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# The engaging researcher



Inspiring people to  
engage with your research



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## About Beacons for Public Engagement

Funded by the Higher Education Funding Councils, Research Councils UK and the Wellcome Trust, the Beacons for Public Engagement initiative aims to inspire a culture change in how universities and research institutes engage the public.

It consists of

- **Six Beacons:** University-based collaborative centres that help support, recognise, reward and build capacity for public engagement work. The six Beacons are based in: Newcastle and Durham ([www.beaconnortheast.co.uk](http://www.beaconnortheast.co.uk)), Manchester ([www.manchesterbeacon.org](http://www.manchesterbeacon.org)), CUE East (UEA – [www.uea.ac.uk/ssf/cue-east](http://www.uea.ac.uk/ssf/cue-east)), UCL ([www.ucl.ac.uk/public-engagement](http://www.ucl.ac.uk/public-engagement)), Wales ([www.engagingwales.org](http://www.engagingwales.org)) and Edinburgh ([www.edinburghbeltane.net](http://www.edinburghbeltane.net))
- **The National Co-ordinating Centre for Public Engagement (NCCPE):** which coordinates, captures, shares and promotes learning between the Beacons, and across UK higher education institutions and research institutes.

Find out more at [www.publicengagement.ac.uk](http://www.publicengagement.ac.uk) which includes more information about the project, resources for engagers, and links to the Beacon websites.



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## 1. Introduction

“Sharing your work can bring enjoyment to those you engage with and in return, new ideas and a personal sense of satisfaction.”

Dr Mark Jabbal, Postdoctoral Researcher, Aerospace Engineering, University of Manchester.

An engaging researcher is just like any other researcher – with one important difference. Engaging researchers go out of their way to involve the public with their research. They open up opportunities for others to get involved, provide new perspectives on the value of their work, and stimulate people to be curious about the world of research – and why it matters.

This booklet highlights some of the many ways you can engage the public, offers practical tips for getting started and explores how public engagement can benefit you, your research and the public with whom you engage.





## 2. Public engagement: what's it all about?

Public engagement describes the myriad of ways in which the activity and benefits of research can be shared with the public. Engagement is by definition a two-way process, involving interaction and listening, with the goal of generating mutual benefit.

Done well, public engagement can have a huge impact on all the participants. It can improve the quality and relevance of your research, help you develop useful skills and reawaken your passion for your subject. For the public who engage it might stimulate their own curiosity, raise aspirations, develop knowledge and understanding or enable them to contribute to the research.

Public engagement covers a range of different types of activity from more traditional one-way forms of engagement, eg lectures and talks, to more interactive engagement, eg co-production of research. Here they are categorised into three different types:

### Informing

- Presentations and talks for the public
- Displays at open days or festivals
- Working with the media, eg writing for the non-specialist, broadcast, social media
- Providing advice to members of the public or external organisations

### Exchanging

- Interactive discussion formats, eg taking part in a public debate or dialogue
- Lifelong learning
- Involving and consulting the public about your research
- Postgraduate researchers working with the public as part of their course, eg applying research skills in a community context

### Collaborating

- Collaborative co-inquiry research, eg co-produced research, with the public involved in shaping the research question, design and delivery as co-researchers
- Dialogue where researchers, policy makers and the public explore the future direction of a particular research topic

Often public engagement activities are run in partnership with others. For example:

- museums, galleries, science centres and other cultural venues
- festivals, exhibitions
- teachers and schools
- community organisations.



## RESEARCHER PROFILE

**Alexis Kirke, Postgraduate Researcher, Computer Music, University of Plymouth**

'Public engagement can't be the only reason for doing my research, but it's amazing how public enthusiasm gives me new energy for further research and gives more meaning to my work.'

