during the doing of it' (Sadler 1989). This can be achieved through self and peer assessment, helping students to see how assessment works in practice, so that they understand the rules of the game, and can give the game their best shot.

The qualities of assessment

Before delving further into a discussion of approaches to assessment, it is important to understand some of the key terms widely used in the literature on assessment:

- *Validity* is about how well we're measuring exactly what we're trying to measure, and boils down to how effectively we're measuring evidence of achievement of the published learning outcomes.
- *Reliability* is essentially about fairness, and getting away as far as possible from subjective judgements, especially in contexts where different assessors would be likely to award quite different marks or grades for a given candidate's essay, report or answer to an exam question.
- *Transparency* is about how well students themselves know how the assessment works, and how much they feel they can trust the processes used and judgements made on their work.
- *Inclusivity* is about the extent to which we can make assessment 'a level playing field' for all students, including those with particular needs, cultural backgrounds or learning problems.
- *Authenticity* is about two things – first, the extent to which it can be guaranteed that what is assessed is the work of the student concerned, and not plagiarised or copied; and second, how closely what is assessed links to the world outside universities and what students will need when employed.
- *Fairness* is critically important to students and assessors alike, and overlaps with several of the factors listed above (see overview by Flint & Johnson 2011).

YOUR THOUGHTS

Review an assessment activity that your students undertake and check the extent to which it aligns with each of the qualities.

To achieve all of these qualities in a single assessment element is almost impossible, but it may be possible to improve some aspects without radically altering design. The assessment profile of a subject – that is, the range of assessments conducted over the length of the course – can ensure that assessment design cumulatively

satisfies each of the qualities. Assessment also needs to be manageable, for university teachers and students. It already takes considerable time, so efforts to diversify to match quality criteria should not add to the volume of assessment. Rather, we should replace long or repetitive assessment with shorter, sharper and more-focused learning opportunities.

A fit-for-purpose approach to assessment

Before designing an assessment strategy for a degree program, consider the following questions, which will help you to articulate how your assessment strategies are fit-for-purpose in terms of context, cohort of students, level of study and subject area:

- Why am I assessing?
- What am I assessing?
- How am I assessing?
- Who is undertaking the assessment?
- When should assessment take place?

The purposes of assessment

The purpose of assessment can vary from supportive, formative assignments in non-threatening contexts that we might use early to help students get the measure of how they are doing, through to final-stage summative assessments, designed to test whether the student is fit to practise in high-risk contexts like medicine or aviation. In-class group activities, including peer review, might be suitable for the former, while Objective Structured Clinical Examinations (OSCEs), where students demonstrate capability in a large range of short practical tasks, might better fit the latter (see Case 5.2 below).

Other purposes of assessment might include:

- enabling students to get the measure of their achievement (finding out what they know and what they don't yet know)
- providing feedback so that students can improve and remedy deficiencies, and become aware of strengths and weaknesses
- helping students to consolidate their learning (often students report not really 'getting it' until they construct an assignment on a particular topic)
- providing students with opportunities to demonstrate evidence of their competence and thereby employability
- motivating students to engage in deep learning (see Chapter 2, Hunt et al. 2012)
- helping students make choices to drop subjects where no consistent ability is demonstrated, or to continue with weaker subjects which are, nevertheless, essential to core study areas

- giving feedback to teachers on their own effectiveness (a few poor pieces of student work may reflect on your students; lots of weak assignments may reflect on the assessment design, task briefing, assessment arrangements or teaching)
- providing statistics for internal and external agencies (without which higher education systems will come to a grinding halt).

Choosing what to assess

When designing an assessment, we need to decide whether we are assessing product or process (or both), theory or practice (or both), subject knowledge as a discrete area or its application to professional or other contexts. Some areas lend themselves to computer-based multiple-choice tests, which can provide instant feedback to students on basic subject knowledge, while others require students to demonstrate critical thinking and reflection through, for example, critical incident accounts, where students identify two or three incidents from a reflective diary and report using a template proforma on the context in which they were working, what they did, what use they made of theory to choose particular lines of action, what happened as a result, what were the short- and long-term outcomes, what they learned from the experiences and what they would do differently next time.

