

# How Assessment Supports Learning

**Learning-oriented Assessment in Action**

David Carless  
Gordon Joughin  
Ngar-Fun Liu  
and Associates

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Hong Kong University Press is honoured that Xu Bing, whose art explores the complex themes of language across cultures, has written the Press's name in his Square Word Calligraphy. This signals our commitment to cross-cultural thinking and the distinctive nature of our English-language books published in China.

“At first glance, Square Word Calligraphy appears to be nothing more unusual than Chinese characters, but in fact it is a new way of rendering English words in the format of a square so they resemble Chinese characters. Chinese viewers expect to be able to read Square Word Calligraphy but cannot. Western viewers, however are surprised to find they can read it. Delight erupts when meaning is unexpectedly revealed.”

— Britta Erickson, *The Art of Xu Bing*

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# 1

## Improving Assessment, Improving Learning

### **What this book is about**

The genesis of this book lies in the Learning-oriented Assessment Project (LOAP) which sought to identify, promote and disseminate useful practices in assessment that would promote productive learning. The project was based in the Hong Kong Institute of Education and included all the tertiary institutions in Hong Kong.

This book is about improving student learning: there are many ways to enhance student learning and the strategy that this book promotes is through assessment. Assessment is an appropriate focus because it is one element of the instructional process that cannot be avoided since institutions require assessments for certification purposes. We seek to refigure assessment so that it not only measures or judges student achievement but also contributes to positive learning experiences. What is more, assessment also helps us to teach more effectively by identifying what students know and do not know, where confusion lies, and where we might most productively concentrate our instruction. Adjusting our assessment practices has enormous potential for improving student learning and providing us with more satisfying teaching experiences. This is the heart of this book.

### **Assessment and teachers**

Lecturers in higher education are busy people facing multiple demands. Our academic interests are usually divided between our disciplines, our research in particular areas of it, our students and their learning. We want our students to learn well, but we are sometimes frustrated by their shortcomings. Few of us have a passion for assessment. In fact, assessment is more likely to be seen as an enemy than an ally in our work. Doing assessment well may be more arduous than recycling what has gone on before. Indeed, assessment often involves time-consuming procedures such as setting examination papers and assignments, marking them, collating scores, carrying out

## 2 How Assessment Supports Learning

moderation and attending Examiners Boards. But can assessment be more than this? Can assessment become a satisfying part of teaching, rather than a drudge?

Assessment often engenders strong emotions. As students or lecturers, we have probably all experienced some negative experiences associated with assessment. At a basic level, many of us may simply feel a lack of enthusiasm for the endless tasks of marking assignments or exam scripts. Despite its unpopular image, we cannot escape from assessment, even though some of us may often wish we could do so. The motivation for transforming assessment and handling it more productively is therefore strong, particularly in view of the considerable dissatisfaction with aspects of current practices. This book contains many examples of how assessment can be made more humane, less unpleasant and more focused on the positive business of enhancing student learning.

### **Assessment and learning**

We are all aware of the influence assessment has on the teaching and learning process. It affects all students and all lecturers in ways that may be positive, benign or negative. Assessment impacts on what content students focus on, their approaches to learning, and their patterns of study. What they do for their assignments and their preparation for examinations, and how they perceive the results of this assessment, have a profound impact on them both as learners and as individuals. Students follow the cues we give them via assessment and this helps them make choices about how they spend their time, so our assessment design needs to be undertaken carefully to maximize the positive impact of assessment on student behaviour. In short, assessment has such power that it is essential that we handle it so that its learning potential is fully harnessed.

### **Assessment and the curriculum**

Knowledge is generally accepted as being realized through three components which interlock and interact. These components are curriculum, pedagogy and assessment. Assessment has a powerful impact on the curriculum; in fact, from the student perspective it often defines the curriculum (Ramsden, 2003). In other words, the assessment components of the curriculum are often more influential than what is written in formal course documentation. Following from this, a common way of instigating curriculum reform is through changing assessment. The term 'backwash' represents this impact that assessment reform has on teaching and learning. Engendering positive backwash can be stimulated through integrating sound assessment within curriculum processes rather than it being something that occurs at its end. Biggs (2003) extends this through the notion of constructive alignment, integrating constructivist teaching methods, learning objectives phrased as outcomes, module content and assessment methods. He holds that student learning is most effective when we align learning outcomes, how we teach and how we assess.