My PhD supervisor organised a concert in my first year and allowed me to submit a piece of music based on my early research. I was invited by Peninsula Arts at Plymouth to organise regular concerts showcasing my research group's work. I saw how people became excited at cutting-edge research presented in a musical and less formal way – I became hooked on engaging the public. The most satisfying thing is to observe people with no expertise in the research, and even with no special interest in 'art music', becoming enthusiastic about the music and the technology used to create it. To see people with no connection with the University, who would normally go to a Mozart string quartet performance, looking delighted to be at a computer-research based event, is wonderful. A concert hall is usually more welcoming to the general public than a seminar room.'

## 3. Public engagement: good reasons to engage

“ The question should not be is our research any good, but what it is good for? ”  
Professor Chris Brink, Vice-Chancellor, Newcastle University

There are many reasons to get involved with public engagement. Here are some of them.

### 1 It can help improve the quality and impact of research

There is increasing evidence that engaging the public improves the quality of the research undertaken. Not only do the public raise relevant questions but projects that have been defined and researched in partnership with the public, often result in greater impact and relevance.



'We developed an engagement process over seven months, first setting up groups of participants including three panels of residents from the community.... The benefit to our research came from harnessing this local knowledge to generate a distinctive research agenda for urban sustainability. Issues had emerged on crime, safety and community cohesion which we had not expected.'

Professor Malcolm Eames, Research Chair with the Low Carbon Institute, based at the Welsh School of Architecture

### 2 It raises aspirations

For example some school children would never have considered going to university had it not been for a researcher going to meet them at their school and inspiring them with their research.



'What got me excited about science was meeting a brilliant scientist and seeing how much he loves his job! So I try and do the same – I try and show how every day at work is different and how my work may make people feel better as I do medically relevant research.'

Dr Mirela Delibegovic, RCUK fellow, IBES, College of Life Sciences and Medicine, University of Aberdeen

### 3 It challenges assumptions, sharpens thinking and injects energy

It's all too easy to lose perspective on why your research matters. Discussing it with the public can help you examine your assumptions and introduce fresh perspectives to improve your thinking.



### 4 It can help build trust

There are many examples of where trust between the public and researchers has broken down (eg over GM crops, or animal testing). Involving the public in discussions of emerging research areas can help avoid such situations and help researchers think through the social and ethical implications of their work.



### 3. Public engagement: good reasons to engage

#### 5 It develops transferable skills which can aid your employment and promotion prospects



Public engagement enables you to enhance and develop your skills, for example communication, networking, media, and project management. These skills are really valuable to a career both inside and outside the higher education sector.

'You only truly know your own research when you can explain it easily to anyone.'  
Charlie Mydlarz, Postgraduate Researcher, Acoustics, Salford University

#### 6 It contributes to accountability

As the public fund much of the research in universities and research institutes, they are entitled to know how that money is being spent, and to feel some ownership of the activity.



'The 'public' are not just a homogeneous group of people; they are everyone from the primary school child who in ten years time may either be your PhD student or a merchant banker, to your elderly aunt who is wondering what her taxes are spent on.....Collectively they are more experienced, cleverer, more creative and more perceptive than you can hope to be. Individually they can be challenging, fun, grateful for your time and generous with their own. They are the people who ultimately will live with the consequences of your discoveries, good or bad, and they want to know what you think.'

Dr Clare Davy, Research Scientist, Virology, MRC: National Institute for Medical Research

#### 7 It is important to the funders and can draw down additional funding



The majority of research funders in the UK (including the Funding Councils, the Research Councils and the Wellcome Trust) recognise the importance of public engagement in research and ask applicants to detail how they will do this in grant proposals. Many also offer public engagement grants.

#### 8 It improves relationships between the university and its neighbours

Public engagement provides an opportunity for a university/research institute to both learn from, and engage with those people living nearby.



### 4. Getting started

Before getting started there are lots of aspects you need to think about. Here are four important areas that you will want to consider to make your public engagement successful: the purpose, the audience, the activity, and how you will assess impact.

