ChallengeCPD@Bath

End of project report, 2019
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The UKRI Strategic Support to Expedite Embedding Public Engagement with Research (SEE-PER) call sought to help enrich and embed cultures within HEIs where excellent public engagement with research (PER) is supported, valued, rewarded and integrated within institutional policies and practices. The first year of this programme ran from October 2017 to October 2018. Two types of approach were funded:

‘Embedding change’ proposals that sought to enhance and embed an institution’s approach to supporting PER, building on the learning from the Beacons for Public Engagement, RCUK PER Catalyst and Catalyst Seed Fund programmes:

- Birkbeck College, University of London, led by Professor Miriam Zukas
- Heriot-Watt University, led by Professor Gareth Pender
- Keele University, led by Professor David Amigoni
- London School of Hygiene and Tropical Medicine, led by Professor Dame Anne Mills
- UK Centre for Ecology & Hydrology, led by Dr Nick Wells
- University of Lincoln, led by Professor Carenza Lewis
- University of St Andrews, led by Professor John Woollins

‘Challenge’ proposals which addressed a specific challenge in supporting PER effectively, and which expanded the existing knowledge base about ‘what works’ in effectively supporting PER:

- University of Brighton: developing an incubator model for finding and fostering community-university knowledge partnerships, led by Professor Tara Dean
- University College London: exploring how to make PER fundamental to the university’s efforts to address global societal issues through cross-disciplinary research, led by Professor David Price
- University of Bath: examining the challenges associated with training and professional development for public engagement, led by Professor Jonathan Knight
- University of Southampton: tackling barriers to professional development in PER and developing a robust educational framework for such activity, led by Professor Simon Spearing
- STFC – Laboratories: investigating the take up and provision of PER training, led by Dr Neil Geddes

In May 2018, the SEE-PER projects were given the opportunity to apply for a second year of funding to embed and expand upon work done in the first phase. Ten of the twelve projects received funding to extend for a further 12 months, and the programme concluded at the end of 2019.

UKRI appointed the NCCPE to co-ordinate this work, ensuring learning was shared across the projects, and that evaluation was used strategically to inform and assess the value of the SEE-PER initiative.

Further learning from the SEE-PER initiative can be found in the ‘Support Engagement’ section of the NCCPE website.
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Executive Summary

Background
This project investigated the provision, uptake and impact of training and professional development opportunities for researchers in public engagement.

Training and continuous professional development (CPD) in public engagement is one of nine core strands of work when embedding a positive culture of public engagement with research at universities. However, research has highlighted that these opportunities also act as a potential barrier to engagement through a perceived lack of availability or relevance of the training on offer.

ChallengeCPD@Bath (2017-2019) investigated the take-up and impact of training and CPD opportunities in public engagement and was funded by UK Research and Innovation as part of the Strategic Support to Expedite Embedding Public Engagement with Research call (Project budget: £78,271).

Our approach
Over the course of the two-year project, we critically examined our training and CPD for public engagement with research. We looked across the literature and worked with an Advisory Group of critical friends made up of academic and professional services staff from the University of Bath and external providers of public engagement training.

Our findings
Through our ChallengeCPD@Bath (2017-2019) work we identified four key learning points about training and professional development for public engagement:

1. **the issues associated with professional development for public engagement are not unique to public engagement training** – there is a wider culture of resistance to formal professional development within universities which disadvantages CPD for public engagement.
2. **professional development is more than just training** - people are less tuned into training opportunities in general and perhaps have a limited view of what counts as training as a result of the culture around CPD at universities. This means significant interventions may not be reported as ‘training’ in surveys such as Factors Affecting Public Engagement survey.
3. **it’s about the learner, not the intervention** - we need to put the learner first in our training interventions through involvement in developing activities, assessing and surfacing their existing skills, knowledge and behaviours from other non-public engagement work, and evaluating the impact of the intervention on their broader professional development and career aspirations.
4. **learning can take time to be realised** - evaluation of professional development should not primarily be about the intervention but about the benefits the learner has derived from the experience. We need to take a longer-term approach to evaluating an intervention to fully understand the impact of those opportunities.

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1 The State of Play: Public Engagement with Research in UK Universities
Changes to our training and professional development offer

The insight from the project has helped the Public Engagement Unit reshape the way we think about professional development for public engagement. We applied this analysis to: improve the quality of provision, develop guidance, and inform the development of new forms of training and CPD. This work has involved:

- framing all our activities, from our Engage Grants to our one-to-one help/advice/guidance, more overtly as opportunities for researchers to learn about public engagement
- developing an online learning tool, the Public Engagement Knowledge Hub (access for those external to the University of Bath available on email request)
- creating case studies of researchers' public engagement learning journeys featuring key learning moments and interventions
- developing self-assessment toolkits for public engagement
- piloting co-produced training, funding five co-produced training programmes and co-producing with doctoral students a module on public engagement with research
- producing workshops and guides for enablers of public engagement with research and external training providers
- evaluating the value of the National Coordinating Centre for Public Engagement’s and University of Manchester’s draft quality framework for public engagement
- sharing our findings with public engagement professionals from across the higher education sector through conference presentations and submitting a paper in the Research for All journal

Recommendations to other universities

Training for PER is important but will not cure all of Public Engagement’s ills. Training for PER is doubly disadvantaged: PER is still a minority activity and training / professional development in HEIs is poorly developed. Do not be surprised when people do not sign up, or do not prioritise your training.

Put your learner first: think carefully about the broader professional development needs of the learners you are working with. Consider how your PER training can support those needs so that the training is more relevant and does more than enhance public engagement practice.

Training is more than what you devise and deliver, it’s about the learning you help to foster. Think carefully about the opportunities for learning that you create – a chat over a cuppa, an internal news item, a small grant - you are probably doing a lot of training already. Can you reframe any of your activities to “count” as training?

Key learning from this work is available in Helen FEATHERSTONE & David OWEN – ‘Rethinking professional development for public engagement with research: A way to improve uptake and impact of training’

doi.org/10.18546/RFA.04.1.10
Introduction

The University of Bath

The University of Bath received its Royal Charter in 1966, celebrating its 50th anniversary in 2016, and is now firmly established as a top ten UK university with a reputation for research and teaching excellence. Our campus, overlooking the beautiful UNESCO World Heritage City of Bath, has a vibrant research culture driven by the enthusiasm and invention of our academic community. Students are attracted by our excellent academic reputation, our outstanding graduate employment record, our world-class sports facilities, and the wide array of other social, recreational and personal development opportunities we offer. Our ability to offer placement options across our discipline base, and with leading organisations, is unique among UK research-intensive universities. We are sector leaders in the commercial exploitation of intellectual property (IP) and the establishment of international links for exploitation of IP.

Our mission is to deliver world-class research and teaching, educating our students to become future leaders and innovators, and benefiting the wider population through our research, enterprise and influence.

The University of Bath has a current research portfolio of £150m. This includes £73m of Research Council grants, £15m in grants from the EU, £15m from industry and £8m from the charitable sector.

In the 2014 Research Excellence Framework (REF), 87% of our research activity was graded as 4*/3*, the highest classifications of world-leading and internationally excellent, placing us joint 12th in the UK (excluding specialist institutions). Research impact was strong, with 96% of our impact rated as 4*/3* and 6 of our 13 submissions in the top 10 by GPA for impact.

The University of Bath is part of 21 Doctoral Training Entities and has a Doctoral College which was established in 2017.

The Public Engagement Unit at the University of Bath

The University of Bath has a small (2.5FTE) Public Engagement Unit which was formed as a result of RCUK Catalyst funding (2012-2015). The Public Engagement Unit works to support and foster a positive culture of public engagement with research. The University of Bath supports public engagement with research as a mechanism for enhancing research quality, increasing the likelihood of research making a difference to society, raising the visibility of the research and researcher, and developing the skills of the academics involved. Public engagement with research is embedded into the research strand of the work allocation model, and is not supported as a separate stand-alone programme of work.

1 https://www.bath.ac.uk/corporate-information/facts-and-figures/
2 https://www.bath.ac.uk/corporate-information/doctoral-training-partnerships-and-centres-for-doctoral-training/
During ChallengeCPD the Public Engagement Unit moved from fixed-term funding to core funding in the July of 2018.

The Public Engagement Unit has four strategic strands of work which work to support and complement each other:

- Public Engagement in Practice
- Professional Development
- Reward and Recognition
- Leadership

Three of the four strands (Practice, Reward and Leadership) have evolved into robust, repeatable programmes of work. Yet the Professional Development strand continues to be different each year. While this could be seen to be a positive situation in that we are being responsive to the changing needs of our colleagues, the reality is that our professional development and training for public engagement is typical of the wider HE landscape:

- Training is offered and not taken up
- For those new to public engagement, training is seen as vital and is often requested at short notice before an event or activity
- For those with some practical experience, practice is seen as more useful than training
- Training and professional development can be invisible because it comes in different forms eg coaching conversations, seed funds and delivery
- The term training is not necessarily appealing

This situation is problematic for us in being able to identify where best to prioritise our limited time. Time spent on developing, delivering or adapting training feels disproportionate to its actual and perceived value. We are often called on for ‘just in time’ training to support events that we are unaware of. Adapting, or developing new, activities for this purpose takes time. However, because these are linked to practice, they are often very well received and valued.

There are times where we are unable to support these activities due to our limited capacity. This means that researchers are undertaking public engagement while feeling underprepared creating risks in terms of public and researcher experience. The latter can result in non-participation in public engagement in the future.

The workshops we put on as part of the PG Skills programme for post-graduate researchers are generally well attended and received favourably at the time. However, our end of project evaluation for the Engaged360@Bath (RCUK Catalyst) work, suggested that the long-term impact of these workshops was negligible with only one or two individuals making a demonstrable transition from workshop to practice.

Our professional development extends beyond workshops. The Public Engagement Unit offers coaching and mentoring on a one-to-one basis for anyone within the university and in particular for those we fund through our funding scheme. We know from the evaluation of this programme that these are true learning experiences for the researchers involved.
However, we don’t know if this type of learning would be reported as ‘training’ in the surveys that capture this data nor in researchers’ own portfolios for professional development.

The evaluation data from our training interventions is always extremely positive which suggests that quality of provision is not a key factor in participation. We readily acknowledge the complexity of the professional development challenge and anecdotally suggest that other factors at play could include the tone of the intervention, how much the intervention creates opportunities for self-reflection and forward planning, the seniority of the person delivering the training, the degree of expertise of the person / people delivering the training, the career stage of the academic, the facilitation / coaching skills of the person delivering the training, the format, time commitment, ability to share experiences and how embedded it is in the broader professional development of the participating academics.

Pre-SEE-PER provision of professional development and training for PER
To give an indication of the variety of our CPD and the numbers reached since the PEU formed in 2012 to the date of our application to SEE-PER:

- 111 workshops reaching 1730 researchers (including doctoral students)
- 280+ one-to-one conversations/advice sessions about PE
- 15 PE Conversations\(^4\) involving 337 staff (academic and professional services)
- 52 Seed funded projects
- 4 Showcases reaching 322 staff
- Cohort-based CPD (Pint of Science: run four times, reaching 37 PGR and 97 staff; and the PG Forum: run twice reaching 19 participants)
- Toolkits and guides eg Supervising a PER PhD, Case Studies, Top Ten Tips, Public Engagement at Bath

These figures do not include CPD which the PEU has not initiated or delivered, for example the cohort provision in the Sustainable Chemical Technologies Doctoral Training Centre, delivered by Graphic Science.

Changes in demands
In the year prior to ChallengeCPD we experienced two changes in the demands for CPD. We noticed an increase in requests to deliver training and CPD for other universities / research organisations; and more requests for departmental support for embedding PER (in contrast to the previous provisions of supporting PER for the individual).

As with delivering interventions in-house, when we deliver at other institutions we get very positive feedback (possibly even more positive). This gives us confidence that the quality of what we deliver is good, and transferrable. It also provides us with other factors to consider when understanding CPD uptake including how much the success is based on the trainer versus the materials / tools, the value of being an external provider, and the role of internal communications to mobilise participants.

\(^4\) Informal seminar series which focus on a particular aspect of PER
As part of our provision for external organisations, we are also beginning to build up expertise in developing *Train the Trainer* sessions and materials. In November 2015 HF co-developed and ran a one-day *Train the Trainer* workshop for members of BIG – the STEM Communicators Network. The evaluation of this demonstrated that people really valued the experience and left with lots of tools and techniques to use in their institutions. More recently, through a recent NERC public engagement pilot grant, we have developed pilot *Train the Trainer* materials for one of our most successful workshops: *Creative Public Engagement*. Early observations on this, and from the BIG workshop, have highlighted the importance of those delivering the training already having strong facilitation or group training skills.

A lot of our time is spent on fairly basic, entry-level advice: introducing colleagues to the concept of public engagement, why they may want to consider it and core concepts about how to do it well. This is very repetitive for us and provides us with less insight into more advanced practice. In response to this we decided to invest in developing online materials so that colleagues could use them independently or as a refresher having spoken to us or after participating in more formal forms of training. This provided a direct route for the findings from ChallengeCPD to be implemented.

**a. The University of Bath – General CPD**

Two relevant departments at the University of Bath (Doctoral College and the Centre for Learning and Teaching) were undergoing a period of change which created a timely opportunity to further embed PER CPD into the culture of the university and to understand the broader challenges of researcher professional development. We have positive relationships with the team members in the departments: some are long-standing colleagues with whom we have very productive relationships, others are new in post and our recent and ongoing discussions have revealed a lot of common ground and shared interests.

In September 2017 the University of Bath admitted its first cohort of postgraduate researchers into the Doctoral College. The Doctoral College has been formed in response to PRES survey results which identified a strong desire for ongoing professional development and community-building for doctoral students not located within an existing Doctoral Training Entity. The Public Engagement Unit has maintained a close relationship with senior managers during the realisation of the Doctoral College to ensure that public engagement features as part of the development of doctoral students located within the College. The Doctoral College team were appointed in June 2017. During Engaged360@Bath we had a strand of activity focusing on doctoral support. Evaluation of our work in this area demonstrated that participating in public engagement activities and professional development was excellent for bringing together researchers from diverse backgrounds and disciplines which was viewed very positively by the doctoral students.

In May 2017 the Centre for Learning and Teaching was launched. This department supports learning and teaching for academic staff and students. Its overall aim is to develop academic practice: both research and teaching. The department supports, amongst other things, curriculum development, teaching practice, and educational technology. The Centre has a variety of tools to do this including, but not limited to, grants, workshops, one-to-one advice etc. The Public Engagement Unit secured funding for two projects under the previous
Learning and Teaching Enhancement Office, through which we have good working relationships with staff in the new Centre. The centre lead wanted to work more closely with the Public Engagement Unit to explore the value of public engagement in teaching, as well as for researcher development and improving research quality.
Year one

Synopsis
In the first year of ChallengeCPD@Bath we wanted to use the opportunity to take a step back from the everyday working of the Public Engagement Unit and reflect on the basics of our assumptions. We commissioned an external consultant to provide us with broad, sector-level insight and established an Advisory Group to work with us on the project. We wanted the Advisory Group to challenge us and to bring alternative perspectives to our ideas as they developed. By the end of year one we had revised our assumptions, developed new ideas and made some easy changes to our work.

Activities/outputs
During ChallengeCPD@Bath year one we took a long hard look at our training. To do this we commissioned a literature review to explore what is collectively known about training in Higher Education Institutions (specifically for public engagement with research, where available) and iteratively tested out the ideas coming from this review with our Advisory Group. The Advisory Group comprised a range of internal and external stakeholders including academic staff developers, Doctoral College, Centre for Learning and Teaching, external providers of public engagement training who have delivered training for staff at the University of Bath, the NCCPE and academic staff at different career stages.

The literature and Advisory Group work helped us to unpack the complexity of Continuous Professional Development (CPD) and training culture meaning that our initial plans to codify and classify training interventions was fundamentally flawed. For example we had anticipated that challenges were linked to characteristics of the training such as who delivers it, if it has a linked opportunity to practice, if it linked to accreditation etc [see Appendix A for more detail]. However, it became clear that more fundamental to understanding our challenges was the need to put the learner at the heart of any professional development. So we spent time unpacking what this means in practice.

We touched on the frame of “leadership” but co-incidentally the university was developing a leadership programme. Rather than developing a specific leadership for PER piece of work, we started working with the HR team to incorporate PER into the new leadership programme.

Outcomes and impact
From the first year of ChallengeCPD@Bath we identified seven points about training and professional development for public engagement:

1. **When is continuing professional development recognised as CPD and by who?** In particular, giving consideration to how we support researchers to reflect on activities they have taken part in, not only to improve those activities, but also to look at their role in their professional development so that it can be captured as part of formal reward and recognition procedures.

2. **Learning can take time to be realised.** We need far greater time lags in our evaluation efforts. How often do people use the resources? How have activities improved over time?
3. **Surface existing skills and competencies.** Professional development is not necessarily about new knowledge or behaviours but helping people become conscious of what they already know.

4. **Involve participants in the development of CPD interventions.** This might include user-testing, train the trainer models, and overall design.

5. **Public Engagement CPD tends not to address quality.** Much of the CPD we found and deliver facilitates awareness raising and participation in PE, rather than making PE better.

6. **Language of CPD.** We still need to find more appropriate language. Training is sometimes the least offensive, other options include researcher development, academic development, personal and professional development, reflective practice.

7. **The role of external partners in supporting CPD is not acknowledged.** They often provide formative feedback and insights into audiences etc. There is professional development in organisations hosting researchers, buddyng, acting as mentors or offering co-location working sites.

**Sharing our learning**
Throughout year one we shared our ideas widely by submitting proposals for, and presenting at, three events in 2018:

**ECSITE (European Network of Science Centres and Museums) – June 2018.**

The session looked at ‘professionalism’ in a broad sense, with training and CPD being one aspect of this. Four presenters (Professor Justin Dillon (University of Exeter), Dr Helen Featherstone (University of Bath), Margaret Glass (Association of Science-Technology Centres) and Andy Lloyd (Centre for Life)) each posed a question to the participants for further discussion in break-out groups. The question from ChallengeCPD@Bath addressed quality (following on from conclusion C) and whether it is appropriate to hold everyone in the sector to the same standards. This was framed as the questions: should scientists who communicate be held to the same standards as science communicators? The discussion was lively and the participants felt that this was inappropriate. The discussion also highlighted the lack of training available for scientists across the broader international context which may be an opportunity for the UK. The session was attended by 100 people.

**BIG (STEM Communicators’ Network) – July 2018**

In partnership with Wendy Sadler (science made simple), Andy McLeod (Association of Science and Discovery Centres) and Jon Wood (Birmingham University) we delivered a practical session framed by the key learning points. We shared the learning from ChallengeCPD before opening into table discussions which were suggested by the participants before finishing with an activity swap shop. The session was attended by 35 people.
Engage (NCCPE annual conference) – December 2018

With Heather Lusardi (National Coordinating Centre for Public Engagement) we delivered a workshop which prompted discussions about three topics: Cohort Effect, Co-Production of CPD, and Learner Journeys. We wanted to consider the implications of delivering training with these three topics in mind. Participants were thoughtful and offered insightful suggestions which will feed into ChallengeCPD phase 2. The session was attended by 50 people.

