Assessment and learning: contradictory or complementary?
David Boud
University of Technology, Sydney

There is probably more bad practice and ignorance of significant issues in the area of assessment than in any other aspect of higher education. This would not be so bad if it were not for the fact that the effects of bad practice are far more potent than they are for any aspect of teaching. Students can, with difficulty, escape from the effects of poor teaching, they cannot (by definition if they want to graduate) escape the effects of poor assessment. Assessment acts as a mechanism to control students that is far more pervasive and insidious than most staff would be prepared to acknowledge. It appears to conceal the deficiencies of teaching as much as it does to promote learning. If, as teachers and educational developers, we want to exert maximum leverage over change in higher education we must confront the ways in which assessment tends to undermine learning.

I have been reinforced in my view of the importance of assessment considerations by the work of my former colleagues in the Professional Development Centre at the University of New South Wales. Sue Toohey teaches the subject on assessment in the postgraduate course for university teachers. At the beginning she asks them to write an autobiography focusing on their experiences of being assessed. The results of this are devastating and the students can’t stop themselves from referring to it in other classes. They emerge from the exercise saying to themselves that they must not treat their students in the same ways in which they were treated. It is clear from this that even successful, able and committed students—those who become university teachers—have been hurt by their experiences of assessment, time and time again, through school and through higher education. This hurt did not encourage them to persist and overcome adversity as some of our more intellectually muscular colleague might argue: it caused them to lose confidence, it dented their self-esteem and led them never to have anything to do with some subjects ever again. Now, some of these incidents were connected with abuses of power by teachers and could not be justified on any grounds, but others were artefacts of everyday assessment practices which we regard as perfectly normal. If assessment has such a profound effect on the successes of the system, how much greater must be the negative effects on their less academically accomplished peers?

Interest in assessment in higher education has been at a low point for about a decade and it has only been in the 1990s that it has started to pick up again. I have been surprised, in coming back to it after a long absence, that it is not the measurement-driven and rather stagnant area that I remembered it to be, but it is now at the heart of considerations of teaching and learning. It actually always was at the heart of such matters, but in the hands of assessment specialists it was easy to gain the impression that it required a knowledge of particular statistical techniques and test-construction that didn’t have much relationship to acts of learning. The dominant discourse in the literature referred to reliability, validity, discrimination (as a desirable feature, of course!) and difficulty.

That has now changed dramatically. Assessment is back, centre-stage, and is of wide interest and concern. The assessment load created by increasing numbers of students and the shift in thinking towards competency frameworks are but the most prominent of many pressures. This is not to say that discussions of teaching and learning are always central to discussions of assessment, but it does mean that we cannot possibly ignore assessment issues: assessment certainly aids or inhibits our endeavours in improving teaching and learning.

A concept which became part of the assessment discourse and which influenced my earlier thinking was Michael Scriven’s (1967) distinction between formative evaluation (to improve) and summative evaluation (to decide). These terms were translated on this side of the Atlantic into formative and summative assessment and used to discuss the importance of making sufficient provision for feedback to students as distinct from marking or grading which did not provide useful information to them. At times, the discussion seemed to imply that it was
possible to make a clean separation between the two and that one could provide separate assessment tasks for formative and summative purposes. This did not prove to be a fruitful path as the dominance of summative assessment in the minds of students (and in the practices of staff) was so great that it tended to swamp the more modest endeavours of formative assessment. Now we see that we must consider both aspects together, at all times. Too often assessment is led by the needs of summative judgement, not learning. It is ironic that it doesn’t even serve the needs of the former very well.

My discussion starts from the premise that assessment for accreditation or certification cannot be separated from assessment for learning. Assessment always leads to learning. But the fundamental question is, ‘what kind of learning?’ What do our acts of assessment communicate to students? I hope to show that assessment and learning are in an uneasy state of tension at present but that it is possible to move towards complementarity. The starting point is: what do students learn from assessment? From there assessment is viewed in terms of consequences, the development of thinking about assessment is considered and the important, but neglected, issue of language in assessment is explored.