#### What's the purpose?

Before you start planning it is important to think about why you want to engage the public with your research. This can be challenging but it is often hard to make a wise decision about the approach without knowing why you are doing it in the first place.

Here are just a few of the possible purposes for engaging with the public:

- to inspire school children, adults or families to take an interest in your subject area or discipline
- to disseminate the results of your research
- to involve the public in helping formulate a research question or project
- to consult the public on their views about your area of research
- to encourage people to help you do your research.

#### The audience

Once you have thought about the 'why' – it is important to think about the 'who'. Who are you going to engage with? A common answer to this question is the 'public' – but who are the public and how can you ensure that you engage with them effectively?

The 'public' is everyone: your family and friends, your line manager, a school pupil, potential future funders or members of your local community. This wide ranging group is often broken down into different types based on categories such as age, gender, ethnicity, location and interests. Examples include:

- schools and colleges (primary, secondary and further education)
- families and children
- young people (aged 18-25)
- adults
- local communities, community groups
- business and industry
- government and policy makers.



## 4. Getting started

### Understanding your audience

Once you have identified your audience, take time understanding their interests and lifestyles. Why might they be interested in taking part in your public engagement activity? The more you understand your audience the more successful your public engagement activity is likely to be.

- Build a profile of your target group. Make a list of what they do, what they read, what they listen to, where they go, how they like to find out about events. You may have to make some assumptions but be wary of stereotyping
- Work with an audience you feel you already know something about. Build on your own knowledge and further develop the profile of the group by asking relevant questions
- Identify an audience champion. A partner from an organisation or venue associated with your target audience who could help develop the event and provide valuable insights, knowledge and contacts. Remember this relationship needs to be a mutually beneficial opportunity to learn together and develop an effective activity
- Seek advice from the equality and diversity staff or various network groups within your institution, eg disability group or Black and Minority Ethnic (BME) group. Ideally, involve members of your targeted audience in your planning, as they will bring new perspectives and help ensure you develop an effective project
- Why might your audience want to engage with you? What are their motivations and needs?
- Think about the audiences' different learning styles. Make sure you include different types of activity to suit different preferences
- Consider barriers and what you can do to ensure that they don't stop your target audience coming to your event. These can include:
  - transport (availability and costs)
  - disposable income
  - timing of the activity
  - interest
  - lack of trust in you and your organisation
  - perceived relevance of your research
  - accessibility and mobility (physical and cultural)

- language (do you need to involve an interpreter?)
- awareness of the event
- childcare
- diet and food (ensure that you provide refreshments that are appropriate for your audience).

### Learning styles

Different people have different ways of learning. It is worth considering a mix of approaches when devising your public engagement activity. It is common to plan activities that suit our own learning preferences, so ensure that you work with people who can help you develop your understanding of how to support the needs of your audience.

There are three main learning styles:



#### Visual learners

prefer learning by seeing. They enjoy communicating through images, graphs or objects



#### Auditory learners

prefer learning by hearing. They enjoy discussion, radio programmes, lectures and debates



#### Kinaesthetic learners

prefer learning by doing. They draw from experience, movement and modelling

#### Inspiring Learning for All

([www.inspiringlearningforall.gov.uk](http://www.inspiringlearningforall.gov.uk)) has an excellent questionnaire which can help you determine your own learning preferences.

### The activity

The most important elements that will determine what you actually do are your purpose and the target audience. The answers to these questions are critical to thinking about which type of engagement activity that you might do. Other key factors are your area of research and the resources you have available. You need to be realistic about the amount of time it will take you to prepare and run an activity and think about whether you have other resources at your disposal.

### Approaches

There are lots of different ways to engage the public with your research – here are some examples to whet your appetite – but remember that this list is only the tip of the iceberg. You can find out more about other approaches in the resources section.

#### Public lecture or talk

An ideal entry level activity for someone new to public engagement – but not without its challenges! The more two-way you can make it the better.

