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## A model of assessment in higher education institutions

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### Summary

Assessment in higher education is a complex phenomenon. A model of assessment comprising four principal levels with a number of associated elements at each level is suggested as a way of comprehending and clarifying the range of issues that need to be addressed in seeking to improve the quality of assessment practice.

### Keywords

Assessment; systems; levels; experience; institutions

### Biography

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### Introduction

Assessment in universities is a complex business. If we pose the question, "What does it take to improve assessment in a university?" the reply is likely to encompass such a range of activities, functions, organisational groupings, philosophies, funding arrangements, structures, and a potentially endless list of obstacles and challenges, not to mention personal anecdotes, that it would be difficult to conclude with a coherent picture of the situation. And that's without considering the impact on our students' experience!

Assessment is something which is 'experienced', though not always positively, by almost all involved in a higher education institution: students, teachers, administrators, managers, policy makers, institutional leaders, library staff, the students union and those supporting students in professional contexts in which learning is assessed, e.g. the nursing supervisor, teaching mentor or manager of the placement student in business. Given this complexity surely it is important for us to try to understand the relationships between these groups in some systematic way.

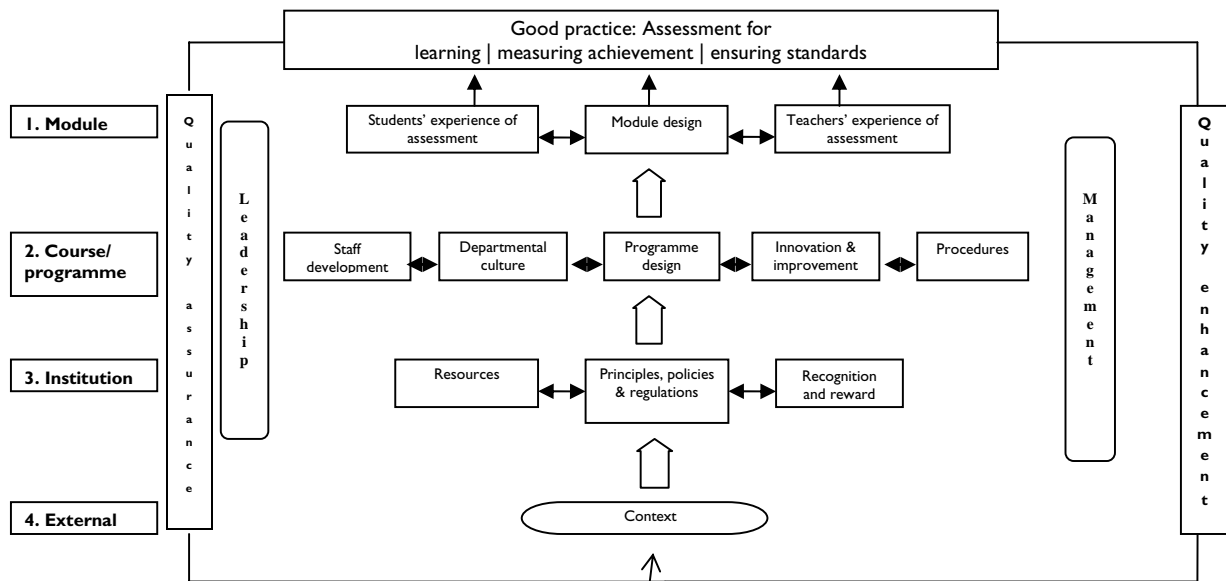
We wish to propose a model of an assessment system in higher education that helps to make sense of the milieu, may be useful in identifying critical points for intervention, and may assist in seeing why attempts to improve assessment across a system, or in a particular part of a system, may succeed or fail. For some the model may help to make sense of, or clarify, issues, whilst for others it may add further complexity or ambiguity to what was already a bewildering situation.

A model is a representation that can remind us of what we already know, help us to see things that we may not have not seen before or to see familiar things in a new way, or help us to explain what was previously unclear. To develop a model, we specify the variables involved and identify the relationships between these variables, while recognizing that any model needs to be constantly modified to reflect better understanding or to address additional dimensions needing further investigation. Our proposed model is offered tentatively (perhaps bravely!), in the hope that it will serve at least one of the above functions for at least some of its readers. It may also lead to other, different, more comprehensive or more illuminating models.

In this article we present the model, identify its principal elements, suggest some key issues with respect to each element, and note some critical relationships between the elements. We also draw attention to a small number of articles that consider substantial components of the model.

## A model of assessment in higher education

We are proposing a model comprising four principal levels with a number of elements at each level, though not exclusively so. Level 1 is where assessment actually happens, with good practice occurring in the context of students' and teachers' experience of assessment and dependent on effective module design. Level 2 supports this practice and includes the elements of staff development, departmental culture, programme design, innovation and improvement, and departmental procedures. Level 3 represents the institutional context of assessment, where resources are allocated, principles, policies and regulations are determined, and processes for recognising and rewarding good teaching are put into place. Level 4 represents the overall context of the institution, including government policy and the expectations of external bodies. The model also includes functions that cut across these four levels and impact on each of them, namely leadership, management and quality assurance. The model is represented graphically in **Figure 1**.