Assessment always leads to learning. But intended or not?

Every act of assessment gives a message to students about what they should be learning and how they should go about it. The message is coded, is not easily understood and often it is read differently and with different emphases by staff and by students. The message is always interpreted in context and the cues which the context provides offer as much or more clues to students than the intentions of staff, which are rarely explicit.

Good assessment is not just a matter of finding the ‘appropriate’ method and using it sensibly in conjunction with given subject matter. There are always unintended consequences in assessment. Students will learn to adopt surface approaches to study in some circumstances and will adopt deep or strategic approaches in others. In so doing they will be prompted partly by the forms and nature of assessment tasks. They will learn that, in order to maximise their marks, they should use rote learning in many circumstances, even when we might believe that this would distract them from the most important aspects of the course. This response—and other undesirable ones—won’t only be a function of the assessment tasks set, but of all the experiences of assessment students have had in the past. [See Kohn (1993), for example, for discussion of the negative long term effects of instrumental approaches to assessment and appraisal]. If, for example, they get the idea that memorisation works for multiple-choice tests, then they will persist in that strategy even when reassured that this won’t be helpful. Students are not simply responding to the given subject—they carry with them the totality of their experiences of learning and being assessed and this certainly extends far beyond concurrent and immediately preceding subjects.

Assessment is the most significant prompt for learning. One of the most important outcomes of research on student learning is the recognition that learning must fundamentally be seen as relational (Ramsden 1987). That is, learning is a function of both teaching and the context in which it occurs. It is not a matter of learners engaging with a body of knowledge to which they have been introduced, but of how this is interpreted by them and the actions which they take as a result of these interpretations. Assessment can encourage passive, reproductive forms of learning while simultaneously hiding the inadequate understanding to which such forms of learning inevitably lead (Entwistle & Ramsden 1983, Ramsden 1988)

This means that in terms of assessment student approaches to learning are a function of:
• the intrinsic qualities of the form of assessment being used;
• the ways in which the assessor translates the material to be assessed into the given format and selects assessment tasks appropriate for the subject and the specific learning goals, and most importantly;
• how the student interprets the task at hand and the context of the assessment.

The latter interpretation is not just dependent on the form of the assessment process, but on how these tasks are embedded within the total context of the subject and within the total experience of the course and of university life. The perceptions and interactions of a student are more important to learning than what staff take for granted as the ‘reality’ of the assessment. These perceptions cannot be assumed: they are only available from the students themselves.
But more is needed. Students experience the interaction effects of one form of assessment on another. In any given month they may have to complete ten assessment tasks, in another month only one. The ways in which they approach each of these will be influenced by the others. A task which is intrinsically interesting and which may be approached meaningfully at any other time may be given short shrift when it is located among a thicket of examinations. Very little attention has been given to the compounding effects of assessment even when we know that it is the total array of demands in a given period which influences how each one is tackled.

**The criterion of consequences**

An important concept related to this notion of learning that can help us in our discussions on assessment relates to the consequences of any given act of assessment. It has recently emerged in the US and was prompted no doubt by the rise of interest in the philosophy and ethics of consequentialism (Pettit 1993). *Consequential validity* refers to the effect of the test or other form of assessment on learning and other educational matters (Messick 1989, Linn, Baker & Dunbar 1991). It prompts the question, ‘what are the broader consequences of a given assessment activity beyond those which are immediately evident?’ Consequential validity is high when there is a positive backwash effect on learning and low when it encourages ways of learning which are counter to what is desired. It points to links between learning and assessment; it is not just another new self-referential test statistic. We should develop assessment procedures of high consequential validity which, for example, encourage students to adopt good study approaches, learning what it is most desirable for them to learn.