- Pitch it to the audience – they may be new to the subject that you know so well, so think about what they might already know or feel about the topic
- Tell stories and use inspiring images
- Involve the audience – by encouraging questions and answers, offering demonstrations and activities that people can volunteer for, or asking the audience to vote on different options
- Practice and test it out with someone who can give you honest feedback

#### Festival

Some festivals have opportunities for talks and workshops, whilst others have more drop-in style activities. For example the Cambridge Festival of Ideas, ESRC Festival of Social Science, Glastonbury and Bristol Festival of Nature all involve researchers engaging the public with their work.

- It's not a captive audience – so give them a reason to stay
- People rarely come to festivals alone – so make sure there is something suitable for everyone
- You are likely to be part of a team – so buddy up with someone who has done it before to gain insights
- Make sure you attend any briefing offered by the event organisers – it will really help on the day
- Experiment with alternative formats. Not all public engagement has to be serious. There are some great examples of researchers using comedy to engage with people
- People will ask you all sorts of questions that have nothing to do with your research – such as where the nearest toilets are. Make sure you know where everything is, as well as who to call if there is an emergency!



Photograph courtesy of University of Cambridge



## 4. Getting started

### Working with schools

Lots of people experience public engagement for the first time by working with a school. This might be through an existing programme (eg Researchers in Residence), or a locally organised activity.

- Visit the school before your event – that way you can get a feel for your potential audience
- Talk to the teacher – they have lots of expertise and know the pupils really well
- Find out what the pupils are currently studying that's relevant to your subject – it will give you an idea of how to pitch your talk/activity

- Remember that there are different styles of learning – so plan for this and include a variety of different types of activity
- Be interactive and get the pupils involved. Try to set them up to score the goals rather than score them all yourself
- Open questions tend to lead to more interesting answers
- Remember to check whether you need a Criminal Records Bureau (CRB) check – these can take a few months to organise so don't leave it until the last minute

### RESEARCHER PROFILE

**Dr Michael Pocock, Research Fellow, Biological Sciences, University of Bristol**

'In my NERC-funded fellowship I am looking at how animals and plants depend on each other, and how we benefit from biodiversity. One of the major threats to biodiversity is invasive species, but native animals can provide a role as natural pest controllers.

In 2009 I ran a research project with Darren Evans (University of Hull). 900 Bristol school children looked after conker tree leaves which had been damaged by the caterpillars of an 'alien' moth (one that had only recently arrived in this country). We asked the children to see whether their alien had been zapped by natural pest controllers (parasitic wasps) by seeing what insects emerged from their leaves.

Many children were excited to see the tiny insects close up and thrilled to take part in a real scientific study. The success of that project led to funding from NERC for us to run 'Conker Tree Science' nationally during 2010, and to inspire school children and the general public to help answer the question: Does the level of pest control vary by how long the alien moth has been present?

Engaging the public with science in this way is important to highlight how we rely on 'our web of life', but is also a great way of gathering ecological data from all across the country in a short period of time to answer an important scientific question.'



### Dialogue events

Provide adults and young people with an opportunity to discuss and debate an issue in a relaxed setting, eg Meet the Expert, Cafe Scientifique ([www.cafescientifique.org](http://www.cafescientifique.org)).

- Visit a similar event beforehand and get a sense of the type of discussion that could arise
- It's an evening out – think chat over a pint, not presentation at a conference
- It's ok to admit you don't know something
- Remember to listen to what people are saying – and to reflect on it. They will have other perspectives and experiences so try to ensure that you create a space where people can express what they think



### Public as researchers

Some projects support and encourage the public to be part of the research team. There are some inspiring examples of how this has worked in practice, like Galaxy Zoo ([www.galaxyzoo.org](http://www.galaxyzoo.org)), where thousands of people have analysed pictures of galaxies and determined what type they are.

It is fair to say that not every type of research lends itself to this approach – but it can really impact the research you are able to do.