We may also ask whether we are assessing what we've always assessed or what it's easy to assess. Authentic, relevant, assessment can be challenging to design and tricky to implement, but students tend to take it more seriously if they can see the sense of what they are doing and recognise how it fits into their overall programs of study, in what Biggs (2003) describes as a constructively aligned approach (Angelo 2012).

Choosing methods of assessment

Many universities rely on a small range of assessment methods: essays, unseen written exams, reports and multiple-choice tests (usually computer-based). Each has merit, but a wider range of assessment methods adds value in terms of student learning, as long as the range of methods is not so great that students never have the chance to get used to any single method (Gibbs & Dunbar-Goddet 2007). Using a range of diverse methods of assessment is valuable because each method disadvantages some students. Using a range of methods means that students are assessed across a range of abilities and skills, and that everyone has some opportunities to play to strengths.

Table 5.1 is intended to illustrate and explain ways of designing assessment. It is not exhaustive. Rather, the elements are a starting place from which to adapt and extend ideas, as appropriate, to different disciplines and contexts.

TABLE 5.1 Diverse assessment methods and approaches

Method	Advantages	Disadvantages	Notes
Exams Traditional unseen, time-constrained exams, which largely use essay style questions.	• regarded as fair, avoiding problems of plagiarism and cheating, and amenable to yielding data which can be handled quantitatively	• traditional exams only measure 'what comes out of students' pens' which is an inadequate proxy for 'what's in their heads' • a great deal of time is used in marking exams, often against the clock	• for a detailed discussion of the pros and cons of traditional exams and alternative exam approaches, see Chapter 2 in Race (2006)
Open-book or open-note exams Students can take into the time-constrained exam specified or unspecified texts and notes, so that the questions focus not on memory and recall, but on interpretation and analysis	• can take away the focus from memorising	• designing good questions for open-book or open-note exams is rather different from designing traditional exam questions, and is a skill which staff need to practise to develop fully	
Take-away papers Students are given, say, a week in which to prepare an answer to a given topic, effectively as a short-term course work assignment	• allows a more normal approach to researching and preparing answers than in traditional exams	• take-away papers can disadvantage students with hectic home lives	
Short-answer questions Students produce short responses to large numbers of questions, enabling high coverage of topics, with less reliance on elegance of sentence construction and argument	• moves away from 'speed of extended writing' as a necessary skill, and allows a wider range of subject material to be tested		

TABLE 5.1 (continued)

Method	Advantages	Disadvantages	Notes
Essays	• enables students to demonstrate the ability to construct an argument and to write fluently, coherently and at length	• essays are rarely used in mainstream occupations, so not an authentic means of assessment for most courses • readily plagiarisable • requires teachers to spend too much time marking • students may be graded on their essay technique, rather than their subject mastery	• one of the most heavily used methods of assessment on humanities courses, with least justification
Reports	• more authentic than essays, as students may enter careers where report-writing is a requirement	• reports are often based on practical and field work and done collaboratively by students, but are usually required as individual write-ups, so the report-writing itself may end up being assessed, when perhaps the collaboration was more important	• the fall-back means of assessment for many courses
Multiple choice questions with feedback responses	• excellent for quick testing of factual material • feedback on correct or incorrect choices can be given instantly, allowing rapid formative feedback on learning	• while suitable for formative purposes, it is much harder to design high-quality multiple-choice questions for summative assessment • questions must be piloted extensively to determine facility values and discrimination indices to select which questions are suitable to include in summative tests	• getting students to design multiple-choice questions and feedback responses is an excellent learning activity, and can lead to the development of substantial question banks for formative use
Sophisticated computer-based tests Using a wide range of question types including drop-down menu selection, drag and drop, clicking points on graphs, interpreting data from maps and diagrams etc.	• best suited to large cohorts and multiply presented courses, where it can be exceptionally efficient • helps new students build confidence as they self-test on new and familiar material	• tends to require considerable work to design good computer-aided assessment • when it is bad, it leads only to efficient guesswork	• needs expertise in question design, subject content and technology to support it