### **Assessment and outcomes**

Outcomes-based education means focusing efforts on student achievement of clearly defined outcomes we want all students to achieve. Biggs's concept of constructive alignment depends on

a clear understanding of what it is that students need to achieve, that is, of the learning outcomes for their particular modules and programmes. Outcomes-based education has become a prominent theme for Hong Kong universities, as it is in many parts of the world, so it is an important factor in our consideration of learning and assessment. Learning outcomes operate at various levels, each of which has implications for assessment.

One specific level involves learning outcomes expressed in terms of subject-specific performance in a module or unit. These criteria become important guide posts for student learning. They become the point of reference for teachers' feedback on students' work, and are an essential tool in helping students to develop their self-evaluation capacities as they learn to compare their work against these criteria.

A second broader level involves learning outcomes as expressions of overarching abilities that an overall programme is seeking to develop in its students (see, for example, Maki, 2004). This involves students in becoming not only proficient in subject-specific knowledge, but also developing more generic abilities such as problem-solving, communication skills, the capacity to work well with others, and the ability to continue learning in whatever work contexts they will eventually find themselves. It is no coincidence that all of the assessment practices presented in Chapter 3 of this book work to develop these kinds of skills in students.

## **The challenges of assessment**

What are the main challenges related to assessment which this book seeks to tackle? We identify some of the main challenges as follows: the multiple demands of assessment; an examination-oriented system which often leads to surface learning; issues of grade distribution and standards; providing effective feedback to large classes; managing the logistics of group assessments; and plagiarism. These are discussed below as a starting-point for the book and we return to these issues with some recommended strategies in Chapter 4.

### ***Double duty in assessment***

A fundamental challenge is that assessment is about several things at once (Ramsden, 2003). It is about learning and it is about grading; it is about summarizing student achievements and about teaching them better; it is about standards and invoking comparisons between individuals; it concerns what students can do now and what they might do in the future; it has technical aspects and social ones; it communicates explicit and hidden messages. Assessment engenders tensions and compromises. Boud (2000) uses the term 'double duty' to represent the dualities of assessment and provides three examples: assessments have to encompass formative assessment for learning and summative assessment for certification; they have to focus on the immediate task and equipping students for lifelong learning; and they have to attend to the learning process and the substantive content domain. Recommending shifts in assessment practice is particularly hampered by this realization that assessments do double duty. The complexity of assessment and its multiple demands makes reform difficult to achieve, but essential to educational progress.



### *Examinations distorting learning*

Assessment can distort the learning process. For example, it can lead to some important topics being neglected by students, whilst others are afforded undue importance. It may mean that certain skills are overemphasized, such as the memorization and regurgitation of information, whilst other skills are neglected. There is a danger that examinations assess lower-order outcomes which are easily assessable, whilst higher-order outcomes are neglected. For example, it is increasingly being recognized that the workforce of the twenty-first century requires generic skills such as communication, problem-solving, collaboration, and critical thinking. Examinations rarely encourage the development of these skills. They may be superficially attractive in terms of providing an apparently level playing-field and avoiding the scourge of Internet plagiarism, but they may not encourage deep understanding, and they may leave students with a satisfactory mark but little else to show for their effort. Biggs argues that inappropriate testing can have a negative impact on student learning and that “low level, surface approaches to learning exist not because of an intrinsic defect in the student but because of a teaching and testing context that encourages such behaviour and allows it to work” (Biggs, 1996: 298).

Examinations make thoughtful planning, drafting, redrafting and self-evaluation for improvement difficult, so students are unlikely to produce their best performance under test conditions. A further disadvantage is that unless an end of course examination is combined with other methods, it can make it harder to identify student difficulties until it is too late. Following from these points, a key theme of the book is the setting of assessment tasks that stimulate the kind of learning we want students to engage in, and that lead to the outcomes we want them to achieve.

### *The bell curve*

Norm-referenced assessment compares students with each other, with students' results typically being distributed according to a 'normal' or bell-shaped curve. Explicit or implicit pressure to comply with fixed mark distributions of this kind can represent an unwanted side-effect of grading student work. Although it seems that in recent years fewer universities explicitly demand a bell curve of grades, there is often an implicit expectation that there will be a spread of grades and not too many grades at the top.

