Innovative Assessment in Higher Education

Edited by CORDELIA BRYAN and KAREN CLEGG
Throughout higher education, assessment is changing, driven by increased class size, changing curricula, and the need to support students better. At the same time assessment regulations and external quality assurance demands are constraining assessment options, driven by worries about standards, reliability and plagiarism. This book is about the difficult process of changing assessment in sometimes unhelpful contexts. More than a ‘how to do it’ manual, *Innovative Assessment in Higher Education* offers a unique mix of useful pragmatism and scholarship.

Key features include:

- exploration of the rationales behind different kinds of innovation in assessment
- discussion of the complex assessment contexts in which teachers attempt to innovate
- contextualisation of innovation in assessment within a range of academic settings
- theoretical and empirical support for innovations within higher education
- case studies illustrating the problems encountered with traditional assessment methods

*Innovative Assessment in Higher Education* is an enquiry into how and why we innovate in assessment and what practices ‘work’ in different contexts and cultures. A vital resource for higher education teachers and their educational advisors, it provides a fundamental analysis of the role and purpose of assessment and how change can realistically be managed without compromising standards.

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Assessment probably provokes more anxiety among students and irritation among staff than any other feature of higher education. It occupies a great deal of time that might otherwise be devoted to teaching and learning, and it is the subject of considerable debate about whether it is fair, effective and worth spending so much effort on. Assessment is a topic about which people have strong opinions, though whether those opinions are backed up by a good understanding of what it is and how it works is less certain.

There is no doubt that many students and teachers would prefer assessment to be different to what they currently experience. However, in what ways should it be different? What should it take into account? Which directions should it pursue? And how can changes be implemented? Assessment seems such a fixed and given part of the educational scene that it might appear to be less susceptible to change than most other features of higher education.

But while this might once have been true, it is not the case now. We are probably seeing more substantial shifts in assessment policy and practice than have ever occurred before. These are being driven not just by the desires of participants for change in assessment – such desires have been present for many years without it making much difference – but by the external influences on higher education institutions for accountability, for responsiveness to changing employment conditions and by the increasing power of consumers. Governments are requiring universities to justify their practices as never before, employers and professional groups are placing expectations on institutions to deliver graduates who can more effectively cope with the world of work and students are starting to realise that they can have considerable influence when they are contributing a greater proportion of university budgets.

These pressures are being played out in complex ways and it will be some time before we can clearly discern what their overall effect will be. What is clear, however, is that they are leading to many innovations in higher education courses in general and in assessment in particular. These innovations are moving in a number of different directions. First, they are generating alternatives to traditional assessment practices that were once dominated by the unseen examination and the standard essay. These practices have proved unable to capture the range and nature of the diverse learning outcomes now sought from courses. Second, they are
involving students more actively not only in teaching and learning activities, but in assessment itself. Society today demands more than passive graduates who have complied with a fixed assessment regime. It wants people who can plan and monitor their own learning and do so without continuous prompting from others. Third, they are generating new forms of portrayal of outcomes. A standard honours classification or a set of grades communicates little to employers or to those admitting students to further study. How can students present what they know and do so in ways that others will understand and which are validly recorded? Fourth, they are recognising that assessment itself has a powerful influence on learning and that changes to assessment may have a greater influence on students’ learning than other changes to the curriculum. Assessment innovations are therefore needed to improve the quality of learning outcomes.

The contributors to this book are some of the leaders of change in assessment in higher education in the UK and elsewhere. They are pioneering new ways of thinking about assessment and new forms of assessment. They are responding to the changing environment and developing specific innovations to meet a variety of the needs identified above. They are doing so within a system that is not well funded and with colleagues that may not fully appreciate the need for many of these changes.

This collection points to new directions in assessment and provides illustrations of important initiatives. The entire area of assessment is in a state of flux and it is not clear how it will settle down from the current flurry of activity. The contributors to this volume show how they have been thinking about these issues and illustrate what they have put into practice. They also offer suggestions to stimulate further innovation in assessment practice. They do not provide recipes to follow, but new perspectives on problems. By engaging with them we can gain greater understanding of the issues we ourselves face.