Through the NCCPE Training Associates programme we have incorporated the learning from ChallengeCPD@Bath into the programme as it develops.
Year two

Synopsis

In year two, we looked to put our learning from year one into practice and sharing the findings from both years more widely. We experimented with co-produced CPD and have reflected on our experiences; we produced content for PER learning case studies which illustrate the range and influence of different learning interventions on those who participate in them; we explored how the draft quality framework\(^5\) could be used when developing and delivering CPD interventions; and shared our learning through existing channels (such as BIG and Engage, the Training Associates, the PEU Blog etc). We also produced practical outputs of our work eg our e-learning modules, self-assessment toolkits, call guidance for co-produced CPD, and the Doctoral Module. A commentary piece was written and accepted for publication for Research For All.

Activities/outputs

The work was undertaken under three strands of work with associated objectives:

1. Putting the learner at the centre of CPD
   a. Co-produced Training – another open call for researchers to suggest topics and formats for CPD interventions they would like to pilot in partnership with PEU based on the learning from ChallengeCPD
   b. Co-produced doctoral module – working with staff and doctoral students from three departments and the Doctoral College to produce a generic PER module which any group of doctoral students can use to develop their PER insight and practice
   c. Self-assessment toolkit – building on the PE Lens on the RDF we produced a suite of self-assessment tools to help learners realise their existing skills and experiences that are relevant to PER

2. Quality PER

   We used the draft framework to inform our CPD offer and how we talk about the skills needed for quality PER. We appreciate that this is a draft framework, so integrated the framework into our work in a reflective and evaluative manner. In order to do this, we worked with an external consultant to:
   a. Undertake light-touch research to explore the implications and responses (both positive and negative) of developing and implementing the framework. The research looked at the literature in this area and involved empirical research with some of our key stakeholders (for example, those who deliver CPD on our behalf; CPD providers at other institutions such as the Science

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\(^5\) During ChallengeCPD the NCCPE and the University of Manchester published a Draft Engage Framework (Good practice principles for public engagement involving universities) for consultation with the HEI community. We were the only university to explore its use in a training context.
b. Evaluate the use of the framework in the development and delivery of our CPD offer, for example in our e-learning tools, with our Public Engagement Facilitators network, with our co-produced doctoral module and a light-touch programme we deliver for Advanced Research Dissertation Engineering students.

3. Long-term evaluation
   a. To respond to both the lack of focus on the learner and the complexity of PER learning, we wanted to develop reflective narrative case studies with some of our key academics. Data and content for these have been collected and early prototypes have been developed, but the case studies are not complete yet. The case studies will illustrate notable learning interventions, points and epiphanies. These will be useful in future CPD interventions to help participants understand their place on a journey, and to help us inform CPD delivery and evaluation tools for future CPD interventions.

Outcomes and impact
At the end of year one we identified the seven points present in the previous section [see Appendix A for the full report]. We used year two of ChallengeCPD to explore some of these ideas further through the activities described after each point. We outline the outcomes for these activities we implemented in this section and offer some thoughts on the two points that we chose not to do work on.

1. **When is continuing professional development recognised as CPD and by who?**

   *Activity: this has prompted a change in our thinking, rather than a specific set of activities. For example, we are being more overt about framing some our general activities as learning interventions in the hope that they get reported as such more readily.*

   We promptly changed how we responded to ad hoc requests for training. Rather than say “yes” immediately (as had been our habit until this point) we took the time to work with the person making the request to understand the broader programme of professional development that our activity would be fitting into. This allowed us to understand how we could frame public engagement in the broader narrative of the programme we were contributing to. It also gave us permission to refuse to do stand-alone interventions that were not embedded into the professional development needs of those being targeted. For example, we worked with the Researcher Development Team and Research and Innovation Services to co-develop and deliver a workshop on engagement and impact for the Bath Course. The Bath Course is the compulsory course for all academic staff on probation. We also declined an invitation to deliver training for a Doctoral Training Centre because the workshop requested was not part of a broader programme of professional development for the doctoral students making it unclear how training on PER would benefit the students.
2. Learning can take time to be realised.

Activity: During year one it was apparent that researchers with a strength in PER had experienced several learning moments that emerged from several sources and over prolonged time periods. This emphasised the need to focus on the learner, rather than the intervention. We felt that it would be useful to capture some of these learning journeys as case studies to raise the profile of what “counts” as training but also to help us understand the ongoing professional development experiences of researchers developing skills and competencies in PER. This would allow us to tailor our offer more clearly.

The case studies are currently with our external consultant. These have been delayed due to the consultant experiencing personal difficulties during November and December 2019. The core work has been completed and user-testing (as part of the Doctoral module) has informed the development of the case studies.

3. Surface existing skills and competencies.

Activity: We created a self-assessment toolkit that we can use with colleagues in training settings, or can be used independently by a learner wishing to know more about their current skills and competencies to inform their longer-term professional development plans.

The draft self-assessment toolkit is included in Appendix F. The toolkit is currently with our graphic designers to enhance the usability of the toolkit and to produce hard copies that we can use in our training. We haven’t been in a position to begin using the tool kit as part of our training and learning.

4. Involve participants in the development of CPD interventions.

Activities: We develop all of our training with informal input from our participants. We wanted to take this concept to a maximum and explore if we could co-produce training. We did this in two ways: the development of a generic module for Doctoral researchers and through a funding call. The Doctoral module idea built on our generic undergraduate module which has been very successful. Three departments and the Doctoral College wanted some form of training for Doctoral students so we worked with them to experiment with involving Doctoral students in the development of a generic module which could be rolled out across other departments, or research centres.

We have found having funding for PER to be a great mobiliser and also an excellent source of learning for the PEU. Anticipating that researchers may value some funding (and associated support from the PEU) to develop some bespoke training we tried two funding rounds to support co-produced training.

See Appendix D for our co-produced training report. We found that co-produced training is not an appealing offer to academics at the University of Bath. We deliberately took our mantra of “putting the learner first” to an extreme. If we felt chastened by some our conclusions from year one that highlighted the sector tends to assume a deficit approach to training we wanted to see what would happen if we swung the pendulum to the other extreme.
What do we note:

- Low numbers of people responding suggest it is not appealing
- Traditional forms of training were suggested in terms of both format and content: video making, social media, data visualisation, workshop-based one-offs or programmes
- Professional services colleagues can identify training needs (perhaps more readily than our researcher colleagues), may have more capacity to hold a programme, and reach more people
- Making the programmes sustainable takes a lot of time on our part. The concept of developing something with a life beyond the funding is not readily grasped nor articulated. This applies to both our academic and professional services colleagues. Perhaps because the concept of devising and delivering training is not embedded in many roles or departments.

It is always hard to assess why something does not work. I think that we have to acknowledge that training / CPD is not an appealing thing to get involved with (we know the word puts people off) and that PER is a minoritized activity that can already feel risky to undertake. This creates two barriers to participating that exacerbate each other.

It is also possible that we (the PEU) hold more developed thinking on both training and public engagement (or are perceived to). This can mean that researchers are doubly unsure as to what to propose. Perhaps we should have heeded one of our researchers in an Advisory Group meeting who told us that we “are the experts and that researchers just need to be told what to do”. Clearly, it is not as simple as that. It’s not just knowing what people need to know, it’s about getting the format right. We listen carefully to our academic colleagues to inform everything we do and will continue to do so, particularly when there’s a deafening silence!

5. Public Engagement CPD tends not to address quality.

Activity: during ChallengeCPD the NCCPE and the University of Manchester released a draft Quality Framework for PER. The framework was put out for consultation and we proposed using the quality framework in some of our training interventions to explore if it would improve the training, how it was perceived by researchers and by those who deliver training, and to see if may inadvertently raise barriers to participation in PER or training.

See Appendix C for the full report about our experiences of using the quality framework. We concluded:

The good practice principles were generally accepted by those we consulted as a reasonably robust and useful set of principles. But we couldn’t say they have been transformative from a CPD perspective. They are a useful resource, and we have successfully referenced them in our training and work with undergraduate students, however the need for tiering, and for translating into competencies, means there is still work to do for them to be really useful in a CPD setting.
Researchers suggested that the framework could benefit from further illustrations of each of the principles, and what they might mean in practice. External trainers suggested they could align their training with the principles, but they did not necessarily see them having an impact on CPD uptake. HR and other staff responsible for professional development of researchers suggested the framework needed to be graded in order to be useful for CPD and to be complemented with additional learning resource.

We’ve undertaken some initial work and further scoping to address these points and to apply the framework at University of Bath. However, our ability to fully progress this work has been constrained by time and was beyond the scope of ChallengeCPD. It was evident that the Good Practice Principles for Public Engagement Involving Universities and the Researcher Development Framework provide a helpful framing for quality and progression respectively. However, CPD comes to life when it is located within the professional practices of the discipline itself, and there is more work needed to promote public engagement as a valid aspect of engaged research. As we tailor our support for researchers, we are learning to be mindful of the discourse of engagement that exists within the academic discipline. If the principles represent a set of agreed quality standards for PER, there is work needed to embed these principles within the Pathways to Impact processes, REF, and Researcher Development, so that they can inform the development of those disciplines.

6. Language of CPD.

No specific activity undertaken

At the end of year one we noted that there is a challenge in what we call our work. Training? Continuing Professional Development? Professional Learning? None of these terms are appealing. We have not been able to identify a more attractive name. Attending the Vitae Conference in 2019 as part of year two confirmed that this is a general problem across all training and development. The Vitae conference also confirmed our year one conclusions that the culture of trainning in universities is challenging.

Through our BIG Skills Day we devised an activity to surface the variety of interventions that participants were delivering. This helped participants realise that they were delivering more training interventions than they had previously thought (for example by realising that having a cup of tea and chat with someone can facilitate learning). As one participant put it “This means that almost everything I do is training!”

If those who are devising and delivering training do not always recognise that they are creating learning interventions, it is not surprising that the learners do not always report these as such. It does suggest that the challenge of training for PER may be, at least in part, a reporting issue.

7. The role of external partners in supporting CPD is not acknowledged.

No specific activity undertaken

We noted that a key part of learning about PER comes in the doing of it. However, we also noted that this is often done in live environments. At the University of Bath we have several
entry-level opportunities where researchers can have a go at public engagement. These are events or activities organised by the PEU that researchers participate in (e.g. festivals, walking tours, lectures). This means that researchers do not need to get bogged down in the administration and logistics of doing PER and they can focus on their own contribution. We also offer small grants to allow researchers to undertake their own independent public engagement work with the support of the PEU.

We know from our evaluation work that these are key learning experiences for the researchers who participate. However, we also recognised that a key contributor to that learning experience are the visitors and community organisations who get involved. A visitor attending a local festival does not invest much time, emotion or money to interact with one academic meaning the risks to the visitor are low, this changes when we start supporting researcher-led PER through the funding scheme. It is common for researchers to want to engage with vulnerable groups, small charities or voluntary organisations. The time and emotional commitment this takes is considerably greater than for a visitor to a festival and consequently is higher risk. We rightfully have to consider our duty of care to both our researchers and those they are engaging. This means we have to be clear to external organisations that they are contributing to a learning experience. We may not use that exact terminology but we should be able to articulate the degree of engagement expertise, in the way we would describe the degree of research expertise. This would allow external participants to make an informed decision as to whether to engage and on what terms. We should stop doing covert training using community organisations as uninformed trainers and guinea pigs.

Sharing our learning

Helen Featherstone has shared insight and outputs from both phases of ChallengeCPD through several mechanisms: BIG Event, BIG Skills Day, ECSITE, various NCCPE activities and through the regional GW4 collaboration.

Event feedback has shown that participants have found the “learner first” concept novel, in particular the idea that PER training can be framed in the context of broader professional development needs and activities of the learners.

Participants have also valued the clarity about what “counts” as training, giving confidence to participants to offer a range of interventions and to go beyond offering workshops.
ChallengeCPD@Bath Outcomes and impact

We have identified four key learning outcomes from the two years of ChallengeCPD. These summarise learning from years one and two however, there are interim steps in learning that have informed these final conclusions, these are detailed below.

**ChallengeCPD learning outcomes:**

1. The challenges of devising and delivering effective training and professional development for public engagement with research are not unique to PER. The culture of training and CPD in universities is not well developed so PER training falls victim to that culture. This culture means that people are less tuned into training and learning opportunities in general, and perhaps also have a limited view of what counts as training meaning that significant learning interventions may not be reported as training in surveys such as Factors Affecting Public Engagement.

2. A lot of the literature and discussions we have focus on the training intervention, rather than the learner who is participating in those interventions. We need to move our thinking from the training intervention to the individual learner: putting the learner first.

3. Putting the learner first means helping learners identify relevant existing skills and experience, understanding their longer-term career aspirations, and understanding the broader research culture the learner finds themselves in. In doing this we can begin to see how training for PER can be used to benefit the individuals more clearly, perhaps making it more appealing.

4. Evaluation of CPD should not primarily be about the intervention but about the benefits the learner has derived from the experience.
Summary of activities and outputs

Over the course of the two years of ChallengeCPD@Bath we have:

1. Commissioned research into researcher training in general and specifically for PER\(^6\) [and see Appendix A]
2. Held four Advisory Group workshops to make sense of the challenges related to uptake of professional development identified by the literature review and our own practice
3. Amended our approach to CPD in response to new insights – in particular in response to ad hoc requests for workshops, and in the development of our e-learning modules
4. Piloted new approaches to CPD – in particular the co-production of training
   a. Using a funding call approach we have piloted (or started) five forms of researcher-led co-produced training and produced reflections on our learning [see Appendix D]
   b. Worked with three departments to co-develop a Doctoral Module on public engagement with research [see separate report]
5. Developed content for self-assessment toolkits which allow learners to identify existing skills and experience that could be brought into public engagement [see Appendix F]
6. Created content for case studies of researchers’ learning journeys featuring key learning moments / interventions [these are still in development]
7. Explored the value of the draft quality framework for public engagement from the NCCPE and University of Manchester in live training interventions in the University of Bath and produced a report on our learning [see Appendix C]
8. Embedded learning from ChallengeCPD into our e-learning “Public Engagement Knowledge Hub” [see Appendix H for screen shots]
9. Produced workshops and guides [see Appendix B] for enablers of PER and external training providers – distributed through BIG Event and BIG Skills Day, NCCPE training associates, Engage conference, GW4
10. Included new ideas for training and PER into the university’s submissions to the EPSRC CDT call
11. Had a paper accepted for Research For All [see Appendix G]
12. Attended Vitae conference 2019 to benchmark and sense-check our conclusions

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\(^6\) https://blogs.bath.ac.uk/publicengagement/2018/09/06/challengecpd-reports/
Sustainability

Changes already made
(i) at our institution
As we have described earlier in this report, we have already taken the learning from year one and incorporated it into our work in year two and beyond. Examples of these changes include:

Ensuring that PER training is incorporated into existing programmes of professional development, rather than running a stand-alone programme of PER training. Linking our training offer to specific practice-based opportunities.

Incorporating the learning into our Public Engagement Knowledge Hub Moodle courses.

Developing activities that meet broader professional development needs of colleagues, using PER as the content and “lens” for the activities. For example, the leadership programme for the faculty of Humanities and Social Science [see Appendix E].

Piloting co-produced training through a doctoral module and a funding call.

Developing tools to use in our ongoing CPD work that: help learners identify their existing skills and competencies that are relevant for PER; and help visualise the range of interventions and activities that are necessary to develop PER skills and confidence.

ChallengeCPD has provided a period of prolonged engagement and collaboration with colleagues in Researcher Development and the Doctoral College which has strengthened existing good relationships.

(ii) for the sector as a whole
We have disseminated our ideas through the following conferences and events:

BIG 7 Event 2018 (n=45) and 2019 (n=30)

ECSITE 8 2018 (n=100)

UK Knowledge Mobilisation Forum 9 (n=30)

BIG Skills Day (n=45)

Event feedback has shown that participants have found the “learner first” concept novel, in particular the idea that PER training can be framed in the context of broader professional development needs and activities of the learners.

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7 BIG is the UK’s national STEM Communicators Network – the Event is the annual conference, Skills Days are day-long training workshops
8 European Network of Science and Technology Centres
9 National network and event for people (often health focused) who have an interest in mobilising knowledge from within and beyond universities
Participants have also valued the clarity about what “counts” as training, giving confidence to participants to offer a range of interventions and to go beyond offering workshops.

We have showcased the Public Engagement Knowledge Hub Moodle courses through these events and have had 22 people from other institutions access them using a guest log-in. The content has been made available for others so they can build their own Moodle courses in their institutions, although we recommend that create their own examples to make it more relevant for their learners.

**Anticipated changes for the future**

(i) at our institution

We will use the materials developed in year two in our ongoing training activities. We anticipate that these will help us to help learners create a more robust academic identity based on PER (in part or more completely).

(ii) for the sector as a whole

We will create a blog post reflecting on our experiences of piloting co-produced training and also share this learning through BIG 2020.

We will share our Knowledge Hub and the underpinning thinking about how it was developed to support others wishing to create their own e-learning tools.

The self-assessment tools will be made available through the PEU website and disseminated through eg the Training Associates, BIG, UK Knowledge Mobilisation Forum through 2020/21

Helen is a Training Associate for the NCCPE. Key ideas from ChallengeCPD will be incorporated into the ongoing development work of the courses run by the NCCPE.

We have an article accepted for publication in Research For All in February 2020.
Final thoughts

Pastoral value of training

It didn’t emerge as a strong area of focus for ChallengeCPD, but it was noted in passing and has been noted in previous evaluations of the PEU’s work, that learners place great value on the face-to-face and personalised nature of talking with a member of the PEU. We described earlier how a lot of our work is routine and entry level which feels repetitive and is time-consuming for us. While the people we work with may perceive our advice to be personalised, we feel it to be routine and generic.

The creation of our e-learning Public Engagement Knowledge Hub Moodle courses is an attempt to decrease the number of these routine and repetitive interactions. However, we were extremely mindful of the reported value of talking with us. We recognise that a Moodle course can never replace a nuanced conversation with a member of the PEU, but we have attempted to keep the Moodle courses personal and with the strong voice of the PEU. The courses are highly interactive, with small activities (based on the activities we use in face-to-face settings) to help users think more deeply about their own PER, they feature videos of the PEU and academics, and use real case studies to illustrate points. We hope that in doing this, users of the Knowledge Hub will come to the PEU with fewer basic questions and so increasing the efficiency of the PEU.

The Moodle courses went live in December 2019. User-testing during the development of the courses has suggested that they are appealing and easy to use. Longer term evaluation will tell us more about how effective they are in supporting learning.

Recommendations

Our recommendations for:

(i) other HEIs addressing similar challenges/ seeking to embed public engagement,

Training for PER is important but is not a cure of Public Engagement’s ills. Training for PER is doubly disadvantaged: PER is still a minority activity and training / professional development in HEIs is poorly developed. Inviting people to participate in PER training is inviting them to do two things that are culturally undervalued so it is not surprising that people do not sign up, or do not prioritise.

Put your learner first: think carefully about the broader professional development needs of the learners you are working with and consider how your PER training can support those needs so that the training does more than enhance PER. For example, can a small funding programme help develop grant writing skills (as well as help applicants develop and deliver PER)?

Training is more than what you devise and deliver, it’s about the learning you help to foster. Think carefully about the opportunities for learning that you create – a chat over a cuppa, an internal news item, a small grant - you are probably doing a lot of training already. Can you reframe any of your activities to “count” as training?
(ii) for funders/ policy makers of public engagement,

The challenges we face in developing and delivering training for PER are not uniquely tied to public engagement with research but are more closely linked to the broader culture of university and research life. While we can continue to create better, more tailored, and more ambitious forms of training, the resultant improvement in uptake and subsequent improvement in quality PER will likely be minimal while we push against the grain of university and research culture.