Criterion-referenced assessment, in contrast, considers what students have learnt in relation to intended outcomes expressed as performance criteria. These criteria provide a basis for students to judge their ongoing progress.

The residual impact of norm-referenced assessment can, however, cast a cloud over criterion-referenced assessment. One way for tutors to apply criteria is on the basis of comparisons with other students and whilst tutors accept that students should be judged according to the criteria, they may still tend to believe that a rigorous assessment should provide a spread of marks — this may or may not be the case. Whilst concerns about declining standards or grade inflation may have some justification (Johnson, 2003), distributing grades according to a pre-set curve makes assessment a competition rather than a quest for high standards. Comparing students with each other rather than with an explicit standard is an attack on standards rather than a defence of them because however good the teaching, however good the student performance, some students are destined to be awarded relatively low grades. Good teaching and good learning should lead to a

large number of students achieving high grades. We need to be prepared to argue this point during Boards of Examiners meetings and provide evidence, where necessary, to support our assertions.

### ***Modularization***

Modular systems of higher education may exacerbate assessment and learning problems. The main challenge, from the student viewpoint, is often having the same or similar assessment deadlines for assessment in different modules. A series of assessment deadlines are likely to accumulate towards the end of a semester. This tends to discourage students from spreading their learning effort evenly throughout the term. It may also mean that students are unable to produce their best performance simply because they become overloaded.

Students may also find it difficult to make connections between modules. From the student viewpoint, coherence may not be evident so a student may find it difficult to use learning from one module on an assessment task for another module. From the lecturers' perspective, it may increase workloads if more than one assessment task is included within a short modular timeframe. The modular system may also distance the student from her lecturers as she moves from tutor to tutor in quick succession and her learning problems may not be addressed or followed up. It may also be difficult for the student to utilize feedback from one module in another.

### ***Feedback and marking loads***

A further challenge is providing effective feedback within the constraints of large class sizes and associated heavy marking loads. Academics may find that they are spending inordinate amounts of time engaged in marking activities, but may ponder the extent to which they are using their time productively. Feedback is central to the learning process and when handled effectively it can be one of the most powerful ways of enhancing student learning. However, the way assessment is currently handled results in students often receiving feedback several weeks after a module is completed. This relates to a problem identified internationally (Higgins, Hartley and Skelton, 2001, 2002) and reinforced by our work (Carless, 2006; Liu, 2005), that much feedback in higher education comes too late for students to be able to make significant use of it. Feedback is labour-intensive for tutors to provide, so it is particularly unfortunate if it is not carried out efficiently and becomes a cause of frustration for both tutors and students. Large class sizes and the way assessment is currently handled reduce the potential for tutor feedback and increase the challenge of providing helpful feedback to students in user-friendly ways.

### ***Group assignments***

A useful strategy in assessing large classes is group projects or group assignments. This has an academic rationale in terms of encouraging skills such as planning, negotiation, compromise and team-work. In other words, it encourages the kind of skills that are essential in the workplace, while also engendering peer learning. There is also a pragmatic rationale — group assignments can substantially reduce lecturers' marking loads. The main problems of group assignments relate to the difficulty of allocating fair individual grades to group members. A further challenge is that much useful peer learning may take place, but that this process of learning may not be easily identifiable from final assessment products.

### *Plagiarism*

Plagiarism is a long-standing assessment problem but one that seems to have been exacerbated by modern technologies (Carroll, 2005). The Internet is a wonderful source of information but is also open to misuse. How can tutors be confident that what they are reading are the efforts of the student rather than something that has been cut and pasted from the Internet? It is generally agreed that plagiarism thrives in large classes because plagiarism thrives on anonymity. Examinations are one possible solution to plagiarism, but they substitute one problem with another one as discussed above.

### **The aim and structure of this book**

How will you benefit from reading this book? We hope that considering the range of practices described in this book, reflecting on them, and adopting or adapting them in your own context, will help your students to learn better and so provide you with more satisfying teaching experiences, as well as making your assessment practices more manageable. The book is designed to provide some new perspectives on the assessment process and its relationship to student learning. It provides an insight into current state-of-the-art instructional practices in tertiary institutions in Hong Kong and as such it can broaden your repertoire of techniques.

This book contains assessment techniques which tackle the challenges outlined above. It provides a source of good practices, tried and tested in the Hong Kong context, which are designed with student learning foremost in mind. But it does more than this. It locates these practices within a framework for assessment based on some of the best research and scholarship available in this field.