Cordelia Bryan and Karen Clegg have done an excellent job in bringing together a stimulating range of chapters in an accessible form. A major strength of the collection is the work of Graham Gibbs and the accounts from various projects that have been stimulated by him and his colleagues in the Assessment Project Network. It is through the collaborative work of this network that the conceptual underpinning for the book evolved. In his two early chapters Gibbs takes a characteristically pragmatic and thoughtful approach to setting the scene and articulating how assessment frames learning. He regards the experience of students as central to what we should be doing in education and examines how assessment can aid learning and shape students’ experience in positive ways. He places particular emphasis on the role of feedback and the need to improve the quality of information that students get about their work.

The editors and contributors share my own view that assessment advocates have ignored the consequences for student learning for too long. Assessment has been seen almost exclusively as an act of measurement that occurs after learning has been completed, not as a fundamental part of teaching and learning itself. In the past, by isolating assessment we failed to realise that it can have a very negative effect on student learning and can encourage students to do things that are
counterproductive to their long-term interests. It also led to courses that did not utilise the positive influences that assessment can have on focusing students’ attention on the most important concepts and practices they are studying. Righting the presently very skewed balance between assessment for measurement and certification and assessment for learning is an important and strong theme throughout this book.

In practice, innovating in assessment does not mean inventing assessment activities that no one has ever used before. Rather, activities need to be innovative in the context of the course and the experience of students so that students respond to the task in hand and not to their preconceptions of what a particular assessment method does. That is why books like this are important. They enable us to extend our repertoire of approaches and stimulate us to consider ways of designing assessment that addresses needs for which our present approaches are inadequate.

Finally, there is one important observation to make about how a reader should approach a set of new ideas in this area. In assessment practice the devil is always in the detail. Most innovative approaches fail not because they do not represent good ideas but because their implementation has been inadequately thought through. At the end of the day what makes a difference is exactly what a student does and how they experience what they do; it is not the intention of the teacher that counts. Students have been trained by many years of schooling to read tasks carefully and take them literally if they are to do well. This applies as much to innovative approaches as it does to the conventional essay question. If there are ambiguities in what is required by a task, if the boundaries are unclear, if the nature of what is to be produced is obscure, then the assessment activity is not likely to be effective. The implication of this is that when using approaches to assessment that students are likely to find unfamiliar, as is the case with many examples in this book, it is often worthwhile to err on the side of explicitness. The challenge in this is to construct an assessment task that is clear without trivialising a complex activity by turning it into a behavioural checklist.

Another level of detail should also be considered. It is common for a new approach to assessment initially to be less effective than anticipated. This is because it often requires several iterations before a new idea or new approach can work in one’s own context. There are many factors to be taken into account and it is only through adjustment over time that really effective practices can be developed. It is in marrying the high-level concepts of assessment for learning with the micro-details of implementation that the art of good assessment practice lies.

In the end, a focus on assessment of all kinds is important because, as I have suggested elsewhere, students may well escape from poor teaching through their own endeavours, but they are trapped by the consequences of poor assessment as it is something they are required to endure if they want to graduate. The more we can engage students in assessment activities meaningful to them and which contribute to their learning, the more satisfying will be their experience of higher education.

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Acknowledgements

This book has been a genuine labour of love. It is underpinned by our shared values to enhance the learning experience and to recognise both the limitations and power of assessment to change lives. It has been a pleasure to work with some of the leading authors and practitioners in the UK and beyond, all of whom are committed to exposing traditional assessment methods to scrutiny and sharing their own ideas and practices in an attempt to improve assessment and learning. We would like to thank all the contributors for their hard work and diligence in keeping to deadlines: we couldn’t have done it without you. Thanks also to Helen Pritt at Taylor and Francis for supporting us in our first collaborative endeavour.

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Introduction

Cordelia Bryan and Karen Clegg

It serves no useful purpose to lower our educational aspirations because we cannot yet measure what we think is important to teach. Quite the contrary, measurement and assessment will have to rise to the challenge of our educational aspirations.

(Cross in Crooks, 1988: 470)

Measuring achievement has become the obsession of higher education. We use terms such as ‘deep’ and ‘surface’ to describe approaches to learning but more precisely they are approaches to assessment. Research of the last twenty years provides evidence that students adopt strategic, cue-seeking tactics in relation to assessed work and we know that in the UK at least, academic staff pursue research funding and publications with promotion and the research assessment exercise (RAE) in mind. Whatever we may think, assessment has become the currency with which we trade; the better the grade, the bigger and better the reward.

Acknowledging the current obsession with measurement, Innovative Assessment provides a systematic attempt to redefine assessment as an instrument of liberation. It offers an antithesis to the old claims of objectivity and reliability in assessment and for some that will make uncomfortable reading. It makes the case that innovative assessments should enhance and enable self-regulated learning and judgements, rather than merely act as instruments of justification, measurement and limitation.