There is growing interest in exploring the dimension of consequences. While they have not been directly using the conception I have just introduced, Graham Gibbs and his colleagues at the Oxford Centre for Staff Development have been promoting the use of action research to develop deep approaches to learning (Gibbs, in press). A vital part of this work is finding out what it is that students actually do. We need to know what approaches to learning students are adopting, what students’ expectations are of different assessment tasks and what they choose to do and what they choose not to do in response to the different assessment regimes which are introduced. There is no substitute for knowing our students learning practices well enough to be able to intervene in helpful ways. This is not just a principle of good assessment, but is, of course, fundamental to our role in fostering learning.

Encouraging deep approaches to learning is one aspect we might explore in considering consequences. Another is the impact which assessment has on the capacities and skills students have in being able to assess themselves. This is of greater long-term significance than the effect of any specific subject-matter learning. Students must leave us equipped to engage in self-assessment throughout their professional lives. They need to be able to make reliable judgements about what they do and do not know and what they can and cannot do. Too often staff-driven assessment encourages students to be dependent on the teacher or the examiners to make decisions about what they know and they do not effectively learn to be able to do this for themselves. Well-designed assessment practices should be oriented around the key concepts and ideas that students should be able to deal with, but the devastating phenomenographic research on concept acquisition in first year classes (for example, Dahlgren 1984) shows that courses tend neither to develop basic concepts well, nor use assessment tasks which allow staff or students to know whether concepts have been learned.

At present, students learn most about self-assessment through their own informal second-guessing of their performance on the assessment tasks which are set but this is rarely adequate. Even the most able, cue-seeking students (Miller & Parlett 1974) would find it difficult to discern, and to work out how to apply, the criteria implicit in much of the assessment to which they are subject. We need to find a variety of ways of giving practice to students in self-assessment. In particular we need to develop those self-assessment activities in which they, and staff, are required to engage with the criteria which distinguish acceptable from unacceptable performance and to actively encourage, rather than discourage self-assessment—as traditional assessment does (Boud 1991).

**Developments in assessment thinking**

In considering changing views of assessment, I have found it useful to think of the evolution of our ideas in terms of a number of stages of development. [See Eisner (1993) for a different
formulation emphasising US developments]. Each stage emerged during a particular period of time and within each there were particular preoccupations among those discussing assessment. In present day discussions we can see concerns of each stage appearing and being influential. While each arose as a result of particular concerns at the time, we presently exist with the conceptions from different eras being held simultaneously in any given institution—often side by side in staff in the same course. I want to outline these stages to lead to what I believe to be an emergent conception of assessment which is qualitatively different from those generally held now in higher education.

- **Conventional assessment**
  It was taken for granted that assessment follows teaching and that the aim of assessment is to discover how much has been learned. Learning was viewed quantitatively in terms of the amount of the teaching which had been absorbed. There was little interest in the specifics of which questions had been ‘correctly’ answered and the unseen examination—the most favoured method—frequently allowed for some choice. Conventional assessment follows closely traditional patterns of assessment practices in a given discipline area: there are differences between assessment practices in different fields of knowledge, but this is not normally a matter of general interest.

  While other forms of assessment, particular those which are used in continuous assessment—for example, reports, essays and short tests—now form part of the conventional pattern and have been absorbed in the conventional conception, there has not been any overall raising of the awareness of levels of sophistication among staff about assessment to accompany this. The adding of marks or scores which are incommensurable is a common and unquestioned practice.

- **Educational measurement**
  Educational measurement takes for granted the basic assumptions of conventional assessment: that is, testing follows teaching, the links between subject content and assessment technique are unproblematic and assessment is quantitative. The main concerns of educational measurement are to make assessment more rational, efficient and technically defensible. Ideas drawn from the field of psychometrics are part of the vocabulary.

  Although measurement concepts have mainly affected external public examinations, many of which have now become quite psychometrically sophisticated, the influences have crept into higher education along with methods such as multiple choice testing which is the only method from this stage of assessment thinking which has had a significant impact. The use of multiple choice tests brought to the fore considerations of reliability and validity and the formal notion of question difficulty.

