

# **Working with Schools**

#### Introduction

Engaging young people with the world of research can be a worthwhile and enjoyable experience for everyone involved. As an expert in your field, you can bring a subject to life and inspire a new generation. Engaging young people in real life research can also better equip them to cope in a world where research-based issues can be controversial and important. You can benefit too, with the opportunity to develop and put into practice your skills, build confidence and widen your research horizons.

# **Getting started**

There are many opportunities for enthusiastic researchers from all disciplines to work with schools. However, before you begin there are a few things to consider:

#### What's in it for you?

Working with schools is not just good for the children; there are also a number of benefits for you and your institution:

- Working with young people can be fun and rewarding and can instil you with a sense of pride and achievement
- You can develop transferable skills such as presentation skills; project management and planning; self-reflection and evaluating your own performance; adapting your language and pitching content for different audiences
- It presents a new challenge to everyday work and you may gain a fresh perspective on your day to day work through the eyes of young people.
- It will help you to build your confidence in delivering engagement projects and working with new audiences
- It is a relatively 'low hanging fruit' for your first forays into public engagement, because schools provide a ready-made audience and the curriculum provides a framework to help you narrow down your subject area
- You can inspire and inform the researchers of the future; ensuring the further study of your research area
- You can benefit from new ideas and perspectives from the original thinking of young people, which may inspire your next research project
- You can develop and deepen links between your employer and schools, strengthening your institution's reputation in the community

#### **Planning your activity**

- Before you design your activity it is important to think about what you want to do and who you want to engage. Think about your audience. Which age group (or key stage) do you want to target? What kind of activity do you want to run?
- Make early contact with the school to discuss expectations and to share ideas. Give the
  school as much advance warning as possible. The school calendar is strictly timetabled and
  the teacher may want to schedule you for a time when they have an 'off-curriculum'
  session or when you can support the teaching of a particular topic. You might be able to
  support a special project week
- Remember to think about any risk assessments required and find out whether you need
  a DBS (Disclosure and Barring Service) check these can take a few months to organise so
  don't leave it until the last minute
- Find out what the pupils are currently studying that's relevant to your subject it will give you an idea of their background knowledge and how to pitch your activity at the right level
- What is the most appropriate language for that age group? Be careful to avoid jargon
- Remember that there are different styles of learning, and that pupils will have different
  abilities and interests so plan for this by including a range of activities. (Let the teacher
  know that you have thought about this teachers are increasingly required to record the
  range of personal, learning and thinking skills of different classroom activities)
- Be interactive and imaginative to get the pupils involved the more hand's on the better!
- Motivate your audience by linking your activities to the real world and encouraging pupils to make their own discoveries. In discussions, open questions also tend to lead to more interesting answers
- It's not just your research that is interesting you are interesting too. Share stories about what it's really like to be a researcher. Drawing upon your personal experiences will be all the more engaging
- Find out about logistics such as the space and resources available. For example, the school might not have space for equipment, or an available budget if you wanted them to travel to your research institution
- Think about what you need to take with you make sure you have enough
  handouts/worksheets and that you have sourced any equipment or consumables required
  for your demonstrations. It would be a good idea to find out what equipment the school
  can provide you might be surprised at what they have in the store cupboard. Be sure to
  provide the school with an equipment list for the technician, in advance of your session

### Ways to work with schools

There are lots of different activities you can run with schools – this may depend on the level of time commitment you can make to the school from the outset. Don't worry too much about discipline! The teacher will still be in charge of the management of the class. Potential activities include:

- Helping with practical projects and experiments, or performing demonstrations
- Running an engaging workshop, relating to your subject area, to support or enhance the curriculum
- Giving a talk about your research or your experiences as a researcher
- Working with after school clubs or national schools' competitions
- Getting involved in school careers events
- · Mentoring pupils
- Inviting students into your research institution/university for a tour or placement
- Working with teachers to help develop their knowledge of contemporary research
- Getting involved in the development of resources to be used in schools

# **Training opportunities**

You might want to think about training and background reading to help increase your confidence and the value of your activity. To gain an understanding of what a school, teacher or class might need, it is a good idea to have a look at the school curriculum. The <u>National Curriculum online</u> site is a good place to start. If your research institution has one, you could try approaching the educational faculty for advice, as they will have an in-depth knowledge to draw on.

The experience of working with schools is a development opportunity in itself, but you may wish to develop your communication skills or learn some techniques for relating to young people in particular. There are many formal training opportunities for researchers wishing to work with schools. Check out the National Co-ordinating Centre for Public Engagement <u>training</u> opportunities.

## Finding a school

You don't have to start from scratch! There is a great deal of support available for researchers wishing to work with schools, along with a range of existing programmes and locally organised activities.

- It is likely that your institution already has links with local schools, so it's a good idea to speak to your outreach/public engagement/widening participation/or communications office. They should also be able to advise you of existing schemes that can place you in a school (see resources section. You might also want to take a look at our guide to participating in someone else's scheme)
- Another good starting point can be talking to your learned society or professional association, who are likely to have a department that works with schools.
- If you are working in STEM subjects, your local <u>STEMPOINT</u> contract holder may also be able to help, (and sign you up as a STEM Ambassador).
- You could also approach your local school directly, especially if you have children at the school
- If you are new to working with schools, or you want to extend your public engagement activity, you might want to consider joining schemes such as the STEM Ambassadors Programme (see resources) as they offer support, training and a DBS check

### Top tips

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- 1. Do your homework schools have a number of conflicting priorities so you will need to have thought about how your activity is relevant to the school curriculum and how it will enrich their existing activities
- 2. Plan ahead and communicate meet with the teacher beforehand to discuss your ideas as they have lots of expertise and will know the pupils well
- 3. Manage expectations be clear about what you and the school want to achieve and how you will go about this. You should also make sure that your Supervisor or Head of Department is aware of your activity if this is appropriate
- 4. Evaluate and get feedback by arranging a short debrief session with the school so that you can improve your activity next time, and others can learn from your experience. In fact when planning your activity it can be useful to ask what others have done
- 5. Have a go and make sure you take advantage of all the available help and support rather than re-inventing the wheel

#### **External resources**

- <u>RCUK</u> fund a range of schemes, activities and resources that help link researchers and young people such as: <u>Engaging Young People with Cutting Edge Research: A guide for</u> researchers and teachers
- **STEMNET** for details of the STEM Ambassadors programme
- Association of Science Education
- British Science Association
- Nuffield Foundation