- Test out the concept before trying to recruit people – a good idea might not prove to work in practice
- Think through the ethics. Who will own the data? Who can have access to it? Are you inadvertently exploiting the people you want to engage in the work?
- Think about marketing and whether you have enough time and resources to make your plan work?

### RESEARCHER PROFILE

#### Tracking the history of climate change – a Researchers in Residence case study

**Hilary Bishop, Postgraduate Researcher, Archaeological Heritage Management, University of Liverpool**

'Whilst doing a Research Preparation Masters in archaeological heritage management, funded by the AHRC, I joined the Researchers in Residence scheme. I was placed at Brine Leas High School in Cheshire where the school was keen for me to cover topics the students could easily relate to their curriculum work. Another researcher, a geologist, was also working with the school and we decided to work together.

We came up with a joint project examining the effects of climate change on the planet, from the dawn of time to the present day, using archaeological techniques and evidence to draw conclusions. Climate change was a topic students were already learning about in class. We did presentations, organised a fossil quiz and even set up a timeline in the playground that students could get involved with; physically charting changes to the planet over the ages. The placement was spread over three days in the same week, working across different year groups (years 7-10). I was concerned how I would cope in a school full of teenagers, but the teachers were always present and on hand to step in, and the students were well behaved.

The highlight of the project was seeing the kids getting involved. Some of the students knew a lot about archaeology already, through watching programmes like Time Team on TV. It was great having the opportunity to broaden my research topic, learning how to tone down the technical side and simplify things.'

## 4. Getting started



### Co-inquiry project

This partnership approach invites community groups to work with the university/research institute staff to define a research question that has value to all the participants.

- Manage expectations – be clear what you can or can't offer at the start
- Relationships take time – therefore think about how you are going to manage these long term
- You're not alone – think about who else needs to be involved from your university/research institute
- Talk to the experts – many people run successful co-inquiry projects so make sure you check their work out and learn from what they have done

“Until last year I saw universities as another world, it didn't seem they were engaging with the community. Now, we are co-researchers developing our own research project.”

Community member, Gateshead

### Media

Many of the options described here are about face to face engagement – however there are other ways to involve people with your research. Whilst many researchers are inspired by the idea of appearing on television, there are lots of other media opportunities. Why not try writing a blog, participating in a discussion forum, or contributing content for your department's website?



## 5. Measuring the impact: how do you make sure what you're doing hits the mark?

### Why measure the impact of your public engagement?

Most funders will ask you to tell them how you have measured the impact of your public engagement work – and it can sometimes feel like an unwelcome add-on. Evaluation is a valuable tool which enables you to learn from your experiences. Think of it as the research element of your activity. It is a process of collecting evidence and of reflection that will help you with your next public engagement event. Benefits can include:

- assistance with planning. Evaluation helps you focus on what you want to achieve, how you will achieve it and how you will know if you have been successful
- providing evidence. It proves the value and benefits of your activity and a record of your achievements (for you and your line manager/supervisor and funder)
- demonstrating value for money. This is important when reporting to funders
- learning that can be shared with others and inform future activities
- an opportunity to reflect on your approach and improve it.

### What is the difference between an output, an outcome and impact?

- **Outputs** are the results of your activity (eg event, website, science show, wall painting)
- **Outcomes** are the overall benefits you aim to achieve (eg deeper understanding of climate change, the skills to create a computer animation, shared values)
- **Impact** is the overall effect or influence of the activity. It is the sum of the outputs and outcomes





## 5. Measuring the impact: how do you make sure what you're doing hits the mark?

### Planning your impact evaluation

It is likely that you will be conducting the evaluation yourself rather than paying for an external evaluator – although really big projects that have a budget would do well to bring in an expert.

