The Student Assessment Handbook

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Designing assessment tasks

As we have seen in Parts A and B, assessment is a crucial issue in student learning and in assuring that the educational provider maintains academic standards. Grades allocated and feedback provided on assessment tasks drive students' progress through their programme of study. It therefore follows that the process of designing assessment is at the heart of the matter and can be considered a very important step along the way to good practice. Without full and creative consideration being given to the design of assessment there is the potential to affect adversely students' whole experience of learning.

Let's now take a step-by-step look at exactly what is involved in this process. Within each of the topics to be considered you will be prompted to pause for reflection and check how the issues may pertain to your situation. The topics covered are:

- context of assessment;
- diversity of students;
- whole-of-programme approach to assessment;
- aligning learning outcomes and assessment tasks;
- determining student assessment load, frequency and value of assessment tasks;
- improving validity and reliability in assessment;
- selecting methods of assessment;
- flexible design of assessment tasks.

Context of assessment

Find the assessment policies at your institution

In all educational institutions certain policies and procedures on assessment are clearly stated by an academic board or assessment committee. In large part these are designed as guidelines or reference points to assist individual staff members.
Can you locate and read through the assessment policy for your institution? Any surprises?

Be clear about assessment policies prescribed by relevant professional bodies

Statements of policy are a means to ensure that consistency of standards is applied through student assessment across the institution. Where necessary, they will also prescribe the compliance requirements of professional, vocational and industry accreditation bodies. Accountability at this level is critical for establishing not only the graduate's credibility in the workforce but also the reputation of the programme and the educational institution as a whole.

Does your assessment design have to conform to industry, vocational or professional specifications?

Make use of the diagnostic function of assessment

The diagnostic role of assessment has been showcased in Part B, so what needs to be appreciated in practice is that, when assessment takes place ahead of formal learning, it is being used to diagnose the extent of students' knowledge and understanding. If this process reveals significant gaps in knowledge, you will need to provide guidance and assistance for students to address this shortfall, before moving on to engage with the rest of the curriculum. An aspect of diagnostic testing that serves as a positive reinforcement to students is where you can help them become aware of what they already know. If you can help students to bring their prior knowledge to the fore, they can benefit by becoming aware of their own foundation knowledge and begin to build upon it.

What is your experience with diagnostic assessment?

Design for a developmental function of assessment

The level of challenge that is presented as you design assessment tasks needs to develop incrementally. What you ask the students to carry out in their final year of undergraduate study will usually be more demanding than their assignments in first year. As students find themselves moving through a course of study, their need for basic encouragement makes way for a higher-order need for authentic application of learning and a lively discourse with their peers.

How relevant is your assessment design to learners' needs? How do you know this?

Be clear about the association of your assessment with other subjects

The broader context of assessment also pertains to the prerequisite and co-requisite knowledge and skills that are assumed within a programme of study.

Since some subjects within the same course will cover the prerequisite knowledge, you need to keep the associated foundation subjects in mind when you teach. Students need to be aware of the prerequisite knowledge that they must carry as they proceed through the syllabus. When the subject you teach has a relationship to another subject that has been prescribed as a co-requisite, your responsibility is also to consider the overall amount of assessment and the due dates of each assessment task. You need to maintain fair and reasonable expectations of your students, and see your demands within the broader context.

How many other subjects are your students studying concurrently, and when are these assessment tasks due?

Ensure adequate resourcing of assessment

The above discussion presupposes a level of resourcing for the assessment process. Without adequate resources—time, support staff and professional development—to support regular review of the course curriculum and the subject learning outcomes, your efforts to maintain fair and valid assessments will be made difficult.

Before reading on, ask yourself:

- Have you taken into account the broader context of your learners?
- Can fulfillment of assessment requirements be applied by learners to a broader setting, such as the workplace or community?
- How is the assessment process reviewed and resourced?

