



The English Baccalaureate

A SCORE response to the Education Committee's Call for Evidence

07 March 2011

Cc Charles Tracy (Institute of Physics)
Marianne Cutler (Association for Science Education)
Nick von Behr (Royal Society)
Rachel Forsyth (Society of Biology)
Nicola Hannam (Science Council)
Ellen Weavers (Royal Society of Chemistry)

About SCORE

SCORE is a partnership of organisations, which aims to improve science education in UK schools and colleges by supporting the development and implementation of effective education policy. The partnership is currently chaired by Professor Graham Hutchings FRS and comprises the Association for Science Education, Institute of Physics, Royal Society, Royal Society of Chemistry, Science Council and Society of Biology.

SCORE welcomes the opportunity to provide evidence for the Education Committee's inquiry into the English Baccalaureate.

SCORE partners' response covers:

- The purpose and benefits of the English Baccalaureate and
- The implications of the English Baccalaureate for pupils and schools.

In summary:

- The English Baccalaureate is trying to serve dual purposes (school accountability and pupils' attainment) and runs the risk of raising the stakes of some examinations, which in the past has led to narrowing of curricula in schools and pupils being entered for inappropriate examinations.
- We would therefore like to see a consultation on developing a school accountability system with aims that benefit all pupils and serve the needs of the country.
- The use of the word 'baccalaureate' is misleading given that it normally refers to a passport to HE study including accreditation of project-based work and other skills-related learning.
- One of the aims of the English Baccalaureate is to drive the take up of individual sciences, however the timetabling pressures introduced by the English Baccalaureate may result in fewer pupils having the opportunity to study separate sciences. Schools may also concentrate pupils efforts on the two sciences either for which they have specialist teachers or based on their results in early assessments.

1 The purpose and benefits of the English Baccalaureate and its value as a measure of pupil and school performance

1.1 School accountability

1. One of the stated aims is to provide a **'powerful incentive for schools to drive the take-up of individual science subjects, humanities such as history and, especially, foreign languages'**. We broadly welcome the desire to encourage schools to provide more students with the opportunity to follow an academic curriculum.
2. Undoubtedly, the English Baccalaureate will lead to a greater proportion of students taking this collection of six academic subjects at GCSE (this stood at 15.6% in 2010). However, there are other ways of increasing the take-up of the English Baccalaureate subjects.
3. In 2010, 70% of maintained schools entered students for the three separate sciences; it is unlikely that the English Baccalaureate will incentivise schools to drive the take up of the separate sciences any further. The introduction of the English Baccalaureate as it

stands may well reduce the number of pupils taking GCSEs in three separate sciences. Timetabling pressures caused by accommodating the English Baccalaureate subjects may restrict the amount of teaching time available such that some schools are not able to offer the separate sciences alongside Science and Additional Science.

4. The science measure for the English Baccalaureate (for those students taking three separate sciences) will be the top two grades from the three separate sciences. There is a concern that schools might concentrate pupils efforts on the two sciences either for which they have specialist teachers or based on their results in early assessments.
5. It would seem that another aim is to steer schools away from offering tactical curricula to improve their league table position. We welcome this aim. Schools should be rewarded for providing a rich, diverse and appropriate curriculum for their students.
6. However, the English Baccalaureate is a very specific measure that looks at just one aspect of a school's performance. If schools focus on maximising pupils' success in the English Baccalaureate, they are likely to pay less attention to other aspects of performance including – breadth, choice and flexibility.
7. A complementary accountability measure would relate to the provision of specialist teaching in all the core academic subjects; in this way, all pupils will have the opportunity to study the core subjects under the tutelage of a subject specialist. If the pupils enjoy and succeed in those subjects, they are more likely to want to continue in the subject and should have the opportunity to do so.
8. The announcement on the English Baccalaureate early in this administration's period of Government has sent a message that schools that have a larger proportion of academically successful pupils will be more highly regarded than those that offer non-academic routes. The role of the English Baccalaureate should also be considered in the context of Alison Wolf's review of vocational education.

1.2 Measure of pupil performance

9. It is not clear whether the English Baccalaureate is being certificated, and hence also intended as a measure of pupil performance. Nevertheless, it will be picked up by pupils, through their schools and through, for example, university matriculation requirements, as a mark of achievement (or otherwise).
10. The use of the word 'baccalaureate' is misleading given that it normally refers to a passport to HE study including accreditation of project-based work and other skills-related learning.
11. As a measure of pupil performance, it is very crude and specific: it will reward broad academic success and is a basic pass/fail certification. It will introduce failure to a large number of pupils.

12. Pupils who are interested in following a technical or vocational route will be particularly poorly served by the English Baccalaureate. Their performance (and that of their schools) will not be measured at all by the proposals. There will also be many able, talented and ambitious pupils whose skills, interest and future plans are not represented in this very specific set of subjects.

1.3 *Linking the measurement of school and pupil performance*

13. It is the case that schools should be accountable. Recently this accountability has been achieved using metrics based on the performance of students in exams. Hence exams have become 'high stakes': they have taken on the dual role of assessing pupils and holding a school to account – often through league tables.
14. We acknowledge that league tables exist and that it will be hard to put the genie back into the bottle. However, it would be preferable to have a system with more subtle and intelligent metrics than solely student performance in exams.
15. We would like to see a consultation on developing a school accountability system with aims that benefit all pupils and serve the needs of the country. It should encourage schools to give pupils access to a rich, diverse, high quality provision and to match pupils to the best route for them, to maximise their potential and to prepare them for HE or for work. It should be possible to show, logically, that the accountability will lead to achieving those aims.

2 The implications of the English Baccalaureate for pupils and schools

2.1 *Effect on the curriculum*

16. The combination of league tables based on performance in high stakes exams and commercially competitive Awarding Organisations has led to a number of unintended and undesirable effects on the curriculum. For example, there has been a reduction of real choice for some students as there is a pressure on schools to enter pupils for courses that yield as many high GCSE grades (or equivalents) as possible.
17. There has also been deterioration in the quality and demand of assessment items and a consequent reduction in the quality of the learning experience. Consequently, the performance measures have led to the curriculum becoming less, not more, academically challenging.
18. The same logic can be applied to measuring school performance using the English Baccalaureate to show that it will reduce the breadth and quality of the curriculum offering; the available subjects, their combinations and the way they are taught will all be driven by the school's targets.
19. In particular, the opportunities to follow a technical or vocational route may be reduced for 14 year olds. This will have a feedback effect on 11-14 year olds with the likelihood that there will be fewer opportunities to experience technical or artistic subjects in the

future, as they will not lead to qualifications that contribute to the English Baccalaureate.

2.2 Pupils

20. It is often difficult for a school to address the needs of pupils and do well in league tables based on exam results. The high stakes in those examinations can drive schools to make curriculum and entry decisions more in the school's interest than that of the pupils.
21. We have heard anecdotally that as a result of the English Baccalaureate some schools are separating science and mathematics students by ability at age 14 to ensure that as many of them as possible attain at least a C grade. Separating by ability may well work for students in terms of their specific learning needs. However, the overall danger reinforced by the English Baccalaureate is that a significant proportion of students will be entered for either undemanding qualifications or qualifications that are unsuitable in terms of further progression.
22. Another consequence of this approach will be that the most able and the less able pupils will, once again, lose out as there will be continued concentration on pupils on the C/D border line.