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Where To Find More Information

Sources of references and websites, including Sector Skills Councils, and finding out about your local area

This section offers a gateway to accessing key information relating to STEM subject choice, career pathways, and resources. The content is not intended to be exhaustive, but aims to save you time by pinpointing sites that will provide the most stimulating and relevant STEM information.

CRAC: The Career Development Organisation –

www.icould.com

A site that provides access to the career experiences of real people through their stories. It includes many inspiring examples of STEM careers at a variety of levels, and through the stories, describes the pathways of people who used their STEM courses as a springboard into other opportunities.

Institute of Biology –

www.iob.org

The IOB aim to encourage a passion for biology in students, and help teachers with resources such as the BioEd e-newsletter and free online lesson plans.

Institute of Physics –

www.iop.org

The Institute of Physics careers service promotes physics through providing information for teachers in the section Careers: Schools and Colleges.

Jobs4u –

www.connexions-direct.com/jobs4u

Comprehensive careers database including the section: Explore Science & Maths.

National Guidance Research Forum (NGRF) –

www.guidance-research.org

A comprehensive site for exploring labour market information. Managed by the University of Warwick Institute for Employment Research (IER) and the International Centre for Guidance Studies at the University of Derby (iCeGS).

Royal Society of Chemistry –

www.rsc.org

The RSC provides a vast range of support for members including publications and a confidential specialist careers service.

Science Council website –

www.futuremorph.org

Launched in November 2008 by the Science Council, with partner support, this inspirational site illustrates that studying science and maths at school can help young people no matter which job they go on to pursue. The site explores the world of STEM through case studies, job profiles, videos, and lesson plans.

STEM Directories –

www.stemdirectories.org.uk

Site to download the STEM directories (for enhancement and enrichment of the curriculum).

STEMNET -

www.stemnet.org.uk

Science, Technology, Engineering and Mathematics Network.

The Association for Science Education –

www.ase.org.uk

Professional association for teachers of science. Includes membership details, publications, INSET, conferences, journals and resources.

www.schoolscience.co.uk

ASE site for teacher resources.

The Centre for Science Education (CSE) –

www.shu.ac.uk/research/cse/

CSE is a research and business development unit specialising in the STEM subjects. CSE creates, manages and delivers resources, projects and initiatives to support teachers and students at all levels of education.

The Council for Mathematical Sciences website –

www.mathscareers.org.uk

This site is the responsibility of the Council for Mathematical Sciences, comprising The London Mathematical Society, The Royal Statistical Society, The Institute of Mathematics and its Applications, The Edinburgh Mathematical Society and The Operational Research Society. Includes a range of resources to support teachers in the classroom as well as parents at home.

The Design and Technology Association –

www.data.org.uk

The Design and Technology Association offer curriculum support through DCSF funded projects such as CAD/CAM in schools, Electronics in schools (with support from the Institution of Engineering and Technology) and Food in schools.

The Engineering and Technology Board (ETB) -

www.eteqb.co.uk

ETB's mission is to improve recognition within UK society of the importance of engineering and technology. ETB aims to help counteract the often negative perception of science, engineering and technology and provide links to careers support and events to achieve this.

The ETB site provides links to the numerous professional Institutes which represent the interests of all the branches of engineering and help to promote the importance of the sector.

The Institution of Engineering and Technology –

www.theiet.org/education/

The Institution of Engineering and Technology offers schools and colleges science, engineering and technology curriculum support.

To help in finding the right science course in higher education, view –

www.science-engineering.net

UK Resource Centre for Women in SET -

www.ukrc4setwomen.org

National programme that can provide statistics and materials relating to increasing the number of females in science, engineering, technology and the built environment.

Sector Skills Councils (SSCs) and Industry Focus websites and resources

Cogent -

www.cogent-ssc.com

Cogent host an interactive 'Careers Pathways' site for the Chemical, Pharmaceuticals, Nuclear, Petroleum, and Plastics & Rubber (Polymers) industries.

Enginuity -

www.enginuity.org.uk/resources/other_links.cfm

This link will provide a complete list of all the SSCs.

eskills -

www.e-skills.com

e-skills aims to transform attitudes, inspire interest and prepare young people with the technology-related knowledge and skills employers need. The site provides information on career opportunities and the skills required for a career in IT and Telecommunications.

Scenta -

www.scenta.co.uk

Scenta has been initiated by The Engineering & Technology Board (ETB) to provide a gateway to the best information and resources for those pursuing a career in science, engineering, and technology. The site includes a role model search, inspirational engineering projects, and updates on Broadband Britain.

Sector Careers Link -

www.sectorcareersinfo.co.uk/newsletter.cfm

The quarterly e-newsletter which will provide updates from Sector Skills Councils on their activities supporting careers.