Subjects and their assessment requirements within the programme context

An arts programme has been very popular with off-campus students for many years because of its very open structure. So long as students undertake 24 units within three years they are able to qualify for the award. This flexibility of student choice has been a major attraction into the course, but staff have been frustrated by their inability to assume any prior knowledge in each of their subject areas. In a recent attempt at least to derive some standardization among the graduates of the programme, two subjects were nominated as compulsory core subjects. But in the spirit of flexibility these could be completed at any time in the students' three-year programme. After some animated discussion within the department it has now been agreed that the 100 per cent flexibility will be diminished in the interest of ensuring students build some foundation knowledge and skills in their first year. The course now runs with four core subjects as prerequisites to the rest.
Assessment in practice

Diversity of students

Knowing your students

Before you start planning your teaching session and assessment tasks, ask yourself:

- Who are your learners?
- What do you know about their cultural background, socio-economic status and living circumstances?
- What is their experience of university study, flexible learning and online learning?
- If you have taught this subject before, what has tended to be the age range of your students? Is it reasonable to expect a similar group this time?

Knowing your own personal perspective

Consider also the influences you might bring into your classroom: your race, gender, age, ethnicity, physical attributes and abilities. How might these impact upon your students when you meet them and as you guide them through their learning? Consider for a moment the time in your life when you first became aware of differences and how you reacted at that time.

Have you taken the time to reflect on your ideas of ‘minority groups’ and have these reflections undergone any change over time? How does your perspective on differences affect you today and how might they impact on your teaching?

Account for diversity in your assessment

It is easy to feel overwhelmed by the idea of having to take account of every student and his or her individual needs. Rather, let’s start by considering a cohesive approach to the process of teaching and assessing for diversity. As the teaching session goes on, you may have come to know your students individually and gained a good sense of their personal circumstances. The difficulty with this in terms of assessment is that, by the time you have learnt about your students, the assessment tasks have already been set in place and little can be done to change them without fear of appeal from some members of the class.

- So what could you do to structure assessment that takes account of diversity? Find out very early in the session if any of your learners have special needs and, while making no assumptions, arrange for any appropriate supports or enablers to be put in place prior to assessments and exams.
- When considering using off-campus strategies, make no assumptions about access to libraries or community services. Allow for the truly isolated students to negotiate the necessary arrangements so that assessment tasks can work in an equivalent manner for all students. Internet connection and access to computers cannot be assumed with certain target groups of students. What is the level of Internet access within your target group?
- How might these issues impact upon your choice of assessment design?

Assessing amid diversity online

Here is an example of how to take account of diversity among students in an online class. Tell the students:

- Everyone in the online class has both a right and an obligation to participate in discussions and, if called upon, should respond to achieve a mark for participation.
- Acknowledge the contributions of others with careful attention and an open mind.
- Ask for clarification when you don’t understand a point someone has made, and before the due date of the assessment task.
- If you challenge others’ ideas, do so with factual evidence and appropriate logic.
- If others challenge your ideas, be willing to change your mind if they demonstrate errors in your logic or use of the facts. Respond online for the archival record of your achievement of change.
- Don’t introduce irrelevant issues into the discussion.
- If others have made a point with which you agree, don’t bother repeating it (unless you have something important to add).
- Be efficient in your discourse; make your points and then yield to others.
- Above all, avoid ridicule and try to respect the beliefs of others, even if they differ from yours.

(adapted from UNC Center for Teaching & Learning, 1992)

Whole-of-programme approach to assessment

Consider the intended graduate outcomes for your programme

Assessment tasks are not designed in isolation from the learning context, and it is important to note that the disciplinary culture, the focus of the overall academic programme and the subject-specific learning outcomes will all play a part in determining the relevance of any individual assessment task that you design.

With these three layers of influence upon your practices – the discipline, the programme and the subject – your assessment tasks will always have several
agendas to address. In many institutions you can find a statement of graduate outcomes, skills or attributes that define these broad areas of requisite achievement. See also the discussion in Chapter 4 on graduate attributes.

Do you know of such a statement at your own institution, faculty or school?

Start by considering your disciplinary culture

As an educator you are steeped in a disciplinary area, and your teaching and learning practices will mostly be derived from the relevant professional values and tacit norms in that domain. Your first step is to take account of the full curriculum in the academic programme within which your subject is placed.

Can you determine whether significant disciplinary outcomes will be covered within the programme as a whole?