- **Competency and authentic assessment.**
  Concerns about validity heralded the new era which we have now entered. Was there correspondence between what was assessed and what students were expected to do after they had graduated? Are existing tests the best vehicles for determining whether students have an appropriate understanding or can perform at a suitable standard? More radical concerns were raised about whether assessment revealed any useful information about what a given student could actually do and whether assessment had a negative backwash effect on learning. The earliest signs of the new era were small shifts away from norm-referenced towards criterion-referenced assessment. Criterion-referenced or mastery tests in themselves are not adequate because the problems are often contrived and the cues are artificial. They can unwittingly reinforce the idea that mere right answers put forth by going through the motions are adequate signs of achievement. What are required are authentic assessments: “contextualised complex intellectual challenges, not fragmented and static bits or tasks” (Wiggins 1989: 711).

  Some implications from new thinking about competency are starting to have an impact, although not in the obvious way. It is not the competency movement which focuses on lower-level vocational skills and potentially reductionistic formulations of objectives which is significant, but the moves by professional bodies to ensure that there is closer correspondence between higher education courses and professional practice (Gonczi 1994).
It is the notion that what is important are learning outcomes, no matter how they were achieved and the specification of assessment tasks which indicate outcomes independent of the preparation for them. And it is the use of more naturalistic in situ, multifaceted, forms of assessment which provides the new challenge.

In higher education it does not necessarily mean a shift to more external forms of assessment—indeed it might not mean this at all—but it will mean that the cosy and unquestioned relationship between a course and the assessment ‘which forms part of it’ will be open to critical scrutiny from an outcomes-oriented perspective. The positive aspect is that assessment will be related to outcomes in a discipline or field of practice which can be publicly justified—to colleagues, to students and to external bodies. The potentially negative aspect is teaching for the test, but this should not be as bad as it once was if the test is authentic and well-constructed.

Towards an holistic view of assessment

Whatever the claimed motives of assessment in the first two conceptions above, the de facto priority was forms of assessment which compared individuals with each other rather than engaged in assessment with respect to criteria or notions of competence. The issue of the links between competence, learning and assessment have now come to prominence. Good assessment now is that which both closely reflects desired learning outcomes and in which the process of assessment has a directly beneficial influence on the learning process.

This is a major challenge for all staff. They will need to become far less the test-setter thinking of items to test knowledge acquisition or the marker processing large numbers of examination scripts. They will need to become researchers of students’ perceptions, designers of multifaceted assessment strategies, managers of assessment processes and consultants assisting students in the interpretation of rich information about their learning. There will have to be less assessment for staff to process if they are to have time to make these qualitative changes. But, this will need to be done so that there will not be fewer opportunities for students to practise and gain feedback. Here is another important role for self and peer-assessment.

We are now seeing moves to a holistic conception: no longer can we think of assessment merely as the sum of its parts, all of which can be considered separately or make a distinction between the work as a whole and particular aspects of it (eg. Hager, Gonczi & Athanasou 1994). We need to look at the impact of the total package of learning and assessment and not simply at fragments of assessment. This means that we must inevitably look at the profile of assessment as students see it, from the point of view of the course, the total experience of the whole. The move to modularised courses which operate as a smorgasbord makes this task much more difficult, but it is a challenge which must be faced.

The discussion so far has been posited on traditional power relationships between student and teacher/assessor, but in an holistic conception this assumption must also be challenged. The very act of a person or authority making unilateral and final judgements over another has major consequences for learning. If students are to become autonomous and interdependent learners as argued in statements of aims of higher education (for example, see Boud, 1988), then the relationship between student and assessor must be critically examined and the limiting influences of such an exercise of power explored. The new agenda for assessment research needs to place this as a high priority if we are not to be distracted, as has so often occurred in the past, by technicalities.

The language of assessment

The final issue to be considered relates to the whole of assessment and it is particularly important because it concerns an aspect of our practice in all aspects of education which is all pervasive but invisible most of the time. Earlier, I drew attention to the importance of student perceptions of assessment and the interaction of students with learning and assessment, but there is an additional aspect. It is a key factor in a lot of the hurt that we have all experienced in our careers as assessees. It is the effect of the language we use in talking about and making assessments.

