


STEM Careers Awareness
Teachers Guide



In March 2008, the Government launched a campaign to encourage more people to take science and maths A-Levels. At the heart of this initiative is the need to improve the quality of Science, Technology, Engineering and Maths (STEM) careers guidance for students to help them decide to choose these A-Levels.

This leaflet has been designed to provide both STEM and careers teachers with an overview of the campaign and information to help them play their vital role in encouraging students to take science and maths.

Background to the campaign

To maintain the UK's position as a leader in research and development, we need to double the number of science graduates in the next seven years. The Government's 'Ten Year Framework for Science and Innovation' set a number of challenges for the secondary education sector to help achieve this.

This campaign forms part of the Department for Children, Schools and Families' (DCSF) response to this challenge, addressing the need for improved STEM careers support for students. The DCSF is delivering:

- an integrated communications campaign to inspire and inform students and their parents about potential careers;
- new teaching resources to help science and maths and careers teachers to guide and inform students;
- an online portal providing instant access to information and resources on STEM careers for teachers, students and their parents.

These initiatives need the support of the STEM workforce to be fully effective.



Campaign overview

Under the campaign strapline of 'see where they can take you', a communications campaign which includes targeted radio and cinema advertising, print and broadcast media coverage and online activity has been generated to inspire young people to take science and maths post-16. Each medium does this by showcasing the range of exciting careers open to those who do, and addressing the myth that science and maths only lead to dull, lab-based work. Such careers include sports technologist, sound engineer and cosmetics specialist among others.

At the heart of this activity sits a website, www.scienceandmaths.net, hosted on the social networking site Bebo. Here, by looking at real life profiles, students and their parents can get a flavour of the vast range of careers available through studying science and maths.

All communications activity is designed to drive them to this site – and we need your help to do this as well.

Communicating with students

Advertising, the media and the internet are just some of the ways we can reach young people directly.

But there are other methods, that are just as effective, if not more so. Direct influence from STEM and careers teachers within school plays a critical role in shaping students' career choices.

For this reason it is vital that you, as these influencers, are aware of the campaign and encourage your students to find out more, by showing them that studying science and maths can help them achieve an exciting and well paid career when they leave school. To see examples of where science and maths could take them in their future career, visit www.scienceandmaths.net.



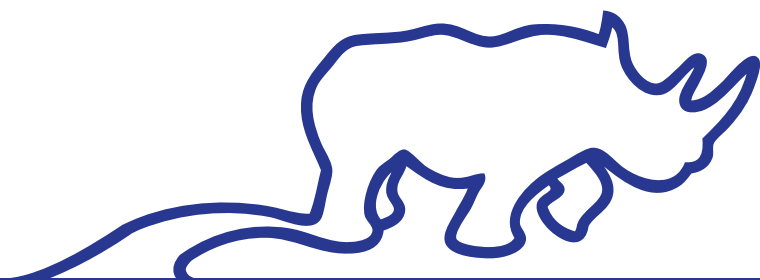
Throughout the campaign there will be renewed bursts of advertising (in cinemas and on TV and radio) aimed at stimulating interest from students. Where possible we will send you materials supporting this activity, such as posters, to help you engage your students about the campaign and guide them to the website.

Communicating with parents

As well as targeting students directly, the campaign also aims to communicate to parents the benefits of science and maths A levels so that they have the confidence to discuss STEM careers with their children. So far, articles in the Times, the Daily Mail, the Daily Express and on Radio 4 have helped do this.

But there is no substitute for direct engagement with a parent from their child's teacher. For this reason, we hope that you will also take the opportunities you have to engage with parents to discuss this campaign with them. In particular we are keen that parents understand that:

- studying science and maths at A level can set their child on the path to a challenging, rewarding and lucrative career;
- The Government is encouraging more young people to consider studying science and maths post-16 through its Science and Maths campaign;
- parents can help support their child in making the important decision about what subjects to study, post 16, by looking at www.scienceandmaths.net



Teaching support and resources

As well as drawing attention to the communications campaign, it is important that you are supported with additional information and techniques to engage students and parents on the range of STEM careers available.

DCSF has commissioned the development of support for teachers focusing on how teachers can increase young people's understanding of the nature of STEM careers, this comprehensive programme of CPD for teachers and trainee teachers will involve:

- A series of eight 15 minute programmes for Teachers TV which can be watched via its TV channel or website, with related resources available for download
- A programme of CPD modules designed to meet the needs of teachers and schools with a range of delivery methods to enhance school practice.
- IAG professional support pack including tools to increase knowledge of the complexity of STEM career pathways;
- a suite of new information on STEM work placements, mentoring and role models.

The Centre for Science Education with their partner VT Enterprise are working with a wide range of organisations to deliver this comprehensive suite of resources.

A pilot project, the Careers Awareness Timeline Pilot, across 30 schools is also underway to test various in-school activities that could improve young people's attitude towards STEM careers. Outcomes of these pilots will be reviewed in conferences and workshops during 2009 and 2010, which you will be invited to attend.

Future Morph, a new web-based STEM resource, has also been developed. Here, a wealth of new content including videos, interactive elements and quizzes to attract all ages and audiences can be accessed. All new teaching resources outlined above will be available for download at www.futuremorph.org in 2009.



Further STEM careers
information at:

www.teachernet.gov.uk/teachingandlearning/subjects/science/

www.scienceandmaths.net

www.futuremorph.org

www.mathscareers.org.uk

www.connexions-direct.com/jobs4u



department for
children, schools and families

You can download this publication at
www.teachernet.gov.uk/publications
Search using the ref: 00958-2008

Crown Copyright 2008

Extracts from this document may be reproduced for non-commercial research, education or training purposes on the condition that the source is acknowledged. For any other use please contact hmsolicensing@opsi.x.gsi.gov.uk

Issue date: **November 2008**

Information and advice contained in this leaflet is correct at the time of going to press.

SCIENCEANDMATHS.NET
SEE WHERE THEY CAN TAKE YOU