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Teaching and Learning: Global Science

Reasons for teaching the global dimension in science

Phillipa Hulme

To challenge racist attitudes and assumptions

It is clear that most popular . . . racist beliefs are ultimately justified by reference to scientific or 'pseudo-scientific' ideas. . . Science educators must accept . . . responsibility for . . . dispelling the myths of race.

John Siraj-Blatchford (2002, p248)

To promote respect for those from other cultures

If one agrees that Western Europeans are not 'innately' more capable scientists, then every effort must be made to ensure that pupils are not left with this misconception. The contributions of black scientists must be included in the curriculum.

John Siraj-Blatchford (2002) p248

To truly represent modern science

Scientific research is often a collaborative activity. International communities of scientists exist, using agreed symbols and units of measurements, standard ways of presenting data and argument. . . Scientists may work in teams from many countries. . . They may study global phenomena such as disease . . . the atmosphere, or food production. . . Scientists may be part of the 'big science' collaborations, notably the Human Genome Project . . . [and] the exploration of space.

Brownlie (2003) p2

To truly represent the diverse origins of science

Other cultures have had flourishing examples of science that should be much more widely known by pupils . . . Pupils can be helped to see that science is a cultural activity, and it is inevitably the case that different cultures produce different sciences.

Reiss (2000) p17

To provide interesting and motivating contexts for students (and teachers!)

Pupils' interest in and enjoyment of their science lessons are generally increased when they use context-based materials.

Bennett (2003) p114

To meet the requirements of the National Curriculum

Pupils recognise the cultural significance of science and trace its worldwide development.

National Curriculum (1999) p15

To deliver the Citizenship curriculum by helping pupils to participate in a global society and interpret science issues in the media

Science knowledge and knowledge of scientists' work are needed for all citizens to make informed decision in a democracy.

Wellington (2000) p35

To encourage pupils to explore social, moral and ethical issues

The global dimension offers pupils opportunities to explore real issues with real solutions where there are clear social, moral and ethical choices made by scientists and all those involved in the journey from scientific principle and research to practical application.

Brownlie (2003) p4

To make people aware of the global economic and ecological connections between different people on this planet.

Dennick (2002) p110

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