Training is important, but the current training environment in HEIs works against anyone attempting to run high quality and effective training. What can you do to create change within the sector so that training and CPD is more highly valued and better understood?

One aspect of the challenge may be a reporting issue, directly related to the poorly developed culture of training and professional development in HEIs which means that people are not tuned into their own learning journeys.

A lot of training for PER is about raising awareness or encouraging people to get involved. That this primarily happens at doctoral level (and above) is problematic because this results in PER knowledge, skills and attitudes lagging far behind topic knowledge and disciplinary research skills. Knowledge and experience of PER should be happening earlier in researchers’ training: at undergraduate or A Level. This will help ensure that PER is perceived as an integral part of being a researcher (rather than an optional add-on), reduce the ethical risks we identified, and mean that training at doctoral level and above can move beyond awareness raising.

(iii) for the NCCPE

How can we work together to disseminate these ideas? The BIG Skills Day was very well received but was quite conceptual. There is an opportunity to extend the ideas into a very practice-focused workshop where we can help people devise training interventions based on our new ideas.

The barriers and challenges we face in PER are not all unique to PER. Be careful of taking on a culture change remit that extends beyond PER. It is not your remit to try to change the training and learning culture of universities (using this challenge as one example). Where are your (potential) partners across the sector that you can work with where broader HE culture is a limiting factor in embedding PER?
Reflections from senior leadership
Professor Jonathan Knight (Pro-Vice-Chancellor (Research))

How has this SEE-PER funded work impacted your institution?

The outstanding institutional benefit of the project is that it has provided the context and the resources for us to think about what we do. This is essential across HE in the UK, and perhaps more than average at our own university. Across the UK, because the need to enhance broader public engagement with the research-led mission of universities has become much more apparent over the last few years. At Bath, because our “shared city” is small and constrained in many ways, necessitating alignment of the interests and activities of the University with those of the city and the region, and now under new leadership there is an opportunity to accelerate that alignment.

Have any of the project team’s initiatives or ways of working stood out to you, and if so what difference or contribution do you feel they have made?

One lesson that I have personally drawn from the project is the importance of a differentiated offer, depending on the level of researcher involved. This is true not just in content but in the use of language too. Indeed, “PER” as a concept carries significant baggage, and other relevant words (e.g. “researcher development”, “training”, “CPD”) are likewise fully-loaded. If we want to get the most from our PER activities in the future we may wish to consider leaving some of the words behind, to enable us to reach the broader internal audience. Another lesson is about the challenge posed by the need for scaling. The progress that we have previously made at Bath has been impressive, but I sense that it may be self-limiting. That is partly due to the strong identity that we now have for PER activities, but also because of the difficulty of moving beyond linear scaling.

What are your thoughts about the future for Public Engagement with Research at your institution, and its resourcing?

It’s apparent that we as a University need PER to be more mainstreamed. I do not consider that we can achieve that by increasing the size of our Public Engagement Unit, because of the scaling challenge. The activities that take place in our Doctoral Training Entities are a significant move in the right direction, but of course they only cover doctoral students (a small fraction of our research base) and they are also somewhat ephemeral. Better integration into researcher development programmes must be a part of it. One could start to make a case that the ethical obligation on publicly-funded researchers to engage publicly might imply that PER is a Research Integrity issue, and that this might ultimately provide a framework for broader implementation. The question of resourcing remains challenging, particularly in the current financial climate. That means that plans for change will require careful thought and likely gradual rollout. Unless we can identify a more suitable financial model, we will struggle to gain what we should from PER.
Talking points

1: ChallengeCPD has afforded us the opportunity to critically engage with our training and professional development offer. We have taken a step back, thought deeply about our work and been able to test our new thinking in a live environment.

Key new ideas include:

**It’s not about training for PER:** The challenges of PER CPD are not unique to PER training and professional development. The culture of training and CPD in universities is not well developed so PER training falls victim to that culture. This means that people are less tuned into training and learning opportunities in general, and perhaps also have a limited view of what counts as training meaning that significant learning interventions are not reported as training in surveys such as Factors Affecting Public Engagement

**Pay more attention to the learner rather than the intervention.** Training is just one step on a journey and as a trainer we should consider ways to bring forth existing skills and experience, understand their longer-term career aspirations, and understand the broader research culture the learner finds themselves in so we can support learners after they have moved on from our intervention. Our role as trainers is to enable learning moments in others. The interventions are the means to this end and we should focus our attention to enabling those learning moments wherever they may happen.

**PER training can do so much more than benefit PER practice,** and attitudes to PER. Learners at different career stages have very diverse training needs. PER training can help to support those broader training needs. Thinking this way could help to overcome the double disadvantage that PER training faces.

2: The challenges we faced during ChallengeCPD were not related to public engagement or to training, but to do with broader work / life situations. Over the course of this two year project we experienced:

- Threat of redundancy while making the business case for core support for the PEU
- Team members leaving
- Team restructure (because of a team member leaving)
- Recruitment, induction and probation of new team members
- Absence due to ill health and family bereavements

These are to be expected over this time frame but it is worth noting that while some of our deliverables have been delayed, they have not been cancelled or dramatically changed. Our project structure – commissioning external consultants to deliver specific pieces of work provided us with continuity during periods of flux. However, it is worth noting that absence due to ill health and family bereavements happened both within the PEU and with our consultants. Indicating that this model of project structure does not make a project immune to broader life challenges. Very few of our deliverables have been time-critical. This
flexibility has meant that we have been able to support quality outputs over working to a
deadline and producing inferior deliverables.

3. We have been delighted by the positive response to our new ideas. Proposing and being accepted for conferences, journals and events shows us that our peers and colleagues across the broad PER and PE-STEM sector perceive the ideas as being novel and worthy of attention. The uptake and feedback from these events suggests that the new ideas resonate across the sector and have helped people think differently about the training activities they develop and deliver.
Reflections on the ChallengeCPD project structure
ChallengeCPD@Bath inputs

The project funding allowed us to undertake work that wouldn’t have happened without the funding.

There are some aspects of how we structured the work that have been extremely beneficial. The funding covered: additional time for HF; external consultants to undertake specific pieces of work; administrative time; time, travel and subsistence for an Advisory Group.

ChallengeCPD@Bath was framed as an opportunity to examine our existing practice, reflect on it and make changes to our future practice. This approach meant that we could be responsive as our context changed. In particular, the PEU was undergoing a period of change during ChallengeCPD with team members leaving, new members being recruited and the case for ongoing funding for the PEU being made. Having external consultants working on specific pieces of work meant that they could remain focused on the work while the PEU navigated these more day-to-day tasks. Had we decided to buy out time within the PEU to deliver ChallengeCPD there is a strong likelihood that the day-to-day would have taken priority over the novel work that was less urgent meaning that project deliverables would have significantly delayed or cancelled due to the significant reduction in capacity.

However, it is worth noting that some of our consultants have experienced personal challenges during our time working with them. This has caused some delays in delivery which has not been problematic as the deliverables have not been time critical. The one output that had a hard deadline (Research for All paper) was delivered on time and was published in February 2020.

The inclusion of additional time for the HF and additional administration time was very useful. This time primarily covered the additional work that comes with holding a grant and running a project: setting up and maintaining budgets and cost-codes, reporting on the work, organising meetings, liaising with consultants and Advisory Group members, and travel to coordination meetings. This meant that the core work of the PEU could continue and the learning from the project was easily integrated into our practice due to the extra capacity being held by an existing member of the team.

As with Engage360@Bath, the status of UKRI funding was helpful in securing commitment from across the University. However, the considerably smaller scale and much tighter focus of ChallengeCPD@Bath meant that the influence across the University has been less high profile.

That the PEU is a well-established part of the professional services landscape at Bath has meant that the outcomes and impact of ChallengeCPD@Bath have been significant. The project has been about changing how we think and work, rather than about setting up new systems. We have been able to rapidly incorporate new ideas and practice into our robust programmes both internally and externally. These programmes have associated core funding so we have been able to allocate resource to try out new ideas and concepts.
We were overly ambitious with our timescales and scheduled too many Advisory Group meetings in year one. However, we were able to reallocate the budget and use it to pilot the Co-Produced funding call. This flexibility was really helpful as it allowed us to get ahead of ourselves for year two.

**Assumptions we made at the start**

<table>
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<tr>
<th>Assumption</th>
<th>Conclusion</th>
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<tr>
<td>CPD for public engagement with research is a challenge area for embedding public engagement within the culture of a university.</td>
<td>The challenges of PER CPD are not unique to PER training and professional development – there is a complex and varied culture of professional development within HEIs.</td>
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<td>The primary aim for CPD for public engagement with research is for improving participation in, and quality of, public engagement with research.</td>
<td>CPD for public engagement with research can contribute to broader academic professional development needs.</td>
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<td>There is something about the training on offer that is part of the challenge. By mapping and analysing our offer we can identify changes we need to make to our programmes.</td>
<td>The broader culture of training in universities is the bigger barrier. Mapping and analysing our work (as was originally intended) was unlikely to be the most useful use of our time.</td>
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<td>Putting the learner first will improve our training provision.</td>
<td>Yes, but what this means in practice is not straightforward as this means understanding their public engagement needs, their broader academic/career goals, their disciplinary/institutional cultures of training and their disciplinary/institutional cultures of public engagement.</td>
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<td></td>
<td>There is a spectrum between interventions that we devise / deliver and full co-production. Not all learners will want the same level of involvement.</td>
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<td>The language of training and professional development is problematic.</td>
<td>The language of training and professional development is problematic. We were unable to develop a more acceptable term or phrase.</td>
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<td>Case studies will be best delivered in video format.</td>
<td>The complex nature of the learning pathways has resulted in a more dynamic method for presenting the case studies.</td>
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<td>Doing public engagement is a core aspect of learning about public engagement.</td>
<td>Doing public engagement is a key learning moment but the ethics of this are dubious particularly where vulnerable groups and individuals are involved. Should we be asking community organisations and individuals to give up their time to train</td>
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<td>Question</td>
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<td>researchers? Should we be more overt about when researchers are learning?</td>
<td>The extra time for HF was essential, but was largely eaten up with administration, rather than creating additional thinking time. The Advisory Group model is a familiar process for the University of Bath so participants were comfortable being part of the group. The Advisory Group helped to sustain existing relationships and improved the embedding of public engagement into broader training programmes. We scheduled too many Advisory Group meetings for the pace of progress within the project meaning we had a small underspend. We were able to reallocate that funding. External contractors were essential to the delivery of many parts of our work. They offered stability and continuity while the Public Engagement Unit was going through a period of uncertainty.</td>
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<td>Project structure (extra time for HF with Advisory Group and external contractors) would be sufficient to deliver the project.</td>
<td>That the Public Engagement Unit would secure core funding to sustain beyond July 2018 upon production of a robust business case. The Public Engagement Unit secured core funding.</td>
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<td>Outputs could be produced rapidly and within the timeframe of the project.</td>
<td>Several of our key outputs have been delivered behind schedule. This is a result of a combination of personal circumstances with our external contractors; the involvement of HF being constrained due to changes in personnel in the Public Engagement Unit and the broader university; and underestimation of how long these novel approaches would take.</td>
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Members of the Advisory Group

- Andy Pitchford, Head of Learning and Teaching
- Fran Laughton, Director of Teaching and Resources (Physics)
- Ioannis Costas Battle, Lecturer in Education, doctoral researcher until 2017
- Jeanette Muller, Academic Staff Development Manager
- Neil Bannister, Graduate Development Manager, Doctoral College
- Sarah Bailey, Senior Lecturer
- Heather Lusardi / Sophie Duncan, NCCPE
- Shane McCracken, Director, Mangorolla
- Ed Drewitt, Freelance
- Matt Davidson, Professor of Inorganic Chemistry

We invited Shane McCracken to participate in our Advisory Group. Shane’s company (Mangorolla\textsuperscript{10}) runs an online engagement programme called I’m a Scientist, Get Me Out Of Here. Evaluation of I’m a Scientist has shown that participants develop skills and confidence and could be described as a form of experiential learning. It was for this reason that we asked Shane to be part of ChallengeCPD. Shane took the discussions and ideas developed during ChallengeCPD and applied them to the I’m a Scientist programme. Specifically, they created a more overtly educational experience that was facilitated by an academic in the Science Communication Unit, called I’m a Scientist – Academy Zone.

Through this pilot work\textsuperscript{11}, Mangorolla noted that:

- Researchers valued being given the space to reflect and think critically about different kinds of engagement
- Researchers gained knowledge of concepts and best practice that will inform future activities
- Researchers learnt from their peers

Showing that the Academy Zone enhanced and improved the learning gained through participating in I’m a Scientist.

\textsuperscript{10} Helen Featherstone is on the board of directors for Mangorolla

\textsuperscript{11} https://about.imascientist.org.uk/2019/reflecting-on-im-a-scientist-participation-academy-zone-pilot/
The UKRI Strategic Support to Expedite Embedding Public Engagement with Research (SEE-PER) call sought to help enrich and embed cultures within HEIs where excellent public engagement with research (PER) is supported, valued, rewarded and integrated within institutional policies and practices. The first year of this programme ran from October 2017 to October 2018. Two types of approach were funded:

‘Embedding change’ proposals that sought to enhance and embed an institution’s approach to supporting PER, building on the learning from the Beacons for Public Engagement, RCUK PER Catalyst and Catalyst Seed Fund programmes:

1. Birkbeck College, University of London, led by Professor Miriam Zukas
2. Heriot-Watt University, led by Professor Gareth Pender
3. Keele University, led by Professor David Amigoni
4. London School of Hygiene and Tropical Medicine, led by Professor Dame Anne Mills
5. NERC Centre for Ecology and Hydrology, led by Dr Nick Wells
6. University of Lincoln, led by Professor Carenza Lewis
7. University of St Andrews, led by Professor John Woollins

‘Challenge’ proposals which addressed a specific challenge in supporting PER effectively, and which expanded the existing knowledge base about ‘what works’ in effectively supporting PER:

1. University of Brighton: developing an incubator model for finding and fostering community-university knowledge partnerships, led by Professor Tara Dean
2. University College London: exploring how to make PER fundamental to the university's efforts to address global societal issues through cross-disciplinary research, led by Professor David Price
3. University of Bath: examining the challenges associated with training and professional development for public engagement, led by Professor Jonathan Knight
4. University of Southampton: tackling barriers to professional development in PER and developing a robust educational framework for such activity, led by Professor Simon Spearing
5. STFC – Laboratories: investigating the take up and provision of PER training, led by Dr Neil Geddes

In May 2018, the SEE-PER projects were given the opportunity to apply for a second year of funding to embed and expand upon work done in the first phase. Ten of the twelve projects received funding to extend for a further 12 months, and the programme concluded at the end of 2019.

UKRI appointed the NCCPE to co-ordinate this work, ensuring learning was shared across the projects, and that evaluation was used strategically to inform and assess the value of the SEE-PER initiative.

Further learning from the SEE-PER initiative can be found in the ‘Support Engagement’ section of the NCCPE website.
Appendix A – Literature review and conclusions from year one of ChallengeCPD@Bath
Continuous Professional Development for Public Engagement

Report for the SEE PER Challenge CPD Programme
University of Bath

Dr Helen Featherstone and David Owen
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Introduction

Over the past decade there has been a major focus amongst research funders on creating a culture of public engagement within research institutes and universities. Significant investments include the Beacons for Public Engagement (BPE), the National Co-ordinating Centre for Public Engagement (NCCPE), the RCUK Catalysts for Public Engagement with Research (PER Catalysts), the Catalyst Seed Fund (CSF) the Wellcome Trust Institutional Strategic Support Fund (ISSF) and Research Enrichment (formally Provision for Public Engagement); and most recently the Strategic Support to Expedite Embedding Public Engagement with Research (SEE-PER).

In 2015, Research Councils UK (RCUK) and Wellcome jointly commissioned The State of Play report to synthesise a variety of evidence sources including research such as the Factors Affecting, evaluations of the key culture change investments and a wide range of literature. The report identified that whilst considerable progress had been made several key challenges exist pertaining to professional development. These included:

- Researchers who are not active engagers are not aware of the training available and see lack of formal training as a key barrier to engaging the public with research.
- There is widespread availability of formal training in public engagement, however uptake from within the research community is low.
- Researchers who are active in public engagement tend not to value the formal training they have received or attribute it to their confidence in engaging the public.
- The core purpose of formal training is to increase participation in public engagement amongst the research community. There are limited policy frameworks or measures relating to quality of public engagement, and therefore professional development has a limited place to play within the landscape beyond participation.
- There is a preference amongst researchers for ‘just in time’ training and support, including one-one coaching conversations, however these types of interactions are often formally valued by researchers and institutions as part of professional development.
- There is no recognition for the role of external partners in supporting researcher CPD for example via formative feedback, providing experiential opportunities for engagement and sharing knowledge (i.e. about specific audiences, processes etc.)

As part of their work in Professional Development the Public Engagement Unit at University of Bath has developed, delivered and commissioned a wide range of training, activities and interventions. These include formal courses in partnership with the postgraduate skills programme and the researcher development units; facilitating organised events for sharing knowledge and experiences, one-one support, the development of online and printed resources and delivery of bespoke courses at departmental levels. In line with the challenges
identified in the State of Play report, the time spent on developing and delivering formal training was disproportionate to its actual and perceived value. Conversely the team are often called on for ‘just in time’ training to support events and public engagement projects. Because this support is linked directly to practice and need, they are often very well received and valued, but the time involved in having one-one conversations and/or developing new resources for this purpose is far more significant.

In 2017, the University of Bath was awarded funding by RCUK as part of the SEE-PER call. The aim of the programme was to critically analyse training and continuing professional development for public engagement with research to understand the barriers and enablers to participation. This analysis was then used to: develop guidance, improve the quality of provision, and inform the development of new forms of professional development within the University of Bath and with the National Coordinating Centre for Public Engagement.

This report pulls together some of the key learning to emerge from the programme. It draws on the following inputs and was conducted between October 2017 and May 2018:

- A rapid review of the literature on continuing professional development in higher education.
- Six interviews with staff in higher education (at other Universities) and learned societies who have responsibility for and expertise in professional development for public engagement.
- A review of key literature pertaining to formal training in public engagement and science communication. Both terms were investigated given the limited number of studies and the fact that they tend to be used interchangeably.
- A review of existing professional development provision including separate evaluations of formal training and support from the public engagement team, alongside interviews with the public engagement team.
- Ongoing discussions with advisory board members, including one meeting and one workshop.

The findings are presented in the following sections:

- **Professional Development in Higher Education**: A short summary of the status of professional development within academia.
- **Continuing Professional Development for Public Engagement**: Focusing on the University of Bath context but with reference to the wider literature.
- **Changing Researcher Demands at University of Bath**: Looking at the ChallengeCPD programme and the steps taken within the project to meet researcher’s changing demands for professional support.
• **Closing Reflections**: A closing reflection on the project, and key learning to take forward.
• **References**
• **Appendix A**: Resources which may be useful for supporting researcher development in particular advanced public engagement skills.
Professional Development in Higher Education

There has been a growing trend towards formalisation of professional practices and procedures, leading to a demonstrable improvement in the role of professional development in supporting researchers. In their most recent report for example, Vitae (2017) suggests that there is a general move towards more formalisation in the processes of recruitment, induction and appraisal. Drawing on data from the Principal Investigators and Research Leaders Survey (PIRLS) survey and the Careers in Research Online Survey, the report finds a significant increase in levels of confidence in recruitment and selection processes, alongside a significant increase in engagement in appraisal from 52% in 2009 up to 72% in 2017. Vitae (2017) which also finds that the proportions of respondents reporting provision of a written job description which includes details of requirements for qualifications, specialist research skills and transferable skills have steadily increased since 2009 and are now approaching very high levels. Concurrently the proportion of researchers finding appraisal useful or very useful to focus on career aspirations has also risen from 52% in 2009 to 62% in 2017. Alongside these shifts there is a marked rise in the availability of induction programmes for newly appointed researchers with nearly 80% being offered an induction, alongside high participation rates (95% of respondents who were offered a local induction participated, and around 90% departmental and institutional inductions).