Not surprisingly, in an act which involves judgement, we use judgemental language. Ironically, it is this which creates much of the difficulty. We judge too much and too powerfully, not
realising the extent to which students experience our power over them. Learning is an act which necessarily leaves us vulnerable: we open ourselves to changes in the ways we see the world, not knowing where we shall end up. We might find a secure spot or be exposed. Rarely are we confident about what we know during the early stages (which include most of the time we are being taught)—the very stages at which we are mostly likely to receive the comments from a teacher. We know how little we know and we fear the depths of our ignorance. To have someone come along and tell us that, for example, what we are doing is all wrong or that we will never do it well or that we haven’t read the book when we thought we had, is a direct attack on us when we are least able to cope with it. In treating students in such ways, and, indeed, with some students by using far less direct forms, we go beyond the realm of valid statements into the world of abusive language. It abuses them in the sense of taking undue advantage of them by virtue of our position, of betraying them. It does not seem abusive to us, but to those on the receiving end, it is profoundly so.

Too often we fail to make absolutely clear the distinction between giving feedback on a specific product which has been produced by a person and judging them as a person. We write and say things which can readily be taken as comments about the person rather than their work and in doing so we link in to the doubts and uncertainties which they have of themselves and our remarks are magnified at great cost to the self-esteem of the persons concerned.

We have to be especially careful about using what Rorty terms ‘final vocabulary’. This is the use of vocabulary which uses terms such as ‘good’, ‘right’, ‘rigorous’, ‘professional standards’ and the like (Rorty 1989; 73). Even though it is apparently positive, it is language which leaves no room for manoeuvre. It has the final say. It classifies without recourse to reconsideration or further data. And it does not allow for other possibilities. Not only are terms such as these, even more so in the negative or implied negative versions, damaging, but they communicate nothing of substance. They are empty rhetoric, more at home in the editorial posturing of the conservative press than in any discourse about learning.

I suspect we use them because they come easily to hand; they help us avoid having to engage with the substance of what we are commenting on and they give the impression that we are concerned with quality and standards without anything of quality being said. We must break any bad habits we might have acquired and choose our words carefully with an eye on the consequences. If we do this, then we can provide something valuable which learners can use to change what they do and not have to worry about defending themselves from the (hopefully) inadvertent use of words which oppress. We need to avoid the simplistic response of cleaning up our terminology while retaining the same universalist sentiments. It is missing the point to steer away from obvious final vocabulary through rephrasing comments into more ‘correct’ forms. The form betrays the intention; it is the intention which must be changed.

One way to begin to address this problem is to stick with descriptive feedback which conveys in detail what from our explicitly subjective point of view is and is not manifest in the work, not expressed as a statement by some apparently absolute authority about what the learner can and cannot do. We need not only to avoid the negative global and abstract words of judgement, but the positive as well, for implied negatives are always close at hand and learners do read the comments on other people’s work. Grades are a form of ‘final vocabulary’ and if they cannot be avoided they must be directly linked with rich statements of competence which meaningfully elaborate on what the grade purports to summarise.

Another important way of avoiding final statements is to shift away from the practice of assessment which occurs only at the end of a period of study or which does not allow for the possibility of response. If dialogue between staff and students is a normal part of assessment practices, there is often a human incentive to avoid the grosser forms of final vocabulary and other dismissive language and there is the opportunity for rich and detailed information to be exchanged that is helpful for both parties. The use of negotiated profiles of achievement also has potential value here. Where they provide specific, descriptive information on achievements they are worthwhile but when they read like a collection of unsolicited testimonials—the home of final vocabulary—they will be of use to no one.