Method	Advantages	Disadvantages	Notes
Portfolios	• allows learners to present wide-ranging evidence of achievement, and to show originality and creativity alongside mastery of subject knowledge	• takes time to mark, and assessment reliability can be quite low as different assessors tend to look for different things when assessing wide-ranging evidence of achievement	• portfolios can be maintained and show development over a considerable time scale, and can be useful evidence of achievement to show to prospective employers
Viva voce individual oral tests or interviews	• allows probing questions to check for understanding • widely used for high-stakes assessment, such as at doctorate and masters levels • regarded as authentic, as many careers and professions may depend on face-to-face skills at answering questions and giving persuasive explanations	• some candidates can be let-down by nerves in face-to-face 'grillings' • evidence of achievement may be ephemeral, and it is hard to analyse retrospectively, unless recordings have been made • difficult to guarantee fairness between candidates, especially when variations in levels of probing occur • with large cohorts, it can be difficult to timetable oral assessment in ways which prevent 'leaking' of questions to forthcoming candidates	• Joughin (2010) proposes a strong case for increased use of oral assessment as part of a balanced range of assessment methods in present-day contexts
Presentations	• allows candidates to demonstrate oral communication skills alongside subject mastery • authentic, as oral presentation skills are often important in future employment • peer-assessment can make presentations a better learning experience for all • can include assessment of the ability to respond to questions from the audience	• time-consuming • may be hard to strike a balance between mastery of content and skills of presentation • 'raising the bar': expected standards can become higher over a series of presentations • unless recorded, presentations are 'ephemeral', making it hard to compare a series reliably	• 'impression' marks can be associated with the quality of presentation slides or handout materials

TABLE 5.1 (continued)

Method	Advantages	Disadvantages	Notes
Posters	• allow candidates to integrate a range of evidence of achievement in an agreed visual format • can be compared with each other in an amenable way • lend themselves to peer assessment, and assessment by third parties, for example professionals in the field or employers	• the visual appearance and design of the poster can rate too strongly in the overall assessment, as opposed to the thinking behind the poster • some candidates may have better availability of resources (colour, photos and so on), compromising fairness of assessment	• exhibitions of posters can be kept photographically or online, and used to train future candidates in the preparation of their own posters
Projects	• can be used for in-depth investigations that develop research skills (Jenkins & Healey 2012) • allow candidates to demonstrate originality and creativity	• reliability of assessment can be compromised when projects are quite different in scope and range • tendency for presentation to influence assessment unduly	
Case studies	• increased authenticity because they are 'real-world' scenarios	• written communication may dominate the assessment (unless an element of oral assessment is used as well) • it is impossible to have a range of case studies of exactly equal 'difficulty'	• a bank of case-studies can be built, to allow students the opportunity of rehearsal to develop the required skills and competences to do well
Simulations	• can measure a range of practical skills and competences beyond written and oral communication • highly authentic when relating to particular professions and contexts	• take time to design, which is offset by advantages when high numbers of candidates are involved	• heavily used in professional subjects like aviation and surgery to test competence in safe contexts
OSCEs (Objective Structured Clinical Exams)	• allow candidates to be tested on high-level skills, in authentic contexts (e.g., interpreting X-rays, interviewing patients (actors), interpreting case notes, making diagnoses, deciding on prescriptions etc.) • can be quite quick	• designing OSCE scenarios can be time-consuming, but the design can be done by groups of students in prize competitions – the real prize being that some of the scenarios they submit are actually used in their own OSCEs	• OSCEs are highly regarded as authentic, valid and reliable assessment processes in medical and clinical education, but the process can readily be extended to contexts such as business, policing, law etc.
Reflective journals	• deepens learning by reflection, and demonstrates analysis, creativity and originality	• risk being narrative rather than reflective	• when reflective journalling works well, students continually develop their learning on the basis of reflection