The remainder of the book is organized as follows. Chapter 2 presents a conceptual framework for assessment. It summarizes some of the key concepts associated with assessment in the service of learning and develops the theoretical bases for the collection of practices which follow. The framework highlights three key concepts which underpin the collection: assessment tasks as learning tasks; student involvement in assessment; and the notion of feedback as 'feedforward'.

Chapter 3 presents thirty-nine separate assessment techniques, selected following a series of reviews of the sixty-four techniques submitted for consideration. Each technique is set out in a structured way to allow easy reading, and includes procedures, student comments, and suggestions for how the technique can be used in different contexts. Each technique has been chosen because it clearly supports student learning and can be adapted by other academics in a range of disciplines and teaching contexts.

Chapter 4 draws out some of the wider implications of the framework and the practices and examines some of the progress which has been made within the theme of assessment change. It examines some inhibiting factors impeding the rejuvenation of assessment processes and suggests some strategies for tackling these challenges.

The Appendix provides an annotated bibliography of articles, web sites and other sourcebooks that we have found to be most useful. We hope that these can inform the interested reader's further investigations into the interface between teaching, learning and assessment.

# 2

## A Conceptual Framework for Learning-oriented Assessment

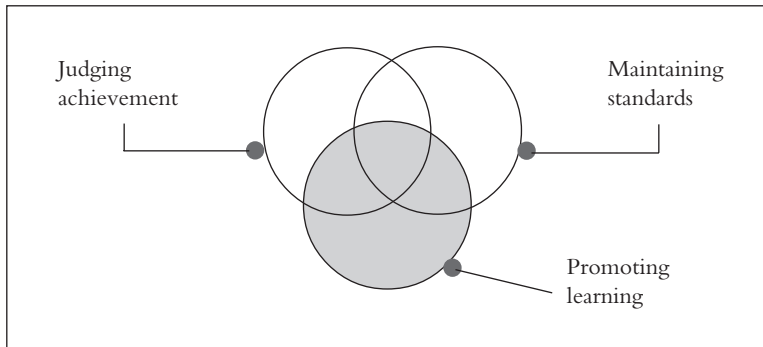
This book presents different techniques used by teachers across a range of disciplines in higher education. Each technique is concerned with assessment in some form. Each one is also designed to improve students' learning.

These techniques are more than simply good ideas. While they are valuable because they have demonstrated their worth in practice, how they contribute to learning fits within a framework for learning-oriented assessment that encompasses some of the best thinking and research on assessment and learning in higher education. This chapter describes the framework which helps to illuminate the practices presented in Chapter 3. Each of these practices is underpinned by some aspects of the framework.

### **'Learning-oriented assessment'**

We have coined the term 'learning-oriented assessment' (Carless, Joughin and Mok, 2006) to describe an approach to assessment which seeks to bring to the foreground those aspects of assessment that encourage or support students' learning. While we are used to thinking of assessment in terms of judgements about students' achievements, 'learning-oriented assessment' seeks to balance this understanding by drawing our attention to the crucial role that assessment can play in promoting productive student learning. Learning-oriented assessment is assessment designed to support learning — regardless of any other functions it may be performing, learning-oriented assessment is planned and implemented with the development of learning firmly in mind. Our conceptualization of learning-oriented assessment is developed further below.

Promoting learning, along with judging students' achievements and maintaining the standards of a profession or discipline are three core functions of assessment. A well planned assessment regime performs all three functions, holding them in balance and integrating them so that they substantially (and ideally totally) overlap. Figure 2.1 below illustrates these three functions.



**Figure 2.1** The main purposes of assessment

### *Learning-oriented assessment, summative assessment and formative assessment*

The terms ‘summative’ and ‘formative’ are commonly used to describe assessment when it is used for the purposes of judging achievement and promoting ongoing learning respectively. They are noted here because learning-oriented assessment encompasses both of these assessment functions. We saw in Chapter 1 that summative assessment can distort the learning process if it leads students to ignore important topics and to focus on lower-order outcomes. However, summative assessment can equally have a positive influence on what students focus on in their study and how they learn as they prepare for and undertake assessment for grades. When summative assessment is learning-oriented, that is, when it is designed with learning, as well as judging, in mind, it can direct students to concentrate on developing their understanding of important content while cultivating key intellectual and generic skills. As we noted in Chapter 1, when summative assessment is aligned with such learning outcomes, deep rather than surface learning is more likely to occur.