There are, of course, forms of oppression in teaching and assessment which inappropriately and offensively discriminate between individuals or groups in ways which are anathema to academic
purposes and which directly act to inhibit the achievements of students. This is a matter of great importance which needs to be explored further in the assessment context, but a useful starting point is to examine the differential use of the types of language to which I have just been referring. I am not referring here just to obviously offensive racist remarks, the apparent invisibility of certain group members or the issue of gender-inclusive language—these are some of very many important aspects of this issue—but the use also of illustrations and examples which favour members of dominant groups, materials used in culturally insensitive ways and assumptions made about learners on little more than their appearance or apparent background. These are matters which deserve far greater attention in all aspects of academic work as the evidence of the deleterious effect of such matters on learning is building rapidly. (See, for example, Hayes & Colin 1994, Luke & Gore 1992, Pettman 1991, Thomas 1990)

Taking the discussion further

The issues raised here are not ones that allow for ready solutions, but they are matters with which staff in higher education need to engage if improvements in the quality of assessment and student learning are to be made. To assist in the process of further discussion the accompanying checklist aims to provide a prompt for the consideration of assessment issues in the context of a particular course. In a few cases items which go beyond the earlier discussion have been included to balance the list and items which are commonly discussed in assessment texts have been omitted.

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References

**How should we judge assessment? Questions to prompt critical reflection**

**Focus and interpretation of assessment**

1. Are assessment tasks oriented towards the world external to the course, i.e. not simply self-referential?
   - How are they related to the central outcomes desired as part of education for a given discipline, field or profession?
   - Are assessment tasks interpreted by students in the ways assumed by staff, i.e. do both parties have the same perceptions about the capabilities to be exercised and ideas and concepts to be engaged?

**Contribution of assessment to overall learning goals**

2. In assessment tasks are learners commonly required to engage in the whole of a process or only in fragments (e.g. problem-formulation as well as problem-solving)?
   - Is as much emphasis to be given to the strategy and process of what is required as to the specific result?
   - Can each separate act of assessment in itself be credibly regarded as a worthwhile contribution to learning?
   - Does the totally of assessment tasks across subjects adequately portray what is most important for learning in the course?

**Consequences of assessment**

3. What are the actual consequences (intended and unintended) of any given act of assessment: on student learning, on teaching, on the curriculum?
   - What are the consequences of the total diet of assessment experienced by any given student: on the student, on staff, on the course?
   - In particular, does assessment act to encourage quality learning throughout a course (e.g. deep/meaningful approaches to study) and discourage undesired learning practices (short-term memorising for tests)?

**Contribution of assessment to lifelong learning development**

4. Does the range of assessment tasks leave students better equipped to engage in their own self-assessment now and in the future?
   - Is the development of student autonomy necessarily encouraged through an overall assessment strategy for a course which takes account of the demands of each subject?
   - Are students able to avail themselves of sufficient opportunities to shape assessment tasks and requirements (including assessment criteria) to meet their own needs and interests (e.g. through negotiating specific assessment tasks)?

**Appropriate language and assumptions of assessment**

5. Is ‘final vocabulary’ avoided in statements of assessment (e.g. is feedback about particular task-related accomplishments emphasised and abstract judgemental vocabulary excluded at all times)?
   - Do assessment activities make assumptions about the subject matter or the learner which are irrelevant to the task and which are differentially perceived by different groups of students (e.g. use of unnecessarily gender-specific examples, assumptions about characteristics, etc.)?

**Portrayal of accomplishments**

6. Does assessment lead to the production of a profile or other form of documentation which fully and fairly portrays the accomplishments of a student and which is prepared in collaboration with the person involved?
   - Are such accomplishments sufficiently contextualised to enable readers to draw meaningful conclusions from them?

**Monitoring assessment and promoting good practice**

7. Is assessment-related work a productive use of time for all those involved (e.g. student and staff learning leading to more effective practice in the future)?
   - Are all staff confident in their understanding and skilled in implementing assessment which takes account of the issues considered above?
   - Are there assessment guidelines or policies agreed by staff which address the kinds of issues discussed here?
   - Are assessment practices and their effects given as much attention in staff discussions and formal review processes as content and staffing matters?