Method	Advantages	Disadvantages	Notes
Critical incident accounts	• allows students the opportunity to choose particular incidents, analyse them in depth, and demonstrate creativity and problem-solving skills • can be word-constrained, thereby increasing 'cut-to-the-chase' writing or speaking • critical incidents are authentic, developing candidates' skills for real-world problem-solving	• incidents inevitably have differing levels of difficulty	• accumulate a bank of critical incidents providing students rehearsal opportunities to develop skills at handling this assessment format • try presenting students with pre-determined incidents; their performance can then be compared
Assessed seminars	• ideally, seminars should be prepared and led by students (individually, or in pairs), and should involve peers and tutors as active audience participants • a series of seminars can give each student the chance to prepare in-depth an element of the curriculum, and present it to the group, and be questioned on it by the group • the assessment can be high in validity, relating to depth of knowledge, as well as communication skills and the ability to answer probing questions	• it is hard to allocate topics of equal difficulty to a large group of students • over a series of seminars, 'drift' occurs, as later presenters tend to bring in what they've learned from earlier seminars • difficult to assess audience participation at anything more than a basic level • students who have already presented may switch off and fail to contribute or attend later seminars	• students' continued participation in a seminar series can be increased if assessment is triangulated by the inclusion in a summative exam of one or more questions relating to things addressed only in the seminar series
Annotated bibliographies	• a useful way to engage students with the relevant literature, rather than just collecting information on it • candidates can demonstrate their depth of study of the sources and the breadth of the source material they have reviewed • plagiarism is limited; although students may choose the same sources, it would be easy to spot identical annotations	• the extent of the literature may mask the depth of thinking about the sources • avoid this by setting an exact number of sources to be included, and by asking students to include some elements of prioritisation of how well the respective sources measure up to two or three given criteria, alongside their own judgements about the sources	• annotated bibliographies can be turned into a resource-bank, and issued to future students as a starting place for them to develop their own bibliographies

TABLE 5.1 (continued)

Method	Advantages	Disadvantages	Notes
In-tray exercises For example, in an exam on ward management, students could find on their exam desks no questions, but a set of paperwork for them to study for a while, including logs of patients on the ward, doctors available, other facilities available on the ward etc. Then (say) 20 minutes into the exam, they each received a slip of paper, for example 'Incident at the airport. The following three patients will arrive in 15 minutes. What will you do?' The students write down their decisions, based on the information available to them. Other 'incidents' are given to them at different stages in the exam.	• this kind of assessment is strong on authenticity, as it measures the skills the candidates will need in their careers • reliability of assessment is high, as normally there will be 'best' choices in terms of the decisions and actions required • this kind of exam focuses on thinking, rather than merely writing • since all the students have the same in-tray exercises, the assessment is fair	• while exams based on in-tray exercises get away from measurement of 'speed of writing' towards 'quality of thinking', different students' 'speed of reading/absorbing' the information provided can be a problem	• because of the relevance of 'in-tray' exercises and problems, a bank of such resource materials can be useful in the day-to-day teaching and learning of the subjects involved, and particular exercises can be used as examples to add variety to whole-class contexts such as lectures
Artefacts (e.g., sculptures, paintings, architectural designs, engineering models)	• assessment of artefacts such as these is high on validity and authenticity • artefacts are useful as evidence of achievement to show prospective employers	• assessment can be compromised in terms of reliability where different judges have their own idea of what constitutes excellence	• where the artefacts can be retained (or photographed) by the institution, they provide excellent indicators of the standards of evidence of achievement for new students to work towards

Choosing who is best placed to assess

The majority of assessment in higher education is based on university teachers undertaking the work, but other agents can make a valuable contribution. Students can assess one another's outputs as individuals or working in groups to assess the work of other groups (inter-peer assessment). An understanding of what the assessment criteria mean is essential (get the students engaging with brainstorming what the criteria should be as a preparation for the task). Students also need guidance on 'final language' (Boud 1995, p. 45) to avoid devastating their peers with thoughtless comments. Peer assessment also needs extensive briefing and rehearsal to avoid collusion and unfair practices. As students become sophisticated in its use, its value becomes more apparent.