Ideally plan your evaluation strategy at the beginning. Plan it as you would a research project. Evaluation can take place before, during and after an activity and can be used to consider the delivery process and the quality of the content. The aim is to assess whether you have met your objectives, what changed as a result of the activity, how it could have been more effective and if there were any unintended outcomes. It is important to understand not only what happened but also why something worked or didn't work.

There are various stages to an impact evaluation strategy:

#### 1 Overarching aim

What do you hope to achieve? eg Raise awareness of health research, recruit new scientists, obtain public experiences of an issue?

#### 2 Objectives

What do you need to do to achieve your aims? Make your objectives SMART: S(pecific), M(easurable), A(chievable), R(elevant) and T(ime limited) and think about what you can realistically achieve.



#### 3 Evaluation questions

These are the questions you want to answer. They are similar to research questions and they should relate to evidence that can be collected.

#### 4 Methodology

You may want to assess your audience to create a baseline before your activity and then see if there has been any change after your event. You can undertake on-going evaluation (formative) to assess how successful your event is in engaging with your audience. This allows you to modify what you are doing. Finally, you can conduct summative evaluation at the end of the event to assess the success in achieving your outcomes and the overall impact.

#### 5 Data collection

There are two main types of data collection methods – quantitative and qualitative. Quantitative methods use facts and figures and multiple choice responses whereas qualitative methods ask what people thought. A mixed approach is recommended. There are various data collection techniques that you can use, for example observation, face-to-face interviews, questionnaires (paper or on-line using programmes such as Survey Monkey), focus groups, and creative techniques such as graffiti walls, video and drama.



#### 6 Data analysis

You need to consider how much raw data you plan to gather and how you will analyse the results. It is advisable to use a spreadsheet and if possible number all your responses. Open qualitative responses can be coded into common themes to make analysis easier.

#### 7 Reporting

When writing your report think about the evidence you have collected, what it tells you and who is going to read your findings. Reflect on what you have learned from the experience. Write a clear and accessible report including lessons learned. Make judgements on what was successful and what was not and how you might do things differently next time.



## 6. Top tips to consider before doing public engagement

### Top ten tips before doing face-to-face activities:

- 1 Audience** Make sure that the activity is targeted appropriately. If you aren't sure, then talk through your plans with an audience champion eg a teacher, a community leader
- 2 Planning** It takes time to organise activities – particularly event based ones. Write a realistic project plan and add in some contingency time
- 3 Venue** Whilst it may be convenient and cheap to use a university/research institute venue for your event, a community venue can sometimes be more welcoming for your audience. Is the venue easily accessible and free to enter? Is it a location people visit on a regular basis?
- 4 Comfort** Toilets, refreshments, heating...sounds obvious but easy to overlook
- 5 Access** From wheelchair access to parking – it's important to ensure that people can easily engage with your event. You may have an access officer at the university/research institute who might be able to give you some advice
- 6 Barriers** Are there specific barriers for your target audience to engage with your activity? Have you done everything you can to make it accessible? For example, if you are undertaking co-inquiry research with a public group, could you reimburse their expenses as an acknowledgement of their time?
- 7 Marketing** It's difficult to get people to come to a one-off event. Offering a session to a group who are already meeting regularly is a great way to start. They have already sorted out the practicalities, leaving you able to concentrate your energy on creating a great event
- 8 Attitude** Whilst it can be nerve wracking participating in a new type of activity, try to remember that people have chosen to come and so they want you to do well
- 9 Listening** There has been a tradition of university staff setting themselves up as the expert and the audience as the recipients of this expert knowledge. However, effective engagement is not framed this way. More important than being able to talk is being able to listen
- 10 Content** What type of activity are you going to do and how are you going to ensure that it is relevant to your chosen audience? Remember that your audience will involve people with different learning styles so try to ensure you use alternative ways to present the content like using audio and films, images, and getting people actively involved