SEMTA -

www.semta.org.uk

The Sector Skills Council for science, engineering and manufacturing technologies. Eight different industry focused sections with information on funding, training information and skills: Areospace, Automotive, Electrical, Electronics, Marine, Mechanical, Metals and Biosciences.

Summitskills -

www.summitskills.org.uk

Summitskills work with JTL (the leading training provider to the building services engineering sector) who have undertaken positive action programmes and succeeded in encouraging more females into plumbing and electrical careers as well as developing a resources pack.

Industry Focus – Space Technology

National Space Centre, Leicester -

www.spacecentre.co.uk

The National Space Centre offers an educational facility with a vast array of interactive challenges, audio-visual presentations and hundreds of artefacts charting mankind's desire to reach beyond the Earth. Many strands of the National Curriculum are covered at each Key Stage, including science, ICT, and maths.

Space Academy Partnership -

www.spacecentre.co.uk/academy

The Space Academy is a partnership between the National Space Centre, the University of Leicester, University of Nottingham, Science Learning Centre East Midlands, STEMNET and East Midlands Development Agency. The Academy programme provides a range of curriculum-based activities that use the contexts of space and climate change to boost learners' engagement and understanding in STEM subjects.

Classroom websites and resources

BAE Systems -

www.baesystems.com/education

As well as a wealth of free resources, curriculum support includes a touring theatre production designed to inspire young people about science and engineering, and 300 employees acting as Ambassadors.

BLOODHOUND Education Programme -

www.bloodhoundssc.com

The BLOODHOUND Project aims to break the world land speed record and through its Education Programme enables schools to access teaching and learning materials to see how the project is developing. Visits can also be made to the University of the West of England, Bristol, to see how the car is shaping up.

BP -

www.bp.com/bpes/cft

Carbon footprint toolkit containing interactive CD-Rom, lesson plans, 3D animations, starter activities, how to calculate your school's carbon footprint.

British Gas -

www.generationgreen.co.uk

Fun online student activities including building an energy efficient house or fixing the online interactive house that is wasting a lot of energy.

BT -

www.connected-earth.com/LearningCentre

From telephone to telegraph to wireless to computer, including good animations such as showing which bit does what inside a mobile phone.

Careersbox -

www.careersbox.co.uk

Over 100 short career, learning and training film clips, including STEM related employment situations.

Engineering Development Trust -

www.etrust.org.uk

Independent charity that run schemes nationwide to inspire young people into STEM careers by giving them experience of industry, business and higher education through events, placements and projects.

Enginuity -

www.enginuity.org.uk

Free and downloadable engineering and technology careers resources online. To help make choosing the various careers information materials an easier task, enginuity produces the UK's most comprehensive online catalogue of STEM-related careers resources:- www.enginuity.org.uk/resources/online_careers_catalogue.cfm

Equality and Human Rights Commission -

www.equalityhumanrights.com

'Be Inspired' role models, and a selection of posters featuring inspirational women.

e-skills uk in schools -

www.e-skills.com

In November 2008 e-skills UK launched a campaign that gives young people an insider view of technology careers. BigAmbition is designed to inspire 14-19 year olds by demonstrating the wide range of IT career options, and how to get into them. The site features interactive tools and video profiles of IT professionals - go to: www.bigambition.co.uk

Learning Grid -

www.learninggrid.co.uk/initiatives

Activities showing modern engineering.

London Engineering Project -

www.thelep.org.uk

Part of the 'Shape the Future' campaign run by The Royal Academy of Engineering, producing useful resources for inspiring girls and BME young people to consider STEM.

Making the Modern World -

www.makingthemodernworld.org.uk

Powerful stories about science and invention from the eighteenth century to today, using the web and dynamic multimedia techniques to go beyond the Science Museum static exhibition.

NHS Careers -

www.nhscareers.nhs.uk

Extensive careers site including lesson plans and supporting materials together with the 'Step into the NHS' website.

NPower -

www.npower.com/education

An easy guide to energy with information sheets providing students with real life skills.

The Nuffield Foundation -

www.secondarydandt.org

Free Design & Technology curriculum materials.

Planet Science -

www.planet-science.com

Site for teachers and young people (originally set up for science year) to enhance the teaching and learning of science.

Planet SciCast -

www.planet-scicast.com

Young people already have the technical skills to record and edit video, and the technology is getting simpler and more streamlined all the time. SciCast enables young people to make films about the impact of STEM to modern life.

Science and Maths -

www.scienceandmaths.net

Includes inspirational case studies including designing sports equipment, developing the latest fashion cosmetics, and sound engineering.

Science Career Videos -

www.vega.org.uk/video/series/10

These videos show a day in the life of a young scientist, giving insights into the lives of young people at the cutting edge of British science and engineering – these are the people who are making things happen.

