Assessment

A resource pack

A website version of this resource pack will provide you with direct links to the webpages listed, and is available at:

http://www.uwe.ac.uk/bbs/research/research/ntfs/about.shtml

Updated May 2004
Introduction

There is a wide range of resources to support lecturers in improving and developing their assessment practice. Rather than provide a comprehensive list of all possible resources, I have chosen to provide pointers ... so that you can head off in any of the following directions.

1. An overview of assessment issues
2. Introducing the Biggs SOLO taxonomy
3. Quick and easy ideas to enliven classes and formal assessment procedures
4. Thinking of researching assessment?: an introduction to the area
5. A particular worry? The issues of plagiarism and large groups
1. **An overview of assessment issues**

A good place to gain an overview of assessment issues is through the Assessment Series of the Generic Centre of the Learning and Teaching Support Network. This series contains the following titles:

No 1  *Assessment: a guide for senior managers*
No 2  *Assessment: a guide for heads of department*
No 3  *Assessment: a guide for lecturers*
No 4  *Assessment: a guide for students*
No 5  *A briefing on key skills in higher education*
No 6  *A briefing on the assessment of portfolios*
No 7  *A briefing on key assessment concepts*
No 8  *A briefing on disabled students*
No 9  *A briefing on self, peer and group assessment*
No 10 *A briefing on plagiarism*
No 11 *A briefing on work-based learning*
No 12 *A briefing on the assessment of large groups*

These guides are succinct and easy to read. Numbers 3 and 4 are a good starting point. Each guide contains a further list of resources. They can be accessed and downloaded from:

http://www.ltsn.ac.uk/application.asp?app=resources.asp&section=generic&process=filter_fields&type=all&id=1&history=
2. Introducing the Biggs SOLO taxonomy

Most lecturers are familiar with the Bloom's (1956) taxonomy of cognitive learning. This includes the following levels:

- Knowledge
- Comprehension
- Application
- Analysis
- Synthesis
- Evaluation

This has been used to categorise different types of learning and to distinguish forms of learning outcome.

You may not have come across the SOLO taxonomy but it represents a valuable development of Bloom's work. SOLO stands for: the Structure of Observed Learning Outcomes. It was developed by Biggs and Collis (1982) and is further described in Biggs (1999). Biggs describes it as "a framework for understanding understanding". (1999, p.37). It is widely used within higher education. A recent Google search on SOLO found 696 hits!

Here is an extract from Biggs (1999, p.37):

"The SOLO taxonomy is based on the student of outcomes in a variety of academic content areas (Biggs and Collis, 1982). As students learn, the outcomes of their learning display similar stages of increasing structural complexity. There are two main changes: quantitative, as the amount of detail in the student's response increases; and qualitative, as that detail becomes integrated into a structural pattern. The quantitative changes occur first, then learning changes qualitatively."

Biggs and Collis identify five levels of understanding:

**Quantitative**

*Prestructural* Where students acquire bits of information that are not connected, lack organisation and don't make sense. Sometimes a response may appear quite sophisticated but may be an complicated tautology!

*Unistructural* This type of response only meets one part of the task. Quite obvious and simple connections are not grasped.
Typically, this type of response deals with terminology but doesn't develop further.

**Multistructural**
In this type of response, a number of connections may be made but there is a lack of complete structure, indicating where and how each aspect fits into the whole. Biggs describes this as seeing the trees but not the wood.

**Qualitative**

**Relational**
Here the student is appreciates the significance of the parts in relation to the whole.

**Extended abstract**
Here the student makes connections within the subject area, but also beyond it. Thus the response will include generalisations and the transfer of principles and ideas underlying the topic. Biggs points out that today's extended abstract is tomorrow's relational.

An excellent visual representation of these five levels of understanding is available on the following website:

[http://www.dmu.ac.uk/~jamesa/learning/solo.htm](http://www.dmu.ac.uk/~jamesa/learning/solo.htm)

This is also a fun site to explore!

**The design and assessment of learning outcomes**

A knowledge of the SOLO taxonomy can inform both the design of learning outcomes and their assessment. Biggs (1999, p.47) identifies a hierarchy of verbs within the five levels of understanding that may be used to inform learning outcomes and the design of assessment activities.

