

SCORE & the Royal Society Vision project – a note of the formal and informal advisory role played by SCORE in the development of the Vision report

SCORE

The SCORE partnership aims to bring a strategic approach and collective action to strengthening education in the three sciences of biology, chemistry and physics at 5-19. SCORE is a partnership between the Association for Science Education, the Institute of Physics, the Royal Society, the Royal Society of Chemistry, and the Society of Biology.

SCORE brings the expertise of its members together in a united voice advocating evidence-based and informed science education policy. We believe that science education should prepare present and future citizens, stimulate interests in the further study of science and educate the next generation of science-based professionals. SCORE's work promotes these objectives through the development of evidence-based policy, and advising and influencing government.

SCORE-Vision workshop, 11 July 2013

On 11 July 2013, a workshop was convened by the Vision Secretariat, attended by the SCORE Committee and members of the Vision Committee. At the workshop SCORE contributed to the development of underlying principles contained in the Vision report and commented on key contentions and questions surrounding particular topics in STEM education. Topics included: science for all; teacher supply; assessment; and accountability.

SCORE-Vision dialogue, ongoing

The Royal Society is a member organisation of SCORE and as such the Committee has regularly engaged in dialogue with representatives of the Vision project on the progress of the report, the principles contained within it, and ways in which to address concerns surrounding STEM education in the long-term future.

SCORE-Vision dinner, 6 February 2014

On 6 February 2014, the SCORE Committee was invited to attend a dinner, during which provisional ideas contained in the Vision report were presented to the Committee and their views considered in the final drafting and direction of the report. At the dinner, a discussion took place surrounding fundamental principles to be presented in the Vision report, and ways in which to harness the report for a positive and effective outcome.

The SCORE Committee noted that it would only be feasible for the sciences to be compulsory subjects until age 18 within the context of a broad and balanced curriculum in which subject combinations allow more choice than currently possible in the A-level system. There would need to be curriculum development for science courses tailored to accommodate a full range of student interests and needs. The Committee emphasised that the education system, and curriculum as a whole, should not pigeon-hole children and young people into highly defined and restricted routes.

It was felt that more work needed to be done in schools to raise awareness of the breadth of opportunity contained in science and science-related professions and to challenge misconceptions so that more young people make positive subject choices in the sciences. It was agreed that the

focus of careers guidance, should be to raise 'science capital' amongst students and provide them with relevant role models rather than narrow impressions of the subjects and potential destinations.

On the question of a vocational curriculum, it was agreed that although changes to the development of vocational courses are currently coming into force, there was a need for more, and better, technical options, designed with the involvement of industry and employers to ensure they were fit for purpose. It was also important for students to be enrolled on courses that were suitable to their needs and aspirations.

A system in which multiple training routes lead to a professional qualification was questioned; it was noted that in respected professions such as medicine and law there are fewer training routes into the career. However, it was agreed that a route should be open to career changers in order to ensure that the profession is accessible. Discussion also focused on ways in which to engender a positive community for training and professional development. It was noted that an accreditation or licensing process might be a beneficial way in which to address concerns around professional trust and bureaucracy in the teaching structure. It was noted that the Vision report should refer to Teaching Unions on the subject of bureaucracy in teaching, and how to ameliorate the situation.

The Committee discussed the role of an independent body in curriculum development, acknowledging that teachers, professional bodies, learned societies, higher education and employers could be involved in the process. There was a clear need for a body that stabilised the curriculum, made an effort to avoid unnecessary and disconcerting curricula changes and brought together the two interlinked areas of curriculum and assessment.

STEM professional community dinner, 11 February 2014

Chief Executives and presidents of professional and learned societies from across science, mathematics and engineering took part in a discussion dinner chaired by Vision Committee Chair, Sir Martin Taylor FRS. The SCORE member organisations were represented at the dinner, and Professor Julia Buckingham, SCORE Chair attended on behalf of SCORE.

Sharing the Vision and working with the STEM professional community, 1 April 2014

Representatives from each of the SCORE member organisations attended this event at which discussion focussed on Vision proposals for curriculum and assessment, and teacher professionalism.