Your subject in context

Once the overall aims for the whole programme are clear, each subject within the programme can be reviewed in order to establish its relevant portion of the overall assessment regime. While it is difficult for any individual staff member to undertake such a thorough review, this is ideally completed at the time of a regularly scheduled programme review. If such reviews have been overlooked or are overdue, you may be in a position to suggest a meeting with your colleagues to review the collection of subjects you teach with specific attention to the objectives and the assessment strategies.

It is at this point that your own syllabus needs to fit within the bigger context of the assessment regime. How many programmes do you know of where, despite the extensive range of global skills espoused, eg oral presentation, group work, information literacy and appreciation of cultural diversity, to name a few, the students’ assessment tasks throughout their entire award rarely diverge from the essay format? Graduates may end up effectively writing over 40 essays to gain a qualification that will never require them to write another extensive narrative such as this ever again.

Which of the overall graduate skills is your subject especially concerned with?

Assessment framework for your subject

Once you have considered the syllabus and course context into which your subject fits, the disciplinary context continues to play a part in the formulation of assessment, as mentioned in Part B. So, the assessment of the knowledge of concepts and techniques within the creative arts will take different forms from those within the applied professions of law or nursing, for example. With this in mind, the relevant content topics and learning outcomes in your subject will provide you with the basic framework of the demonstration of knowledge, capabilities and understanding that you need to design into an assessment regime.

How might you design an overall assessment regime to include a number of smaller tasks that build on each other in an integrated approach to achieving the learning outcomes in your subject?

Process-oriented assessment

In addition to the content areas to be assessed, consider if you need to design for process-oriented learning outcomes that weigh up students’ achievement in a range of more global skills such as:

• verbal and written communication;
• accessing and evaluating information;
• working effectively in cooperation with others;
• the application of higher-order critical thinking skills.

Using assessment for benchmarking self-development

And finally, in many cases an ideal assessment regime also gives room for establishing early benchmarks for change in students’ attitudes, values, ideals and personal and professional principles.

Before moving on ask yourself:

1. What is the relationship between the structure of your assessment design and the disciplinary culture in which the learner encounters it?
2. What does your assessment design contribute to the overall aims of the programme?
3. How have you ensured an alignment between the stated subject learning outcomes, the learning activities throughout the syllabus, and the assessment design?

Whole-of-programme assessment design

When an applied science degree was to be externalized, a series of consultations took place between educational designers and all subject coordinators to examine the graduate qualities intended from the course. These were then prioritized in order to see clearly where the emphasis in assessment needed to go. On the basis of these broad qualities, subject coordinators were able to see that they need not assess every skill or capability on the list. Coordinators of later-year subjects were able to rely on...
the assessment of information literacy, communication and teamwork skills in the prerequisite subjects, so they focused their assessment tasks on the higher-order challenges of co-authoring and drafting scientific papers, researching and presenting material using computer-based presentation tools, delivering oral presentations and peer review.

Aligning learning outcomes and assessment tasks

What is a learning outcome?

As you will be aware from the themes discussed in Part A, the first question to ask when developing a subject of study is 'What should the students achieve by doing this subject?' Learning outcomes are explicit instructions to the students in a subject about what should be learnt during the subject, the skills and capacities that must be demonstrated in relation to them, and the standards expected.

Check your learning outcomes and focus on the verbs you have used. Will the students know what they have to do to achieve these outcomes?

Making learning outcomes explicit

An essential ingredient in students' overall success in the subject is that you tell them clearly what they should learn and your expectations of them on completion of the subject. It makes sense that you then examine whether each student has learnt, and can do, what you expect. As we know, students will perform with varying degrees of success. In Chapter 23, we will discuss how you can examine their performance and give them feedback, and provide guidance about how to improve.

If you were a student, you would want precise instructions about how to do well. You would want those instructions to be clear: explicit, unambiguous and written in simple language. You would want your university teachers to help you to learn well enough to be able to achieve the learning outcomes by the time you completed the subject. And you would want the assessment tasks to assess precisely what your teachers have assisted you to learn.

Do your students know what you expect them to achieve? Do your assessment tasks assess what you have taught?

How assessment can go wrong

It is a curious and unfortunate reality that these principles of alignment are not always applied when learning outcomes and assessment tasks are designed and constructed. As a result, it is not unusual for educators to assess content and skills that are not stipulated in a subject's learning outcomes, as we discussed in Chapter 4.

