

Initiatives

Slide	Script
1	<p>This is one of a series of presentations from the Energy Institute that look at energy and energy engineering.</p> <p>In this presentation, we look at some of the national schemes that can be used to support and enhance your teaching of energy in the curriculum.</p> <p>Please click the mouse button to start the presentation.</p>
2	<p>The energyzone web site has been produced by the Energy Institute.</p> <p>It has four sections.</p> <p>About energy is designed for students and teachers. It gives accessible information about energy from fossil fuels, nuclear and renewable sources. It also looks at the need to conserve our current sources of energy and to search for alternative sources to meet our future needs.</p> <p>The section also contains extensive links to teaching resources available to enrich the curriculum.</p> <p>Towards a career in energy has information on the variety of jobs in the energy industry. There are extensive job profiles, so that students are able to see what is involved in working in the energy industry. Fact sheets and information about accredited courses allow students to see how to embark on a career in the energy industry.</p>
3	<p>The Royal Academy of Engineering runs several outreach programmes. These cover both primary and secondary education.</p> <p>Young engineers is a scheme that covers the 7 to 19 age range. It supports science, engineering, electronics and technology clubs in schools and colleges throughout the UK. This is through competitions, challenges, teaching resources and some grant support.</p> <p>The Smallpeice Trust Engineering Courses enable secondary school students to work with professional engineers. This could be on a residential courses at a university or in STEM enrichment activities arranged in schools.</p> <p>The Engineering Education Scheme is aimed at year 12 students. Teams of students need to work on producing a solution to a real-life problem. A professional engineer advises the students. Universities support the scheme and provide residential workshops during the course of the projects.</p> <p>Other initiatives allow students to gain experience of engineering at University level. Have a look at the Royal Academy of Engineering web site for the latest information.</p>

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4	<p>The BA runs the CREST programme.</p> <p>CREST stands for Creativity in Science and Technology. It is a UK-wide Science, Technology, Engineering and Maths award scheme. It encourages young people, aged 11-19, to explore the real nature of science and technology by problem solving through mini projects.</p> <p>There are three levels to the awards. The Bronze level is suitable for students up to age 14 and requires around 10 hours of work. This can be integrated into the science and technology curricula.</p> <p>The silver award requires more work, around 40 to 50 hours, and a link with an industrial partner is recommended.</p> <p>The Gold award is usually undertaken by students studying post-16. It requires around a 100 hours of work and groups undertaking a gold award are linked with an industrial partner.</p> <p>The BA have also introduced awards for Primary children called CREST Star Investigators. Based around discussing and solving investigations, children can gain Star, Superstar and Megastar status!</p> <p>Look at the BA website for more information on all their initiatives.</p>
5	<p>The science and engineering ambassadors scheme is run by the national science, technology, engineering and mathematics network. Also known as stemnet.</p> <p>They have contact with over 18,000 ambassadors who are science and technology professionals working in industry or universities. These ambassadors will come to your school to give your students an insight into their work. This could be through a range of activities such as supporting after school clubs, and in some cases providing work-based placements for teachers and students</p> <p>All ambassadors have had training in working with school students and their services are free.</p> <p>The way to contact a local science and engineering ambassador is through the STEMNET system. Details of local contact can be found on their web site.</p>
6	<p>We hope that this presentation has been useful in showing you some of the national schemes that can be helpful in enriching the science and technology curriculum. Remember also that there may be opportunities local to your school. many of the power companies have visitor centres or education officers at their sites. One may be local to you.</p>