

A better approach to Higher Education/Award Body interaction for Post – 16 qualifications: A policy consultation.

A response from the Society of Biology to Cambridge Assessment

11th February 2011

The Society of Biology is a single unified voice for biology: advising Government and influencing policy; advancing education and professional development; supporting our members, and engaging and encouraging public interest in the life sciences. The Society of Biology is committed to promoting biology as a subject of choice to students in schools, colleges and universities. We support and recognise excellence in biology teaching; champion a biology curriculum that challenges students and encourages their passion for biology; support young scientists through higher education, and provide career guidance at all levels. We offer a range of tools to assist our members working in education in their professional development, we respond to education policy consultations, and contribute to curriculum development and course accreditation. Through partnership with other leading science organisations, we aim to increase our influence over the advancement of biology education.

The Society represents a diverse membership of over 80,000 - including practising scientists, students and interested non professionals - as individuals, or through the learned societies and other organisations listed below. As part of our commitment to working with the wider biology and science community we have shared details of our response with our members and member organisations.

Summary

The Society of Biology welcomes this review and the opportunity to comment on it.

The Society of Biology believes that principles for good qualifications development include: a clear understanding of what the qualification is measuring and being used for; a clear vision, purpose and target audience; and finally that qualifications need stability and therefore changes should be evolutionary rather than revolutionary in order to maintain confidence in the qualification.

Whilst the consultation specifically requests feedback from Higher Education Institutions we are concerned with the lack of acknowledgement of the role of the subject specific professional bodies. In summary the Society of Biology, its members and member organisations can offer the following during the development process:

- **the community:** we work closely with all the stakeholders in biology education, teachers, students, academics and employers, and can consult fully and properly with all of them;
- **evidence-based development:** through our links with biology educational researchers;
- **expertise:** the Society of Biology represents a broad range of biology subject specialists through its staff, trustees, members and member organisations;

- **understanding of biological principles and scientific method;** biology has unique requirements in particular in relation to practicals, mathematical competencies and subject diversity that the Society of Biology is able to advise on;
- **ownership:** given the right circumstances, we are happy to pin our colours to the mast and take ownership of what we develop – because we have a desire and interest in getting it right.

Detailed response

Whilst the consultation specifically requests feedback from Higher Education Institutions (HEIs) we are concerned with the lack of acknowledgement of the role of the subject specific professional bodies. Stakeholder engagement is of utmost importance when developing new or redesigning qualifications and the Society of Biology strongly believes that any qualifications, including A Levels, should be developed in consultation with the full range of subject specialists, teachers, employment sectors and HEIs. We would argue that at the level of specific A level subjects, for example Biology A level, it would be more effective and efficient for Awarding Bodies to work with the appropriate Learned Society. Learned Societies integrate the views of a range of HEIs, offering a broad and balanced response whilst also ensuring that Awarding Organisations do not have to develop multiple contacts with multiple HEIs. In particular in 4.3: the consultation refers to *qualification communities of practice* that bring together leading users, subject specialists, teachers, syllabus designers and question writers to share a particular view of what constitutes the standard in relation to a subject level. We would argue that this directly reflects the *raison d'être* of the Society of Biology:

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Further more it would currently appear that *communities of practice* are too dependant on individuals rather than appropriate bodies and societies. Many HEI professionals are affiliated with a subject specific society or organisation who are able to represent the breadth of a given subject area from across their membership. In this case the Society of Biology for example represents a diverse membership of over 80,000 - including practising scientists, students and interested non professionals - as individuals, or through the learned societies, and other organisations listed at the end of this response. Through our networks, professional committees and wider community we can identify Higher Education (HE) representatives who offer a broad and balanced opinion of the skills, knowledge and understanding required for progression by students into HE or the work place. We would also argue that approaching such bodies will ensure that there is continuity over a significant number of years and will prevent criteria from simply reflecting the particular expertise of a small group of individuals.

Referring to point 5.2 and the abolition of QCDA and reallocation of government funds: We recommend again that there is a significant role for the various professional bodies and learned societies representing HE to support the development of content criteria. Learned Societies, such as the Society of Biology often have employed staff responsible for an education remit, experience varies from society to society but they will usually have a rounded view of curriculum development processes and the various progression routes. Further more within the proposals there is no explicit mention of the role of education and initial teacher education departments within HEI's and how these, usually experienced individuals, can support HE

engagement with the development of content criteria. Learned Societies can further ensure that these members are engaged in the process also through special interest groups and other networks.

Specifically we would be able to develop a curriculum with content and contexts chosen so that they provide opportunities for teachers to:

- develop coherent narratives that develop ideas, knowledge and skills,
- do practical work with the learners,
- give students an authentic experience and flavour of what biology is,
- show what it means to think like a biologist, at an early stage
- match concepts to capacity to understand them,
- show that ideas in biology are interlinked and part of a consistent and coherent interpretation of the biological world,
- demonstrate the beauty and power of biology,
- coherently explain the difficulty with biological data and experimental design,
- exemplify the success of biology –whilst also showing that there are limits to what we do know;
- develop CPD courses to enhance the subject knowledge of teachers and ensure that contemporary science is incorporated into classroom teaching

We welcome an increase in duration of the accreditation cycle, allowing awarding bodies and publishers to better develop qualifications rather than continually seeking to amend existing specifications to comply with small regulatory changes. Any development of qualifications should be decoupled from political cycles and only revised if there is demand by the subject community. The system proposed might seek to address many of the current issues however we would recommend that further thought is given to the sustainability of such a system and seek to ensure that there is sufficient support in place to maintain good quality and purposeful engagement from HE.

Finally we would like to highlight that we are concerned about strong emphasis placed on the primary purpose of A-levels as the prerequisite of Higher Education and the assumption that HE is the only destination of successful A-level students. While we agree that A-levels must provide a sufficient grounding in the skills and knowledge required for HE, they should also seek to ensure that students are also appropriately equipped for employment should they decide that they will not progress to HE. To this end there should be involvement from industry sectors in the development of criteria and qualifications.

The Society of Biology is pleased for this response to be publicly available and will shortly place a version on www.societyofbiology.org. For any queries, please contact Rachel Forsyth, Society of Biology, 9 Red Lion Court, London, EC4A 3EF. Email: education@societyofbiology.org.

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