When this happens, students will be confused because it will not be possible to work out exactly what they are expected to do in an assessment task until after the assessment task is completed, and by then it will be too late. If students are informed by reading the learning outcomes about the requirements of assessment tasks and the criteria against which they will be measured, then they will be able to learn strategically.

Is the alignment of outcomes and assessments in your subject evident to you?

The purposes of learning outcomes

Appropriate learning outcomes are able to be operationalized and measured. These two qualities make them student-centred (see Chapter 4 - Valid assessment). In addition, learning outcomes signal clearly to students what they should be able to do upon completion of the subject. Within this, they should signal the areas of content that students will learn.

Learning outcomes:

- provide a limit to the content to be covered;
- provide focus and direction in the learning process;
- provide an intellectual framework for making meaning of the content;
- indicate what intellectual and/or practical tasks students should be able to perform;
- provide a guide to what will be assessed.

The purpose of giving explicit learning outcomes to students is to give a clear indication of what students should learn and what kinds of applications they should be able to do with the knowledge. John Biggs (1999b) observed that learning is performative: you need to be able to measure what the student can do at the end of the learning process. If you do not make this clear to students, they can have little hope of knowing how to do well in your subjects.

How to write appropriate learning outcomes

Appropriate learning outcomes should be consistent with what you assess, so that you measure only what has been stated as a learning outcome. In the example that follows you will notice that these learning outcomes do not limit a student's imaginative or creative capacity, and they are written so that they can be measured. Another feature of effectively written learning outcomes is that they permit judgements to be made about how well students have met the criteria. For examples of grading scales, descriptors and marking schemes, see Chapter 21.
This example is of a fictitious subject – interpersonal communication (IPC) in customer relations contexts. It illustrates how learning outcomes, and teaching and learning strategies are outlined for students, telling them what to do and how to do what is required.

Upon completion of this subject, students in IPC 1 should be able to:

- correctly identify the main theoretical perspectives of DeBono, Bloggs and Billyo;
- examine customer service contexts and identify the relevant IPC issues;
- demonstrate a comprehensive understanding of the range of IPC techniques applicable to the customer service context;
- demonstrate the ability to work as team members and contribute productively on resolving IPC issues;
- write an evaluative essay in IPC that is appropriate to the conventions of the social sciences;
- demonstrate the ability to assess issues and devise solutions for problems in customer service contexts.

Teaching to learning outcomes: is your subject constructively aligned?

An essential feature of John Biggs’s model of ‘constructive alignment’ is that the learning outcomes and the assessment tasks are closely aligned with each other. The learning outcomes represent the beginning of the subject, where students find out what the subject is all about. The assessment tasks measure what has been learnt. In the middle, the student has to do the learning, with the aid of teaching, guidance or some kind of direction towards being able to perform the learning outcomes successfully. Biggs coined the term ‘constructive alignment’ to represent a situation where the learning outcomes, the teaching and learning activities and the assessment tasks are all working in unison to support student learning – the subject is then said to be constructively aligned.

Assessing achievement of learning outcomes

There is a simple way to establish the quality of learning outcomes for a subject. Assessment, which is the primary focus of learning, is the key. Do the assessment tasks:

- measure all the main criteria called for in the learning outcomes?
- measure any skills or capacities that are not explicitly stated in the learning outcomes?
- measure more than the criteria stated in the learning outcomes?
- enable the students’ achievements, according to what is valued in a subject in this course and at this level, to be measured?

If there is a concern about measurement, then the problem lies within the assessment tasks themselves. But if there is a concern about what is being measured, the problem is likely to be that the learning outcomes need review. Do either of these concerns apply to your assessment or stated learning outcomes?

What needs to be assessed?

Only the abilities stipulated in the learning outcomes should be assessed. Of course, within that, the subject assessor has options about how the abilities will be measured:

- Should all of the course content be assessed?
- Should the course content be assessed selectively?
- Is there too much assessment?
- Is there enough assessment?
- Are the assessment tasks appropriate?

These questions raise issues about assessment that are dealt with later in this chapter.

