







A mini guide created for science and discovery centre practitioners on preparing researchers to work effectively with youth groups.

This two-part guide, written by Dr Helen Featherstone, Head of Public Engagement, University of Bath and Katie Weldon, Project Coordinator, Science Ceilidh, provides top tips from public engagement professionals working in universities, and science engagement specialists working directly with youth groups. It's been prepared for science communicators, project leads and education teams within science and discovery centres and museums to support in the development of new working partnerships between researchers and youth groups.







Part 1: Guide for preparing researchers to work with youth groups

These tips have been developed from Curiosity in Action, a two-year programme involving youth workers and researchers across Scotland working together in long-term partnerships to develop and deliver STEM-themed activities with youth groups. The programme focuses on understanding how these activities impact young people's social development, while supporting researchers to gain confidence in working with community groups and youth workers to gain confidence delivering STEM activities. Curiosity in Action was funded by the Science and Technology Facilities Council (STFC) and facilitated by Science Ceilidh with the support of YouthLink Scotland and a wider steering group.

The do's:

- Do encourage the researcher to make an introductory visit to the group. The best preparation for working with a new group that you are unfamiliar with is to go along and join in with one of their typical sessions. This will help researchers get a feel for the group dynamics, structure (and lack of structure in some cases!) and energy of the sessions. This also helps the group feel more comfortable with the new face joining their sessions.
- Do encourage researchers to bring their 'whole selves' to youth group engagement and not just their identity as a researcher with particular expertise. Encourage them to share their interests, hobbies and passions.
- Support with establishing the researcher's responsibilities. Don't assume everyone will know their exact role in the session, helping to develop these can create a more positive partnership. For example, who will be responsible for setting boundaries with the young people, who will buy materials for the activity, and who will write up the risk assessment of activities? These roles don't always need to be assigned to one person and can be a shared responsibility, but it is always helpful to run through them.
- Do emphasise the importance of flexibility. It's important to meet the young people where they are at on the day, some days this can look like lots of energy and conversation while on others it can look like low energy and young people needing quiet time.
- Do integrate what young people are already interested in and connect it with you as a person, or with your research. For example, if they are interested in football you could incorporate this into your sessions as a breather and share your own interest in football, but can it also be used as a hook for an element of your research?

- Do make sure you're available to support with the planning. It's easy for planning to be left until the last minute when there are multiple partners involved who are all working across various projects. Having one person take the lead on scheduling planning meetings and suggesting deadlines helps everyone involved to be more prepared.
- Do create opportunities for direct collaboration.

 Set up times for the researcher to meet the community group leaders to hear from them what works for their groups, and to allow them to develop the session together. This lets the researcher know any direct needs of the group, whether that be 15 minutes of the session allocated to a snack or time to warm up to a new face.
- Do highlight the unique space community work creates. It is helpful for the researcher to understand the value of youth work, including how the relationships between young people and youth workers can create space for young people to be vulnerable, and in control.
- Do focus on the fun! These types of sessions are all about having fun and creating positive experiences for and with the young people and researchers. Intentionally incorporate elements of playfulness to encourage an enjoyable and memorable experience for everyone.

"I'm happy to do things that won't necessarily work out and just allow people to give things a go without there needing to be, you know, a final product or completion of something."

Researcher from the Curiosity in Action programme



And the don'ts

- Don't expect researchers to be familiar with informal engagement. Make sure they aren't going in expecting quiet listening or rigid activity plans, prepare researchers for interruptions, discussions, and deviations.
- Don't ignore potential power imbalances. Be mindful of power dynamics and actively work to create an environment where both researchers and youth workers feel comfortable contributing and guiding the engagement. It's also important to acknowledge any power dynamics your role creates.
- Don't over-prepare a rigid plan. Encourage the researchers to be prepared for sessions and activities to go off-script and allow the young people to direct activities in a direction that is most interesting to them. Still have them think about things like risk assessments and different activities they plan to run, but not to plan out a fixed script for the session.

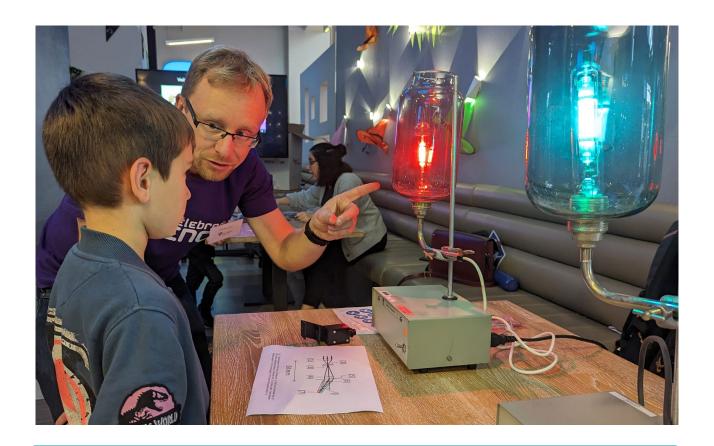
- Don't underestimate planning needs and scheduling challenges. Providing structure and support to ensure regular communication and progress is useful, especially when working with groups who work at varying times.
- Don't assume shared priorities for the activity.