To assess students' ability to collaborate, get them working together in groups and then ask students to rate one-another's input, based on evidence against clearly articulated criteria (intra-peer group assessment). This is a much better way to assess process than tutors trying to watch each group in action. Both forms of peer assessment provide a good grounding for students to learn to judge their own work and become competent at self assessment and reflection (Boud 1995). It is also an excellent means by which learners can get inside the assessment process, so that they take more seriously the feedback they receive from tutors.

Other agents for assessment can include clients in practical domains, for example, in legal practice surgeries where students provide walk-in clients with advice under the supervision of trained solicitors. Many disciplines already make use of employers, practice tutors and line managers, but there is significant scope for wider use of such colleagues in a broader range of subject areas.

When should assessment take place?

Significant amounts of assessment in higher education take place at the end of the learning process. Yet, it may be best to avoid excessive 'sudden death' assessment, where students remain un-assessed for long periods of time followed by only one high-risk opportunity to demonstrate their learning. Incremental assessment, where students provide elements of a large assignment over the period of its construction and receive feedback from tutors, peers or both is efficient in reducing student failure and underachievement, and is also a good strategy for reducing plagiarism. Continuous assessment, where students undertake a number of smaller, separately assessed, tasks also spreads the risk and enables students to learn from feedback to improve the next assignment.

When designing an assessment strategy, it is also important to avoid giving students no assessed work for some time and then giving multiple assignments with clashing submission dates (commonly known as 'Week 7 Blues'), which is stressful and risky for students.

Giving fast, effective feedback to students

Too often students seem interested only in their mark, avoiding interest in the detailed written comments that staff have provided. We therefore argue that staff should make time during orientation to help students to understand the importance of feedback and the value of spending time reflecting on it. Benefits can accrue from providing opportunities for students to respond to feedback, for example, by giving students follow-up tasks or giving them 'feed-forward' comments to improve their next assignment. Tactics that can help students to make use of feedback include the following (Race 2010):

- *Give students some immediate feedback when they submit work.* For example, get them to hand in their essays or reports at the start of a lecture, and immediately issue a short summary of likely 'frequently encountered problems' in the assignment concerned. Another useful tactic is to provide this even before they attempt the task.
- *Give students marks only when they've tried working them out themselves, making use of feedback given on their work.* Incentivise this by offering that if the mark suggested by the student is within (say) five per cent of the actual mark awarded by the assessor, the higher number goes forward. This also allows those students who really do need a chat with the assessor (e.g., those whose mark is more than five per cent away from the tutor's mark) to be identified, focusing time and energy of feedback discussions on those students who can benefit most from individual feedback.
- *Use much shorter assessments.* Rather than using one 3500-word essay, have two or three much shorter, sharper tasks, such as a 200-word (exactly) digest of what Smith and Jones say about Topic X, a 100-word summary of the main points in Chapter 2 of Bloggs, and a 300-word annotated bibliography of the five most important papers on Topic Y. Shorter pieces of work require higher-level thinking than a 'waffleable' essay. They are fast to mark, and have less likelihood of plagiarism.
- *Get students to make judgements on their work,* by filling in a short self-assessment proforma before they submit. This means they have the chance to reflect *before* it is assessed, and improve it before submitting. It also means that assessors know more about what the student thinks of the piece of work, and can fine-tune feedback accordingly.

