PREVENT PROGRAMME 2015-16

British values and the curriculum: A-level Sciences

The Prevent duty requires providers and practitioners to exemplify British values in their practice and to use opportunities to explore British values and to challenge extremism.

British values are defined as including

"Democracy, rule of law, individual liberty, tolerance and mutual respect and different faiths and beliefs"

This includes complying with the Equality Act 2010 by not discriminating against the following nine groups:

- age
- being or becoming a transsexual person
- being married or in a civil partnership
- being pregnant or having a child
- disability
- race including colour, nationality, ethnic or national origin
- religion, belief or lack of religion/belief
- sex
- sexual orientation

In implementing the Prevent duty in A-level Science classes and other settings where teaching and learning takes place it is expected that this is much more likely to be effective through naturally occurring opportunities rather than specially contrived situations. It is also acknowledged that there will be other colleagues supporting the delivery of the science curriculum, for example, laboratory and Information Technology technicians and also visiting speakers on a range of topics. This guidance should therefore be read alongside other specific material relating to the Prevent duty and support staff, visitors, vocational qualifications and mathematics. There are also strong links to critical thinking and General Studies syllabuses.

Behaviour in teaching and learning settings

Effective learning takes place in a classes, workshops or labs where there is tolerance and mutual respect as set out in the Equality Act and where those with the protected characteristics receive fair treatment, so that all are treated fairlly.

All providers should have a code of conduct which requires all students to behave with tolerance and mutual respect of others.

By maintaining these standards of behaviour in class teachers, lectures and trainers will be exemplifying and promoting British values.

The Law and Democracy

A core part of all A level Science subjects will be the importance of safe practice of science in accordance with Health and Safety legislation. Opportunities will arise to discuss British law in this context. Students are likely to have opportunities to undertake group and individual investigations which will allow a range of legal and democratic issues to be explored.

There are a diverse range of topical scientific issues that allow students to explore the nature of scientific evidence and the interplay between scientific communities, the media, politicians and policy makers. Legislation has an impact on all areas of science in both college and university laboratory work and also in commercial applications of science.

Critical thinking to build student resilience

Students of GCSE Science(s) will find it necessary to distinguish between opinion based on valid, repeatable and reproducible evidence and opinion based on non-scientific ideas (for example prejudices, or hearsay).

Individual Liberty

Students of A-level Science subjects will have opportunities to use their individual liberty to make decisions about their future education and careers. They will also be aware that there are limitations on those freedoms. They will also have the opportunity in various topics to explore individual freedom of choice and constraints on freedom of choice. This could include constraints in the use of methods, materials and also freedom to engage in a potentially dangerous activity which could lead to a requirement for medical treatment e.g. rock climbing or to follow an unhealthy lifestyle.

Challenging extremism

The Prevent duty is not intended to stop students debating controversial ideas

If students make comments which could be regarded as extremist staff should encourage the students:

- to think critically
- to consider whether the evidence they have is accurate and full
- to consider whether they have received a partial and/or unsustainable interpretation of evidence
- to consider alternative interpretations and views

Staff should use opportunities to challenge extremist narratives through discussion with students. If staff do not feel confident in challenging extremist ideas with their students they should ask for support. This will normally be through the Safeguarding officer.

If students behave in a way which contravenes the equality and diversity aspects of the code of conduct which they have signed then this is a disciplinary issue e.g. refusing to work with a gay student or a student of a different ethnicity. It should be dealt with through normal provider disciplinary processes.

The Safeguarding team should be notified of examples where extremism has been challenged.

Applying British values to A-level Sciences: some examples.	
Democracy	• Science at work: political decisions which are made about experiments which are allowed e.g. in the area of genetics. • Decisions on NHS funding • The role of the NHS in the treatment of self-inflicted health problems including the misuse of drugs; cost and effectiveness of drugs; ethical issues associated with vaccinations • Political decisions about the subsidy of food production; genetic modification of food crops; bioengineering. • Decisions about subsidy and planning decisions in relation to energy production e.g. nuclear power, wind farms and fracking. • Political decisions on mineral extraction; recycling of materials; controls in relation to global warming;
Rule of Law	• Science at work: health and safety legislation, employment legislation. • Drug legislation including animal testing. Animal rights legislation. Badger culling to prevent bovine TB. Drugs and sports performance. • Food production legislation. • Hygiene legislation • Environmental legislation
Individual Liberty	• Limitations on freedom through health and safety legislation and the rules of the laboratory to ensure safe practice • Career and education choices that students make and limitations on these freedoms e.g. exam results • Individual freedom to accept or use life support in maintaining circulatory and respiratory systems; • Individual freedoms to decide whether to donate organs for transplantation • Individual freedom to use or not use birth control • Individual freedom to have genetic screening • Individual life style choices which influence health • Restraints on freedom in relation to the use of GPS or mobile phone technology to track the movements of individuals
Tolerance and mutual respect different faiths and beliefs	The approaches to solving scientific problems that are part of A level Science qualifications require students to show tolerance and mutual respect in relation to: • Behaviour in the laboratory and classroom • Creation of an effective working environment whether in a college, ILP or the workplace through tolerance and mutual respect • Healthy and Safety: implications of clothing and other items of religious significance • Understanding of the influence of different faiths and beliefs in some decisions which impact on science and health care.