Policy implementation within HE is more likely to be the result of negotiation and conflict than of rational decision making and top down implementation. Universities are therefore more likely to discover their preferences through actions, than act on the basis of preferences, learning from past failures and successes (Trowler, 2012). Research suggests that despite the above gains, development still lacks currency and is met with scepticism and sometimes seen as an attack on academic freedom as part of a growing culture of performance measures (Dill, 2005). For staff with responsibility for professional development there is a leaning towards delivering programmes through cooperation and collaboration, to work with academics and to assist them to reflect upon their academic role in relation to teaching, research, scholarship, leadership, funding and supervision of students etc. (Fraser, 2001, p.55). These approaches are more in line with the values and needs of academics, as well as good practice in implementing change within Higher Education but may not necessarily be recognised as professional development.

In our review of the literature we identified a number of characteristics that influence the delivery and effectiveness of professional development:

- Academics have significant agency in exploring and to some extent defining what it means to be a professional in the contexts in which they live and work, alongside
regulating theirs and their peers ongoing adherence to vigorous academic standards (Dill 2005).

- An academic may identify themselves as a Historian, a Scientist, a Dentist or a multitude of other professions. These factors taken together may lead many academics to ground their professional status and identity within their disciplinary community rather than their institution (Blackmore and Blackwell 2003). This may in turn lead to a loose connection between CPD at individual, departmental and institutional levels.

- CPD and Professional Development can be met with significant resistance within academic communities in particular its link to what is seen as an obsession with measuring performance (Stefani, 2013) in line with a growing neoliberal encroachment on higher education (Bozalek et al, 2014; Mockler, 2013; Kneale P et al. 2016)

- There is sometimes a reverence for the doctorate degree and it is assumed that it prepares researchers for other roles encompassed by the academic profession, such as management, leadership, and teaching. It is sometimes assumed that these skills will emerge as individuals take on such roles and responsibilities (Pilbeam 2009, Brew 1995).

- Evaluation of CPD tends to focus on one-off formal training and is restricted to an immediate assessment of the extent to which the training met the needs and goals of participants. There is a dearth of long-term evaluation, or a broader understanding of the role of professional development in generating behaviour change and improving practice particularly in line with broader institutional and national goals; extent to which institutional standards and norms are met (in areas such as equal opportunities etc.) (Tourish 2012; Blackwell and Blackmore, 2003; Murphy, 2014)).

- There are fragmented structures responsible for the delivery of CPD sometimes revealing an absence of coordination and leading to a lack of coherence in provision (Murphy, 2014).

- Academic development programmes can suffer from a lack of “currency within the economy of the institution” (Boud 1999, p.8) as they can been seen as irrelevant to the daily life and work of a researcher.

- Ongoing pressures on time, a lack of awareness of available opportunities, lack of incentives to engage with professional development are all frequently cited barriers. There is lack of awareness of development opportunities, whereby academics often ignore the emails that are being sent from central departments like the Library, HR, and the Centre for Teaching and Learning (Murphy, 2014; TNS BMRB, 2015)

- Short-term funding arrangements for academic staff alongside the absence of clear career structures for academic developers, mean professional development is a marginal priority (Murphy, 2014; McKenna and Hughes, 2015)

- Much development work is not even categorised as such, and there is a narrow notion of training held by many senior managers (Clegg 2003).

- There is limited awareness regarding the extent of the university’s spend on professional development provision, or indeed what level of spend would be appropriate (Murphy, 2014).
Findings from the University of Bath – ChallengeCPD Programme

The ChallengeCPD project had an advisory group comprising academics, academic staff developers, doctoral college representatives, external providers of training for academics, representatives from the National Coordinating Centre for Public Engagement and the Public Engagement Unit. In the first meeting of the advisory group we conducted a pinpointing exercise with participants to identify what makes for good quality professional development. The following pointers arose:

Design
- Enables you to **reflect** on an intervention, task or professional challenge and what you have learned from it.
- Is **linked to a big picture** (i.e. not a one-off box tick) but linked into career pathways
- Is **timely** and run when people need it at times that they can attend.
- It is **enduring** and provides resources that people can return to
- In an **environment** that is supportive of learning.

Delivery
- **Challenges thinking and behaviour.** Opening-up new ideas that might change practice – providing a space to ‘dream differently’.
- **Is inclusive** and designed to account for different attitudes towards ‘training’, different learning needs and styles etc.
- Uses **active learning** approaches, not simply presenting black and white answers.
- **Is responsive** to the needs of participants (i.e. tailored on the fly) and **relevant** to participants’ backgrounds and requirements.

Valued
- Provides **recognition and accreditation for skills**
- **Is efficient** and **effective** saving more time than the time invested in it.
- Is delivered by someone who has the **confidence** of the researchers.
- Helps build **networks and cohorts of practice**, facilitating peer to peer support.

In our discussions, we noted that there are tensions around the purpose of CPD and the position of the learner that must be accounted for. For example, if CPD is designed to change behaviour, then learners who are resistant to change, or not aware of a need to change their behaviour may have a different relationship to CPD as a result. Given the loose alignment between individual goals for CPD and institutional goals identified earlier in this document the trainer must strike a balance between providing challenge and supporting.
**CPD for Public Engagement**

**The Content**

The professional development landscape for public engagement is characterised by a range of formal training, a tentative although improving position within promotions, recruitment and selection criteria, a smattering of fellowships and specialist awards, and a plethora of informal under the radar processes of support and development (i.e. peer support, mentoring, one-one coaching). The Public Engagement Unit at University of Bath has developed, delivered and commissioned a wide range of training and development activities and interventions. Participation in these has been varied and reflects the national picture including: occasionally low participation levels, a perception amongst staff that there is no training on offer, and a desire for ‘just in time’ support.

In preparing for this project the Public Engagement Unit developed the following model to capture the diversity of CPD related practices:

<table>
<thead>
<tr>
<th>One-off activity</th>
<th>Ongoing support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stand-alone</td>
<td>Part of broader CPD programme</td>
</tr>
<tr>
<td>Closely linked to practical PE</td>
<td>No link to upcoming PE opportunity</td>
</tr>
<tr>
<td>Entry-level</td>
<td>Advanced</td>
</tr>
<tr>
<td>Stand-alone skill</td>
<td>Embedded in research</td>
</tr>
<tr>
<td>Internal provider</td>
<td>External provider</td>
</tr>
<tr>
<td>Group</td>
<td>Individual</td>
</tr>
<tr>
<td>Linked to RDF or other accreditation</td>
<td>No link to broader framework</td>
</tr>
<tr>
<td>Telling the institutional agenda / goals</td>
<td>Supporting the individual’s agenda / goals</td>
</tr>
<tr>
<td>Linked to stage in career</td>
<td>Linked to levels of experience of engagement</td>
</tr>
<tr>
<td>Badged as professional development</td>
<td>Not overtly badged at CPD</td>
</tr>
<tr>
<td>Skills based</td>
<td>Attributes based</td>
</tr>
</tbody>
</table>

In our review, we found much of the literature on CPD for public engagement was focused on formal training (Edmondson and Dawson, 2004; Young and Mathews, 2007; Illingworth and Roop, 2015; TNS BMRB, 2015). Training is often linked to a specific activity (i.e. delivering at a science festival, working with schools), but may also support a general awareness raising of public engagement and its value for research, without there necessarily being an opportunity on the horizon (Besley et al, 2016). Research suggests that levels of formal training for public engagement or communications stand at around one quarter (TNS BMRB, 2015; Vitae, 2017). Studies also suggest a steady increase overtime (TNS BNB, 2015; Owen et al, 2016), for example...

The formal training on offer across the sector, typically covers basic introduction to public engagement with research, funding, evaluation and specific skills such as working in partnership, communication skills, working with the media, working with policy makers, and creative approaches. If we broaden our definition of formal training to include conferences, the range of is broadened out a little further particularly focusing on research methods and epistemologies of practice. Some examples of this include a recent conference from University of Sheffield Faculty of Arts and Humanities exploring public engagement as a method. The day was developed to support researchers in developing their understanding of the experiential, embodied, communal and dispersed nature of knowledge changes the role of researcher. Sessions included ‘art as research’, and the ‘divided self’. Another example, we found was ‘Digital Storytelling theory and practice’ run Unconference at the University of East London - a one day exploration of approaches to Digital Storytelling Facilitation for experienced academic researchers and teachers, media activists, community and media students or professionals who wish to explore the applied use of Digital Storytelling as a participatory research method.

The literature we reviewed appeared to us to focus implicitly to role of formal training in promoting participation in public engagement, predominantly through sense making and creating an attitudinal shift and appreciation for the role of engagement within academic life (Poliakoff & Webb, 2007). There was very little written around its role in improving quality of engagement. The formal programmes being developed in Higher Education Institutions appeared to be one-off models, whereas external organisations such as the NCCPE, Learned Societies and funders such as the Wellcome Trust have developed programmes to support reflection and learning over time.

Another key area we noted is how the overall purpose and ideas that are driving formal training are evolving over time. A review of academic papers found two published studies that had looked at this topic, both focusing on training in Science Communication. The themes that emerged:

- a shift towards scientific literacy away from public understanding;
- a shift towards science capital, reflexivity and themes of social justice in science communication, away from deficit models;
- a greater appreciation for the role of two-way communication as an approach to improve communication and achieve strategic objectives.

(Illingworth and Roop, 2015; Besley, 2015)
Although not cited in the literature, we know that institutions are taking new approaches to embedding public engagement within existing training and support. For example, at the University of Bath, the team have developed bespoke training and resources for supervisors of PhD students, and there is interest across the sector in providing support for principle investigators and departmental leads. There appears to be a growing demand for context specific departmental level support and institutions we spoke with were experimenting with train the trainer models to deliver this, however with mixed results. In some circumstances, there was a resistance amongst active engagers to taking on additional responsibilities in public engagement given their existing activities were not fully recognised or supported. At the University of Bath researchers who were active in engagement recognised that they were experienced in one aspect of the PE spectrum (for example working with the media, or delivering outreach) and as a result they felt ill-prepared to support other researchers in their department who might be using different methods. As part of this programme we've started to reflect on the nature of support that is required by leaders of engagement (see section on changing researcher demands for more details).

The Value of Training and CPD

As discussed in the introduction researcher's perception of the value of training and CPD appears to evolve depending on their experience of engagement. Those who have done very little engagement say they would like training as a mechanism to improving their confidence and getting some experience, whereas those who are active engagers place high value on learning through experience (Owen et al. 2016). Evaluation of public engagement CPD that we located is largely focused on responses of participants towards the extent that the one-off training met their specific goals and needs.

Where these evaluations exist, they tend to report improvements in:

- communication and organisation skills;
- levels of confidence to engage the public;
- generating new ideas and ways of working;
- enhanced teamwork and interpersonal skills;
- greater understanding of the benefits and relevance of public engagement to academic role;

(Illingworth, S. & Roop, H, 2015; Review of formal training for ChallengeCPD; 2018)

Holliman and Warren (2017) was one of the few published studies we found to return to researchers twelve months after the initial interaction asking about the usefulness of the
training, how it had been applied and whether researchers would recommend the training to their peers. Written in relation to Science Communication training, responses received provided a wide range of examples where researchers had applied what they had learned in practice, from increased confidence and composure in media interviews through to greater clarity in written presentations.

In line with some of our discussions above Silva and Bultitude (2009) provides the following recommendations for training in public engagement that focuses on communications skills:

- Practical and interactive exercises are useful to enable trainees to observe and reflect upon their practice; if possible, this aspect could be delivered during a real science communication event to ensure contact with real audiences.
- Include a session on reflection/discussion of learning outcomes to encourage the trainee to be responsible for his/her own learning;
- Improve the quality of the content of materials and use them more effectively;
- Enable contact between trainees and peers involved in science communication, to promote the sharing of experiences;
- Be delivered by more than one trainer; this provides support to the trainer while making the session more complete and dynamic;
- Be bespoke (i.e. tailored to suit the trainees);
- A sound knowledge of the trainees' needs, abilities and expectations and adjust the training course accordingly.

Silva and Bultitude (2009) also note that trainers and enablers are much more aligned in their perceptions of what makes effective training when compared to researchers, it may therefore be worth considering involving researchers in the development of training and resources.

The role and purpose of CPD

Our discussions on the Challenge CPD advisory board highlighted that there was a lack of quality frameworks for public engagement, and in the absence of such there was no ‘steer’ for the skills, behaviours and attributes that professional development should be supporting, this mirrors findings from State of Play (Owen et al. 2016). The challenge here is that the quality frameworks for public engagement should simply be the frameworks that measure the quality of research for example REF, Pathways to Impact, Publication. These frameworks have only recently adopted ‘impact’ as a measure, and there is more work to define and capture high-quality public engagement within this measure.

Two frames that could be used to capture the journey towards excellence in public engagement were put forward in our discussions. The first frame was called the four stages of competence, or the “conscious competence” learning model. Originally developed by Gordon
Training International in the 1970s relates to the psychological states involved in the process of progressing from incompetence to competence in a skill:

- **Unconscious incompetence**: The skill has become "second nature" and can be performed easily. The individual may be able to teach it to others, but not necessarily.
- **Conscious competence**: The individual understands and knows how to do something. However, using the skill or knowledge requires concentration, there is heavy conscious involvement in executing the skill.
- **Conscious competence**: Though the individual does not understand or know how to do something, they recognize the deficit, alongside the value of a new skill in addressing the deficit. The making of mistakes can be integral to the learning process at this stage.
- **Unconscious competence**: The individual does not understand or know how to do something and does not necessarily recognize the deficit. They may deny the usefulness of the skill or training to develop the skill. The individual must recognise their own incompetence, and the value of the new skill, in order to take steps to towards next stage.

The second frame was developed in by Miller (1990). Known as Miller’s Pyramid, it is a way of ranking competence both in educational settings and in the workplace. In distinguishing between knowledge at the lower levels and action in the higher levels, it brings to light ethical considerations around practicing public engagement and the knowledge required to do so without causing harm.

- Does
- Shows how
- Knows how
- Knows

Additional levels have been added to suggest that learners need to have heard about and have awareness of before knowing.

- Knows about
- Heard of

St. Emylns (2018)

Using these frameworks as a starting point the ChallengeCPD advisory board proposed that it would be helpful to map out the actions that might take place and the support needs of researchers to move them up a step, alongside the types of experiences and actions that are associated with each level. We noted for example that having to teach public engagement as part of the undergraduate curriculum was a crucial step in the development of researchers (i.e. from knows how to shows how). As one example, Denicolo (2014) has mapped for example the expected outcomes from professional development related to the impact agenda for different stages of research careers.
In our discussions, we identified potential barriers to researchers taking part in professional development for public engagement. These included:

- Not recognising that professional development is required to do public engagement (unconscious incompetence, unconscious competence)
- Lack of visibility of PER and understanding of what ‘good PER’ looks like
- The name ‘professional development’
- A lack of time
- Mismatch between what researchers need from training and what is on offer
- An institutional culture that is resistant
- Professional development for public engagement emphasises it as a separate activity

ChallengeCPD Advisory Board (2017-2018)

An interesting point here is the position of professional development for public engagement and the fact that it is still viewed as a separate activity from CPD for research or teaching. Its notable that participation in CPD for teaching and lecturing and ethical practice are in significantly more advanced positions compared to say knowledge exchange. McWilliam (2007) points to a more established tradition of dedicated centres for teaching and learning, that were established from the 1990s and accompanied groundswell of support for greater recognition of scholarship of teaching.

(Vitae, 2017)

Indeed writing on the role of professional development in shifting the culture and practice of academics, McWilliam (2007) suggests that in teaching and learning, it has brought the academic away from traditional pedagogic models such as the ‘sage on the stage’ towards more open and discursive models what she terms the ‘guide on the side’.
In comparison with public engagement, CPD in teaching has a number of more formalised systems including:

- Postgraduate Certificate in Teaching and Learning in the UK (LTHE/PGCAP or equivalent),
- Short training courses;
- in-situ training;
- consulting,
- peer review
- mentoring;
- student assessment of teaching;
- intensive staff development

(Kneale et al. 2016)

These systems are supported by several mechanisms and investments. For example, SEDA the professional association for staff and educational developers in the UK, and the Higher Education Academy.

It’s evident that the Public Engagement agenda still has long way to go in relation to being embedded fully in the training and professional development agenda of research, so that research can take the same journey that is described by McWilliam (2007). This was explored further on the Challenge CPD advisory board was the need to embed professional development as part of the bigger picture of being a researcher. It was noted that focusing on ‘training’ may take attention away from the eco-system of research. Several dimensions were identified:

- **Evaluative measures:** how can we measure the impact of professional development over time? What are the quality measures for public engagement? For example, in teaching we use the NSS, module feedback etc.
- Can we adopt peer review/peer support in public engagement?
- How do we align professional development with career stage and previous experience of public engagement?
- How do we value the skills and experiences that people bring from outside of their professions (i.e. voluntary work, life experiences etc.)
- How can we work with different parts of the system for example specific support to postgraduate research communities and supervisors?
- How do you foster a culture of professional development?
- What is the role of professional development for public engagement within the progression of a research career?
- How do you account for the fact that professional development is not linear?
Join up effectively with other departments offering CPD (i.e. HR, Centres for Teaching and Learning, Library etc.). Ensure that there are clear development pathways for researchers and a coherent offer.

Make links with reflective practice as part of the professional research career and the role of Public Engagement within this.

Recognise teaching practice as a form of professional development for example, embedding engagement in the curriculum.

What can be learned from other sectors?
Changing Researcher Demands at University of Bath

In recent years, the Public Engagement Unit have noted a surge in demand for three areas of support for public engagement. The first can be described as ‘just in time’ one on one support, the second is to help researchers develop resources from established activities, these can then be used to roll out activities in other departments, or hand over the management of the activity to someone else. The third area is for departmental level leadership support. This may come from an academic who is passionate about public engagement and wishes to mobilise their department, or from an academic with a formal role (i.e. Head of Department, P.I. etc.) looking to learn how to create enabling cultures for public engagement or how to develop a strategy etc.

The ChallengeCPD grant provided a way of investigating how to meet these changing demands whilst learning to integrate the lessons identified in our review of the literature and advisory board meetings. In scoping, new ways to support researchers we had to consider how to deliver this support within current capacity. To meet the first demand, the approach we selected was to create resources that meet entry level needs (i.e. researchers who are new to public engagement), so that the professional support available from the Public Engagement Unit could focus on more complex areas. In doing so we also wanted to maintain the qualities that researchers value in their interactions with the Unit. A similar approach was taken for the second demand. With regards to leadership support in public engagement, we began to scope out what this support would consist off. It is likely that it will be developed as a formal package in the first instance.