 Take the time to set out these shared priorities at the beginning for everyone to understand each other's perspectives and goals. This includes being transparent about your own aims for the session. One way of doing this is to have everyone write their top three aims for the session, e.g. 'young people have a positive engagement with STEM' or 'young people increase their confidence in themselves'. Everyone can then read each other's priorities to see overlap and differences before deciding as a group which three they would like to use for planning the session.

"If I don't prepare too much, I have more fun. Have a few topics and a few little things around the topic, and then engage with them where they are, it is what works best"

Researcher from the Curiosity in Action programme





Part 2: How can Science and Discovery Centre practitioners work effectively with university researchers?

The front door

There often isn't a front door to a university. So, if you've found a researcher who sounds interesting and you'd like to talk to them about their work, you can approach them directly (their contact information is nearly always available on the university's website). If you aren't sure who is best to approach, contact someone in professional services.

Professional services staff often work with many academics so have a good understanding of who could be interested in what you are doing. They can also help translate. Look for teams who work in Public Engagement, Community Engagement, Knowledge Exchange.

Professional services teams can sit centrally in the university, or could be based within local faculty, department, or college level.

Making connections...

Turn up to (or run your own) networking events. It can be useful to theme them but use a broad topic like "healthy ageing" or the "future of transport" so that academics can link their work to the theme. Sometimes the offer of networking is not enough, so it can help to have something else beyond the networking such as an opportunity to get involved with a public engagement event, or to apply for funding. However, having an offer

can make people feel they are signing up for something before they know what it is so make your pitch carefully.

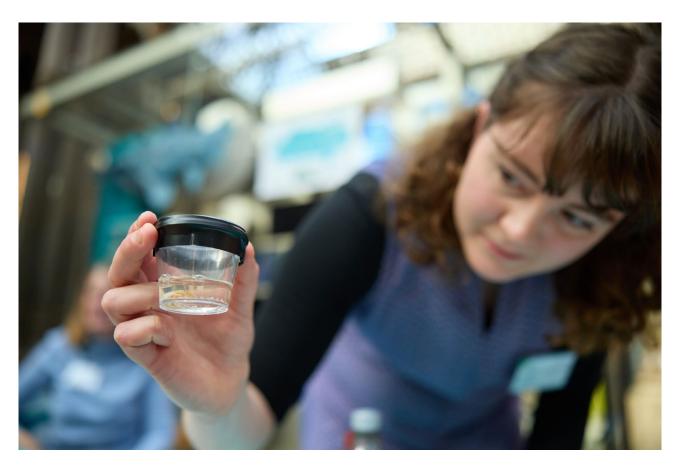
The University of Bath runs Connect! events:

"If your work or research is focused on the environment or sustainability - join us for the second edition of Connect! an event series that aims to bring people together and explore issues that matter to them.

Connect! is an event programme produced by us here at the University of Bath's Public Engagement Unit and Bath Spa University. Connect! events aim to support networking between researchers and community organisations, charities, creative practitioners, social enterprises, and statutory organisations across Bath and North-East Somerset."

...and ending connections

While it's easy to focus on the project you're running, take the time to build the relationship with the researchers you're working with. A key part of building good relationships is to be mindful of how you will leave the relationship you've built up over the course of a project. Be open about what you are hoping for and how you will leave on good terms. One way of doing this is to have a conversation about what the experience has meant to each of you and the difference it's made to something you might do next.



Career stage matters

Researchers at different career stages have different enablers and barriers to their participation in public engagement activities.

- **PhD** a PhD is a multi-year training programme which is preparing people for the next stage in a research career. A PhD is often the first time that a person will be doing independent research. The flexibility that comes with a PhD means that PhD researchers are looking for experiences (like public engagement) to enhance their CV. To do a PhD a person has to have good background knowledge of their area, however, they may also think they don't know enough to be considered an expert. While they do have specialist knowledge about their research area, they may be less well versed on the broader areas of their work, including any contentious histories. A PhD researcher could be part of a Doctoral Training Centre.
- **Post-Doctoral** these are people who have completed their PhD and are now doing research as a job, rather than a training programme. Post-Docs are usually on a fixed term contract funded by a specific research project which means they have less flexibility but are often still looking for CV development opportunities. You can be a post-doc for many, many years after you finish your PhD which means some post-docs are really experienced researchers while others are not.
- Early Career Researcher the definition of ECR differs between institutions, but these are generally people who are on a contract with a university (not funded by

- a research project) and they are looking to secure a permanent role. They can be in the process of exploring what type of academic they want to be. This can mean undertaking compulsory training in order to pass a probationary period. Time can be less flexible due to the constraints of the probationary period.
- Researcher / Reader once researchers have tenure (permanent contract) their flexibility may increase as the pressure to pass a probationary period has passed. However, the pressures now shift with greater teaching commitments, expectations of securing research income, and contributing to the wider aspects of academic life. They many have PhD students who they could mobilise for public engagement activities.
- Associate Professors / Professors are researchers
 who are established in their field and can often be
 leading large and/or many research projects. They
 have autonomy and can be visible but can be very
 busy meaning that prioritising public engagement
 can be difficult. They may be able to help you find
 researchers who do have the time and energy for public
 engagement.