*Formative* assessment is always learning-oriented since its purpose is to identify students’ strengths and areas for improvement in order to shape their ongoing learning. The term ‘learning-oriented assessment’ highlights the need for such assessment. While formative assessment can take many forms, both formal and informal, one of the greatest challenges in higher education is to design *summative* assessment so that it performs a formative function.

### **The elements of learning-oriented assessment**

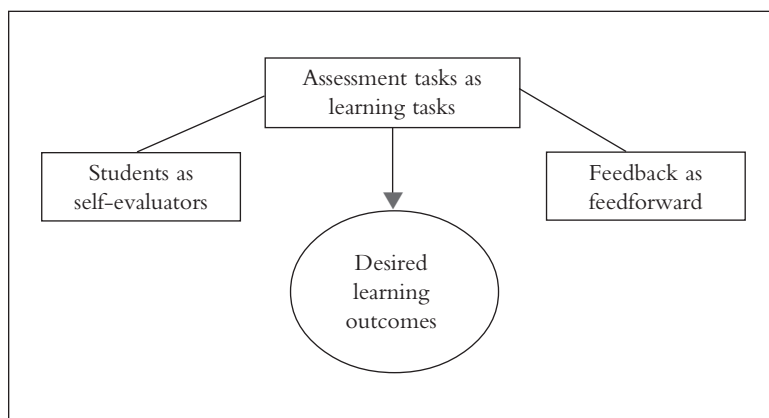
While the design of summative and formative assessment tasks are central to learning, learning-oriented assessment builds on and extends these notions (Joughin, 2005) so that for us, learning-oriented assessment is concerned with three things:

- designing assessment tasks that engage students in processes that lead to learning — what we term ‘assessment tasks as learning tasks’;
- involving students in the process of evaluating their own work and that of their peers, a skill that is an important part of effective learning, as well as being crucial in their later professional lives; and

- building complete feedback loops into learning so that students act on information received — the key concept here is ‘feedforward’, as students use information provided to progress their work and their learning.

While these three elements are at the heart of learning-oriented assessment, their ultimate value lies in how they lead to desired learning outcomes. Learning-oriented assessment focuses on the quality of student learning outcomes through applying the above three processes to help students achieve key disciplinary and generic understanding, values and skills.

Figure 2.2 sets out these elements of learning-oriented assessment in graphic form.



**Figure 2.2** Learning-oriented assessment

From the understanding of learning-oriented assessment outlined above, we can see that the key question in considering any particular assessment practice is “How does this assessment practice support learning?” We believe that an important part of the answer to this lies in the three elements of learning-oriented assessment which we will unpack in more detail in the following sections.

### **Assessment tasks as learning tasks**

We noted in Chapter 1 the powerful influence that assessment requirements have on students’ learning. Consequently, an effective way to channel student learning is by adjusting the tasks they are required to do, and the way they are encouraged to carry them out, so that these become prime ways of learning. In other words, assessment tasks are constructed so that they become learning tasks as well. ‘Assessment tasks as learning tasks’ is therefore the overarching element of our framework for learning-oriented assessment.

‘Assessment tasks as learning tasks’ work most powerfully when the process involved in completing the assessment task is actually the same as the learning process. An assignment that requires students to engage in a process of inquiry (see practice 4 in Chapter 3), a project that

can only be completed by research, peer discussion and the application of theory to practice (see practice 2, Chapter 3), or an essay that requires independent research and structured interaction with the lecturer (see practice 1, Chapter 3) are examples of learning processes that culminate in an assessed product. This close alignment of assessment tasks with learning activities is at the heart of Biggs's 'constructive alignment' noted in Chapter 1.

Designing assessment tasks as learning tasks is far from straightforward, for as we have seen in Chapter 1, some assessment tasks (for example, examinations) can fail to generate the kind of skills that are the espoused objectives of our courses. However, there are some points that we can usefully keep in mind in order to develop effective assessment tasks which engage students in learning activities and lead to high quality outcomes. These tasks are likely to have some, and possibly all, of the following characteristics:

- They are often closely related to some kind of 'real-life' activity, reflecting what students will need to do in their chosen field of practice.
- They are likely to provide some particular challenge and interest to students.
- They clearly and directly promote the knowledge and skills that the course requires, so students appreciate the purpose and value of the tasks.
- The tasks extend, rather than duplicate, what is done in class time.