Innovative Assessment in Higher Education is a collaborative effort which enquires into how we innovate in assessment and what practices ‘work’ in different contexts and cultures. It provides a fundamental analysis of the role and purpose of assessment and how change can realistically be managed without compromising standards. Contributors reflect the active, organic nature of assessment and its relationship to student learning. Innovative Assessment is about continually reviewing and reflecting on current practices so as to enhance the learning experience. It sets out an agenda for innovation in assessment and explains why it is justified given the constraining nature of:

• existing assessment regulations;
• quality assurance procedures;
• concerns about standards and fairness, plagiarism and cheating;
• conservative student expectations;
• academic traditions;
• increased class sizes;
• reduced resources;
• diverse types of less well-prepared students.

A defining feature of this book which sets it apart from many other books on assessment is its conceptual framework which acknowledges that assessment frames learning, creates learning activity and orientates all aspects of learning behaviour. In Chapter 2 Gibbs outlines eleven conditions under which assessment supports learning based on the findings from the Assessment Experience Questionnaire (AEQ). The eleven assessment conditions proved to support learning are summarised here, clustered under the five headings used to structure the AEQ.

1 Quantity and distribution of student effort – assessed tasks need to capture sufficient study time and effort and distribute student effort evenly across topics and weeks.
2 Quality and level of student effort – assessed tasks need to engage students in productive learning activity and communicate clear and high expectations.
3 Quantity and timing of feedback – sufficient feedback needs to be provided both often enough and sufficiently quickly to be useful to students.
4 Quality of feedback – feedback should focus on learning rather than on marks, should be linked to the purpose of the assignment and to criteria and should be understandable to students.
5 Student response to feedback – feedback is pointless unless it is received by students and attended to. It needs to be acted upon in order to improve student work or learning.

Working within this conceptual framework, the book offers a comprehensive rationale for changing assessment and what such changes can and do achieve.

The authors of case-study chapters do not present assessments as a package of ready-made tactics to be pulled off the shelf, but instead provide rationales for their innovations which derive from relevant underlying principles (discussed in detail in the first part of the book). The innovations are problematic and set in complex contexts bounded by regulations, traditions, political pressures and beliefs. Despite these constraints, evidence of pedagogic impact is provided. Our intention is to expose current assessment practices to the scrutiny of peers, you the readers, and to invite you to make judgements about whether they can work.

Can you honestly claim that your assessments:

• enhance the student learning experience?
• provide useful and timely feedback?
• help students to understand and recognise quality?
• lead to improved performance?
If you have reservations about answering ‘yes’ to any of these questions, this book is for you. Good formative assessment should meet the above criteria. Yet too often we focus on the grades and quality assurance aspects of assessment and lose sight of the pedagogic role that assessment can and should play in improving learning. In this book, we have tried to redress this imbalance and move away from a ‘one size fits all’ approach to assessment and academic practice. We have set out to create for colleagues a model of critical examination of our own work in relation to the research and empirical data on student learning. The result is a collection of assessment interventions grounded within a unifying conceptual framework that has worked in practice and provides an evaluation of the conditions that enabled its success.

What unites us as editors is not just a commitment to enhancing assessment but a dogged determination to scrutinise what assessment can and can’t do and to offer examples and evidence of the powerful impact it has on motivation, self-efficacy and the general experience of learning. Our common experiences include managing FDTL projects, supporting learning and teaching at subject level (LTSN), teaching and assessing at institutional level and evaluating assessment projects. As such we are active participants, recipients and stakeholders in the assessment game.

How and why is assessment changing?

Modern society is demanding and complex yet many of our assessments are magnificently basic in their nature. Despite work on educational taxonomies and more recently Biggs (1999) advocating a more sophisticated and aligned use of assessment to support high-level learning, much of our assessment still focuses on testing knowledge and comprehension and ignores the challenge of developing and assessing judgements. It is time we recognised the changing nature of society and acknowledged that quality is a more complex concept than traditional assessment criteria suggest – quality cannot be reduced to a set of easily quantified learning outcomes. The widespread use of the phrase ‘anticipated learning outcomes’ is in part a recognition of individualised, personal perceptions and reactions to learning situations. People learn what they want to learn and in different ways. The innovations described in this book show that assessment which supports learning is flexible and takes into account the need for individuals to make sense of feedback in the context of their own experience.

