

Assessment within a framework for effective learning

- the FAST approach -

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Agenda

- Overview of the FAST project with introduction of the analytical framework
- The tools
- Example of the use of the framework in introducing online assessment
- Activity – a reflection on your use of computer based or online assessment
- Feedback

FAST - improving the effectiveness of Formative Assessment in Science Teaching

- Collaboration between OU and SHU (and ~15 other universities and consortia)
- Science courses and programmes
- FDTL 4 funded till end of 2005
- Evidence and research based improvement in the use of assessment to influence teaching and learning

Focus is on the formative role of assessment

'... if we wish to discover the truth about an educational system, we must first look to its assessment ...' (Rowntree 1987)

Framework - 11 conditions under which formative assessment supports learning (Gibbs and Simpson 2003)

4 conditions that relate to engagement

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

7 feedback related conditions

- Feedback is provided often enough & in enough detail
- Feedback is provided quickly enough to be useful to students
- Feedback focuses on learning rather than on marks or the students themselves
- Feedback is linked to purpose of assignment & criteria
- Feedback is understandable to students
- Feedback is received by students and responded to
- Feedback is acted upon by students to improve their work or their learning

Simplified framework

The 11 conditions can be grouped into five areas. The assessment should affect;

- the quantity and distribution of student effort
- the quality and level of student effort
- the quantity and timing of feedback
- the quality of feedback
- the student response to feedback.

Using the Framework

- Investigation (Assessment Experience Questionnaire, interviews with students and staff, follow up surveys or analysis > > informed reform > > evaluate)
- Structured reflection

Tools

- Assessment experience questionnaire (2 versions)
 - Perceptions of feedback questionnaire
 - Written feedback characterisation tool
- + interviews, detailed follow up surveys etc.

An example S151 Maths for Science

- Basic maths needed to underpin Science
- 2 week fulltime equivalent
- 4 times a year – adult students
- Course book including worked examples and questions & study guide & CD-ROM.
- Telephone study advisor; computer conference

The problem

Standard OU support and assessment methods;

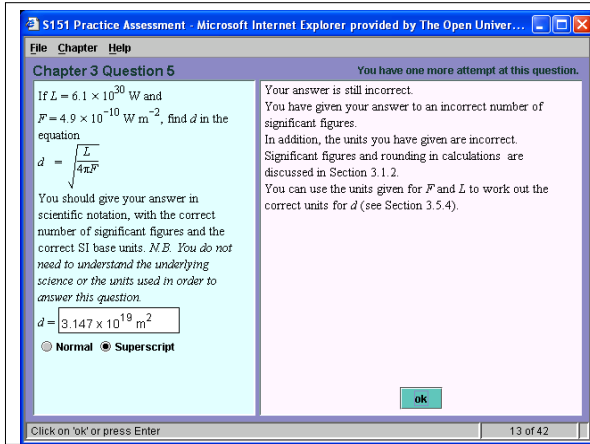
support (personal tutor who provides feedback)
interactive and formative teaching materials
summative assessment (timetabled assignments and exam)

AEQ responses suggested relevant framework conditions

Feedback is provided often enough & in enough detail
Feedback is provided quickly enough to be useful to students
Feedback is received by students and responded to

Assessment strategy

- Online summative assessment with embedded formative feedback
- Practice assignment which provides additional feedback and familiarises students with technology
- Mark reduces with feedback



Highlights

- 90% of those who do summative assignment also do practice assignment
- Logged on for 48 mins to 22 days (average 1.3 days)
- 79% want OU to use more online assessments
- However, 10% of those who did not complete the module cited the online requirement as the reason
- 89% - 'the assignment questions 'helped me to learn''
- 79% - 'the feedback helped me to answer the questions'

Using the Framework

- Investigation (Assessment Experience Questionnaire, interviews with students and staff, follow up surveys or analysis > > informed reform > > evaluate)
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Activity

- Identify an example of the introduction of CBA into a course/module with which you are familiar
- Using the simplified framework, discuss the overall course/module assessment strategy.
- Identify the strengths and weaknesses of the assessment strategy's impact on learning.
- How does the CBA contribute to this impact?
- Generalising from this example, how can CBA contribute to meeting the conditions, i.e. to encouraging effective learning

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