Gibbs and Simpson have provided a good summary of how such assessment tasks support learning. They describe how assessment can be used to ensure that students do enough work, that this work is spread across the semester, and that it promotes good learning. They specify four conditions under which assessment tasks function as learning tasks:

- Assessed tasks capture sufficient time and effort.
- These tasks distribute student effort evenly across topics and weeks.
- These tasks engage students in productive learning activity.
- Assessment communicates clear and high expectations to students.

(Gibbs and Simpson, 2004)

### **Students as evaluators of their own work**

Once students are engaged in assessment tasks that promote their learning, the second element of our framework involves them in developing the capacity to evaluate the work they are doing as they complete these tasks. This capacity is important for two reasons: it is essential if students are to become independent learners who can monitor and improve the quality of their work while they are engaged in formal study, and, just as importantly, they need this capacity if they are to become lifelong learners and effective professional practitioners in the workplace.

Assessment processes are often something of a mystery to students, particularly when the assessment is always done by tutors, and when students have no real understanding of the criteria which are being used. Students can have many unanswered questions: What is the tutor looking for? What is good performance? What do I need to do to get a high mark? How do I know if I have met the required standards?

By involving students in the assessment process, students can take important steps in coming to grips with criteria and standards in their chosen field, learning what constitutes good work, and developing the capacity to evaluate the quality of their own work. Peer assessment and self-assessment are two of the best known and most useful practices for allowing this to happen. These practices become particularly powerful when students can compare their peers' assessment of their work to their own self-assessment of the work.

Assessment usually involves two kinds of activities. Firstly, it involves getting information about a person's knowledge, understanding, attitudes or skills. We usually do this by looking at their work, observing how they do certain things, or talking with them. Secondly, it involves having a sense of what that work should be like — what its different elements are and how well they should be done, or what we often term 'criteria' and 'standards'. Then we look at the gap between performance and standards, make judgements about the quality of the student's work, and suggest ways to improve it.

Involving students in assessment means engaging them in these processes, helping them to look at their own and others' work in a thoughtful and informed way, with a view to improving it. Sadler (1989), in his seminal article, described this process in terms of how students become evaluators of their own work through developing a sense of the standard of work they should be aiming for; comparing their level of performance with this standard; and taking action to close the gap between the standard and their own performance.

Involving student in their assessment in these ways has several benefits: it helps students to come to grips with the nature of good work in their discipline as they consider criteria and standards and apply these to work of varying quality; it helps students to develop the ability to evaluate their own work, something that will be crucial in their working lives; it helps students to understand how their work is assessed by tutors, letting them know more about how assessors' minds work, and what the assessment criteria actually mean in practice; in large classes or when a tutor's time is limited, it can provide an opportunity for students to receive a greater amount of timely feedback that can help them to review and revise their work; and it helps to develop a collaborative approach to learning.

The heart of self and peer assessment is not marking or grading, though sometimes this may be part of the process. The important thing is that students are actively reviewing their own work, providing feedback on their peers' work, and receiving and responding to feedback from others.

Self-assessment is often combined with peer assessment; many of the same processes and skills apply to both. Peer assessment is perhaps more common because it is a social activity which takes advantage of students' natural propensity to engage with their peers and the readily available opportunity to give and receive feedback to and from their peers. Self-assessment, by its nature, is often more of a private, individual activity, but one which can be developed and facilitated through classroom activities. In peer assessment, peer contributions may take the form of questions, comments or challenges. With self-assessment, it is the learners who are empowered to make a judgement about the value of the various inputs they have received and the direction they might take. As Boud (1995) has pointed out in another influential work on self-assessment, this process goes beyond strategies and techniques; it is a transformative process that changes how students see themselves and their learning.



Both self and peer assessment make important contributions to lifelong learning and lead us to propose another condition under which assessment supports learning:

- Students' involvement in assessment helps them develop the capacity to evaluate their own work.

Students' capacity to evaluate their own work has another particularly important benefit in terms of our framework for learning-oriented assessment: it enables students to make sense of feedback provided by tutors or peers and to act on this feedback as they seek to improve their work. This leads us to the third element of our framework.