## 6. Top tips to consider before doing public engagement

### Getting people to your event

- Find out how your audience like to receive information – word-of-mouth, email, poster, radio or social media
- Discover existing networks that reach your audience and use these routes to promote your event
- Work with your audience champion or ask advice from other umbrella community organisations
- Work with your venue – they may have established networks and places to advertise activities where you can promote your event
- Run your public engagement activity during a local, regional or national event such as a festival (eg Cheltenham Science Festival) or annual nationally-recognised event (eg Festival of British Archaeology). The event organisers may offer support in marketing your activity as many have national and regional marketing campaigns which you can benefit from
- Locate your event in places that your target audience regularly frequent, such as a shopping centre, railway station, library or coffee shop
- Build loyalty – if you start something on a regular basis, eg once a month, you may be able to develop a loyal audience who then start bringing their friends

### Other forms of engagement

Many of these suggestions are particularly pertinent to face-to-face activities – however some are also relevant to other forms of engagement. For example if you want to engage the public with your work through online media, write articles for magazines, volunteer content for your department's website, or post your YouTube videos, you will need to think about making the content accessible to your audience, how you are going to get people to access your content, and how you use this to encourage them to engage with you.



## 7. How can you be sure that you will be good at public engagement?

Just as with any area of your research career, it's important to take a professional approach to your public engagement. Planning and preparing well are crucial – as is choosing an activity that you feel comfortable with.

Engagement draws on a range of skills and personal qualities, as well as depending on a range of tried and tested techniques. Over time, you can begin to stretch yourself by developing your skills and learning new techniques – but don't try to run before you can walk!

The NCCPE Public Engagement Attributes Framework (B Johnson, 2010) highlights some of the core skills necessary for effective public engagement. Here is their summary.

### Communication skills are at the heart of public engagement.

#### The engaging researcher:

- adapts their communication for different audiences
- has a robust knowledge of the topic in question
- listens and responds carefully
- respects and values other people's contributions
- builds on their audience's knowledge and understanding.

### It's also really important to try to be reflective about your work.

#### The engaging researcher:

- welcomes feedback
- reflects on their own practice
- is willing to embrace new views
- conducts formative and summative evaluation
- can recognise when to seek advice or support.

### There are lots of people skills involved. The engaging researcher:

- is sensitive to issues of diversity and inclusion
- respects differences in understanding and attitudes
- is sensitive to social and ethical issues
- builds and sustains effective partnerships.

Finally for those developing their own engagement projects, there is a need for project management skills, many of which you will already be using in your research, or you can access training and support.

### Reflection exercise

You may be surprised to find that you already have many of the skills needed to be an engaging researcher. Why not spend ten minutes looking through the core skills in the attributes framework and list the things that you already do that are relevant to each area. Draw examples from your work, study and social life. Examples could include:

- explaining your research to friends
- participating in a volunteering project in your local community
- reflecting on your research with your peers
- writing content for a newsletter.

Once you have mapped your current skills, think about your strengths and where you might need more support. This will help you to determine how to get started – either supporting someone else in their engagement work, participating in a project that has already been set up, or creating your own project. Start small, and you will soon find that you develop your experience and skills, and can try more ambitious things

All of the skills and attributes of public engagement are also referenced in the 'Researcher development framework' (RDF) developed by Vitae. This is a tool for planning, promoting and supporting the personal, professional and career development of researchers in higher education. For more information, visit [www.vitae.ac.uk/rdf](http://www.vitae.ac.uk/rdf)

## 8. Top tips from engaging researchers

We asked researchers who engaged the public with their research to tell us their top tips. Here are some of their suggestions.

