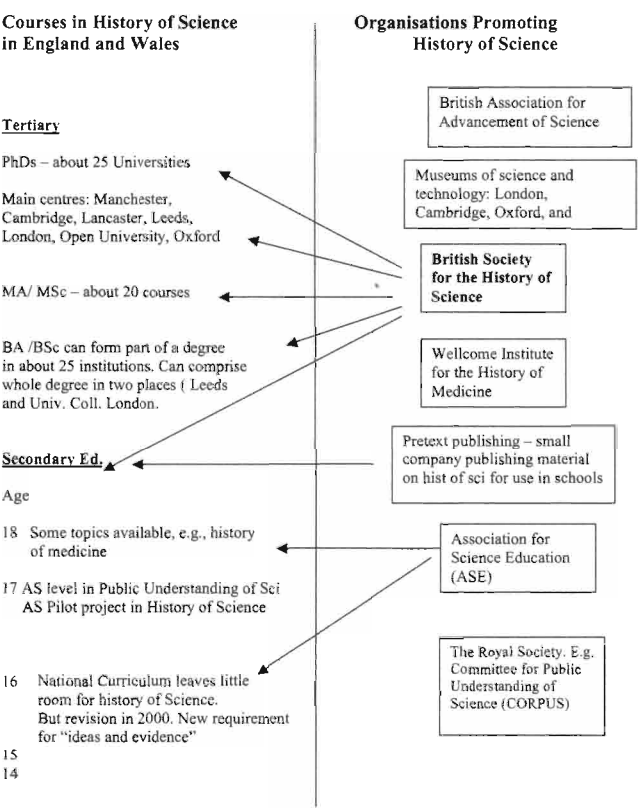
THE HISTORY OF SCIENCE IN SECONDARY AND TERTIARY EDUCATION IN ENGLAND AND WALES

JOHN CARTWRIGHT
Chester College
UK



NOTES:

a) Between the ages of 16-18 students usually study at a school of college for Advanced level (A level) qualifications. Performance at A level is used to select university applicants. A first degree at a UK university is called a Bachelor's degree (BA- Bachelor of Arts, or BSc - Bachelor of Science). This normally takes 3 years. A master's degree (MA or MSc) normally takes 1 or two years depending on the hours of study per week. A PhD normally takes 3 years full time.

The table above shows that whilst the history of science is fairly well represented in HE it is under utilised in secondary education. In the short term, there are a few hopeful signs that this situation may improve. A summary of some recent events and developments that may impinge on the uptake of the history of science is given below.

1. In 2000, the House of Lords published an important report on science and society. This pointed to the need for a dialogue between scientists and the public and suggested that a study of the history of science might be an important component in this.

2. The National Curriculum for 14 - 18 yr. olds is undergoing revision. All examining boards now have to tackle an "ideas and evidence" theme. This means that there is scope for the study of the history of science to illustrate important features of the process of scientific inquiry. One board for example (AQA) will probably suggest 6 classic stories from the history of science: Darwin, Mendel, the periodic table, atomic theory, the nuclear atom and continental drift.

3. As a result of the revision of 16-18 education, an AS level in the history of science is being developed. In addition, a new AS level in the Public Understanding of Science is soon to be launched complete with a new textbook. This later course will also contain some historical material.

4. Many recent popular science books aimed at a general readership have been very successful, e.g. *Longitude* by Dava Sobel; *Fermat's Last Theorem* by S. Singh. This suggests that there is an appetite, among the general reading public, for popular accounts of the history of science.

Despite these promising developments, there remains a need for a more productive dialogue between the various groups in the UK that have an interest in the history of science. These include professional historians of science, educators, and authorities responsible for designing

school curricula. Although the reading public appreciate historical narratives in the history of science, this has not fed through to mainstream science teaching. It is a wasted opportunity that we can only hope will be remedied.