Be clear in apportioning the relative value of learning outcomes

The key to what needs to be assessed lies in the learning outcomes. By looking at a set of learning outcomes, subject assessors should ask whether achievement of each of the learning outcomes is measured in some way in the assessment regime for the subject. It may be that several outcomes are measured in one task, or it may be that one learning outcome is measured by a number of assessment tasks. The apportionment depends upon the relative importance in the overall subject of the ability being measured. From the student’s point of view, the relative importance of the learning outcome will be evident from the weighting attached to it in the related assessment task.

You may recall the human rights law subject we already mentioned in Chapter 3. We use the same example here to show learning outcomes as they are developed from a statement of graduate outcomes:

The Law School seeks amongst other things to produce graduates who:

- are aware of gender and cross-cultural issues in law;
- are able to examine legal and non-legal issues critically;
- have substantive knowledge of a wide body of case and statute law;
- are able to express themselves clearly, creatively and concisely;
• are able to argue logically and objectively;
• have high levels of practical legal skills.

An assessor for a human rights subject in the law programme built upon these aims in the performance criteria, as follows:

In this subject (human rights) performance will be assessed against the following criteria:
• demonstrated awareness of gender and cross-cultural issues as they affect human rights in law;
• performance in examining critically a range of legal and non-legal issues that apply to human rights;
• substantive knowledge of case and statute law related to human rights;
• demonstrated ability to write clearly, creatively and concisely;
• demonstrated ability to argue logically and objectively.

The assessor then translated the criteria into grading standards for a specific assessment task. This process is discussed in Chapter 21.

Before moving on, ask yourself:
• In what ways does this assessment design succeed in assessing the explicit learning outcomes of the subject?
• How does your assessment design motivate learners to achieve the stated learning outcomes or to develop insight into their progress towards gaining the attributes of a graduate from your discipline?

Determining student assessment load, frequency and value of assessment tasks

Recognizing constraints

In considering the issues discussed so far in relation to designing assessment tasks, there are a number of constraints to take into account. These include:

• Inclusive of the examination period, a semester may be 16 weeks and a trimester 15 weeks. In some countries the study term is even shorter and in all cases the actual time available for assessment is less than 16 weeks. In most but not all subjects, the first assessment has to wait till the students are sufficiently into the subject to have something to assess. This is usually not before the fourth or fifth week.
• In planning assessment for a subject you need to allow time for marking and the return of material with feedback so that students can gauge how they are doing before having to submit their next piece of work. The time lag is exacerbated with distance education students, as you have to allow time for material to be mailed to you and, subsequently, mailed back to them when marked. This time may be reduced if you use fax or e-mail for assignments.
• In most cases your subject is not the only one the students are taking. A student taking a full load of four subjects may have to do between 12 and 20 assessment tasks in the teaching period! Does this matter? It means that students spend most of their time doing assessment tasks that tend to become the sole focus of their academic work. Is all this formal assessment really necessary?
• Finally, the more assessment, the more marking there is for you or other markers. Given increasing staff-student ratios, there is a case for being more economical with assessment.

Determining a fair student assessment load in a subject: how much assessment is enough?

The constraints mentioned above need to be taken into account in determining a fair student assessment load for a subject. In principle, a fair assessment load is one that ensures the learning outcomes for the subject are covered as efficiently as possible. This, however, assumes that the learning outcomes are themselves reasonable and appropriate, and that the assessment tasks are well focused and do not require disproportionate effort on the part of students. A fair assessment load will also be seen as reasonable by students if they get a fair return for their effort, not only by way of a grade and its relative weighting in the subject but also by way of useful and informative feedback.

For assessment tasks such as essays, case studies or reports, the subject assessor often prescribes the number of words within which the task should be completed. This is a useful but rather arbitrary guide. It implies that, taking into account all aspects of the assessment task, an adequate answer should be in the order of a certain number of words. There is, however, wide variation in the number of words required within a standard undergraduate or college programme. For a subject, the range can be from 3,000 to 10,000 words. Institutions need to address the issue of justification of word lengths, as the variations exist within schools as well as between them.