### Feedback as feedforward

We noted in Chapter 1 that feedback is essential for student learning but that it is time-consuming to provide and is often received too late to be of maximum benefit to students. We emphasized that it needs to be forward-looking so that that it can improve students' learning and enhance their future performance on assessed tasks.

Feedback performs many important functions. It helps clarify what good performance is; it encourages teacher and peer dialogue; it supports self-assessment; it gives students quality information about their learning; it encourages self-esteem; and it provides opportunities for students to bridge the gap between current and desired performance (Nicol and Macfarlane-Dick, 2006).

How feedback works to improve students' learning seems to involve three main factors:

- Firstly, there needs to be an *appreciation* of the student's work, recognizing what has been achieved and where further development is required.
- Secondly, there needs to be an *explanation* of this appraisal, by relating feedback to the purpose of the work and to the criteria used in judging its quality. This explanation needs to be made in a way that can be understood by the student and that will encourage the student to pay careful attention to it. Opportunities for clarification, dialogue and ongoing discussion are often required for students to learn from the feedback provided.
- Thirdly and most importantly, there should be opportunity for *action* by the student based on what he or she has learnt from the feedback. This may be in a revised piece of work, or in the next assignment, but if it is the latter, the next assignment needs to follow reasonably promptly. It is probably beyond the capacity of most students if feedback needs to be acted upon several months after it has been received. This leads to a further principle that feedback should be *timely*; it needs to be received at a time that is useful to students and when they can act upon it to 'feedforward' to future work.

Feedback is typically provided by tutors, but students themselves are often effective providers of timely feedback that can be acted upon as outlined above. Some students provide insightful feedback, others less so. Student feedback may gain in promptness what it may lose in sophistication.

Gibbs and Simpson provide very helpful guidance in noting the conditions that need to apply

if feedback is to function effectively to support student learning. These conditions provide an illuminating backdrop to many of the practices presented in Chapter 3.

*Quantity and timing of feedback*

- Sufficient feedback is provided often enough and in enough detail.
- The feedback is provided quickly enough to be useful to students.

*Quality of feedback*

- Feedback focuses on learning rather than on marks or students.
- Feedback is linked to the purpose of the assignment and to criteria.
- Feedback is understandable to students, given their sophistication.

*Student response to feedback*

- Feedback is received by students and attended to.
- Feedback is acted upon by students to improve their work or their learning.

(Gibbs and Simpson, 2004)

## Learning-oriented assessment and learning outcomes

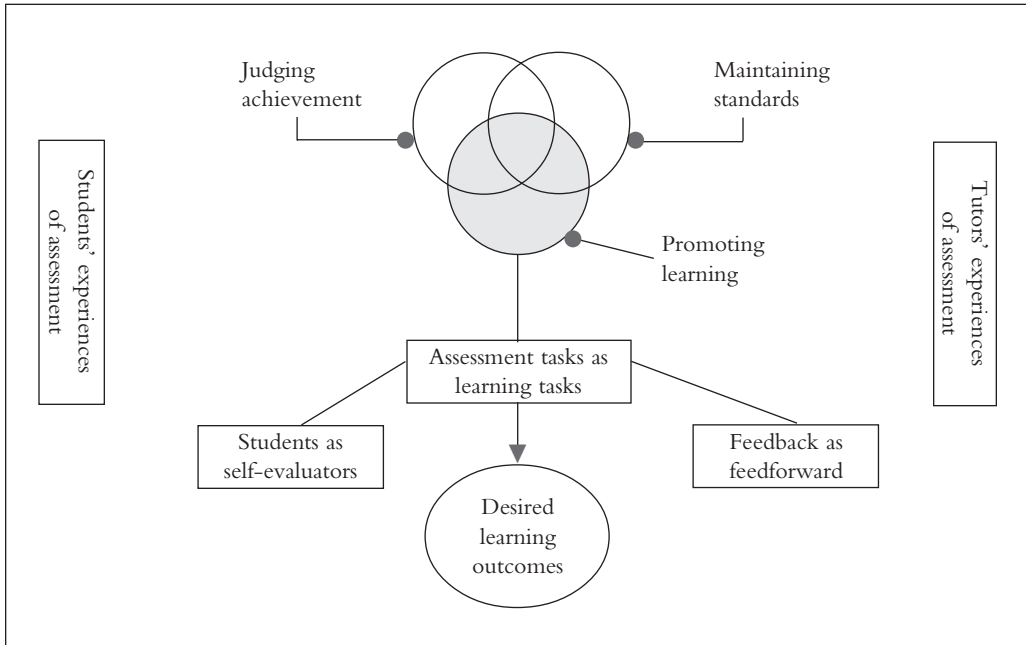
The three elements of learning-oriented assessment that we have considered so far — the design of assessment tasks as learning tasks, the development of students' self-evaluation capacities, and the use of feedback as an influential learning device — are powerful mechanisms for learning. However, they are not concepts that should be used for their own sake. They are important only when they are used to help students achieve the required learning outcomes of their particular courses, units and programmes.