The book contextualises innovation in assessment within a range of academic disciplines and institutional settings. It provides both theoretical and empirical support, thus making a compelling case for why we need innovation to bring into alignment the processes of learning, teaching and assessment. The book brings together elements of assessment which bridge studies of innovative practice thereby contributing to the growing body of literature which is gradually beginning to impact on pedagogic practice.
How the book evolved through collaborative effort

The inspiration for this book came in 2003 when UK colleagues with a specific interest in the relationship between assessment and learning met to exchange experiences. Most participants were involved in funded projects (e.g. Higher Education Funding Council for England) so the group became known as the Assessment Project Network. Collaboration then extended to include colleagues from overseas who experienced similar problems to those of UK higher education.

On both sides of the Atlantic, calls were being made for assessment practices that enable students to do something with the feedback they are given; to experience the process of making judgements for themselves; and to become reflective, resilient learners who are able to progress to more sophisticated levels of understanding and application. In order to do this they need to be engaged in assessment processes, not simply feel the effects of someone else’s assessment.

Structure of the book

The book is divided into four parts. Part I deals with the pedagogic context of assessment from different theoretical perspectives. Part II comprises case studies which illustrate the impact of appropriate and timely feedback in relation to the seven principles of good feedback. Case studies in Part III focus on how to stimulate learning through assessment. And case studies in Part IV illustrate how innovation in assessment encourages continuing professional development.

Assessment innovations are drawn from more than twenty UK higher education institutions (HEIs) with case studies covering a wide range of disciplines including medicine and allied caring professions; humanities; business studies; psychology; engineering; maths for science; geology; performing arts; and sport, leisure and tourism. The breadth and depth of the research make this book a valuable contribution to the scholarship of teaching and learning which should be of equal value when viewed from both theoretical and practitioner perspectives.

Graham Gibbs explains the pressures to change assessment and outlines the kinds of change taking place in the UK and elsewhere. He cites the collapse of some traditional modes of assessment due to increased class sizes reducing the level of personalised and prompt feedback. Reduced class contact time and the need for students to spend more time studying independently has necessitated different approaches to teaching which subsequently require new and more relevant ways of assessing learning.

In his second chapter Gibbs draws on extensive research and student experience to illustrate how assessment frames learning and in some courses has more impact on learning than does teaching. He then discusses the eleven conditions under which assessment supports learning, thereby providing a conceptual underpinning to the innovations in assessment described in the case study chapters.

Roger Murphy comments on the curious phenomenon that in the UK assessment debates which have occurred in HE have usually been quite distinct from those taking place in school-level education. The author explores some reasons why this
has been the case, noting the marked disparity between professional training for teachers in schools (commonly four years) with that of HE lecturers (the majority of whom, until recently, required no formal teaching qualification). He welcomes the move towards professionalising the whole approach to the support for student learning within UK higher education.

Marcia Mentkowski invites readers to engage in reviewing the ideas and long-standing student assessment-as-learning practices at Alverno College, Milwaukee. She outlines the college-wide assessment process and articulates educational assumptions and learning principles that inform what students learn and connects them to elements of assessment substantiated by research evidence (e.g., public criteria, feedback, self-assessment) that lead to deep and sustainable learning.

David Nicol and Colin Milligan explore how formative assessment and feedback might be used to promote the development of self-regulated learning (SRL) in contexts in which face-to-face and online learning are integrated. Self-regulated learning refers to the active control by students of some aspects of their own learning; for example, the setting of learning goals and the monitoring and regulating of progress towards the attainment of these goals.

Evelyn Brown and Chris Glover describe how the analysis of feedback provided to students on their written assignments can shed light on the way in which they respond to that feedback. The Assessment Experience Questionnaire on which they base their findings has strong links with the conceptual framework for effective assessment and feedback discussed in this volume (Chapters 2 and 5).

Alan Robinson and Mark Udall offer a conceptual model which promotes the design of an aligned teaching, learning and assessment strategy. The focus is on increasing the quality and quantity of formative assessment activities, but within a manageable overall assessment workload for students and teachers.

Margaret Price and Berry O’Donovan offer a cost-effective approach to enhancing students’ understanding of standards which goes beyond that conveyed by explicit description. The authors consider the application of a social constructivist approach to all aspects of the assessment cycle and how this might support improvement in student learning and performance.