The question needs to be asked: is there any need for students to write, say, 4,000–5,000 words in total for all assignments in a subject, excluding examinations? How much is enough? The answer may be: enough to demonstrate the students' grasp of the requirements of the assessment task in relation to the marking criteria (see Chapter 21).
In trying to establish a fair assessment load the following questions may be helpful:

- Are any of the learning outcomes redundant?
- Are any of the assessment tasks redundant?
- What do students and staff say is the amount of time and effort expended on each assessment task in this subject?
- How many assessment tasks are required of students in this subject?
- Are all the assessment tasks essential?
- Do the assessment tasks reflect a suitable sample of the subject content?
- Is any of the content in this subject assessed elsewhere in the course?
- Where students are provided with choices (e.g., essay topics), are the choices comparable in terms of difficulty and subsequent marking?
- What is the overall workload of full-time and part-time students in the course?
- Is it feasible to set formative assessment tasks, e.g., 'work in progress' assignments, or is formative feedback combined with summative assessment?

**Deciding the frequency of assessment tasks: how often should students be assessed?**

Frequency depends on what kind of subject you are teaching. A laboratory-based or problem-based subject may require students to complete experiments on a weekly basis and have their work checked. A practice-based subject may require students over a semester to demonstrate competence in a range of skills consecutively or concurrently. A conceptually based subject may require students to write essays or reports, present seminars and undertake examinations. The principle of parsimony applies, that is, as few assessments as possible are consecutive or concurrent. A conceptually based subject may require students to complete experiments on a weekly basis and have their work checked. A practice-based subject may require students to complete experiments on a weekly basis and have their work checked.

The following questions may be helpful in thinking about frequency:

- Do students have sufficient time to prepare each assessment task adequately?
- If you were to reduce the number of assessment tasks would the students be disadvantaged? How?
- Do students, both on-campus and off-campus, receive feedback on early assignments in time for learning to occur before another assignment is due?
- What opportunities does your assessment design provide for learners to obtain feedback on their progress, without penalty?
- What are the implications of failure—does it mean wasted effort or encouragement to improve?
- What opportunities have you in place for students to resit or resubmit?

**Determining the value of assessment tasks: how much is each task worth?**

How do you arrive at the value you assign to each assessment task? If you have, say, two assignments and an examination, why assign 20, 30 and 50 rather than 30, 30 and 40? One reasonable justification for a smaller mark for the first assessment task is that the assessment is usually early in the study period when students are finding their way into the subject, it is often shorter than the second, and timely feedback may allow students to be more confident about their next assessment task. Complexity, effort and the relationship of assessment tasks to learning outcomes are considerations when you determine the value given to each task.

The impact of conflation of marks needs some attention here. Conflation can occur when different markers or different assessment tasks impact upon the overall spread of marks in the group. For example, one marker who is consistently 'harder' in the allocation of marks will impact upon the whole group of marks by drawing the range of marks below what might otherwise have been. Or one assessment task may be found to be inadequate in discriminating the poor students from the better students, leaving the majority of students with a similar mark, in which case it has little impact upon the final grade. In standards-based marking schemes this may be of less significance than in the case of norm referencing (see discussion on these approaches in Part A).

The following questions may be helpful in thinking about the value given to each assessment task:

- Is the value (usually percentage weightings) assigned to each assessment task commensurate with the complexity of the task?
- Is the value assigned to each assessment task commensurate with the amount of effort required for students to complete it?
- Is the value assigned to each assessment task commensurate with the importance or degree of complexity of the learning outcomes related to the assessment task?
- Have I had the opportunity to engage in moderation of marks together with the team of markers? If not, is there a way to organize this for the future? (See Chapter 23 for more details.)

**Fair reward for group work**

In your subject, it might be appropriate to allocate students to small groups to work on all or part of an assessment task. The learning outcome(s) might reflect the need for collaborative activity, critical analysis, problem solving, or some other type of learning that is appropriately accomplished in groups.

Collaborating in groups is a time-consuming and difficult, albeit rewarding, activity. Group members must find time to get together, coordinate research, learn together and rework drafts of their essay, report or project.

