Bologna: brief update for COPS working group

J L Hutton 7 May 2008

There are sections to this update; the first is a summary of a meeting arranged by the Engineering professional bodies to discuss the UK science community views on Bologna, with input from DIUS; the second comments on 'the Dublin descriptors' of degrees, and a QAA consultation on FHEQ for EWNI.

A useful website for understanding the Bologna Process is that of the Europe Unit:

http://www.europeunit.ac.uk/home/

The academic community is requested to notice events on this website and to attend: UUK will brief us. *Involvement is essential for influence.* Doctoral programs are now especially relevant, as discussion is in early phase.

bf Acronyms
CATS: Credit accumulation and transfer scheme.
DIUS: Dept of Innovation, Universities and Skills.
ECTS: European Credit transfer scheme.
EWNI: England, Wales and Northern Ireland
FHEQ:Framework for Higher Education Qualifications.
HEI: Higher Education Institution.

Engineering meeting on the Bologna Process, 5 October 2007

Bologna is an agreement with 48 signatory countries. The aim is mobility, not uniformity, and countries vary widely in the speed of their response. Degrees can be compatible with Bologna, but Bologna compliance does not exist. Nothing particular will happen for 2010. It might be best to see Bologna as a meta-framework to which British qualifications can be related. The UK is among the leaders on Bologna; Scotland already has a FHEQ.

DIUS line

The Lisbon agreement emphasizes the importance of HEIs in achieving competitiveness. The Government recognized the value of HEIs for economic growth. The benefits of Bologna are (might be) increased mobility of students; pooling students; increasing the scope of research; and producing a broader range of potential employees. The London 2007 Bologna meeting achieved agreement on Europe in relation to the rest of world. The USA, Australia and South East Asia are taking an interest in the process. Financial barriers to mobility were noted.

An independent register of agencies for quality assurance will be set up, to work under a meta-framework (quality assured quality assurance agencies :-). I think the intention is to let countries have their own systems and agencies. Within DIUS, there is disagreement about the relevance of ECTS. They do not think that MSc degrees are threatened.

Measuring credit

The main focus so far has been on Masters degrees, especially Integrated Masters. A continuing problem is the units of measurement. There is no shared European understanding of 'learning outcomes (LO) and workload'. Hence, a consistent translation between CATS and ECTS is not agreed. Imperial College carried out a detailed study of hours worked by MSc students, and concluded they did clock up sufficient hours: students work 48 weeks, 47 hours per week, hence in excess of 2250 hours.

Credit systems address accounting, not achievement. Most professions and academics advocated education, not training; compatible rather than identical systems; learning not time-serving. The

engineering and science communities generally agree that a total of 8 years to graduate with a PhD is a sensible length of time. (See also the Royal Society Jan 2008 report 'A higher degree of concern.' http://royalsociety.org/document.asp?latest=1&id=7403)

The Engineers note that M.Eng is fine in Bologna, and professional bodies and employers accept it. It is also important to engineers to stress the difference between degrees and professional accreditation. The American Engineering Council is outcome based; all graduates are tested by AEC. The reality in Europe can be very different from official line: the official Norwegian government policy is that a 120 ECTS MSc is a prerequisite for PhD study, but in reality universities decide. Entry levels vary: a foundation year before entry might contribute credit. German 1st cycle qualifications have been deemed not compatible with the International Engineering (Washington) Accord.

Extensive, informal consultations indicate unease in physics and chemistry. M.Phys, M.Chem etc are seen as very good degrees, and accreditation is not so important as in Engineering. Chemists have anecdotal evidence of employability problems. The Institute of Physics is concerned that industrial and academic career prospects are poor in competition with non-UK graduates; and that our ability to attraction international students, and our reputation with European partners might be affected.

Funding

Funding was agreed by the meeting to be a critical issue. Lack of MSc funding is a major reason for various groups not considering alternatives to the present Int. MSc and 1 year MSc. The implications of introduction of university fees in Europe are unknown. Funding is the issue on which lack of leadership from HEFCE or DIUS (and lack of connection with Lisbon agenda) is most obvious.

Concerns and consequences

The issues of credit descriptors which are academically and professional sensible, and of funding for BSc, MSc and PhD are the main concerns. Government, DIUS, and HEFCE have fobbed off the Institute of Physics, the Royal Society of Chemistry, the Engineering Council UK and the Council for Mathematical Sciences. There is frustration and anger at the lack of leadership or focus for effective debate.

We (the HE community) must marshal all arguments; raise debate with Staff and Students at European universities (and hence governments); and assess the employment value of different degrees.

The Royal Society report was part of this. In the last month, a response to the QAA FHEQ for EWNI has been prepared by various mathematics groups.

Dublin descriptors, QAA

There are two competing sets of descriptors for Bachelor's, Master's and Doctoral awards in EWNI. See separate summary sheet. (Apologies to Scottish colleagues: I've not had time to check yours out.)

The major issue is that the QAA has, since 2001, required MSc courses to evaluate critically current research and advanced scholarship in the discipline. Arguments from mathematics communities that there are areas of mathematical sciences in which it is not possible to reach the forefront by the end of an MSc degree have been ignored. HoDOMS's submission in 2007, that QAA FHEQ is not internationally acceptable, whereas the Dublin descriptors are, appears to have had no effect on QAA.

The April 2008 QAA draft on FHEQ seems to be self-contradictory on this, and there is a risk that idiosyncratic regulations imposed by QAA will hinder international exchange in mathematics. I expect a fuller report to be produced by CMS, and others, soon.