We will look at each of these area in more detail below, and cover some of the steps taken on the ChallengeCPD programme.

Just in time one to one support

This covers a wide range of topics including for example, what is public engagement, how do you write about public engagement in grant proposals, how do you facilitate an effective workshop, through to how do you evaluate and measure success. This type of support is both bespoke and tailored to the specific needs of the researcher. It is offered through corridor conversations, post meeting chats, telephone calls and formal meetings.

Our first step was to investigate and capture what researchers valued about one to one coaching and mentoring, and the learning process that emerge through the relationship
between a researcher and the Public Engagement Unit and/or trainer. Our concern was that if we only focused on the content (i.e. questions researchers have and how to provide content that addresses those knowledge gaps) we would lose something quintessential about the nature of the support on offer, when it came to developing resources.

We found three key components to the relationship:

- **Establishing a rapport:** this includes active listening skills, communication skills. The questions in the sections below are used constructively to both demonstrate interest in the relationship and planned activities.

- **Knowing when to offer support and when to challenge:** this requires a high level of emotional intelligence, and an ability to tailor style accordingly, recognising when to be tactful when to be more direct.

- **Building trust:** Particularly through demonstrating professionalism and competence. Concerns over competence may arise when the researcher experiences the trainer or team member as suspect in their approach or judgement. One of the key ways in which trust is built is when the public engagement unit knows the limits and strengths of their knowledge and experience and acts in accordance.

The role of the Public Engagement Unit via these informal one to one informal conversations is very similar to that of a trainer in a formal training session except that they are occurring in a variety of settings, formats and times. Still within these interactions the team draw on a wide set of knowledge, tools and informal resources and engages the researcher in a process which encourages greater reflexivity. By asking questions, they are not only supporting researchers to reflect on their own stance, motivations, aims and objectives but to improve how these might be communicated to others more clearly. As one researcher said in relation to her engaged research: “...they helped me to define what I am and what I am not...”

In our review, we also found a strong emphasis on non-judgemental and flexible support:

“No matter what you take or how late in day that you take a problem to them, they will have a go at supporting you. They really understand us, and how we work”.

“I’m never be embarrassed to go to them with stupid questions”.

“Very friendly and approachable. I’ve never had a bad experience. Even if you are not confident of the fit, just go and talk to them and they will have practical suggestions about what you can do”.
“I love the PEU. I have endlessly positive things to say about them. They always suggest such great things. I love talking with them”.

An earlier review of the Public Engagement Unit and the support offered researchers identified the following aspects that were important and valued in the interactions:

- **Credible**: a deep and rich understanding of the university, HE sectors, Research Councils and public engagement through research and practice. Well-connected outside of HE.
- **Reflexive**: using reflective practice to inform and develop the work of the Public Engagement Unit as well as individual researchers and teams.
- **Passionate**: deeply held, and evidence based, conviction that public engagement brings benefits to research, researchers and the research environment.
- **Connecting**: working in a way that interacts with many different communities within and beyond the university to translate, facilitate, mediate, network and broker. The ability to pull together activity across departments and harness it for strategic value.
- **Sensitivity/Emotional intelligence**: working in a way that recognises, and influences both feelings and behaviours.
- **Memory**: working to collate, share and deepen knowledge and experience of what works and what has been tried before.

(Owen, 2014)

It was clear that in moving to online resources, whilst some qualities could be embedded in the system, certain qualities would be lost. For example, it is more effective for a well-trained and highly qualified human being to judge the support needs of researchers than an online e-learning system that is built to help the user decide what they most need. The development of online resources to help the unconsciously incompetent may not be as effective as a short conversation, as the learner is not yet fully able to recognise their own training needs. We also noted that by encouraging researchers to online resources, the Public Engagement Unit could also risk losing some knowledge about the research community and in particular who is interested in what.

**Identifying Current Needs**

Simultaneously we scoped the specific development needs that researchers who have worked with the Unit have expressed, alongside identifying frequently asked questions which researchers. To do this we reviewed evaluation data collected from formal training and other PE fora, existing evaluations of the support offered by the public engagement team and findings from interviews with seed fund recipients which explored support needs for further PE activities.
The following areas were identified in the first instance:

<table>
<thead>
<tr>
<th>Development area</th>
<th>Skills required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding what Public Engagement with Research is</td>
<td>Basic understanding of definitions, examples and the role of public engagement in research</td>
</tr>
<tr>
<td>Advancing PE skills</td>
<td>Informing Graphic design and graphic communications techniques Animations Acting and performance based techniques Social media and blogging Developing websites Photography Writing for different audiences</td>
</tr>
<tr>
<td>Consulting</td>
<td>Facilitation (i.e. working with conflict/facilitation methods)</td>
</tr>
<tr>
<td>Collaborating</td>
<td>Participatory research methods (i.e. using drama, film)</td>
</tr>
<tr>
<td>Managing engagement</td>
<td>Collecting and using audience insight Situational Analysis Writing about PE in academic work Evaluation</td>
</tr>
<tr>
<td>Developing or scaling up PE activities</td>
<td>Setting up social enterprises Funding Who to work with and how to work with them (i.e. Heritage Sector, Science Centres, Festivals) Engagement plans Training others and developing resources</td>
</tr>
<tr>
<td>Embedding Public Engagement and Leadership</td>
<td>Capturing PE activity in department Developing PE strategy at a department level Embedding PE training in PGR training and supervisory support Within the curriculum</td>
</tr>
</tbody>
</table>

We found that many of the ‘advancing PE skills’ areas would be best met via specialist external training. We did however question whether researchers would seek to develop some of these skills (i.e. photography, developing websites), or if they needed to know what was involved in producing a good photo or website, and how to commission others who already have these skills.
Speaking with the Public Engagement Unit we found that most time was spent offering support in the first introductory area. Therefore, through conversations with the unit we came up with a set of introductory resources that could be further developed and hosted online:

<table>
<thead>
<tr>
<th>Resource type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decision trees</td>
<td><strong>Is this Public Engagement with Research?</strong> Helping researcher’s identity who, in professional services they should be talking with.</td>
</tr>
<tr>
<td>A triage tool to help a researcher navigate where to go next in relation to a specific commonly asked question.</td>
<td><strong>I want to work with a creative.</strong> (i.e. you want your research to look pretty, new forms of research, engaging the public). This is to help people to work out if they should be commissioning a designer, data visualizer etc. or if they are looking for a genuine collaboration with artist/creative.</td>
</tr>
<tr>
<td>Exercises</td>
<td><strong>What motivates you to engage the public with research?</strong> Leads to suggest certain activities based on a researcher’s personal motivation.</td>
</tr>
<tr>
<td>Stand-alone exercises</td>
<td><strong>Getting started</strong> Navigates the researcher through three key questions. Why do they want to engage the public? What activity do they want to do? Who do they want to engage?</td>
</tr>
<tr>
<td>Quick start guides</td>
<td><strong>Where next?</strong> (i.e. you have an activity – do you want to develop resources, sustainability, scale up, make it better). This is to help researchers to think about different ways they can build on existing activity.</td>
</tr>
<tr>
<td>These are more extensive interactive mini-modules which cover key content currently delivered through formal training.</td>
<td><strong>Managing public engagement</strong> Covers foundational knowledge such as event planning, consents MOUs, communications plans and legacy.</td>
</tr>
<tr>
<td></td>
<td><strong>Working in partnership</strong> Covers the ethics of collaboration, how to develop effective partnerships.</td>
</tr>
<tr>
<td></td>
<td><strong>Evaluating public engagement</strong> Introduction into evaluation and how it can be used.</td>
</tr>
<tr>
<td></td>
<td><strong>Facilitating a workshop</strong> How to host and event and read a room.</td>
</tr>
</tbody>
</table>

The second related area of demand was to help researchers develop resources from established activities. To this end the Public Engagement Unit identified a suitable pilot for developing resources from an established activity. These resources will then be used to help researchers leading these programmes to involve others in the work, passing on some of the responsibilities for managing the programme, and also to enable the model to be developed.
in other departments. The pilot we selected was the Young Researchers Programme a programme which matches individual postgraduate researchers with two or three young people (aged 12–15) each. The postgraduates act as supervisors, supporting the young people to complete a meaningful research project of their choosing and design.

Taken together we have put out a tender to develop e-learning materials. The e-learning materials will be targeted at researchers of any level but who are relatively new to public engagement and/or the areas covered in the resources that will be developed. It is anticipated that the materials could act as a precursor to approaching the public engagement team for support. The materials will be developed in Xerte an e-Learning authoring tool for producing engaging, interactive e-learning resources which is currently being used at the University of Bath. We anticipate that the will be hosted within Moodle which is the University’s preferred virtual learning environment (VLE), however we will be seeking advice from the appointed consultant on this. The consultant and/or consortium will be tasked to conduct further instructional design, content research and training development (storyboarding etc.), overall navigation and structure, content design, and review and test the materials.

Leading public engagement

The third and final area is for investigation and development was departmental level leadership support. This may come from an academic who is passionate about public engagement and wishes to mobilise their department, or from an academic with formal role (i.e. Head of Department, P.I. etc.). Further work is needed to identify the role of the public engagement champion and look at support needs. We have begun this work and through reflecting on the support we provide, and conversations we have found that whether in a formal departmental position or acting as a champion for engagement, a leader in public engagement, might for example:

- Support others by offering advice and guidance in relation to specific activities.
- Devise departmental level schemes and projects, involving and training others across the department.
- Connect people across the department and institution to help galvanise activity, mobilise and share knowledge.
- Map current activity with a view to share resources, measure impact and build a coherent strategy.

In addition, a public engagement leader with formal responsibilities might also for example:

- Set a clear strategic vision for public engagement, defining for example what is in scope and out of scope, the priorities for the department.
- Advocate for the public engagement activities of others in the department.
• Understand staff development needs and interests in public engagement, matching this with opportunities or training.
• Can allocate resources to priorities.

To date the support on offer within the Public Engagement Unit is emerging for this area. The unit may help run a departmental level workshop bringing together researchers and professional support staff with an interest in and remit for public engagement. They also have experience in approaches to foster a culture change, such as setting up a seed fund to help galvanise activity and generate learning, embedding engagement within training, reward and recognition processes etc. There are also ongoing conversations with staff working in professional develop to embed leadership for public engagement as part of their ongoing support, for example the University is currently working on a behavioural framework which captures the behaviour of leaders against a set of attributes. Working with this framework we have started to populate the behaviour of a public engagement leader. This work is still at an early stage and can’t be shared in this report, but some examples from this work are included below:

• Bringing in new sources of funding/resource for activities.
• Building networks and developing new ways of working with different partners.
• Helping others to manage their PE priorities and workloads.
• Being inclusive of a diverse range of experiences in PE.
• Sharing your PE skills and experience with other researchers
• Listening and learning from other’s experience.
• Advocating enabling cultural shifts in procurement, recruitment, promotions, teaching programmes etc.

As part of our ongoing work we’ve identified the following training areas that could be tested and developed further.

1: Widening the net, bringing people in to help you develop and implement a PE strategy.
Shared leadership and who to work with.
What kind of public engagement leader are you? (i.e. lead through doing, pragmatist, advocate).

2: Nurture relationships, the role of the public engagement champion.
Explores the different aspects of the role - championing, developing/supporting staff, devising departmental strategy, interpreting institutional policy etc.
How to motivate others, the different motivations for Public Engagement.
What type of public engagement leader are you?

3: Mechanisms to affect change.
Covers a wide range of interventions for example - how to set up and manage a seed fund, workshops, sharing practice, communications.

4: Developing a public engagement strategy.
What are the core components of a PE strategy? What might such a strategy help you with.
5: Evaluate and learn
Developing KPIs. Using evaluation and reflection to strengthen your strategy and leadership.
Closing Reflections

What we have learnt from the Challenge CPD Project? First of all we have some criteria as to what makes good quality CPD:

- **Networks**: building cohorts of practice
- **Big picture**: Coherent
- **Rigorous and high quality**: plays to people who are short on time, apprehensive of value
- **Enduring**: something you take away and return too
- **Change**: challenges thinking and behaviour
- **Active, timely and relevant**.

Secondly, we must acknowledge that although the status of public engagement with research is growing, it is still at the fringes and there is a way to go before the research culture in Higher Education gives parity of esteem to between discovery, application and engagement. It flows from this that the role of public engagement within how researchers develop and grow careers and skills is also at times marginal, despite a growing presence. It is fitting that academics have significant agency in exploring, and to some extent defining, what it means to be a professional in the contexts in which they live and work, alongside regulating theirs and their peers ongoing adherence to vigorous academic standards. The growing role and status of public engagement within the academy is helping to place greater onus on researcher’s defining what it means to be an ‘engaged historian’ or an ‘engaged neuroscientist’. However, a lack of coherence over what constitutes excellence in public engagement (and therefore excellence in research), may hamper further developments in this arena. It is apparent therefore that public engagement professional development needs to be embedded at the heart of academic development and supported by relevant frameworks and standards that stipulate and encourage excellence in research. We recognise that there is an emerging knowledge and language of what constitutes excellence in engagement, however this knowledge lacks currency within the mainstream of the sector, for example it is not yet utilised on the assessment of funding applications.

Whilst the primary purpose of much formal training in public engagement appears at the surface at least to centre around enabling participation in public engagement, building confidence and helping researchers make sense of where engagement sits in their role. However, there is a growing awareness and demand from researchers for more advanced techniques, a more diverse suite of support including ‘just in time’ and ‘one to one’ support, and as above, a growing focus on quality. We’ve begun through this project to look at the role of e-learning in supporting these emergent needs, but there is more work to be done perhaps learning from professional development in teaching.
In this project, we also came across the value for academics of doing engagement, supporting others to engage the public, and embedding public engagement in the taught engagement. It’s evident that leadership roles are emerging in this space, and more work is needed understand and develop appropriate lines of support. However, for some researchers CPD is too heavily associated with growing instrumentalism and an ongoing assault on academic freedom and academic qualifications are still being viewed as being sufficient to prepare researchers for other elements of their role (i.e. supervision, teaching, engagement).

Simultaneously the development and delivery of CPD within HEIs is distributed across a wide range of central departments alongside faculty and departmental provision and there is a lack of awareness of development opportunities from central departments (i.e. Library, HR, and the Centre for Teaching and Learning) alongside lack of time to engage with these opportunities when researchers become aware. The Public Engagement Unit therefore invest significant time supporting researchers via one to one just in time support, however much of this support despite being similar in nature to mentoring or coaching is not recognised by researchers as part of their professional development and learning. We took the following learning points from the work above:

- **When is continuing professional development recognised as CPD and by who?** In particular, giving consideration to how you support researchers to reflect on activities they have taken part in, not only to improve those activities, but also to look at their role in their professional development so that it can be captured as part of formal reward and recognition procedures.
- **Learning can take time to be realised.** We need far greater time lags in our evaluation efforts. How often do people use the resources? How have activities improved over time?
- **Surface existing skills and competencies.** Professional development is not necessarily about new knowledge or behaviours but helping people become conscious of what they already know.
- **Involve participants in the development of CPD interventions.** This might include user-testing, train the trainer models, and overall design.
- **Language of CPD.** We still need to find more appropriate language. Training is sometimes the least offensive, other options include researcher development, academic development, personal and professional development, reflective practice.
- **The role of external partners in supporting CPD is not acknowledged.** They often provide formative feedback and insights into audiences etc. There is professional development in organisations hosting researchers, buddying, acting as mentors or offering co-location working sites.

Finally, it is evident the impact of CPD on behaviour and outcomes needs to be more explicitly addressed within evaluation. Too much emphasise of formal training often as a conduit to encouraging researchers to engage the public with research rather than advancing critical skills and thinking. We found very little by way of formal programmes designed to support ongoing
reflective engagement. The discussion in the literature was largely focused on one-off training interventions, and there is a clear need undertake long-term evaluation, and gain a broader understanding of the role of professional development (of all forms) in generating behaviour change and improving practice.
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Royal Society (2006) Survey of factors affecting science communication by scientists and engineers


Factors Affecting Public Engagement by Researchers, TNS


Trowler (2012), Higher Education Policy and Institutional Change: Intentions and Outcomes in Turbulent Environments


SEDA Professional Development Framework https://www.seda.ac.uk/what-is-seda-pdf


Willems, J (2003) Bringing Down the Barriers: Public Communication Should be Part of Scientific Practice, NATURE|VOL 422 | 3 APRIL 2003


Appendix A: Useful Finds

Museum Association

https://www.museumsassociation.org/professional-development

- AMA Support Groups (regional)
  Reflective, Collaborative Learning to enhance your career.
- CPD Plan
- CPD Log
- Knowledge Journal
  - 1. The ethical responsibility of museums and galleries.
  - 2. The purpose of museums; why museums develop and safeguard collections to enable inspiration, learning and enjoyment.
  - 3. The role of museums: how museums develop and safeguard collections to enable inspiration, learning and enjoyment.
  - 4. How museums develop their collections.
  - 5. How museums develop knowledge of collections.
  - 6. How museums and galleries use their collections to inspire learning and enjoyment.
  - 8. How museums develop and represent their audiences.
  - 9. How museums have changed over time and how this has shaped the sector today.
  - 10. The different types of museum governance.
  - 11. The role and impact of sector related bodies, specialist groups and networks.
  - 12. The impact of society on museums.
- Practical project that meets the CPD criteria
- Professional review
- Mentor

Social Care

Information, guidance, resources and accredited training for anyone supporting people with dementia.

https://www.scie.org.uk/dementia/

Faculty Self-Assessment: Preparing for Online Teaching

This self-assessment for online teaching will allow you to evaluate and reflect upon your competencies in key areas of online teaching and provide a baseline of your pedagogical, technical, and administrative skills. As part of your results, you will receive additional guidance/resources for each competency to better prepare you for the online teaching environment.

https://weblearning.vmhost.psu.edu/FacultySelfAssessment/

Advanced PE Skills
Lynda

Lots of Design Based Resources – i.e. photography, web development, graphic design; other topics such as marketing and communications, sound editing, animation. Some institutions have access/accounts.

https://www.lynda.com

E-learning/Training Tools

http://www.sussex.ac.uk/tel/learningtechnologies/apps

Pulled together by University of Sussex there are a few gems in here. Basically, a list of apps and online tools that might be useful in teaching and/or learning – but also PE. Some that stood out for example:

- Anchor FM (twitter for sound)
- Easel.ly (infographic creator)
- Kahoot (real-time quiz)
- The noun project (icons)

The need for engaged research leadership

http://www.open.ac.uk/blogs/per/?p=7891#more-7891

NCCPE Leadership

https://www.publicengagement.ac.uk/sites/default/files/publication/leadership_resource_pack.pdf

Effective leadership in higher education: a literature review

https://www.tandfonline.com/doi/abs/10.1080/03075070701685114?journalCode=cshe20#VGC2d8aEyKl

Factors Driving Learner Success in Online Professional Development


Some Examples of Professional Development in Teaching

Sheffield Tool-kit for Teaching and Learning

https://www.sheffield.ac.uk/lets/toolkit/pathways/intro

UCL Evaluating your Teaching

UCL Peer Dialogue Scheme
https://www.ucl.ac.uk/srs/academic-manual/c6/pot

UCL Exchange Seminars
https://www.ucl.ac.uk/teaching-learning/professional-development/arena-open/arena-events/exchange-seminars

University of Brighton – Curriculum Design Framework [PE Design Framework]
https://staff.brighton.ac.uk/clt/published/CDF%20AB%20approved%20CC%20licence%20for%20external%20publication%20Jul17.pdf

University of Brighton – Writing for Academic Publication
https://staff.brighton.ac.uk/clt/PD/Pages/Research/Writing.aspx

University of Oxford
https://www.learning.ox.ac.uk/support/teaching/resources/evaluate/
This report has been produced from the ChallengeCPD@Bath project at the University of Bath, funded by UK Research and Innovation (2018).