**Figure 1. A model of an assessment system in higher education**

### Level 1: Good practice

'Good practice' is the level where assessment happens. At this level, we need a clear expression of the ultimate purposes of assessment, commonly stated as encouraging learning, measuring student achievement and maintaining standards. The key elements at this level are the 'pedagogy' of good assessment practice expressed through module design, and the people who are immediately involved in this practice – students and their teachers/assessors. This is the realm of the teacher or the teaching team, the student or the team of students, and the individual course or module. It is where assessment methods are selected, tasks are designed and students respond, setting in train a web of interactions that are at the very heart of teaching and learning. At this level, the focus is on 'tactics' or specific methods rather than on broader strategies.

### Element 1: Module design

#### Critical issues

- The alignment of assessment methods and tasks with module objectives and learning activities
- Balancing the multiple purposes of assessment - for learning, measurement achievement, and maintaining standards.
- The accessibility and inclusivity of assessment, so that assessment tasks enable all students to fully demonstrate the quality of their learning with an equal amount of effort
- Feedback that is detailed, timely, related to objectives, and leads to a response from students
- The balance of time allocated for teaching and for assessment

## **Element 2: Teachers' experience of assessment**

### *Critical issues*

- Teachers' awareness of good practice and their repertoire of assessment methods
- Teachers' time – to design assessment tasks, evaluate student responses, provide feedback that is genuinely useful, and innovate
- Teachers' conceptions of and values/beliefs about assessment
- Teachers' experience of assessment
- Teachers' enthusiasm and motivation

## **Element 3: Students**

### *Critical issues*

- Students' perceptions of assessment tasks and the alignment of these perceptions with teachers' intentions
- Experience of assessment and being assessed
- Workload and time-pressures
- Students' approaches to studying, including strategic approaches based on motivation and workload
- Students' preparation for assessment – their understanding of the task, familiarity with the format and ability to engage with assessment criteria
- Students' family, educational, employment and social backgrounds
- Student culture
- The student's 'lifeworld' including the competing demands on their time and commitment for studying

## **Level 2: Supporting good practice**

Level 2 provides the immediate context for good practice. It is the level that determines whether teachers experience support or isolation, whether students experience an integrated programme or a series of discrete modules, and whether innovation and improvement can flourish. It is the realm of the programme, the department, and the student cohort. It is where institutional policies are translated into practices, and where procedural requirements are implemented. It is the critical level for supporting improvement at level 1.

## **Element 4: Departmental culture**

### *Critical issues*

- The departmental culture and the extent to which it supports teachers and encourages innovation
- Values such as scholarship and respect for, and valuing of, individuals
- Community of practice and extent to which there is a core and periphery to assessment practice

## **Element 5: Programme design**

### *Critical issues*

- The design of assessment at the programme level to maximize coherence in students' experience
- The extent to which the assessment strategy reflects programme learning outcomes

## **Element 6: Innovation and improvement**

### *Critical issues*

- Innovation based on programme-level objectives and learning processes
- Innovation involving changes in assessment methods
- Embedding change at the programme level

## **Element 7: Staff development**

### *Critical issues*

- Access to information on assessment
- Opportunities to reflect on current practices and to discuss practices with colleagues
- A structured programme of research and writing on assessment practices
- Whether staff development is perceived as meeting deficiencies, addresses management agendas or is more developmental

## Element 8: Procedures

### *Critical issues*

#### Moderation procedures

- Peer review of teaching, including review of assessment design and evidence of student learning
- The expression of institutional policies in departmental procedures

## Level 3: The institutional context for good practice

Institutions are not homogeneous bodies, having their own cultures, priorities and organisational structures and processes – all of which may change to some extent over time. Responding to external demands from governments, funding councils, professional bodies, quality assurance agencies, research bodies, etc. means that what happens in learning, teaching and assessment may not always appear to be top of the policy agenda. However, it is at this level that the valuing, recognition and rewarding of good practice, together with the approaches adopted to quality assurance and enhancement, shape institutional practice at levels 1 and 2. It should, of course, be recognised that, even at this level, individuals are important and the Vice-Chancellor/Principal, Pro-Vice Chancellors, Registrar, etc. can all have an effect on assessment policy, strategy and practice.

## Element 9: Principles, policies and regulations

### *Critical issues*

- The existence and quality of institutional policies and principles
- The process of developing policies and principles, including the involvement of staff and students
- The nature of institutional policies and principles as edicts or guides
- The extent to which policies and regulations are seen as constraining or enabling

## Element 10: Resources/funding

### *Critical issues*

- Academic support units that are viable
- Funding for innovation
- Targeting of resources for strategic improvement
- Resources for teaching (including assessment)
- The balance of resource allocation between research, teaching and other activities

## Element 11: Recognition and reward (for good teaching, including assessment)

### *Critical issues*

- Institutional recognition of good teaching
- Institutionally endorsed processes for the review of teaching and assessment (including, for example, peer observation/peer review)
- Rewards, promotions and allocation of roles and responsibilities for teaching and assessment

## Level 4: The external context

The external context reflects political, economic and social forces that impact on higher education, as well as initiatives from within the higher education sector itself. It also includes the competitive environment in which institutions find themselves – for students, funds for teaching and research, sponsorship and international partners.