Science Learning Centres -

www.sciencelearningcentres.org.uk

Provide quality continuous professional development for everyone involved in science education, with a network of 10 centres nationwide providing innovative and inspiring courses.

Science: (So what? So everything) -

www.sciencesowhat.direct.gov.uk

Shows how science touches everything in life through human interest stories through videos and case studies. Great for ideas for lesson plans and projects.

Science Upd8 -

www.upd8.org.uk

Provides short downloadable, easy to use science classroom activities based on up to the minute science in the news and popular culture with a growing STEM career section.

The Association of the British Pharmaceutical Industry -

www.abpischools.org.uk

Biotech is a resource that aims to examine the technology and concerns associated with developments in genetics, including diagnosing disease, medical biotechnology, and neuroscience.

The Association of Teachers of Mathematics (ATM) –

www.atm.org.uk

ATM aim to provide teachers with the resources to help them develop their maths teaching in creative and broad-thinking ways. FREE resources are provided on their website for teachers to download or use online in the classroom.

The Council for Mathematical Sciences –

www.mathscareers.org.uk/teaching_resources.cfm

This link will provide access to exciting classroom resources that emphasise the transferable skills that maths provides for students, whatever jobs they eventually enter.

The Geological Society -

www.geolsoc.org.uk

Free curriculum materials and visiting speakers will inspire students to consider geoscience, where there is increasing demand for students in civil engineering and associated industries that are seeking to make the best use of the planet's resources.

The IET (Institute of Engineering and Technology) Faraday -

www.theiet.org/faraday

Award winning programme of resources, activities, competitions and events designed to inspire young people about STEM, including a free, high quality interactive website.

The Institute of Mathematics and its Applications -

www.ima.org.uk/careers/school

Maths careers resources including posters, and careers information for teachers and careers advisers.

UK Resource Centre for Women in SET -

www.ukrc4setwomen.org

The resources section provides access to a range of information and initiatives relating to girls and women in science, engineering and technology. The SET Directory includes links to a plethora of groups and websites tackling issues that contribute to female under-representation in STEM. The Publications Catalogue hosts over 4,000 items, including promotional material and articles. There is also a fully searchable listing of case studies and role models showing women at all stages of their careers. Use the 'enquiry' facility to request information and resource materials such as posters and leaflets.

www.ukrc4setwomen.org/html/education/careers-professionals

Access this site to find out about the Let's TWIST gender equality training run by UK Resource Centre for Women in SET. The training materials have been developed for anyone involved in providing information, advice or guidance to young people, and illustrates the importance of challenging occupational segregation and gender stereotyping.

Why not chem eng -

www.whynotchemeng.com

Contains careers website, lesson resources, posters, real life case studies, live graduate and student blogs.

WISE (Women into Science Engineering and Construction) -

www.wisecampaign.org.uk

WISE works creatively with industry and education, offering colourful and innovative tools and approaches to support them in encouraging girls into non-traditional STEM careers. Email info@wisecampaign.org.uk for leaflets, careers mindmaps, postcards, and further information.

Working in....booklets -

www.vtlifefskills.co.uk

Attractive high quality careers information booklets that include Science, Manufacturing, Hospitals, the Built Environment & Construction, Transport & Logistics.

YWCA -

www.ywca.org.uk

YWCA work with the most disadvantaged young women and seek to tackle occupational segregation and gender stereotypes through programmes, games and interactive discussions including the 'Play your cards right' game.

Finding out about your local area

Accessing local and Regional information will help young people to identify the STEM pathways in their area. The following are examples of where local and regional information can be located.

Online 14-19 Area Prospectus –

www.local.direct.gov.uk/LDGredirect/index.jsp?LGSL+1145&LGIL+8

Use your local 14-19 online Area Prospectus to find out about the wide range of courses and learning programmes offered by education providers in your area.

Increasingly an electronic version of the Common Application Form is being used for entry to post-16 learning – check the procedure used in your local area.

Local and Regional Labour Market Information – NGRF (National Guidance Research Forum)

www.guidance-research.org

NGRF (National Guidance Research Forum) website is created and maintained by guidance researchers and practitioners. The partnership involved in the development of the site includes the University of Warwick Institute for Employment Research (IER) and the International Centre for Guidance Studies at the University of Derby (iCeGS).

This site can be used to explore labour market information in your area. Choose the LMI Future Trends section and click on national, regional & local data to access industry profiles and labour market statistics including all STEM-related sectors.

Local Connexions Services

Connexions Services serving your area will have access to local LMI, and may have an LMI Specialist within their team producing bulletins and newsletters which provide updates on local and regional labour market activity.

Learning and Skills Councils –

www.lsc.gov.uk/regions

LSCs are a source of local and regional LMI, including publications and research papers and surveys. Select your region to be able to locate LMI for your area.