Brown et al. (1994) indicated ways to give feedback promptly and efficiently. All the approaches can save staff time when assessing, but tend to involve additional time and skill in the design process. They include:

- Use *assignment return sheets,* showing how marks link to learning outcomes, and enabling students to indicate the extent to which criteria have been achieved

by completing Likert scales, e.g., ranging from 'fully met' through 'partly met' to 'not yet met' and so on.

- Provide *model answers* which demonstrate good answers, and explain why they are good. Huxham (2007) demonstrated that model answers in formative feedback result in higher scores in summative assignments than personalised individual feedback.
- Give groups *oral feedback* on cohort performance, common errors and shared areas for improvement within classroom settings or as podcasts via the subject website. This makes feedback a shared learning experience.
- Provide a collective *written assignment report*, so that students see how to improve and how they compare to others.
- Build and use a *statement bank* of commonly used feedback comments which can be given to students electronically or in hard copy, enabling detailed formative feedback with minimum effort.
- Use well designed *computer-aided assessment* to maximise the speed with which students receive feedback. This is most applicable where there are large cohorts of students and frequently repeated curriculum materials.
- Incorporate elements of *self and peer review*, particularly formatively, so that students can measure the quality of work by applying criteria to each others' and their own work.

CASE 5.1 SUPER-FAST FEEDBACK ON INCREMENTAL ASSESSED TASKS
Sarah Nixon and Louise Williams, Liverpool John Moores University

The context is a third-year module on Business for Sport with around 40 students. Dissatisfied with their previous end-point assessment methods where students could not benefit from feedback, tutors decided to implement weekly tasks within the Friday whole-day sessions, which culminated in an assessment task which they marked over the weekend and returned on Mondays. Students were originally horrified at the idea, but nowadays appreciate the chance to achieve tasks and get regular really fast feedback.

Tutors were particularly keen that assignments be authentic and lead to learning. Some elements are individual, but most are group tasks including presentations and product development. Students take the work seriously and the teaching team is delighted by the high levels of commitment and creativity demonstrated by students, who are gaining employability skills. Attendance has improved to over 90 per cent, compared with parallel modules where attendance is as poor as 20 per cent on Fridays. Achievement is high, with one group convincing a supermarket chain of their marketing idea. Students find the workloac heavy but enjoy the high levels of engagement. Some get annoyed if their grades are affected by low commitment and achievement of fellow group members, but each element of assessment carries relatively low weighting overall. It is indicated to them that in real life contexts overall

performance will also be dependent on a team's weakest elements. Currently these assessed tasks are accompanied by short individual reflections and 1500-word essays, but the team is considering whether to reduce this to avoid over-assessing.

Using authentic assessment to promote learning

Students are more likely to take assessment seriously if they think staff are playing fair (Sambell et al. 1997) by assessing material from across the breadth of the curriculum rather than cherrypicking elements to assess, which carries high risk for students who try to guess which particular areas will come up in their assessment. Too often assignments test what is easy to test, rather than the heart of what has been learned. Effective assignments test students' capabilities in ways that are relevant to their own contexts, and which have a level of intrinsic value for learning.

Where students study professional or vocational programs, it is important to ensure that tasks use or simulate real-life practices, and that students are evaluated by demonstrating their competences rather than their ability to write about such competences. As Bloxham and Boyd (2007, p. 193) argue: 'Being able to reproduce knowledge in a decontextualised examination does not guarantee that knowledge can be used in a real-life setting'.

CASE 5.2 AUTHENTIC ASSESSMENT

Julia Tum, Leeds Metropolitan University

In the UK Centre for Events Management, teams of staff teach three second-year modules. One assessment uses Practically Assessed Structured Scenarios (PASS), adapted from Objective Structured Clinical Examinations (OSCE) which have been used effectively in medical and veterinary education for many years. An OSCE is a checklist marking approach to assessment that enhances consistency between multiple assessors. It also provides relevant and challenging short scenarios which can be used to assess students' understanding and the application of theories.