The UK Research and Innovation Strategic Support to Expedite Embedding Public Engagement with Research (SEE-PER) call sought to help enrich and embed cultures within HEIs where excellent public engagement with research is supported, valued and rewarded, and integrated within institutional policies practices and procedures. The call invited two types of approach:

- Embedding projects that sought to enhance and embed an institution’s approach to supporting public engagement with research
- Challenge projects that sought to address a specific challenge in effectively supporting public engagement with research

UK Research and Innovation is a new body which works in partnership with universities, research organisations, businesses, charities, and government to create the best possible environment for research and innovation to flourish. We aim to maximise the contribution of each of our component parts, working individually and collectively. We work with our many partners to benefit everyone through knowledge, talent and ideas.

Operating across the whole of the UK with a combined budget of more than £7 billion, UK Research and Innovation brings together the Arts and Humanities Research Council; Biotechnology and Biological Sciences Research Council; Engineering and Physical Sciences Research Council; Economic and Social Research Council; Innovate UK; Medical Research Council; Natural Environment Research Council; Research England; and Science and Technology Facilities Council.
Appendix B – Rough guide to running training for public engagement
Rough guide:
running training for public engagement
When planning some training take the time to think about: the learner, the trainer (you) and the format.

The learner

What do they need from the training? Are they running a stall at a festival next week so need to upskill quickly? Do they want to think whether public engagement is something they could / should be doing? These require vastly different types of intervention. The former is going to be deeply practical and probably rushed, while the latter is more reflective and discursive. Can you involve the learner in developing the intervention?

What do they already know? They may already have skills and experiences from other aspects of their lives that could readily translate to a public engagement or science communication setting. Don’t assume a deficit that needs correcting. Have they done a lot of public engagement and are looking to really advance their practice, or think more critically about their work?

What is the culture for professional learning within their department or research group? It’s common in academia to not place a high priority on professional development. There is an overarching perception that simply doing a PhD is training enough for a lifetime career in academia.

How will the participants find out about the training? People don’t look for / notice adverts unless it’s immediately relevant. Place your advertising where academics go when they want to know something. This might be a departmental intranet, newsletter or a person.
The trainer

Do you have the skills and qualities to run a training intervention? If you are running a group-based training session you need to have the fundamentals of group facilitation under your belt. Being a skilled and confident facilitator will ensure you and your trainees have a much more productive time. You will need to establish a rapport, build trust and know when to support and when to challenge. For example:

- a) Be approachable so the trainee feels comfortable asking questions and clarifying information.
- b) Be honest so the trainee does not feel misled and can trust you further.
- c) Be empathetic to support the trainee in their learning.
- d) Be non-judgemental and avoid judging or comparing trainees.
- e) Be patient.
- f) Have integrity so that needs are not compromised by hidden agendas.
- g) Be trustworthy and do not deceive the trainee.
- h) Have a sense of humour to help the trainee enjoy the learning.

Know your limits: you don’t need to know everything. A well facilitated intervention will enable the participants to make sense of the agenda / topic for themselves. There will be aspects that you don’t know about which is fine, as long as you didn’t claim to be the expert when you advertised the activity. Encourage peer comments and review – it’s what academics are used to.

Could someone else say it? Having external speakers / contributors can be a real draw for researchers. It’s sad but true – people outside your institution are frequently perceived as more credible than those from within the university. If you can afford it, then consider external speakers for important training sessions but do make sure they are on message with what you want them to say. You can always trade your time with someone in another university.
The format

Training doesn’t always look / feel like training. A key learning point might not be a training session at all. When planning what your learner needs, the format should emerge from that (take the time to do some formative evaluation by asking colleagues what they would like). Would a quick chat over a coffee be enough or does the person need a sustained, cohort-based programme? Could you provide an article to read, or a video to watch?

Lead by example. Your training interventions should demonstrate good public engagement and science communication practice. It can be daunting to run a highly interactive, practical session when academic colleagues are used to experiencing and delivering powerpoint-led lectures. If it’s the right thing to do – then be dynamic. You can’t run a workshop on effective presentation skills if the participants don’t stand up and say something in front an audience.

What’s in a name? Think carefully about what you call your training. Training can be perceived negatively, but so can the term professional development. People don’t want to be labelled as a ‘beginner’ and you will find that complete novices will come to your ‘Masterclasses’.

Did it work? Having planned learning outcomes is important. Evaluating the activity can help you understand which sections to change and what other aspects were of value. For example, many PhD students value group-based learning that provides them with the opportunity to meet others from outside their lab and do something different. However, it’s worth noting that assessing the long term impact of a training intervention is (really) hard...
This guide has been produced by Dr Helen Featherstone, University of Bath with funding from UK Research and Innovation SEE-PER programme. © 2018

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You can contact the Public Engagement Unit on public-engagement@bath.ac.uk
Appendix C – Report exploring the draft quality framework for PER
The role and value of quality frameworks for public engagement with research training: an exploratory case study

David Owen, 2019

This work was commissioned through the UKRI-funded ChallengeCPD@Bath project.
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A summary of what we did ............................................................................................................. 5
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Introduction

The provision of, and participation in, professional development for researchers is one of the nine key strands of creating a positive culture of public engagement with research (as described in the NCCPE’s EDGE Tool). Yet it appears to be under-utilised. The focus of much of the training and professional development is typically covering the basic introduction to public engagement. To date, there has been very little attention to developing high quality public engagement within the academy and what this actually demands from researchers. This should be contrasted to the development of teaching practice, which is often supported by centres for excellence in teaching, external funding and training schemes such as those run by the Higher Education Academy, and benchmarking and assessment devices such as the teaching excellence framework, national student survey. Public engagement training seems to be about reducing barriers to involvement, as opposed to improving quality.

The lack of agreed quality standards emerged as a pressing issue for University of Bath in the first phase of their UKRI-funded ChallengeCPD project and led to a programme of work for phase two of the ChallengeCPD work. There are recurring discussions about developing a quality framework for PER (e.g. Science and Society consultation (2009) and ScoPPES (2017)) that have not been realised. The development of the Research Excellence Framework and the impact dimension in pathways to impact are all mechanisms through which engagement is to some extent assessed, and judgements are made around quality. Yet, assessments are based on what makes for good impact case study, or what makes a successful pathways statement, as opposed to what makes for good engagement. People’s experience of our research is seldom reflected in these processes.

More recently, a draft framework of good practice principles has been developed between NCCPE and University of Manchester (launched at Engage 2018). While agreed quality standards should help CPD providers develop and signpost their offer in a broader context, and let individuals understand their own CPD needs, responses to these frameworks from the community range from those strongly in favour for reasons outlined above to those vehemently opposed. In opposition there are fears about adverse effects that such frameworks might bring, such as creating barriers to involvement in public engagement from researchers – if the quality bar were too high to reach; or that such frameworks would give rise to greater bureaucracy creating external custodians of quality. ChallengeCPD recognised an urgent need to get beneath the skin of these responses within our own context and to contribute to the continued development of these frameworks so they are useful for the sector.

We utilised the draft NCCPE framework to inform our CPD offer and how we talk about the skills needed for quality PER. Working with an external consultant to:

- Undertake light-touch research into the implications and responses (both positive and negative) of developing and implementing the framework. In particular looking at how it influences the take-up of CPD.
• Work with our advisory board to evaluate the potential application of the framework in the
development and delivery of our CPD offer, for example in our e-learning tools, with our PEF
network, with our co-produced PGR module, and with the successful EPSRC CDTs.

We assume that taking the University of Bath situation as typical of the broader HE sector the
experience of using the framework in practice will feed into the work the NCCPE are doing in this area
as an in-depth case study. We also committed to feed this learning into a journal article about
ChallengeCPD for Research For All.
A summary of what we did

<table>
<thead>
<tr>
<th>Task</th>
<th>Activities</th>
<th>Key questions</th>
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<tbody>
<tr>
<td>Explore the implications and responses (both positive and negative) of developing and implementing quality frameworks and how it influences the take-up of CPD.</td>
<td>Undertake light-touch desk research</td>
<td>What other comparable professions have quality frameworks?</td>
</tr>
<tr>
<td></td>
<td></td>
<td>What is known about their impact on the take up of CPD?</td>
</tr>
<tr>
<td>Evaluate the use of the framework in the development and delivery of our CPD offer</td>
<td>Feedback from Advisory Board</td>
<td>How accessible is the framework?</td>
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<tr>
<td></td>
<td>Interviews with external training providers</td>
<td>Can you see how could apply the framework in your role?</td>
</tr>
<tr>
<td></td>
<td>Interviews with Seed Fund applicants</td>
<td>What further support/resources might be needed to help apply the principles?</td>
</tr>
<tr>
<td></td>
<td>Embedded in development of training including PGR module, advanced engineering module and e-learning resources.</td>
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<td></td>
<td>Workshop at UK Knowledge Mobilisation Forum 2019</td>
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Key Findings

Quality frameworks from other sectors and professions

There are a plethora of quality frameworks across numerous different sectors. These fall into different categories:

- Those related to the provision of CPD in a particular field. See for example: [SEDA Professional Development Framework](#). These are targeted at ensuring quality in professional development and come with a form of accreditation to CPD providers.
- Those related to the CPD of individuals in a particular field. See for example [The Teacher Educator Framework](#), or [Policing Education Framework](#). These focus on individual learning and self-assessment, helping people assess where they are and providing the building blocks for progression.
- Those related to the provision of services. See for example [patient experience improvement framework](#). These focus on organisational culture, leadership and collaboration across multiple agencies and are often used as a tool driving organisational change around a specific service goal.
• Those related to specific activities. For examples the good practice principles for public engagement involving universities, performance management or good practice principles in humanitarian aid. These focus on the act of doing something, and set out what doing something well looks like.

It can be assumed that frameworks that are designed to improve the quality of CPD, may have an impact on take-up (e.g. higher quality equates to higher demand). Likewise, those that drive self-assessment may increase up-take of CPD by helping people identify gaps and training needs in order to progress in their careers. Where these frameworks are linked with formal accreditation and career progression it is again possible to assume that the framework will influence the take up of CPD, as there is an extrinsic as well as intrinsic reward for doing so.

Evidence from the Kings Fund suggests that quality frameworks that pertain to the provision of services in the health sector can play a significant role in improving the quality of care and outcomes for patients, provided they are applied consistently and systematically across organisations and systems. However, we found no studies linking these frameworks with an increased uptake of CPD, though it’s possible that this could happen should the implementation of the framework surface a need for greater CPD in specific areas. We could not see a direct link between good practice principles and training uptake (unless the good practice principles were related to the development of training and therefore raised the quality of that training e.g. good practice in autism training). In our interviews with training providers they did indicate that good practice principles would inform training focus and content, but not necessarily uptake.

Feedback on the good practice principles for public engagement involving universities
Those consulted included researchers through the challenge CPD advisory board, and those who were awarded the University of Bath public engagement seed fund. We spoke with a wide range of external providers of CPD, HR and public engagement professionals. The first question we asked was around the accessibility of the framework. Was it easy to read? Did it make sense? Could people see the relevance for their work? Was it helpful? Here the feedback was broadly positive. People described it as accessible, they liked the examples given (‘in practice this could involve’), and on the whole found it to be jargon free. Some of the researchers we spoke with, particularly those in the natural sciences, suggested it could be put forward in plainer language and that the title of the document could be more engaging/accessible.

“I (honestly) found it more accessible than I expected. My initial thoughts are that possibly the name is a bit off putting - I was definitely expecting tables of information, but this looks to me to be practical and common sense guidance and a good checklist or tool for provoking thoughts”.

Researcher
“Fantastic list of principles to have. Some training interventions would see more emphasis in certain areas than others. But on the whole, it is a beautifully broad and complete set of attributes”

Trainer

“I often find documents like this so vague and written in a style that as a scientist I’m not familiar with. Some of this document is written in this way, but it also immediately gives much more concrete explanations of what the phrases mean (RE: In practice, this could mean...)”

Researcher

Our discussions highlighted a small number of developments which we would need to consider either in the context of University of Bath, or could be taken forward by the NCCPE at scale.

These were:

- Complement the framework with illustrative examples to help show what some of the phrases might mean. For example: “I will consider carefully the nature of my participants...”. Could there be links to segmentation tools or worked examples. This was a theme running through the feedback. There was an interest in linking the good practice principles with additional resources. Signposting where might someone go next to develop their strengths in this area.
- Develop the principles into competencies so that they could be used to inform CPD. It was noted that levels would be helpful (i.e. what good looks like, what level you might be when you are starting out... etc.).
- There could be an additional/more explicit leadership lens within the principles. What does leadership look like in the context of public engagement. It was suggested that this section would focus on sharing and developing practice, leading across institutional boundaries, and developing others’ skills and capacities.
- A couple of people commented independently that there was something missing about compassion or care for others in the principles. It was suggested that there was a level of care that is assumed in the principles but that they could be made more explicit. We were signposted to the work of the Kings Fund.
- Some people reflected that the principles were written mostly for researchers and did not apply to the work of enablers. We think there may be a case for making more explicit how this framework applies to the different audience groups it is intended for.

Some quotes from our discussions illustrate these four points:

““I think some specific examples might help. I realise this is tricky across all disciplines, but maybe there could be a science example, a humanities example etc.””

Researcher
“Does it need some graduation? - what good looks like, what it might look like when you are starting out? From starting out, to expert...”

Challenge CPD Advisory Board

“Leadership - and institutional change. Your role motivating others. Some of this is in there in learning for example, but it could be made more explicit”

Challenge CPD Advisory Board

“Is there something missing about the emotional aspect of engagement. How we apply care and kindness to our work? There is a level of care that is assumed, but we need to be explicit that this is important”

Trainer

Applying the framework – University of Bath

The Challenge CPD Advisory Board suggested that in order to inform CPD in a meaningful way, in particular to affect the uptake of CPD, the good practice principles would need to be further developed into a competency framework as a first step. The framework would need be further developed with levels which could help a user reflect on areas for further development. However, it was noted that the Vitae Researcher Development Framework already had an engagement lens, and this was informing professional development and progression in Universities.

The trainers we spoke with said that the principles were useful as they were, but would more likely to be referenced in training sessions as a resource, most could see how their existing training content aligned with the principles. To implement the framework with internal/external trainers – University of Bath could consider a half day development workshop to unpack the principles in more detail and how this might relate to existing and new CPD.

Developing a competency framework for public engagement based on the good practice principles

We decided to take these suggestions forward and develop the good practice principles further to develop a set of levels, framed around competencies. For each of the principles we asked:

- What would someone need to be able to do to do this principle well?
- What skills or attributes might they need?
What does good look like? But also... what does not so good look like?

One approach to developing a competency framework would be to observe people and their practice, and to review these into a set of competencies, which could then be tested and further developed. We did not have the resource behind us to try this approach, but it may be something we return to at a later date.

Instead, in response to the suggestions from our Advisory Group we created a set of levels/progression for each principle. To create the levels, we used a framework that is commonly applied in training and development [See for example: Gordon Training International[12]]:

- **Unconscious competence:** The skill has become "second nature" and can be performed easily. The individual may be able to teach it to others, but not necessarily.
- **Conscious competence:** The individual understands and knows how to do something. However, using the skill or knowledge requires concentration, there is heavy conscious involvement in executing the skill.
- **Conscious incompetence:** Though the individual does not understand or know how to do something, they recognize the deficit, alongside the value of a new skill in addressing the deficit. The making of mistakes can be integral to the learning process at this stage.
- **Unconscious incompetence:** The individual does not understand or know how to do something and does not necessarily recognize the deficit. They may deny the usefulness of the skill or training to develop the skill. The individual must recognise their own incompetence, and the value of the new skill, in order to take steps to towards next stage.

A worked example of principle four is shown below. It proved difficult to do this for each of the principles, and at times we had to revert to colloquial language which may not be the suitable for presentation to a researcher.

12 [https://www.gordontraining.com](https://www.gordontraining.com)
During this exercise we reflected that different forms of CPD would be needed to reach different groups. For example, the unconscious incompetent group (who are unaware of their incompetence and therefore do not identify a need for further development) may not attend formal training, and therefore compulsory training as part of their professional development as a researcher might be most effective. Whereas we reflected the unconscious competent (who are intrinsically engaged) might benefit from formal training programmes, but would be able to contribute and learn from action learning sets, peer to peer groups.

One of the challenges we had with the principles was that we couldn’t see how they might link directly into CPD training packages. For example, training on purpose (principle one) would invariably overlap with at least two of the other principles (people focused, and mutually beneficial). At the same time there were sub themes within each of the principles, e.g. leadership, project management that one might want to focus on developing skills for as a discreet package.

We therefore reviewed the document once again and started to draw out some cross-cutting themes that could help us link the principles more formally to CPD. We kept referencing the Vitae Researcher Development framework to identify areas of overlap, and gaps. The end result was the emergence of four cross-cutting themes that could help us to link the principles to a CPD programme.
These were:

- **Project management/delivery**: Your overall approach to quality, the techniques you use, and the time you carve out to develop yourself and do engagement well [partially reflected in D2: RDF (Communication and dissemination)]

- **Partnership**: Interpersonal skills, working across organisational boundaries and cultures, your curiosity about others [partially reflected in D1: RDF (working with others)]

- **Learning, evaluation and reflection**: Your capacity to learn and do things differently, to test and challenge your assumptions, to understand your impact [Reflected in B1: RDF Personal effectiveness].

- **Leadership**: The spaces you create for others, how to build bridges with other organisations, your contribution to creating an engaging culture [predominantly domain D1: RDF (working with others)].

To some extent the above four domains can also be tiered. We find for example that many people start out in public engagement thinking about specific activity and delivery, they move from this to think about partnership and working with others in a more sophisticated way. This is often coupled with greater learning and reflection, as the different perspectives that partnerships bring often demand this. Finally, after developing a proficiency and level of confidence in public engagement activity, people often start to think more about opening the spaces out for others. This model is not necessarily as linear as it sounds, and there is overlap. There are also levels of graduation within each of the four domains. For example, someone may be quite a mature engager at a Science Festival, but only just beginning to think about where they are in terms of leadership.

Below we show the leadership lens fleshed out a little further. Each of the sub-headings are taken from different sections of the good practice principles.

**Leadership:**

The spaces you create, how you relate and build bridges with other organisations etc.

- **Building bridges with others**: I will take account of the context within which I will conduct my engagement work, including who else is working in this space.

- **Inclusive**: Build on the knowledge and experience of my audiences, participants and partners. Exploring my own motivations and how these intersect with those of the people I am collaborating with.

- **Facilitative**: Exploring the value that your partners and participants want to realise, and explore how you can work together to realise that value.

- **Enabling learning**: Sharing your learning and evaluation of your engagement with others. Supporting learning across the project participants. Helping others to learn from our approach locally and nationally, through relevant networks.
Further work is needed to develop different phases/levels for each of these domains that align to the RDF. For example, what leadership abilities might one expect from a researcher just starting out in public engagement. However, it also brought into question for us whether the Vitae Researcher Development Framework was in need of a refresh, and perhaps some further case studies/illustrations of how public engagement aligns with other domains of the RDF that Engagement and Impact. Another challenge, was that proficiently in public engagement, did not necessarily align to career stage. An early career researcher might bring quite high levels of competence in these areas, whilst not necessarily being that far advanced in their careers.

