

Workshop Ideas

To explore their views on Science and Science Education, I use two workshops from

Race Equality And Science Teaching Edited by Steve Thorp ASE (1991) – “What is Science” (Pages 24-25 Activity Materials Pages 30-32) and “What is Science Education” (Pages 26-27 Activity Materials Pages 33-34)

I have always found that the “What is Science” workshop works very well with my groups (both PGCEs and UGs). Trainees carry out several activities including looking at a burning candle and describing what is going on – I have had some of them waxing (!) poetic here - and doing “A Tropical Area Farm” exercise (about the use of chemicals in agriculture). There are also 14 statements for them to discuss in groups exploring the different views of science and the social, political, economic contexts in which science operates. The outcome for the session is for the trainees to clarify their own views of Science and write them down.

The ‘What is Science Education’ Workshop works better later in the course after they have done a block placement.

I also get the trainees to read the article by James Williams in *School Science Review*. This article considers the portrayal of scientists GCSE textbooks and their suitability for teaching the ideas and evidence strand. It concludes with a suggested approach for the teaching of ideas and evidence in science. (Williams, James D. **Ideas and evidence in science: the portrayal of scientists in GCSE textbooks** *School Science Review*, December 2002, **84**(307) P89 – 101 accessible at http://www.ase.org.uk/htm/journals/ssr/pdf/ssr_2002_dec_89_101.pdf (accessed 6 March 2006))

The Secondary Undergraduate trainees are set at least one assignment which involves them researching the life of a scientist. As James says in his article:

Using people and events in the history of science can lead to:

- *A greater understanding of the concept.*
- *A greater understanding of the context within which the discovery or idea occurred.*
- *A greater understanding of the person or persons involved in the idea or discovery.*

(Williams, P99)

The trainees seem to enjoy the assignment have produced some fabulous work.