Katherine Harrington et al. discuss the implementation of a programme of writing workshops designed around the concept of ‘core’ assessment criteria. The workshop approach aims to help undergraduates improve their essay writing and also to adopt a deep approach to their studies. It also aims to encourage strategically focused students to reach a more advanced conceptualisation and understanding of the discipline.

Shelagh Ross, Sally Jordan and Philip Butcher address the problem of providing rapid but detailed teaching feedback to large distance-education groups. Their case study researches online assessment of a ‘maths for science’ course in which meaningful feedback was given in response to student answers on formative and summative assessment exercises.

Sean Gammon and Lesley Lawrence analyse the effect of ‘flow’ theory (an experience of deep enjoyment, satisfaction and irresistible spontaneity) on the assessment experience of students. The authors tested whether the introduction of
‘flow’ might reduce student anxiety and ultimately engender some enjoyment of the whole assessment experience. Their findings suggest that ‘flow’ can positively affect the assessment experience of both lecturer and student.

Tony Gardner-Medwin’s chapter looks at experience with confidence-based marking (CBM) at University College London over the last ten years. The CBM strategy was initially introduced to improve formative self-assessment and to encourage students to think more carefully about questions in objective tests. CBM is seen by the students as simple, fair, readily understood and beneficial. They are motivated to reflect and justify reasons either for confidence or reservation about each answer, and they gain by expressing true confidence, whether high or low.

Cordelia Bryan documents an innovative approach to assessment designed to encourage students to focus on the process of collaboration. It shifts student attention from focusing almost exclusively on performance and outcomes to attitudes which begin to value cooperation and group dynamics. Evidence is cited which shows how students’ ultimate performance grade might be improved when collaborative skills were manifest, observed and an integral part of the learning and assessment process.

Kay Sambell, Liz McDowell and Alistair Sambell focus on assessment as a pedagogic tool to foster learner autonomy. The authors look at both procedural autonomy (managing learning) and critical autonomy (ways of thinking) to analyse students’ views in two case studies. They address the philosophical paradox that to become autonomous, students need tutor help and direction. They recognise the need to structure activities and initially to direct students towards the means which will ultimately enable them to become autonomous learners. They advocate a developmental approach to build up both skills and concepts by scaffolding the student experience.

Sue Williams and Sheila Ryan report the findings of a study on personal development planning (PDP) for undergraduates. They highlight the need for targeted staff development based on a systematic evaluation of staff capabilities and readiness to act as both personal and academic tutors. Their findings clarify the responses required of institutions wishing to implement PDP, placing emphasis on staff training objectives being linked to defined organisational aims.

Christine Curle, Jim Wood, Catherine Haslam and Jacqui Stedmon address the needs of postgraduates in Clinical and Community Psychology by assessing learning outcomes using PBL exercises. The assessment episodes incorporate group outcomes and dynamics in a context where students must manage large amounts of knowledge while developing clinical and intrapersonal skills. The intention here is to make professional training mirror the nature and quality of work undertaken by qualified practitioners. The authors offer some evidence for the success of the approach and have subsequently developed it in other areas of the curriculum.

In their chapter Simon Cotterill, Philip Bradley and Geoff Hammond report on their experiences and lessons learned from developing and implementing electronic portfolios (ePortfolios) for Medicine. They address the challenges posed by students receiving educational input and assessment from numerous ‘suppliers’, with formal
and informal learning often based in multiple locations and involving a range of different educational and IT infrastructures.

Sue Morison and Mairead Boohan examine the assessment methods developed and evaluated in interprofessional education (IPE) medical and nursing programmes. The clinical ward was selected as the most favourable learning environment and two studies were carried out. The first employed role-play to assess clinical, communication and teamwork skills and the second concerned history-taking, problem-solving and reflection.

Lewis Elton explores the extent to which the practice of academic staff may be considered ‘professional’, how this is currently assessed and how perhaps it should be. He makes a case that genuine professionalism requires a combination of training, education and acculturation and explores how the necessary systematic and personal changes required to achieve genuine ‘professionalism’ might be tackled.

Drawing on recurring themes from the book, Karen Clegg and Cordelia Bryan argue for a holistic approach to assessment which enhances students’ skills, abilities and capabilities rather than one which attempts to measure such skills in the misguided notion that it is done so with ‘scientific reliability’. The authors point to a need for further research into innovative assessments designed to enhance students’ creative processes and develop their professional judgement. Such innovations, they argue, will be required if we are to equip the students of the future to cope with uncertainty and unpredictability inherent in our high-risk, super-complex society.
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