



# Assessment and Computer Assisted Assessment

## Assessment

### Practice

#### Code of practice - Assessment of students

This QAA document is a code of practice for the assessment of students in UK higher education institutions.

[www.qaa.ac.uk/academicinfrastructure/codeOfPractice/section6/default.asp](http://www.qaa.ac.uk/academicinfrastructure/codeOfPractice/section6/default.asp)

#### Academy Exchange

*(a Higher Education Academy publication)*

The 4th issue of Exchange covers various aspects of the assessment debate and practice.

[www.exchange.ac.uk/issue4.asp](http://www.exchange.ac.uk/issue4.asp)

#### Designing Assessment to Improve Physical Sciences Learning

*Physical Sciences Practice guide*

Contents

1. Putting assessment into perspective
2. How important is expertise in the design of assessment?
3. Concerns about assessment
4. Pros and Cons of Fourteen Assessment Techniques
5. Tips on assessing dissertations and theses
6. Feedback and Assessment
7. Involving students in their own assessment
8. Setting up self-assessment tutor dialogues
9. Making the most of learning outcomes

*Phil Race*

[www.heacademy.ac.uk/physsci/publications/practiceguides](http://www.heacademy.ac.uk/physsci/publications/practiceguides)

#### Effective Practice in Objective Assessment

*Physical Sciences Practice Guide*

The bulk of the guide is devoted to the development of the expertise necessary to design questions, to construct papers and to handle the results. The effort expended to gain this expertise will pay off in terms of better and sharper assessment tools which will help our students to take a realistic view of their progress and which will keep us from self-delusion about our teaching.

*Alex Johnstone (formerly of The Centre for Science Education, Glasgow University)*

[www.heacademy.ac.uk/physsci/publications/practiceguides](http://www.heacademy.ac.uk/physsci/publications/practiceguides)

#### What Do Examinations Really Test?

*Physical Sciences Development Project*

Over the last two decades, there has been a move from examination testing to continuous assessment in chemistry at the tertiary educational level. Even so examinations still play a major part in assessment. This project set out to find if there had been a change in examinations in line with the changing assessment regimes.

*Stuart Bennett, Department of Chemistry, Open University*

[www.heacademy.ac.uk/physsci/home/projects/devprojects/completedproj](http://www.heacademy.ac.uk/physsci/home/projects/devprojects/completedproj)

### What is a TOOLKIT?

A resource  
which brings  
together and  
provides links to:

- reports
  - information
  - resources
  - downloads
- for a particular  
topic.



### Assessing group work

#### *Physical Sciences Primer*

This covers individual report or assignment; group report or assignment; observation and interview; group presentations; poster presentations; peer assessment of contribution to the group and individual exercises plus further information and some examples of peer assessment marking schemes

*Paul Chin and Tina Overton, UK Physical Sciences Centre, University of Hull*

[www.heacademy.ac.uk/physsci/publications/primers](http://www.heacademy.ac.uk/physsci/publications/primers)

### The ASSHE Inventory

#### *Changing Assessment Practices in Scottish Higher Education*

The ASSHE Inventory is a rich source of information and ideas on assessment in higher education. It brings together over 120 descriptions by Scottish university and college teachers of changes in how they assess their students' progress and performance.

[www.heacademy.ac.uk/resources/detail/litreviews/LITREV\\_The\\_ASSHE\\_Inventory](http://www.heacademy.ac.uk/resources/detail/litreviews/LITREV_The_ASSHE_Inventory)

### Assessment - Quality Enhancement Theme – Scotland

The theme of this work is Efficiency and Effectiveness in assessment

[www.qaa.ac.uk/reviews/ELIR/default.asp](http://www.qaa.ac.uk/reviews/ELIR/default.asp)

### Generic Centre Assessment Series

This series (originally produced in 2001 by the LTSN Generic Centre) takes the form of twelve booklets, each of about 24 pages in length, dealing with a range of aspects of assessment: with guides for Senior Managers, for Heads of Department., for Lecturers, for Students; and briefings on Key Skills in Higher Education, on Assessment of Portfolios, on Key Concepts, on Assessing Disabled Students, on Self, Peer and Group Assessment, on Plagiarism, on Work-Based Learning, on Assessment of Large Groups.

*Various authors - whole collection edited and produced by LTSN Generic Centre and now hosted by the Higher Education Academy*

[www.heacademy.ac.uk/resources/detail/ourwork/tla/assessment\\_series](http://www.heacademy.ac.uk/resources/detail/ourwork/tla/assessment_series)

### Pedagogic theme - Assessment

The Physical Sciences Centre is involved in a number of assessment related activities and has produced a number of associated publications which can be viewed from:

[www.heacademy.ac.uk/physsci/home/pedagogicthemes/assessment](http://www.heacademy.ac.uk/physsci/home/pedagogicthemes/assessment)

### ASKe CETL

ASKe focuses on ways to help staff and students develop a common understanding of academic standards.