### *Key issues*

- National issues/government policies
- Professional bodies
- External examiners
- Funding issues
- Media perception and portrayal of higher education
- Interpreting quality assurance requirements and managing external quality assurance processes
- Perceptions of employers
- External research and evaluation

## Cross-level functions

There are at least **four functions** that impact across the various levels and elements: leadership; management; quality assurance; and quality enhancement.

This raises interesting potential polarities between quality assurance and quality enhancement and between management and leadership. Whilst they should be part of an holistic approach, they may well be seen as the remit of different people/roles at different, or even all, levels within the institution. Whilst they may be drawn together by institutional mission statements and by strategic and operational planning, at a day-to-day level they may be perceived as having their own committees, champions and processes. There is also the potential for always choosing the safe or convergent approach when a more divergent, riskier or 'out of the box' approach might yield more beneficial outcomes.

In assessment terms this might relate to the greater use of continuous assessment rather than unseen examinations; to the involvement of students in more self and peer assessment rather than the tutor being the sole assessor; to assessment being experienced by students as being more about helping their learning rather than just showing them how much they do or don't know; and to the greater use of *feed forward* to improve learning rather than just *feedback* to reflect on what has gone before.

## Critical relationships between elements and functions

There are a myriad of connections to be made between the twelve elements and four functions we propose. The links between the following pairs of elements are illustrative of relationships that may be highly functional or characterised by unresolved tension:

- Institutional policies *and* departmental practices.
- Program design *and* module design
- Students' experience *and* teachers' experience

The role of staff/educational development or other functions in providing the links between and within levels is highlighted by the proposed model.

## A final thought

This is not a conclusion as we are trying to develop our thinking further across countries, contexts and institutions. To this end we would welcome others being involved as part of the growing worldwide sharing of ideas, practices and even problems surrounding assessment. If you would like to continue the discussion with us, please contact us at [R.Macdonald@shu.ac.uk](mailto:R.Macdonald@shu.ac.uk) or [joughin@ied.edu.hk](mailto:joughin@ied.edu.hk).

## Six web sites

The following web sites draw attention to the complex nature of assessment in higher education and the need to deal with multiple elements in the assessment system in order to bring about significant and lasting change.

McInnis, C. & Devlin, J) (2001). Centre for the Study of Higher Education, The University of Melbourne. *Assessing learning in Australian universities: from the authors*. <http://www.cshe.unimelb.edu.au/assessinglearning/fromAuthors.html>. Accessed 21 June 2003

The authors point out the need to work on multiple fronts, addressing many elements of an assessment system, in bringing about worthwhile change in assessment practices.

Radbourne, J., & Nulty, D. (2002). *Immersing a faculty in assessment: Making an organisational cultural shift*. <http://www.cshe.unimelb.edu.au/assessinglearning/02/immersing.html>

The authors describe the integration of a number of elements of an assessment system in a four-year faculty level project. The result of the project was a "well integrated multi layered methodology".

Mutch, A. & Brown, G. (2001). *Assessment: a guide for heads of department*. LTSN Generic Centre.

[http://www.ltsn.ac.uk/application.asp?app=resources.asp&section=generic&process=filter\\_fields&type=all&id=1&history=](http://www.ltsn.ac.uk/application.asp?app=resources.asp&section=generic&process=filter_fields&type=all&id=1&history=)

This booklet in the LTSN Assessment Series focuses on developing a departmental assessment strategy that addresses many of the elements of the proposed model.

Yorke, M. (2001). *Assessment: a guide for senior managers*. LTSN Generic Centre.

[http://www.ltsn.ac.uk/application.asp?app=resources.asp&section=generic&process=filter\\_fields&type=all&id=1&history=](http://www.ltsn.ac.uk/application.asp?app=resources.asp&section=generic&process=filter_fields&type=all&id=1&history=)

This contribution to the LTSN Assessment Series raises questions and addresses issues across all levels of the assessment system from the perspective of academic leadership.

Quality Assurance Agency for Higher Education, (2000). *Code of practice for the assurance of academic quality and standards in higher education*. (See section 6: assessment of students)

<http://www.qaa.ac.uk/public/COP/codesofpractice.htm> Accessed 10 June 2003

This short section addresses a number of elements of an assessment system. While it focuses on the conduct of assessment at the module level (including scheduling and amount of assessment, marking, grading and feedback), it also addresses staff development, meeting the requirements of professional bodies, processes for reviewing and developing regulations, and policies regarding assessment panels and boards.

Gibbs, G. (2003). Improving university teaching and learning through institution-wide strategies. Paper presented at *Teaching and Learning in Higher Education: New Trends and Innovations*. University of Alverno, 13-17 April.

<http://event.ua.pt/iched/main/invcom/p151.pdf>

While this paper is about teaching and learning, the points it makes, and the framework it presents, are directly applicable to assessment as part of teaching and learning. The 12 components of a learning and teaching strategy outlined here need to be considered in developing a model of an assessment system.

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