### Dr Andy Russell, Postdoctoral Researcher, Atmospheric Science, University of Manchester

- 'Play to your strengths – there are lots of ways to engage the public so find something that you'll do well
- Don't be afraid to admit that you don't know something – research is all about the things we don't know so not knowing the answer to a tricky question is fine
- Make sure you put aside enough time to do the activity and to plan it properly'

### Dr Michèle Mendelssohn, University Lecturer and Tutorial Fellow, Faculty of English Literature, Oxford University

- 'Speak in plain English rather than in 'academese'
- Have a sense of humour (or try to have one)
- Remember when it was all new to you? Never lose sight of what makes your work exciting and the reason you got into it in the first place'

### Dr Sarah Hart, EPSRC International Research Fellow at the Life Science Interface and Lecturer in Bioscience, School of Medicine, Keele University

- 'Practise what you're going to do or say before you get there
- Ask a friend or colleague's opinion on your ideas – if you can get your non-scientist friends excited about your work you'll probably get kids excited too
- Make sure you're having fun'

## 9. Getting support

There are lots of ways to engage with the public, some of which you can set up and organise yourself and others where you can get involved in someone else's project. The good news is that there are numerous places you can go to get help, advice and support – as well as a wealth of opportunities to 'sample' public engagement, for instance by taking part in an organised project in a local school.



### Here are some of the things currently available:

- Many universities/research institutes have a member of staff and/or unit that supports people to engage the public and coordinate opportunities with external partners, so why not arrange to meet with them to discuss opportunities they have coming up?
- Does your local museum or science centre run public events? They may be looking for people to help act as experts in their activities
- Does your university/research institute participate in any public festivals – either running their own, or hosting a stall at someone else's?
- Has your university/research institute got a website – do they need content providers? What about your department's website – do they need help making the work relevant and accessible to others?
- Does your funder offer any particular opportunities to engage with the public?

- If you want to start exploring how to write for a public audience you could start your own blog or create an iTunes U or YouTube film
- Is there a colleague in your department or school who is doing public engagement? Why not go along and help?
- Researchers in Residence: brings together early career researchers and young people via exciting placements in secondary schools or colleges across the UK. The scheme offers researchers the opportunity to use their expertise as a researcher, develop their skills and demonstrate impact as well as inspiring the next generation of researchers. The scheme is open to researchers funded by one of the UK Research Councils or the Wellcome Trust. [www.researchersinresidence.ac.uk](http://www.researchersinresidence.ac.uk)
- STEM Ambassadors: volunteers who act as inspiring role models to young people providing a refreshing change to regular lessons and activities and helping young people to see science, technology, engineering and mathematics (STEM) subjects and careers with a fresh perspective. [www.stemnet.org.uk](http://www.stemnet.org.uk)

### Online resources available to you:

There are lots of online resources to help support people wanting to engage the public with their research. You can find an up to date list on the National Co-ordinating Centre for Public Engagement website:

[www.publicengagement.ac.uk](http://www.publicengagement.ac.uk)

Here you will be able to find links to current funding schemes, training courses and events, NCCPE opportunities and more information including literature reviews.

In addition, visit the Vitae website for further updates on Vitae public engagement events and for downloading a copy of this booklet:

[www.vitae.ac.uk/publicengagement](http://www.vitae.ac.uk/publicengagement)

For more information about Vitae resources visit [www.vitae.ac.uk](http://www.vitae.ac.uk)

## RESEARCHER PROFILE

### Dr Martin Coath, Postdoctoral Research Fellow, Centre for Robotic and Neural Systems, University of Plymouth

'I have done all kinds of stuff! I have given presentations at public events and not just science festivals (for example I spoke last year at the Cheltenham Music Festival), done science busking in pubs, and regularly visited primary and secondary schools. Also in the last few months I won 'I'm a Scientist – Get Me Out Of Here'. I was a finalist in the NESTA Famelab competition and I am a STEM ambassador – both of these things have provided me with many opportunities.



Talking about my own work is fun of course, but it is also important that people, particularly young people, see all of science and mathematics as something worth talking about so I like to do real experiments with young people. For example, last year (with help from others) we measured the acceleration due to gravity in a public park with under-tens holding the stopwatches – it was great fun. These types of public engagement are crucial because the argument for science has to be made at all levels, not just in grant applications!