From this process we began to see how we could inform some of our more generic training offer, and our one to one conversations with researchers. For example, we can envisage a CPD programme that focuses on leadership in public engagement, and is informed by the good practice principles, whereas the principles themselves did not lend themselves directly to CPD in its broad/generic sense.

PGR Module
We used the good practice principles to help structure conversations with researchers who had had a lot of experience of public engagement. The aim of these conversations was to elicit their learning journeys, and to use this to inform training for PGRs. Here we found the principles were incredibly helpful as a set of prompts. We sent these prompts to researchers in advance for them to reflect on. During the discussions they reflected to us that the questions had helped them to reflect more on their own journey and the assumptions that they had had when they started about the audiences, and how these had evolved. For example, one researcher spoke of having evangelistic motivations around engagement with science and wanting to make everyone love science. However, as she developed her practice, she started to challenge these assumptions and developed a more nuanced set of motivations for her work. She felt the good practice principles really helped her to articulate this journey. When it came to the development of CPD for PGR students however, we did not find the principles as useful as some of the other frameworks – particularly the Researcher Development Framework. This was again down to the need for graduated levels of competencies.

Applying the framework with external trainers
One of our Advisory Board members developed and ran an Academy Zone using the good practice principles, for participants in “I’m a Scientist”. I’m a Scientist (IAS), is an online event where school students get to meet and interact with scientists. It’s a competition between scientists, where the students are the judges. Students challenge the scientists over intense, fast-paced, online live chats. Then they ask the scientists all the questions they want to, and vote for their favourite scientist to win a prize of £500 to communicate their work with the public. The team behind the programme ran an extra training zone to help give participants a grounding in good practice in public engagement and key concepts like Science Capital. Using peer to peer learning and reflection they wanted to challenge their thinking and reflect on how public engagement could be done.
Every couple of days, researchers were sent a question to help them reflect on and think critically about public engagement while doing IAS. The questions related to the NCCPE Engage Framework and Science Capital.

- Q1: Engage Framework Principle 1 – Purpose
- Q2: Science Capital concept introduction – Is science ‘for me?’
- Q3: Science Capital Teaching Approach and student-led formats
- Q4: Engage Framework Principle 2- People Focused
- Q5: Engage Framework Principle 3 – Mutually Beneficial
- Q6: Engage Framework Principle 5 – Learning

Eleven out of fourteen researchers were active in the programme. The evaluation suggested that the academy had helped develop good practice. For example, researchers clearly valued the chance to step back and thinking about their motivations to take part (principle one: purpose), they also indicated they would be more likely to stay involved in public engagement and seek opportunities for further development. For the course reviewers the good practice principles had also worked as useful prompts to elicit learning from participants and support their CPD.13

Applying the good practice principles with Engineering students

We presented the good practice principles to Undergraduate students in Engineering and used it to inform the training workshops delivered. Their task as part of a module was to set up and deliver a public engagement activity, which was then accessed partly through their reflective journal.

Although there was no obligation to use the principles in anyway, we looked at a randomly selected sample of five student’s journal and three out of five students had adopted the principles to inform their reflective journals. There were different levels of integration. One had simply referenced some of the principles (demonstrating knowledge of them), one had cited the principles and used them to identify gaps in their practice or areas for further learning, and one had woven the principles into their reflections of the engagement activity they had planned. The reflective journals indicated that the principles had in some way influenced their practice, however as an assessor to these journals we found ourselves needing an assessment criterion to assist with marking.

Linking the good practice principles to other training resources

Finally, we took the good practice principles and started to map out where researchers would go to get more support if they wanted to develop or strengthen a particular area of their work. We began by asking our advisory board to signpost case studies, training and further resources. Below we show examples of what we found for principle one, and principle two. We found the individual principles did not necessarily link exclusively to specific areas of CPD, and a more holistic approach was needed. For example, training in ethics contributed to a number of different principles.

To address this and implement the good practice principles it was agreed that we would need to create bespoke resources that helped illuminate the principles to researchers from different disciplines, practicing different types of engagement. For example, under the People Focused principle, we could create a blog resource that shows how audience segmentation can be used in engagement, to help reflect on different attitudes and values that people bring. We valued the opportunity to explore these developments within the Advisory Board, however we have put the task onto our ‘to do list’ for future as there was not the scope within ChallengeCPD to deliver what would be a significant piece of work.
We also reflected that this may be a piece of work that is taken forward at a National level, for example as part of the NCCPE resources and training provision.
Conclusions

The good practice principles were generally accepted by those we consulted as a reasonably robust and useful set of principles. But we couldn’t say they have been transformative from a CPD perspective. They are a useful resource, and we have successfully referenced them in our training and work with undergraduate students, however the need for tiering, and for translating into competencies, means there is still work to do for them to be really useful in a CPD setting.

Researchers suggested that the framework could benefit from further illustrations of each of the principles, and what they might mean in practice. External trainers suggested they could align their training with the principles, but they did not necessarily see them having an impact on CPD uptake. HR and other staff responsible for professional development of researchers suggested the framework needed to be graded in order to be useful for CPD and to be complemented with additional learning resource.

We’ve undertaken some initial work and further scoping to address these points and to apply the framework at University of Bath. However, our ability to fully progress this work has been constrained by time and was beyond the scope of ChallengeCPD. It was evident that the Good Practice Principles for Public Engagement Involving Universities and the Researcher Development Framework provide a helpful framing for quality and progression respectively. However, CPD comes to life when it is located within the professional practices of the discipline itself, and there is more work needed to promote public engagement as valid aspect of engaged research. As we tailor our support for researchers, we are learning to be mindful of the discourse of engagement that exists within the academic discipline. If the principles represent a set of agreed quality standards for PER, there is work needed to embed these principles within the Pathways to Impact processes, REF, and Researcher Development, so that they can inform the development of those disciplines.
Annex A: Quality Frameworks

Teacher educator framework describes the overall competence and the kinds of professional knowledge, understanding and skills associated with the role of a teacher educator. British Council.

[https://englishagenda.britishcouncil.org/sites/default/files/attachments/teacher_educator_framework_final_webv1.pdf](https://englishagenda.britishcouncil.org/sites/default/files/attachments/teacher_educator_framework_final_webv1.pdf)

- CPD central to the success of teaching for success approach
- The aim of CPD is to have a transformational impact on teachers and their learners
- CPD helps achieve deep, systemic, and sustainable improvement in performance and outcomes.
- CPD framework provides guidance to help understand CPD needs at different stages, and the right activity to meet these challenges.

SEDA Professional Development Framework: provides recognition for higher education institutions and organisations, accreditation for their professional development programmes and recognition for the individuals who complete those programmes. SEDA. HEIs

[https://www.seda.ac.uk/pdf](https://www.seda.ac.uk/pdf)

Draft Community Development Performance Management Framework: the framework supports health and social care organisations to:

- Systematically develop community development approaches in all aspects of their business;
- Ensure a realistic development route for community development;
- Measure progress on mainstreaming community development approaches; and
- Incorporate community development into performance management arrangements.

[https://www.publichealth.hscni.net/sites/default/files/Community%20Development%20Performance%20Management%20Framework%2009.06.11_0.pdf](https://www.publichealth.hscni.net/sites/default/files/Community%20Development%20Performance%20Management%20Framework%2009.06.11_0.pdf)

Patient experience improvement framework: This framework helps trusts to focus on the key factors (including the underlying factors) that need to be present in a provider focused on the needs of its patients. It brings together the characteristics of organisations that consistently improve patient experience and enables boards to carry out an organisational diagnostic against a set of indicators.

[https://improvement.nhs.uk/documents/2885/Patient_experience_improvement_framework_full_publication.pdf](https://improvement.nhs.uk/documents/2885/Patient_experience_improvement_framework_full_publication.pdf)

Quality improvement framework: The QIF is an overarching document which draws together all initiatives that are currently underway within the Isle of Wight NHS Trust to improve quality of care.

[https://www.iow.nhs.uk/Downloads/Quality%20Improvement/Quality%20Improvement%20Framework%202015.pdf](https://www.iow.nhs.uk/Downloads/Quality%20Improvement/Quality%20Improvement%20Framework%202015.pdf)

Policing Education Framework: The PEQF (Policing Education Qualifications Framework) is a new, professional framework for the training of police officers and staff. Based upon a new modern curricula aligned with the education levels set in England and Wales, this framework will over time
cover the range of professional training for police officers through the ranks of constable through to chief officer.


A Framework to Improve the Quality of Treatment for Depression in Primary Care: In this article, the authors review current concepts and theory regarding the quality of treatment for depression. They present a conceptual model of four points in the course of a treatment episode when clinicians could deviate from guide-lines

https://www.rand.org/pubs/reprints/RP1277.html

International Development and Humanitarian Training Competency Framework:


Performance Management Good Practice Guide

Appendix D – Co-produced training: Reflections on the Choose Your Own funding call
ChallengeCPD DIY training - reflections

Background

In first phase of ChallengeCPD we identified that a lot of training does not actively put the learner at the heart of the intervention (for example, by identifying existing skills, recognising that learning can take time to realise, that not all learning interventions are intended to be learning interventions, and involving the learner in the development of the intervention).

Due to a slight underspend in our budget in phase 1 we piloted a co-produced training call. We used the term DIY Training because members of our advisory group felt this suggested an overly large time commitment. As well as this, we also made suggestions in the call document that were relatively light-touch interventions to reassure potential applicants that this need not be an onerous commitment, but with a clear emphasis on working with the PEU.

We put the call out on 3 May 2018 with a deadline of 28 May. See Appendix A for the call details.

What happened

We received two applications one of which was a request for video-making training for social media and another for speaker fees for a collaborative design thinking event. Through discussion with the applicants we developed the ideas to bring them more in-line with our needs:

- In-house training for video making / social media – with a linked practical opportunity at European Researchers’ Night (this also supported the Social Media Officer in developing their training offer)
- Documenting the design thinking process through the use of video so that others could use it in the future

Neither of these ended up being particularly collaborative – more that we paid for something so it was difficult to influence the work.

The low numbers of applicants, with weak ‘fit’ to the call could be because of the timing. There was a lot of disruption in the early part of the year due to poor weather and industrial action, meaning that colleagues may have been feeling very time-poor and having to prioritise other areas of work (particularly exams and marking).

We were constrained about timing due to the imminent end of financial year and anticipating there being development time before we could sign-off spend, meaning would could not undertake appropriate internal communication and engagement.

The nature of the call is unusual and does not have a precedent within the university. Funds are available for eg developing teaching, but these are funds to ‘do’ novel teaching, not to co-develop it. The Staff Development Unit has no resources to support new / novel forms of CPD.

There may also be a reluctance to engage with something that seems time-consuming. Working with others to develop anything takes more time than doing it yourself. Developing training for PER is one step removed from doing something that in itself seems to be an extra burden. We also have to remember that knowing what you need from a training intervention may not be particularly clear. It takes a certain amount of self-awareness to know what type of intervention works for you, and what content you need. The nature of CPD in HEI’s means this may not be readily accessible to many people.
There were no opportunities to overtly link the CPD to European Researchers’ Night was confirmed around the time of this call so we were able to link one of the activities to that event.

The suggestions of types of activity were not appealing (to the two people who applied), we could diversify the types of activity we would consider eg to include documents, guides etc.

The lack of a recognised skills framework and/or quality framework for effective public engagement could also be an issue. Those who are doing PER are getting on with it and learning by doing? Those who aren’t are wanting to be told? Perhaps we suggest some skills or other content forward and encourage people to suggest formats/techniques they’d like to develop with us? We may want to look at skills that people develop through PER activities, but that are more broadly relevant so they have a wider appeal (eg project management, ethics, partnership working, understanding others)

**Next time**

So what shall we do differently?

- Try again but with more time to foster buy-in and promote through the university
- Link to future PER opportunities: iVent, Bath Taps into Science, Festival of Nature, seed fund projects...
- Work with our Public Engagement Facilitators (meeting on 19 November, week before AG meeting) to develop a department / faculty level intervention
- Do we put out a call for specific interventions we’d like to see happening (rather than leaving it as a blank slate)
- Do we put out a call for specific skills (or other content) that people may wish to develop

To consider at Advisory Group meeting

Budget is £5000 from PEU budget as match funding with time.

**Outputs:**

Videos from Russ, Craig Gunn, Henrietta

Russ – has since developed a high online profile and used the skills for his BAS trip

**Second round**

The second round of Choose Your Own Training was opened early in 2019. Appendix B includes the amended call guidance that took into account our proposed changes from round 1. For example, there was more time to apply, more support available, more advertising on campus (eg creating a video for the digital screens) we were more specific about topic / format differentiation. We also changed the title from DIY to Choose Your Own to emphasise the personalised nature of the training rather than an independent DIY approach.

**What happened**

We received three applications which is not a significant increase on round one. Two of these applications were from professional services staff. We had specifically put in the call guidance that we wanted this to be researcher-led. However, reflecting on our learning from Year 1 of
ChallengeCPD that training and CPD is not highly valued in universities which suspected that this may mean that offering co-produced training is doubly unappealing: why would a researcher want to spend time working with the PEU to develop something that they are not particularly invested in?

Because of this, rather than not do anything, we decided to continue with the three applications to see what we could learn by working with both researchers and professional services staff.

The three projects were:

- **Leadership Fellow programme in the faculty of Humanities and Social Sciences** from the Operations and Project Manager in the faculty – Yvonne Ascott
- **Media training programme within the Science faculty** to develop a sustainable method for developing media-savvy PGR and ECR from the Media and PR Manager (Science) – Chris Melvin
- **Data Visualisation programme** proposed by a lecturer in the department of Mechanical Engineering – Rick Lupton

**Leadership Fellows (HF and YA)**

The concept has been developed with a draft schedule. This has been developed into a proposal for consideration within the faculty (see Appendix C). The proposal was developed following a significant period of front-end evaluation with other universities who have run similar courses and participants on those courses. Following that information-gathering exercise and taking into account our learning from year 1 of ChallengeCPD we decided to frame the course as a leadership course (rather than a PER course) – working on the assumption that leadership is a more transferable and more generalizable skill so would have wider appeal. We also noted that the courses ran at other institutions focused on PER only, often included a project element (sometimes with associated budget) and did not include specific leadership / culture change content. Because of this we have developed the proposal to overtly include leadership content. We have also decided not to include a project element as this doesn’t fit with the faculty’s / university’s approach to PER which is embedded in the research approach, rather than an additional activity. Having to find annual budget to support projects each year also meant that this would have been unsustainable.

We (Yvonne and Helen) liaised with the Director of PER in the faculty and the newly appointed Associate Dean for Research throughout the development process.

Yvonne moved roles over the summer of 2019 and her successor was not appointed immediately. Yvonne’s successor, Sarah, is new to PER, but has picked up the programme. This has meant there has been a delay in progressing the programme, however there is still appetite and we expect it to progress. It is likely that we will run the programme in the academic year 2020/21 giving the programme the planned nine month duration and also providing Helen and Sarah the chance to work together and get the programme materials developed in good time.
Media training (DV and CM)

Immediate reflections:

We had a successful training day on July 18 where 11 PhD students from Faculty of Science participated – we had a few drop outs on the day sadly.

We brought in Media Players International to help run the training – they are experienced journalists who delivered a good overview of how media works, what makes a story, how journalists go about their jobs etc. Vicky and I from the press office also delivered training on how we work, how to prepare for an interview etc.

Then in the afternoon we split into groups and everyone had the chance to do some practise interviews on camera, which everyone said was really valuable experience. We had some really promising communicators in the group working on interesting stories.

The evaluation forms were all very positive with ‘excellent’ or ‘good’ across the board for every question.

From our point of view, we achieved our goals:

1) Delivered high quality training to a team of promising communicators who can represent the University
2) Raised awareness of the press office’s work and services among their cohort – so they will bring us their news and stories
3) We’re now exploring ways to sustain the training so that we can deliver it in-house, on a regular basis

Project update (December 2019)

From our perspective the pilot was a success. We successfully delivered high-quality media training for a dozen PhD students in the Faculty of Science and received very positive feedback from the attendees.

We have since worked with one of the students directly to publicise a paper coming from their research, and the contacts we made through the training mean we have a greater understanding of the newsworthy research going on in the Faculty. In addition we have since been able to offer some further guidance to some of the attendees on future careers in science communication.

The pilot proved that we have the capacity to deliver media training and that there is an appetite for it within the Faculty. We will be considering how we might be able to make this a regular course, and not just for the faculty but across the university.

Plans to develop our own media training syllabus have not progressed very far since the pilot training for two main reasons.

Firstly we’ve had a lot of upheaval in the department in the latter half of the year. The dept has been restructured with a number of new positions created and personnel changes. Secondly we need to have discussions with other departments who currently provide these sorts of training
opportunities about how we can work together to provide a solution that is satisfactory for all parties, cutting down on duplication of effort and spend, and avoiding contradictory messaging. I am hoping that it’s something I can work on in the coming year.

Data Visualisation (RC and RL)

We had to work quite closely with Rick to work out how to make his proposal into a sustainable programme of training.

Rick has attended the Guardian Masterclass on data visualisation, which allowed him to get an overview of the data visualisation process and decide on two key areas of training (1) training researchers to work effectively with data visualisation specialists and (2) training researchers with a basic knowledge of data visualisation methods to advance their practice.

Rick has begun working with the data visualisation company Real World Visuals to develop a training resource for both (1) and (2). Real World Visuals will produce data visualisation output based on Rick’s research and the process of creating this product will be used to create the training resource for researchers in a similar position to Rick. The Public Engagement Unit will then evaluate the data visualisation techniques used by Real World Visuals.

We are currently exploring additional Impact Acceleration funding from the University of Bath to assist in creating training materials, which can be used by other researchers including impact case studies at the University of Bath to ensure that the resources produced are relevant to other researchers.

Conclusions

Co-produced training is not an appealing offer to academics at the University of Bath.

We deliberately took our mantra of “putting the learner first” to an extreme. If we were chastened by our initial work of assuming a deficit approach to training we wanted to see what would happen if we swung the pendulum to the other extreme.

What do we note:

- Low numbers of people responding suggest it is not appealing
- Traditional forms of training suggested in terms of both format and content: video making, social media, data visualisation, workshop-based one-offs or programmes…
- Professional services colleagues can identify training needs (perhaps more readily than our researchers?) and may have more capacity to hold a programme, and certainly can reach more people
- Making the programmes sustainable takes a lot of time on our part. The concept of developing something with a life beyond the funding requires a change of mindset to normal university funding processes. This applies to both our academic and professional services colleagues. In this specific case it is perhaps because the concept of devising and delivering training is not embedded in many roles or departments.
It is always hard to assess why something does not work. I think that we have to acknowledge that training / CPD is not an appealing thing to get involved with (we know the word puts people off) and that going into a collaborative process is also unappealing (knowing how time-pressured researchers are).

It is also possible that we (the PEU) hold more developed thinking on both training and public engagement (or are perceived to). This can mean that researchers are doubly unsure as to what to propose. Perhaps we should have heeded one of our researchers in an Advisory Group meeting who told us that we are the experts and that researchers just need to be told what to do. Clearly, it is not as simple as that. It’s not just knowing what people need to know, it’s about getting the format right. We listen carefully to our academic colleagues to inform everything we do and will continue to do so, particularly when there’s a deafening silence!
Appendix A: Call information for first iteration of DIY training

Do you have a great idea for training for public engagement? If so, read on!