We noted in Chapter 1 that important learning outcomes are likely to include both generic capabilities such as problem-solving and teamwork, and more specific outcomes related to a particular discipline or subject. Learning-oriented assessment is concerned with both levels of outcome. Discipline-specific outcomes need to be considered in the context of each discipline. On the other hand, generic outcomes are becoming increasingly important in higher education and are well supported by the assessment practices outlined in Chapter 3. Indeed, these outcomes provide the most appropriate framework for organizing the practices in that chapter.

## A consolidated framework for learning-oriented assessment

By amalgamating Figures 2.1 and 2.2 we now arrive at our framework for learning-oriented assessment (Figure 2.3). From the three main purposes of assessment, we have highlighted the learning purpose as being central to our aim of improving student learning. We have discussed the three core components of a learning-oriented approach to assessment and noted the central role of learning outcomes.

Mindful that learning-oriented assessment is far from being just a technical matter, we have included on the left and right hand sides the important student and staff perspectives on and experiences of assessment. Based on their previous experience and their beliefs about assessment,



**Figure 2.3** A consolidated framework of learning-oriented assessment

learning and teaching, tutors and students can understand and respond to assessment in a variety of contrasting ways. For example, students whose experience of assessment has been limited to traditional methods may be reluctant to accept innovative assessment methods. Tutors will need to explain and justify the rationale for a chosen strategy so that students can see how they will benefit from it. Tutors' capacity to be innovative is often constrained by their own limited experience of assessment formats. A core purpose of this book is to provide tutors with a variety of alternative assessment methods that can be adapted or customized for their context. Learning-oriented assessment therefore needs to take into account how students and tutors alike experience assessment and help them develop their capacity to use assessment in new ways to promote learning. There is clearly much scope for greater collaboration between staff in sharing their assessment practices and for enhancing the opportunities for staff to expand their repertoire of assessment practices through professional development activities.

We believe that this framework provides a useful conceptualization of how assessment can serve learning better. How it is implemented in practice is illustrated by the techniques in Chapter 3. Many of these techniques support learning in several ways and each is useful in promoting particular generic outcomes. Each technique also highlights aspects of the learning-oriented assessment framework. Some particularly emphasize the nature of the assessment task as learning task, with the assessment task carefully constructed in order to give structure and direction to students' learning activities. Some explicitly involve students in evaluating their own work and/or that of their peers. Others pay special attention to feedback processes by ensuring feedback is timely, helpful and acted on. Of course, these aspects are not mutually exclusive and many practices exhibit more than one of them. However, each practice does tend to highlight one aspect. For

readers who may wish to explore a particular aspect of learning-oriented assessment, Table 2.1 draws attention to elements of learning-oriented assessment that are highlighted in each practice found in Chapter 3.

**Table 2.1** How specific assessment practices support learning

<b>Assessment tasks as learning tasks</b>	<b>Students as self-evaluators</b>	<b>Feedback as feedforward</b>
1, 2, 3, 4, 10, 14, 18, 19, 26, 27, 31	11, 15, 20, 21, 22, 23, 24, 25, 32, 33, 34	5, 6, 7, 8, 9, 12, 13, 16, 17, 28, 29, 30, 35, 36, 37, 38, 39

## Summary

This chapter has presented our conception of learning-oriented assessment. We view assessment as supporting learning when tasks are focused on sound learning, when students are involved in the assessment process in ways which promote their own self-monitoring ability, when feedback is forward-looking, and when all of these factors are moving students towards the achievement of worthwhile learning outcomes. In this way, the assessment practices in Chapter 3 are supported by a framework of general principles. These principles can be used to generate and validate new techniques congruent with the framework.