The frequency, time allocation and percentage weighting for assessment tasks involving group work itself or the product of group work should be recognized and commensurate with the amount of time and effort involved.
Improving validity and reliability in assessment

As assessors we are not only concerned with what the student said or did in an assessment task, but we are concerned with the ‘truth’ of the raw data of assessment and what to ‘make’ of it in terms of grading the student’s work. The ‘truth’ of assessment depends on the validity and reliability of the assessment method, while what we ‘make’ of it depends on what type of measurement we use (for example, norm-referenced assessment or criterion-based assessment). Assessments should be both valid and reliable.

Defining validity

As we outlined in Chapter 2, validity is concerned with whether the assessment method actually measures what we want it to measure. An assessment task is valid when it corresponds to the purpose of the test. Assessment tasks are more likely to be valid if they align directly to the learning outcomes for the subject. Validity is as important as reliability, as without validity a reliable test will consistently measure performance inaccurately, e.g. a speed-reading test will consistently measure speed of reading rather than comprehension. But whether or not a task validly assesses a particular outcome depends upon what the student does, not what the designer of the assessment intended.

It is helpful in this regard to use the same language in the assessment task as in the objective. For instance, if an objective to be tested is stated as ‘the ability to critically analyse...’, then the assessment task should ask students to ‘critically analyse...’. Markers must of course be clear about precisely what this means and reward appropriate efforts by students (see also Chapter 21).

Checking validity

The following questions may help you in checking validity:

- Do the learning outcomes accurately reflect what you want students to learn in the subject?
- Does each assessment task align constructively with particular subject learning outcomes, content and learning activities?
- How might you increase the sample of learning outcomes and content areas included in any single assessment task?
- Are you using assessment methods that are appropriate for the learning outcomes specified?
- Have you employed a range of assessment methods?
- Is the percentage weighting appropriate to the learning objective and the task?
- Are there any implicit marking criteria that are not articulated to students?

Is a portfolio assessment valid?

If you are considering using a portfolio-style assessment for an introductory subject in the social science domain, ask yourself: 'Could students present a good portfolio but not understand the nature and scope of social science as a disciplinary area? Could students fail to present a high-quality portfolio but still understand the range of perspectives within social science?'

Of course, the answer to both is 'yes', so it's a good idea to give explicit instructions in how the portfolio is required to demonstrate students' awareness of the range of social science perspectives (through supporting critique, for example). You can use the portfolio in association with other types of assessment, such as online discussion participation or oral presentations as a means for students to demonstrate their conceptual understanding.

For a description of portfolio assessment, see Chapters 16 and 19.

Defining reliability

Reliability refers to the consistency with which the same assessment task under the same conditions will produce the same set of results. The closer the level of correspondence in the results obtained from repeated applications of an assessment task, the greater the reliability and precision of measurement. Reliability is increased when the assessment task consistently measures the 'real' level of attainment regardless of who administers it, who learners are tested and who marks the submissions. For more discussion on reliability in marking, see Chapter 23.

Setting standards

Validity, reliability and the ways we judge student performance are all related to how we establish standards. The concept of standards has been identified as critical in higher education. Standards can be expressed as ‘an agreement between examiners’, ‘a common understanding of quality as manifest in their subject’. A common understanding of quality can take the form of standards derived from criteria embodied in learning outcomes. For further discussion, see Chapter 3. We also discuss setting standards in Chapter 21 and marking reliability in Chapter 23.

Setting standards and preparing a team of tutors to help with marking

In a large first-year core subject, the marking is done by casual tutors, who are not always the same people from year to year. One of the ways in which this subject assessor hopes to achieve greater reliability among her group of tutors is to work with them and develop a marking sheet...
or scoring rubric. She then works with the team through several examples, and together they agree on the selection of a few exemplars, each representing the achievement of a different score. They discuss what distinguishes these from each other. Following this preparation, the team of tutors is usually able to complete the marking of all 500 or so papers, requiring only the confirmation of the assessor for a handful of borderline cases.

Selecting methods of assessment

There is a wealth of assessment methods used in higher education to assess students' achievements. How do you choose?

It is particularly useful to think first about what qualities or abilities you are seeking to engender in your learners. Nightingale et al (1996) provide us with eight broad categories of learning outcomes, which were covered in detail in Part B. Within each category, you will have found suggestions for some corresponding methods that are particularly suitable. You might recall the evaluation of research literature as an assessment of critical thinking skills, the group work to test problem solving, and the open-book exam that assessed the skills of accessing and managing information at the same time as testing content knowledge. These are just a few examples of the case studies of assessment methods as they align with the range of learning outcomes and disciplinary contexts in Part B. When you identify the abilities that students need to be able to demonstrate to achieve particular learning outcomes, you will be able to choose appropriate methods of assessment.