**Quantitative**

**Prestructural**
N/A. The student misses the point.

**Unistructural**
Identify or carry out a simple procedure.

**Multistructural**
Enumerate, describe, list, combine, do algorithms

**Qualitative**

**Relational**
Compare/contrast, explain causes, analyse, relate, apply
However, the SOLO taxonomy is also of value when seeking to evaluate student responses. In particular, it can overcome a common problem in assessment - that of giving too many marks for essentially small component parts of an overall response (Biggs describes this as “analytic marking”). The use of the SOLO taxonomy supports a lecturer in looking at a response in a holistic way (Biggs describes this as the assessment of “discourse structure”). The lecturer will not ignore details, but he or she will also ask of the details:

- do they make a coherent structure? (if yes, it’s at least relational)
- is the structure used appropriate or not?
- does the structure open out new ways of looking at an issue? (if yes, then the response is extended abstract)

It will be seen that the five levels of understanding within SOLO can also be used to indicate to students the types of response that are expected.

Useful references on the SOLO taxonomy


http://www.dmu.ac.uk/~jamesa/learning/solo.htm

3. Quick and easy ideas to enliven classes and assessment

Small classroom assessment activities can be a useful way of providing feedback to students on their progress. Such activities don’t have to involve marking or extensive lecturer involvement! The following three texts are very popular with lecturers.


The fact that this has gone into a second edition is an indication of its great popularity. It is a practical handbook containing fifty effective techniques that
are easy to use. Great for everyday use in the classroom, as well as for more formal assessment procedures.


A rich compendium of suggestions on different methods and procedures of assessment.


A useful set of hints on different approaches to assessing student learning.

4. Researching assessment?: an introduction to the area

Texts

The following is a list of texts provided by the LTSN Generic Centre: Report No 3. Assessment: a guide for lecturers (see above).


A substantial and scholarly commentary on assessment and the purposes of higher education.


This text describes in detail all the topics in this guide and it reviews the relevant research. Several workshop activities are included. Useful for lecturers and staff developers.


A lively discussion of assessment replete with hints and persuasive arguments.

Heywood, J. (2000) Assessment in Higher Education: Student learning,
Teaching, Programmes and Institutions. London: Jessica Kingsley

For a detailed review of the literature on assessment. Considers Australian and US findings as well as assessment of competencies and examinations in secondary education. Invaluable for researchers.


A practical guide to assessment supported by research findings.


A seminal work. A stimulating discussion of the ideas and assumptions underlying assessment.

Journals

It’s useful to start searching the literature via a journal abstracting service. Two useful ways into the literature are given below.

- Research into Higher Education Abstracts: 3 issues a year. Available in most libraries. It allows you to review journal contents quickly and it gives you a good overview of what journals are out there, and what they publish.

- ERIC database (available from most library websites) which will allow you to search within a wide range of educational journals.

Most educational research journals address assessment issues. However, one that you might particularly want to review is:

Assessment and Evaluation in Higher Education
http://www.tandf.co.uk/journals/carfax/02602938.html

And don’t’ forget the accounting education journals!

Accounting Education: An International Journal
http://www.tandf.co.uk/journals/routledge/09639284.html

Issues in Accounting Education
http://aaahq.org/ic/index.htm
5a. Plagiarism

This problem preoccupies many of us! It was certainly a key concern raised at consultative workshops for introductory accounting lecturers in 2002.

The Generic Centre series referred to above has one report on plagiarism. This is an excellent overview of the issue. You might also find the following of interest:


The JISC Plagiarism Advisory Service has been funded from September 2002 to provide generic advice on plagiarism prevention, and access to a national plagiarism detection service: http://www.jiscpas.ac.uk/

It’s always a good idea to try and understand plagiarism from the student’s perspective. The following article is a fascinating read:


5b. Assessing large groups of students

This is a major issue for introductory accounting lecturers. Many introductory accounting modules have several hundreds of enrolled students. The following will provide you with some ideas about effective and efficient forms of assessment.


A useful summary of approaches to assessment that focuses upon the problems of assessing larger numbers of students.

LTSN Assessment Series: Report No 12 A briefing on the assessment of large groups (available from the LTSN website, see above).
Page 12 of this report contains an example from a first year accounting course: peer-teaching teams in accountancy.


It’s well worth accessing this report. The case studies provide detail about how particular initiatives reduced lecturer input and improved assessment!