The reasons the assessment style changed were to:

- replace outdated formal examinations and a report writing assessment
- ensure validity and relevance for industry needs
- encourage a deeper understanding of the taught material and the relevance and usefulness of its application
- ensure that the assessment was realistic, challenging and reflected the everyday pressures of decision-making in the events industry
- minimise time for marking, moderation and recording of marks.

All three modules have their unique 20–30 minute assessment which is accessed by students successively entering different rooms pre-prepared with assessment scenarios, which they

tackle individually. There is a tutor in each room, and 270 students pass through a suite of rooms and are assessed on the same day, with their marks standardised, moderated and recorded, within two days. Students can elect to have further feedback at a private meeting. Otherwise generic feedback is posted online.

Students report that the whole day is stressful, but authentic, and that each of the scenarios tests different elements of the modules in a practical way. The marks represent a good cross-section of grades, rewarding students for hard work and insightful comments, and not rewarding those who have failed to prepare for the assessment. Most of the scenarios are undertaken individually, but in one of the modules, students are assessed in small groups. Actors playing industry-relevant roles have been involved on some occasions to make the situations even more authentic.

Designing assessment to improve achievement and retention

Higher Education Statistics Agency data indicate that student drop-out is higher among students from low-participation neighbourhoods, students in receipt of Disabled Students' Allowance, mature-aged undergraduate students and students from lower socio-economic groups (Yorke & Longden 2004, cited by Brown 2011). In this context, it is important that your assessment strategy offers low-stakes, formative assessment in the first part of a degree program to enhance retention. Assessment should be formative, informative, developmental and remediable. Yorke argues that the links to assessment are crucial:

> Roughly two-thirds of premature departures take place in, or at the end of, the first year of full-time study in the UK. Anecdotal evidence from a number of institutions indicates that early poor performance can be a powerful disincentive to continuation, with students feeling that perhaps they were not cut out for higher education after all – although the main problems are acculturation and acclimatisation to studying.
>
> (Yorke 1999, p. 37)

Students, especially but not exclusively those from disadvantaged backgrounds, may need guidance at induction on understanding the various academic discourses that are employed within the subject and the institution if they are to be successful at learning through assessment (Northedge 2003, p. 173). It is also likely that we will need to help them to understand when writing needs to be personal and based on individual experience, such as in a reflective diary, and when it needs to be formal, using academic conventions like passive voice and third person, as in

written reports and essays. Students who just don't 'get it' are more likely to fail early assignments.

Colleagues at Central Queensland University explored the impact that starting a course can have on student achievement and retention. They found only weak correlations between student performance and percentage attendance, but strong correlations between student performance and attendance in the first two weeks of class. In another study they found that students who missed the first two weeks received marks that were between seven and nine per cent lower than the average (Hamilton et al. 2007). Taken together, these findings reinforce the message that student orientation is critical. While it is important to have early assessment in a program, we need to ensure that late starters are not excessively disadvantaged.

Computer-aided assessment (CAA) can support retention effectively when it is used to let students know early on how they are doing; for example, through the use of weekly CAA tests incorporating feedback on right and wrong answers. Students like the chance to find out how they are doing, and attempt tests several times in an environment where no-one else is watching how they do. This approach allows first-year tutors to monitor what is going on across a cohort, enabling staff to concentrate their energies on students who are repeatedly doing badly or those who are not engaging at all in the activity. For example, Professor Bill Buchanan, School of Computing at Edinburgh Napier University, UK, designed 'So you want to be a millionaire?' – a computer-based, multiple-choice game, with hundreds of questions at various levels of difficulty. Easy questions are presented first with questions gradually getting more difficult. As soon as students get one wrong they are returned to lower-level questions for a while, until they work up to more difficult ones. Students work alone or in groups with the question bank, striving to get to the highest level questions, accumulating considerable practice and immediate formative feedback along the way.