Assessment methods that best measure achievement of the stated learning outcomes

The primary rule is to choose methods that most effectively assess the stated learning outcomes of the subject. If your objective is to develop oral communication skills, then a written assessment will clearly not be an effective measure. Similarly, if you are wanting to develop critical and analytical thinking, an assessment emphasizing memorization will negate your efforts. Assessment methods need to be closely aligned with your aims and learning outcomes, as otherwise your teaching and learning goals will not be realized. As we know, students will take their cues from the assessment. Moreover, misalignment of learning outcomes and assessment tasks may also cause confusion or anxiety in students, and may lead to their adopting a surface approach to their learning.

Assessment methods that are aligned with the overall aims of the programme

A secondary rule is to choose methods that are aligned with the overall aims of the programme. This may include the development of disciplinary skills (such as critical thinking or problem solving) and support the development of vocational competences (such as report writing, team skills etc). Hence when choosing assessment items you have one eye on the immediate task of assessing student learning in a particular subject, and another eye on the broader aims of the programme and the qualities of the graduating student. Ideally this latter task is something that you do with academic colleagues so there is a planned assessment strategy across a programme.

If you haven't already looked at Part B, you would do well to browse through the various examples of assessment methods provided within the context of the range of learning outcomes.

When you are designing assessment tasks, do you allow students the opportunity to develop their exam techniques or to master the format for assessable tasks, e.g. written reports, reflective journals, exemplary portfolios?

Flexible design of assessment tasks

Flexibility in higher education is represented in many ways and at many levels, as our discussions in Parts A and B have shown. Not only can higher education institutions today provide flexibility in enrolment, pedagogy and learning environment, but they are also doing their best to facilitate cross-institutional collaboration and accreditation.

In certain settings, students have the benefit now of flexibility in the timing of when they can complete an assessment task – before, during or after formal learning. The flexibility of mode of delivery has also increased in recent years because of the increasing use of the Internet and World Wide Web in assessment.

Does the online environment offer flexibility for your assessment scheme?

Does the introduction of online technologies to support the assessment process enhance student learning in your subject?

The following considerations may help you in reconceptualizing your assessment for greater flexibility:

- What does flexibility mean for you?
- What might be the benefits and motivations inherent in such a change to your usual ways of assessing?
• What might be gained or lost by moving some or all of the assessment process into the online context?
• Would you say that the online context offers additional opportunities or constraints for applied and holistic approaches to your assessment?
• What types of online assessment tasks might be relevant and realistic?
• Alternatively, which assessment approaches might be best supported in the offline context for your subject and thus enable greater flexibility?

Flexibility for whom?

In some cases it appears that the student’s and teacher’s perspectives may be somewhat exclusive of each other — to devise a learner-centred solution to flexibility does not necessarily also result in reduced workloads or greater efficiencies for teachers, as the time and resources required for negotiation of tailored tasks to enhance authentic learning experiences would be prohibitive in large classes. The question is: why would you want to make your assessments more flexible? The point of considering flexibility is to highlight the importance of designing your assessment task to suit the circumstances of your class size, subject area and learner characteristics.

Students negotiate assessment details

Many busy adult learners have reported that flexibility in assessment has great appeal. There are possibilities to negotiate the nature, scope and form of the assessment task. You might allow negotiation on individual versus group work, or the context of the task. If students are in a workplace, a more authentic learning task can be devised and the assessment of outcomes can be matched to the students’ own desired outcomes or, indeed, those of their workplace. Student-centred flexibility is not solely about the online context.

Designing assessment tasks at a glance

• Design assessment methods that are aligned with the overall aims of the programme.
• Ensure you have accounted for any requirements set by professional bodies.
• See that your assessment tasks are aligned with the stated learning outcomes.
• Use assessment methods that best measure achievement of the stated learning outcomes.
• Rely on as few assessment tasks as possible to meet the learning outcomes of the subject and provide feedback to students.