Staff on teaching contracts, who may also do research, will have other factors that affect their ability to engage with public engagement projects.

Doctoral Training Centres and Doctoral Colleges

Many PhD researchers are members of Doctoral Training Centres (DTC). These are cohort-based, multi-year training programmes funded by Research Councils. Often DTCs work across several institutions so you may find a member of a local DTC is actually based in a university many miles away. A DTC can be a useful entry point to many PhD researchers.

A university may also have a Doctoral College (or something with a similar name) which is the institutional support for PhD training. Doctoral College staff can also provide access to PhD researchers.

Know the teaching calendar

Teaching is set for the year at the start of the academic year. It can't be moved so if there are teaching obligations and periods of marking you will have to work around them. Universities often have a calendar for teaching, holidays, examinations, and marking etc online. See if you can find the one for your local institution to help understand when it is best to contact people and schedule activities.

Drivers in universities

Understand the different drivers in a university. Academics will align themselves with some or all of them. Could your work help with any of the following:

- **Teaching** how can your initiative help with "enhancing the student experience"?
- **Research** will your initiative help improve research quality, impact, or visibility?
- Impact, because it features in the Research Excellence Framework (REF) is particularly influential. However, be realistic about how much impact you'll be able to evidence from your public engagement initiative. Familiarise yourself with the criteria for impact in the REF.
- Civic this is about the role the university plays in its physical location(s). Can your work help the university look like it's doing good locally?
- Knowledge Exchange (KE) is often perceived as working with business and involving IP and spin-outs, but some institutions will have their public engagement teams in the KE department. KE activities are reported through the Knowledge Exchange Framework (KEF), could your activity help with this?

Training – or briefing

There isn't a strong culture of Continuing Professional Development in universities. Even though researchers will need to do some training, it might be helpful to find a different way of describing it. Perhaps you have a "run through" or there's a "briefing". Science communication

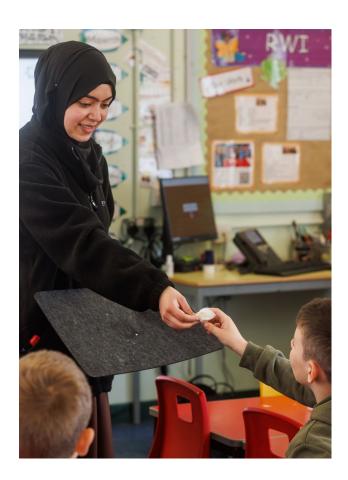
and public engagement are minority interests for many researchers (after research and teaching). Be comfortable with that and accept that their primary job isn't being a science communicator, but in being a content expert. Work together so you can both shine.

Universities can be opaque

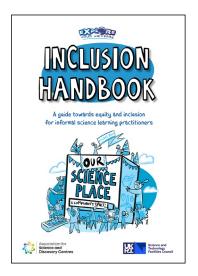
Even for people working within a university, the sheer size of a university can mean that staff might not know who to ask for support (particularly administrative tasks). You may need to help the researcher navigate their institution's processes. Watch out for overly complicated and heavy-handed contracts, get onto the payment system as soon as possible so you can be paid (and make sure that you are being paid through the correct mechanism). Identify their communications team and help the researcher make contact. Encourage researchers to ask for help from their public or community engagement teams.

Internal communications

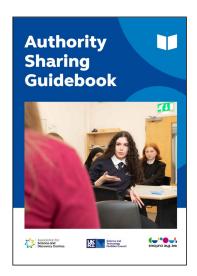
There isn't a single reliable way to communicate inside a university. Going through one of the front door teams can help. Departmental administrators can help. The internal communications team can help. **Don't give up!**



Useful resources



Download the ASDC Inclusion handbook



Download the Authority Sharing Guidebook

Download the Equity Compass



Watch the ASDC animated guide to equitable partnerships



Visit the Science Ceilidh website to find out more about Curiosity in Action

Image credits:

Cover - Techniquest, Fotowales

Page 2 - Museum of Natural History & Royal Botanic

Garden Edinburgh

Page 3 - Centre for Life / Durham University

Page 4 - Museum of Natural History

Page 5 - Centre for Life / Durham University

Page 6 - Museum of Natural History

Page 7 - Centre for Life / Durham University

This guidebook was written by Dr Helen Featherstone, Head of Public Engagement, University of Bath and Katie Weldon, Project Coordinator, Science Ceilidh.

Developed by the Association for Science and Discovery Centres (ASDC) with funding from the Science and Technology Facilities Council (STFC, part of UKRI) and the natural Environment Research Council (NERC, part of UKRI).







101, QC30 30 Queen Charlotte Street Bristol BS1 4HJ

info@sciencecentres.org.uk

sciencecentres.org.uk