Using assessment to improve student confidence

Dweck (2000) argues that students' self-theories about intelligence can affect learning and achievement (see Stewart 2012). Students who hold a fixed theory of intelligence – for example, 'I am no good at maths' – are more likely to interpret failure on an assessment as proof that they themselves are failures. Others have more malleable views of intelligence: when they get poor marks, they see it as a challenge to overcome rather than an insurmountable problem. Dweck suggests that students subscribing to a fixed theory of intelligence need 'a diet of easy successes' with incremental feedback to confirm their ability. Hence we advocate streamlining assessment to include early successes via regular, small assessed tasks with positive, constructive feedback.

Students may have difficulty in making the transition into higher education from school, college, work or other contexts and may find it problematic to

decipher what is required of them. For non-traditional students to succeed in higher education, they have to become meta-learners, able to decode assessment requirements. Bowl's study of non-traditional entrants to higher education noted how difficult these students found it to penetrate the discourses of academic study. Issues included 'understanding what tutors wanted and what advice and support they were prepared to offer, and making sense of academic cultures and conventions' (2003, p. 88). As one student said:

> The hardship was not understanding. When they give you an assignment and say it was on this handout. But my difficulty is not understanding what to do at first ... It's reading as well as putting what you read into your essay ... I can read and understand it, but then you have to incorporate it into your own words. But in the words they want you to say it in, not just: She said this, and this is the way it should be. The words, the proper language.
>
> (Bowl 2003, p. 90)

Conclusion

Assessment is the engine that drives student learning, and it is your job to make this engine run smoothly and efficiently. As a university teacher, you have a responsibility to ensure that your assessment processes and instruments encourage students to take ownership of objectives and understand the standards of the required evidence of achievement. For, indeed, assessment is the basis of the qualifications students want to take away from higher education as their passport to the rest of their careers. Nothing you do for your students is more important than assessing their learning fairly, openly and in a well-planned way. Since assessment takes up a significant part of teaching time, it is important to spend this time wisely. We hope that the discussion in this chapter will help you to maximise the benefits of the time spent designing and implementing assessment, and hence help your students to demonstrate their optimum potential in the range of assessment opportunities they encounter.

'New teachers are not the only potential beneficiaries of the knowledge and expertise within the pages of this book — those who have been teaching for some time are also likely to find ideas for the development of their pedagogic practice. I can truthfully say that I have.'

From the Foreword by Mantz Yorke, Visiting Professor, Department of Educational Research, Lancaster University, United Kingdom.

University Teaching in Focus provides a foundational springboard for early career academics preparing to teach. Focusing on four critical areas — teaching, curriculum, students, and quality and leadership — this succinct resource offers university teachers a straightforward approach to facilitating effective student learning. It aims to empower university teachers and contribute to their career success by developing teaching skills, strategies and knowledge, and linking theory to practice.

Written by internationally acclaimed experts, topics include learning theories, assessment, discipline-based teaching, curriculum design, problem-based and work-integrated learning, effective classroom teaching and flexible modes of delivery. The needs of diverse student groups are explored and the scholarship of teaching and learning is addressed within a quality and leadership framework.

The clear and accessible style makes reference to influential works and current resources. Real-world cases illuminate the theoretical content and 'Your Thoughts' sections encourage reflection and adaptation to local contexts.

University Teaching in Focus explores ways that teachers can effectively engage students in lifelong learning, extending their capacity to solve problems, enter the workforce, understand their discipline and interact positively with others in a global community throughout their professional lives.

About the editors

Lynne Hunt is Emeritus Professor, University of Southern Queensland and Adjunct Professor, University of Western Australia.

Denise Chalmers is Winthrop Professor and Director of the Centre for the Advancement of Teaching and Learning at the University of Western Australia.

HIGHER EDUCATION

Routledge
Taylor & Francis Group
www.routledge.com/education

ACER

an informa business

ISBN 978-0-415-64406-8