

20 Top Tips for a Successful STEM Careers Day

1. Contact your local STEM broker (www.stemnet.org.uk) as early as possible. They can help with ideas and signposting to other enrichment activities going on in your area that could be tapped into. They can also circulate your request for role models to their list of STEM Ambassadors (who are all CRB checked and have attended training). Check out the STEM portal if you are in a region that has one. The STEM careers project is training STEM Ambassadors to be able to have a more active role in events and careers - find out if you have any local STEM Careers Ambassadors.
2. Where can you get role models from if STEMNET can't help? Don't despair if they cannot help and do not put all your eggs in one basket! Other organisations can help with role models and if you think laterally you can often find people in places you might not have thought of. (Chambers of Commerce often has industry contacts who will come into school, parents and governors may be working in STEM, various schemes like www.whynotchemeng.com or www.researchersinresidence.ac.uk or Ecology Society can sometimes supply role models - also local universities outreach or Widening Participation can help with undergraduates.
3. Make sure your role models are fully briefed and supported - make sure someone personally speaks to them - they may be very nervous about coming into school. They need to know the time, place and their role - they are usually giving their time voluntarily. Speed networking sessions are very effective - the young people are in control - they ask the questions - and the role models don't have to write a long speech that young people may not find interesting. They need to be met when they arrive.
4. Why not encourage a group of sixth formers to support the day or activity - this gives them useful experience and allows younger pupils to explore STEM subjects at a level. They may be from your school or a local college.
5. A workbook will provide a lasting impact after the day - it allows teachers to see how the pupils engaged with the activities and for evaluation ready for next time. You can provide links to curriculum that can be picked up later and award prizes for the best workbook. You also have a set of activities that can be time fillers if things go awry at any stage.
6. Word searches and bingo activities included in the workbook provide simple activities for those quiet moments.
7. Make sure you have a mixture of practical, writing, group and individual or paired activities - and some passive watching - this will give you the greatest chance of pleasing all and reaching a wide range of learning styles.
8. You could include elements of PLTS within the workbook and the activities with a little thought. Build on this to ensure a broad and strategic approach to

- careers education. Check out the Timeline Project (part of STEM careers campaign).
9. Take the opportunity to involve the pupils in the organisation and embed additional PLTS and offer the opportunity to gain the STEM Leader qualification.
 10. Teachers who are managing groups need to be fully briefed early. Written briefs for the purpose of the activities will allow teachers to run any activities or support them - and if you have a Supply Teacher they can help too.
 11. Think laterally about STEM local employers - Vets, Dentists and Doctors, Fire Service, Water Companies, Pharmacies, Energy Suppliers, Universities and Hospitals all have a range of STEM jobs. What about local RSPCA, RSPB and Fowl and Wetlands groups as well as agriculture and farming. Others like Surveyors and Architects are STEM related employers. Small employers are often very supportive to a local school and provide an opportunity for a long term partnership. Other subjects and school departments may also have links you are unaware of - citizenship, pshe, Connexions.
 12. Did you know you can apply for a grant to fund enrichment activities from The Institute of Physics (although they have run out till January 2010), the Science and Technology Facilities Council, Royal Society of Chemistry, Royal Society and may be more.
 13. Activities that always go down well and are relatively easy to arrange include Knex - bridge building, design of a chair using newspapers, making bath bombs. There are many enrichment activities that are designed for STEM after school clubs that can have a career element added very simply with a little more work.
 14. If you can afford it - start the day with a big activity to the whole group - circus skills and science or a science based theatre group as well as many other ideas can be found in the STEM Directories. Each school should have received a set - check out www.stemnet.org.uk
 15. Some organisations can often be relied on and have no cost e.g. RAF, Army - others are willing but may have cost implications e.g. Science Centres and Museums. Check out the Association for Science and Discovery Centres UK www.sciencecentres.org.uk and www.scizmic.net
 16. Equality and Diversity needs to be embedded in any STEM careers day - so you need to check whether your role models are diverse and challenge the stereotypes. Contact Women's Engineering Society or UK Resource Centre for Women in SET or the Association of Black Architects. Can you do an activity that challenges stereotypes face on with separate activities for girls and boys - so that girls do an engineering activity and boys make bath bombs or DNA necklaces? Check out the STEM Subject Choice and Careers Equality and Diversity necklace.

17. Make use of the STEM Subject Choice and Careers Curriculum Resources - make sure you are registered - and the Teacher TV programmes for ideas. They can help you with ideas for simple and effective activities and provide links to further resources.
18. Make use of Future Morph activities and case studies. You can make a simple activity for a careers day by asking your pupils to write an article reviewing the Future Morph site.
19. Risk assessments - don't forget them!
20. Finally have a follow up celebration event that involves parents and put displays up of the work produced by the pupils. This all helps keep up the momentum and embeds STEM careers in a sustainable way.