

A review of the student learning experience in Biochemistry and Microbiology in UK higher education

Introduction to the review

In 2007, the Centre for Bioscience will undertake a review of the student learning experience in Microbiology and Biochemistry in order to provide evidence-based overviews of the context and state of higher education provision within each discipline. Funded by the Centre for Bioscience and Higher Education Academy, the project has commitment and endorsement from the Biosciences Federation, HUBS (Heads of University Biological Sciences), the Biochemical Society and the Society for General Microbiology (SGM). Two other reviews are also taking place across the subject centre network:

- A Review of the Student Learning Experience in Art, Design and Media in UK Higher Education (Art, Design, Media)
- A Review of the Student Learning Experience in Materials (Materials)

The three reviews form a pilot for a series of reviews in coming years.

Purpose and scope of the subject review scheme

The purposes of the scheme are to develop a common framework for carrying out and reporting subject-based reviews focussing on the context and state of higher education provision of the particular discipline within the UK, the student learning experience and to commission a number of such reviews led by [Academy Subject Centres](#).

The principal audience for individual reviews will be the discipline community and those involved in subject-based policy and practice development at sector, professional, institutional, departmental and course levels. Secondary audiences will include HE institutions, national bodies, sector policy makers, employers, researchers and future students. Comparisons between review reports from different disciplines will also be relevant for HEIs, sectoral bodies and policy makers, researchers and, not least, for the [Academy](#) itself.

It is intended that, in conducting a review, the Subject Centre will develop mechanisms for the collection and analysis of certain key information. Such information can subsequently be collected on a more routine basis, perhaps annually or biennially, supporting the identification of trends.

The scheme will be managed and monitored by an overarching Higher Education Academy steering committee whose responsibilities will include defining the details of the scheme, selecting which reviews are taken forward each year (on the basis of proposals submitted by Subject Centres) and signing off final reports of reviews prior to publication. The Higher Education Academy steering committee will be chaired by Professor Bernard King, Vice-Chancellor at Abertay and the membership will be decided by the Chair in conjunction with Academy senior staff.

Individual subject reviews

Each review will consider factors relevant to students' learning and learning environments, from pre-entry factors, through aspects of provision at undergraduate and postgraduate level to factors relating to graduate destination and employment.

Every review will follow a common structure and will collect evidence relating to a core set of factors. Individual reviews will add to these common elements as appropriate. The principal output from the review will be one or more public reports providing an evidence-based overview of the context and state of higher education provision for the particular discipline. The emphasis will be on descriptions of the status of provision supported by robust evidence rather than on specific recommendations. It is anticipated that development of recommendations for action would be separate from and subsequent to the report of the review. The originator, the target and the nature of any such recommendations would be a matter for the subject centre and others involved in the review to consider.

The common structure will be defined in detail by the overarching Higher Education Academy steering committee, but in outline will involve the following stages:

- Identification of key factors relevant to the terms of the particular review
- Systematic collection of evidence relating both to core factors and to factors particular to the review.
- Analysis of the collected evidence
- Identification and consideration of issues and questions arising from the data analysis, perhaps requiring further consultation or evidence collection
- Production of one or more evidence-based reports.

Likewise, details of the core factors to be included in every review will be defined by the overarching Higher Education Academy steering committee. A preliminary list is as follows:

- Data relating to the provision across the sector: numbers, nature and structure of programmes at undergraduate and postgraduate levels; what is taught in these programmes; diversity in teaching and trends across HEIs
- Data relating to applications and admissions to HEIs
- Data relating to staff profiles: e.g., retention and turnover, age distribution, typical profile in terms of research, professional activity
- Data relating to students populations at undergraduate and postgraduate levels: diversity, retention rates, mode of study, age distribution
- Data relating to curricula and to characteristic forms of teaching, learning and assessment
- Data relating to student achievement
- Data relating to student expectations and experiences: e.g., National Student Survey data and other surveys
- Data relating to external validation or accreditation: role of PSBs
- Data relating to graduate destinations
- Evidence relating to employment: employer expectations and feedback, national needs and trends
- External pressures and trends

It is to be expected that some reviews will pose certain risks as well as offering benefits. Focussing the review on descriptions of current status and trends rather than on interpretation and recommendation may ameliorate some forms of risk.