[www.brookes.ac.uk/aske/](http://www.brookes.ac.uk/aske/)

## Resources

### Self and Peer Assessment of Text

An online tool that allows a tutor to set a text-based assessment exercise with a criterion-based marking scheme for use online by a small or large number of students

*Richard Parsons, Centre for Learning and Teaching, University of Dundee*

[www.dundee.ac.uk/learning/leu/ilt/selfpeer.htm](http://www.dundee.ac.uk/learning/leu/ilt/selfpeer.htm)

### Development of a Generic Computer-based system for the Assessment of Practical Work in Chemistry

An intranet based system using a database has been developed and implemented for the assessment of some chemistry practicals

*Dr George Olivier, University of Brighton*

[www.heacademy.ac.uk/physsci/home/projects/devprojects/completedproj](http://www.heacademy.ac.uk/physsci/home/projects/devprojects/completedproj)

## The Higher Education Academy Supporting Learning pages - Assessment

The assessment of students is an issue of central concern to everyone in higher education.

These pages include advice on policy, resources, and a series of activities to help share and recognise good practice

<[www.heacademy.ac.uk/ourwork/learning/assessment](http://www.heacademy.ac.uk/ourwork/learning/assessment)>



## FAST: Improving the Effectiveness of Formative Assessment in Science

*(FDTL phase 4 project)*

This project is concerned with the way assessment affects student learning. It is not about measuring learning but about supporting learning

<[www.open.ac.uk/science/fdtl/](http://www.open.ac.uk/science/fdtl/)>

## Research

### Assessment in Universities: A critical review of research

This critical review of research has been constructed with these audiences in mind:

1. Those who wish to maintain good practice within current assessment methods.
2. Those who wish in the main to improve practice within current assessment methods.
3. Those who wish in the main to change current assessment methods.

<[www.heacademy.ac.uk/resources/detail/id13\\_assessment\\_in\\_universities](http://www.heacademy.ac.uk/resources/detail/id13_assessment_in_universities)>

## Web sites

### ERIC Clearinghouse on Assessment and Evaluation

ERIC/AE promotes the best resources and provides balanced information concerning educational assessment, evaluation and research methodology.

<[ericae.net/](http://ericae.net/)>

# Computer Assisted Assessment

## Practice

### Getting started with Computer-assisted assessment

*Physical Sciences Primer*

This primer covers definitions, usage, benefits and pitfalls and resources for CAA; including useful web sites, products, examples of usage in physical sciences

*Roger Gladwin, Physical Sciences Centre, University of Liverpool*

<[www.heacademy.ac.uk/physsci/publications/primers](http://www.heacademy.ac.uk/physsci/publications/primers)>

## Standards

### IMS Question and Test Interoperability

This is a summary of the current position of the new international standard for computer based questions and tests, for those who are using, or planning to use, computer based assessments in courses. It also includes links for more information and to testing systems

*Dick Bacon, Physical Sciences Centre, University of Surrey*

<[www.heacademy.ac.uk/physsci/publications/newsletters](http://www.heacademy.ac.uk/physsci/publications/newsletters)>

## CETIS

*the centre for educational technology interoperability standards*

CETIS represents UK higher-education and further-education institutions on international learning technology standards initiatives.

It has Special Interest Group for assessment, and this group's web site contains information about the group's activities, about the progress of the development of IMS assessment specification and a simple working introduction to the specification.

<[assessment.cetis.ac.uk](http://assessment.cetis.ac.uk)>

## Resources

### Publication and projects

For examples of CAA products and examples of using CAA in the physical sciences see Getting started with Computer-assisted assessment

<[www.heacademy.ac.uk/physsci/publications/primers](http://www.heacademy.ac.uk/physsci/publications/primers)>

For examples of CAA resources in the physical sciences see Physical Sciences Development Projects

<[www.heacademy.ac.uk/physsci/home/projects/devprojects](http://www.heacademy.ac.uk/physsci/home/projects/devprojects)>

### UK Physical Sciences Centre Question Bank

This project funded by JISC (Joint Information Systems Committee) has produced a database of physical science questions which can be exported in different formats for use in a variety of assessment systems, such as Blackboard or Questionmark Perception.

<[www.heacademy.ac.uk/physsci/home/projects/jisc\\_del/questionbank](http://www.heacademy.ac.uk/physsci/home/projects/jisc_del/questionbank)>

## Web sites

### CAA Centre

This site was designed to provide information and guidance on the use of computer-assisted assessment (CAA) in higher education.

The site is no longer maintained as the project has formally closed, but it contains much useful information.

Source of the CAA Blueprint – the 'Bible' for CAA implementers

<[caacentre.lboro.ac.uk/](http://caacentre.lboro.ac.uk/)>



## Publication Details

**This document is just one of a series of Toolkits from the UK Physical Sciences Centre all available to download from the website (see right). The Centre also produces other publications and resources in support of teaching and learning in higher education. This includes a newsletter and journal. To have these sent to you in hard copy format upon publication, visit our website and join the Centre mailing list.**

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