As you may know, the Public Engagement Unit secured funding from RCUK last year to examine professional development and training to support public engagement with research. You can read more about the project in previous blog posts. As a result of this project we would like to pilot some new (to us) professional development tools and activities. We are inviting researchers at any stage in their career to work with us to develop and test them so that these activities are relevant and meaningful.

We have identified three possible areas that we would like to explore (but we are also open to suggestions):

- **Self-assessment of existing skills / competencies** - just because you’ve not done public engagement with research before, it doesn’t mean you don’t have the skills already. How do we surface skills from all areas of our lives to feel prepared for doing public engagement?
- **Mentoring / buddy system** – It can be useful to share your experiences of public engagement with someone else. You might just want to talk about what you did, or perhaps you want to talk with someone else who’s already done it from your department or faculty or beyond. How can we set up and run a mentor or buddy system to support learning and confidence in public engagement?
- **Job swaps / placements** – stepping into the shoes of people you want to work with can be really beneficial. Media Fellowships are commonplace and the University runs a Policy Fellowship scheme. What can we do to enable learning between community partners and researchers by spending time with a partner organisation?

Something else entirely different – tell us what you’d like to try and why it’s needed.

We have a small budget of £5000 to help with the development and delivery of materials or to cover other expenses (e.g. travel and subsistence) but this will not cover staff time.

**Process**

If you would like to work with us, please send an email to public-engagement@bath.ac.uk outlining:

- Which of the areas you would like to work on and why
• What you will do, including a timeline
• How you would like to work with the PEU, including outlining what you need from us (we are flexible about when this works takes place)
• How you will assess success
• How the work could be sustained after the funding period (assuming it is successful in this pilot phase)
• Budget (with justifications)

We are looking for proposals with no greater value than ~£1500. If proposals of a smaller scale are submitted we will be able to fund more of them.

Please send your proposal to public-engagement@bath.ac.uk no later than 5pm on Monday 28 May. We will let you know if you have been successful on 4 June.

Assessment

We are looking for:

• Ideas that are new to us (but can be tried and tested in another setting)
• Tools and activities that can be scaled up, rolled out across departments or faculties, or used again in some way
• Feasibility
• Willingness to collaborate with the Public Engagement Unit – for example by getting in touch to discuss your idea before the deadline
Public Engagement Unit Choose Your Own Training Fund - Call Guidance

Aim of fund

The Choose Your Own Training Fund aims to develop training activities and interventions that work for you. By working with you to develop researcher-led training and development activities, we hope they will be more relevant and more effective.

This is an opportunity for you to directly shape the types of training and development activities that will help you with your public engagement thinking and activities.

We’ll be holding a short information session on 6 February from 14:15 – 15:05 in the Claverton Rooms if you want to find out more or explore your ideas with the Public Engagement Unit or colleagues across the University.

Please note: this is the first time we’ve developed training in this way (it’s possible we’re the first in the country), so if you wish to get involved please be aware that we’ll be learning with you.

Format

Examples of activity formats we could be interested in supporting include (but are very much open to others):

- Mentoring / buddy systems
- Written materials and guides
- Site visits e.g. We The Curious
- Self-assessment of existing skills
- Job swaps / placements

Topic

Examples of topics we already cover include:

- Introduction to Public Engagement
- Effective collaborations
- Evaluating Public Engagement
- Object handling
- Working with industry
- Public engagement through exhibits
- Reflective practice
- Supervising students doing public engagement

We are interested in proposals that:

1. cover an existing topic in a new format
2. cover a new topic in an existing format
3. cover a new topic in a new format

Funding available
We have £5000 to help with the development and delivery of materials or to cover other expenses (e.g. travel and subsistence). We are looking for proposals up to the value of ~£1500. If proposals of a smaller scale are submitted we will be able to fund more of them.

Who can apply:

This funding is open to all researchers (including doctoral students) at any stage in their career.

Assessment

We are looking for:

- Ideas that are new to us (but may be in use in another setting)
- Willingness to collaborate with the Public Engagement Unit – for example by getting in touch to discuss your idea before the deadline
- Activities that can be sustained beyond this initial phase by you or by the Public Engagement Unit
- Feasibility

What we are not looking for:

1) A single intervention, run by an external expert which has little / no chance of being delivered again without the same repeat costs.

Assessment Process:

Application forms must be emailed to public-engagement@bath.ac.uk no later than 17:00 on 28 February with ‘Choose Your Own Training’ in the title

Applications will be reviewed by the Public Engagement Unit.

Timetable:

A launch meeting will be held on Tuesday 12 March from 11:15 – 12:05 in 8W, 2.12 (TBC) for all successful applicants.

<table>
<thead>
<tr>
<th>Call Opens</th>
<th>Call Closes</th>
<th>Awards Start from</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 January</td>
<td>24 February</td>
<td>7 March</td>
</tr>
</tbody>
</table>

If you are considering an application, we would strongly encourage you to speak with a member of the Public Engagement Unit about your project prior to application submission. Please email Helen Featherstone and Robert Cooper via public-engagement@bath.ac.uk
Appendix E – Proposal for the LEAD programme
Faculty of Humanities and Social Sciences LEAD Programme Proposal

Leadership Engagement and Development (LEAD)

WHY?
The Faculty of Humanities and Social Sciences is committed to developing a fairer, healthier, more productive, more secure, more sustainable, and enabling society. As part of this commitment, the Faculty is looking to improve links with the local community, working as a partner with local agencies to the benefit of those in the city and surrounding area.

To aid this agenda, the Faculty wants to develop a culture of local engagement within its academic community and is exploring a range of approaches to enable this ethos to thrive.

The Leadership Engagement and Development (LEAD) programme is aimed at mid-career researchers who have previous experience of public engagement with research, but would like to develop their public engagement and leadership practice at a more strategic level. The programme will create an opportunity to explore practice further, develop engagement and leadership skills, tie into promotion goals and provide the tools and confidence for participants to excel in their academic career.

HOW?
The programme will run over nine months, over one academic year, with six sessions covering key areas of high-quality public engagement plus an end of programme celebration. Each session will cover core public engagement content, as well as providing leadership ‘top tips’.

The overall approach is about advancing public engagement practice through the introduction of advanced ideas and practice, peer learning, reflective practice, and practical experience of leadership and public engagement in research. Each session will provide practical tools or activities that participants can take forward between sessions. There is an expectation that xx hours will be spent undertaking public engagement work between each session. These activities will be manageable and purposeful, and designed not to be an undue burden on time. Participants will be supported to work on their own engagement practice during the programme.

Each participant will have a community organisation they are already in a partnership with (there will be no specification for how old/young that relationship is).

[We need to define the role of the partner – they could be participants, they could agree to e.g. a certain amount of mentoring].

The pilot cohort will be for approximately six participants, potentially one from each department.

<table>
<thead>
<tr>
<th>Session title</th>
<th>Content outline</th>
<th>Leadership top tip</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Purpose</td>
<td>Frameworks for defining purpose(s) for public engagement</td>
<td>Leadership through Supervision</td>
</tr>
</tbody>
</table>
2. People | Critical ideas about who the public are, how they form, how they behave and identifying their needs | Leading your peers

3. Ethics | Considering the ethics of PE including power (in)equalities, inclusive practice, and cultural needs. Toolkits for surfacing ethical consideration of PER | Influencing upwards

4. Process | How to ensure that PER interventions are most effective. Worked examples | Leading with and through others

5. Evaluation | The value of reflective practice and robust evaluation of PER | Communication

6. Leadership | Consolidation of leadership skills
Leadership styles
Dos and Don’ts
Describing your leadership approach | N/A

7. Celebration event | End of programme celebration to share learning and practice
Sharing of programme outputs by each participant
Presentation of certificates and badges
Encourage the next cohort to apply. | N/A

Each session will have a similar timetable, but the first session will have more time dedicated to getting to know each other. These sessions will run once every 4-6 weeks over a two-hour period with lunch included. There will be time for informal networking and discussions at the end of each session, recognising that some participants will benefit from exchanging ideas and sharing practice.

<table>
<thead>
<tr>
<th>Time</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>00:00</td>
<td>Where am I now? (sharing insight and experiences since previous session)</td>
</tr>
<tr>
<td>00:15</td>
<td>Provocation – a short presentation or activity designed to further critical thinking</td>
</tr>
<tr>
<td>00:35</td>
<td>Peer / group discussion-based activity</td>
</tr>
<tr>
<td>00:55</td>
<td>Leadership top tip activity</td>
</tr>
<tr>
<td>1:15</td>
<td>Action planning for inter-session activity</td>
</tr>
<tr>
<td>1:30</td>
<td>Free time to network</td>
</tr>
<tr>
<td>2:00</td>
<td>End</td>
</tr>
</tbody>
</table>

There is also the possibility of running up to three “consortium” workshops during the programme where the academics and their community partners come together to explore their engagement relationship.

The final workshop will be an end of programme “celebration” event to share their collective insight into advancing public engagement practice (so others in the department/faculty/university/community can learn) and their aspirations for the future. The celebration event will be an opportunity to award participants with a LEAD certificate and pin badge to confirm their participation. This could be done in collaboration with the Public Engagement Unit and their annual event.
WHO?
Applicants to the programme are expected to be mid-career academics who already have knowledge and experience of public engagement with research and wish to further develop their skills in this area, with an emphasis on leadership. Applicants will need to have identified a partner in the local community that they can work with during the programme.

There is also a preference for applicants whose work aligns with the newly formed Faculty themes: ‘to promote a fairer, healthier, more productive, secure, sustainable, enabling and inclusive society’... ‘challenging thinking and inspiring positive change’

Participants are expected to be mentors for the following cohort, in order to help build department / faculty community.

BENEFITS TO THE PARTICIPANTS
The LEAD programme offers a number of benefits to those participating:

• an opportunity to reflect on current practice and further develop skills in community engagement
• receive leadership tips to support advancement in their academic careers
• increased visibility of the participant’s research in the local community
• an opportunity to enrich their research by acquiring an alternative perspective from the local community
• Enhances promotion and career prospects - Programme outcomes can be used as evidence as part of an application for academic promotion to more senior roles
• Development of mentoring skills by supporting a colleague in a subsequent LEAD cohort and contribute to the development of a public engagement community within the Faculty/department.

BENEFITS TO COMMUNITY PARTNERS
Community Partners would benefit from being involved in the programme in the following ways, by:

• developing an improved knowledge of the work of the University
• receiving support and advice in solving an issue or problem
• having an opportunity to get involved in the design and development of high quality research
• having an opportunity to obtain visiting research fellow status for the duration of the collaboration
• receiving/providing advice on proposal writing

APPLICATION PROCESS
Applicants are required to complete and submit a written application that must include a letter of support from the community partner. You will also require support from from your Head of Department to undertake the course.

You application will be considered by the LEAD panel. It is expected that if your application is successful, you would need to attend all six sessions, including the final celebratory event, where practicable.
LEGACY
The LEAD programme will help support the Faculty to develop a positive reputation for engaged research. Mid-career researchers within the Faculty will be known for excellent engaged research and leadership skills. Community partners, future staff and students will wish to join the faculty because of this focus.

SUSTAINABILITY
The first pilot programme will be co-delivered by the Public Engagement Unit and the Faculty Public Engagement Lead. The resources and activities will be developed and documented so that the Faculty can run the programme independently in the future, as the Public Engagement Unit does not have the capacity to run the programme each year. We have successfully used this model for undergraduate public engagement modules.

COST
The following approximate costings have been identified for the first pilot programme:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catering (lunch and tea/coffee) for 6 sessions (based on six participants and two facilitators)</td>
<td>£7 per head - £336</td>
</tr>
<tr>
<td>Refreshments/canapés for celebratory event (based on 20 attendees)</td>
<td>Approx. £250</td>
</tr>
<tr>
<td>Travel costs for community partners</td>
<td>Unknown</td>
</tr>
<tr>
<td>Design and print cost for 6 x Posters</td>
<td>Approx. £300</td>
</tr>
<tr>
<td>Design and Print cost for banner stand</td>
<td>£90 plus design costs</td>
</tr>
<tr>
<td>Design and production of LEAD Pin badge and Certificates</td>
<td>Approx. £200</td>
</tr>
</tbody>
</table>

COMMUNICATION PLAN

News item on Faculty Newsletter (is this an suitable item to include – usually research)
Area on HSS web page?
Email directly to Heads of Department asking them to circulate to their departments
Other?
Please note we have not included all of the tools here. They are with our designers so not ready for full circulation yet. We provide these notes to give you a sense of the toolkit.

**PER Self-Assessment - Where do I start?**

Before you start out on your PER Journey it is important to take a moment to really think about your motivations and purpose(s) behind it. Why do I want to engage people with my research? And what do I already know and/or have that can help me with this process?

Skills are really important, but so is considering what you value, your interests, your motivations behind getting involved with PER, and also what you might need to help you on your way.

The following chart is a really simple way to help with this thinking process.
PER Self-Assessment Chart

Values

Skills

Self Assessment

Interests

Needs

Motivations
Once you have considered what you value and the skills you have, this should help you identify things you are interested in, what you are motivated by and what you might need to develop your PER.

The PER Self-Assessment Chart is a simple starting point, but is likely to become a dynamic document, changing as you acquire different PER experience and skills. Taking time to reflect at different points along your PER journey will enable you to think more strategically about the PER that you do.
Instructions:

Place the four Skills & Attributes Statements at the top of a workspace. Then place the different Skills & Attributes Cards underneath the statement you think best describes where you feel you are now.

This activity is aimed at identifying your strengths, weaknesses and any skills gaps, facilitating your thinking and planning of areas for further professional development. All of which will help improve your PER, and develop further transferrable skills.

"I hadn’t really considered this!"

(Unaware of the skill or attribute and your lack of proficiency)

"I am aware of this but am not very experienced."

(Aware of the skill but not yet proficient)

"I can do this but would like to gain more experience and continue to improve."

(Able to use the skill but still takes thought and effort)

"I do this all the time without really thinking about it. It’s just instinctive."

(Performing the skill becomes automatic)
PER skills and abilities linked to RDF Domain A (there are similar ones for the remaining three domains)

Knowledge (A1)

Subject knowledge
Confident in own area of research and how it relates to other research locally, nationally, internationally.

Knowledge (A1)

Public Engagement with Research – context
Background knowledge and understanding of context of PER. Has a clear purpose for own PER.

Knowledge (A1)

Public Engagement with Research – practical
Has a wide range of practical PER experience. Has the needs and wants of the audience at the heart of the engagement.

Knowledge (A1)

Seeks out information
Able to seek out and keep up to date with PER learning and practice.

Cognitive abilities (A2)

Language skills
Able to use and adapt language so it is appropriate for the audience engaging with and the medium being used, e.g. written vs verbal. Introducing and explaining ‘research jargon’ to develop shared understanding and ownership.

Analysing
Able to critically review and evaluate your own PER.
Synthesising
Can see connections between own PER and that of others.

Critical thinking
Can understand other arguments and articulate own assumptions.

Evaluating
Evaluates the impact and outcomes of own PER, and uses the learning from this process to develop and improve. Understands how to use formative and summative evaluation in this learning process.

Problem solving
Is able to asks questions about own PER in order to identify any problems, and seeks out ways to address these. Is able to ask questions of others.

Inquiring mind
Is willing to learn and able to acquire knowledge about PER. Is open and flexible in their approach to PER. Asks questions of participants and others doing PER as part of this learning process.

Innovation
Develops new ways of working and able to seek out appropriate partners and opportunities to achieve this.

Argument construction
Can construct clear and evidenced arguments and ideas relating to research.

Intellectual risk
Is open to critical review by others and able to critically appraise other PER.
Self-assessment Values

PER Self-Assessment
What do you value most?

Before you start planning any public engagement with research (PER) it is really important to think about what you value, and how this might influence the type(s) of people you want to reach and the engagement methods you chose to use.

**Values Cards**

These cards are designed to encourage you to consider what you really value, and how this will impact of the types of PER you decide to do.

These should help identify things you like and don't like doing (how they fit with your interests and motivations), and areas you might like to challenge yourself on.

**Using the Values Cards**

- Place the three *Values Statements* at the top of a workspace.

- This should give you three headings: *Strongly Value, Value at Times* and *Don’t Value*.

- Using the *Values Cards*, now place each card underneath the statement you think best fits with your own personal values.

The aim is to take time to consider the things you really value. These values, along with your skills and attributes can help make the right choices in terms of the types of PER you choose to do. Choices that are in line with values that are important to you, along with the relevant skills, will help you stay motivated, run effective activities and importantly be something you enjoy doing.
<table>
<thead>
<tr>
<th>Variety</th>
<th>Travel</th>
<th>Working under pressure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Building things</td>
<td>Supporting others</td>
<td>Challenge</td>
</tr>
<tr>
<td>Accountability</td>
<td>Accuracy</td>
<td>Approval</td>
</tr>
<tr>
<td>Balance</td>
<td>Change</td>
<td>Collaboration</td>
</tr>
<tr>
<td>Community</td>
<td>Competition</td>
<td>Compassion</td>
</tr>
<tr>
<td>Cooperation</td>
<td>Creativity</td>
<td>Credibility</td>
</tr>
<tr>
<td>Democracy</td>
<td>Discovery</td>
<td>Diversity</td>
</tr>
<tr>
<td>Education</td>
<td>Equality</td>
<td>Exploration</td>
</tr>
<tr>
<td>Fairness</td>
<td>Flexibility</td>
<td>Fun</td>
</tr>
</tbody>
</table>
Hard work  Honesty  Improvement

Inclusivity  Independence  Individuality

Initiative  Innovation  Integrity

Intelligence  Intuition  Knowledge

Leadership  Learning  Meaning

Money  Openness  Optimism

Perfection  Perseverance  Personal growth

Practicality  Privacy  Problem solving

Professionalism  Progress  Purpose
<table>
<thead>
<tr>
<th>Recognition</th>
<th>Reward</th>
<th>Resilience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straightforwardness</td>
<td>Success</td>
<td>Teamwork</td>
</tr>
<tr>
<td>Timeliness</td>
<td>Tolerance</td>
<td>Trust</td>
</tr>
<tr>
<td>Truth</td>
<td></td>
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</tbody>
</table>
Rethinking professional development for public engagement with research: a way to improve uptake and impact of training?

Helen Featherstone and David Owen

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Abstract

Training is often cited as key to embedding public engagement in universities. The literature and professional discussions on public engagement training tend to focus on the training intervention itself (for example, the content and delivery formats); rather than the learner (for example, current levels of public engagement practice, longer term career aspirations, and workplace environment).

In this article we share our reflections on putting the learner first. We draw on our own general experiences and in particular our ChallengeCPD@Bath programme (funded by UKRI through the SEE PER call). We argue that many of the challenges associated with the provision and uptake of training and professional development for public engagement with research are not unique to public engagement but relate more broadly to perceptions to training and professional development that exist within the academy.

However, putting the learner at the heart of professional development means understanding their public engagement needs, their broader academic/career goals, their disciplinary/institutional cultures of training and their disciplinary/institutional cultures of public engagement. It also entails a shift in how we evaluate interventions, moving beyond measures of satisfaction or enjoyment towards long term evaluation in particular
accounting for the extent to which learning can be, and is, applied on the job, or looking at how it might change behaviour in the workplace.

**Keywords**

Training; professional development; public engagement; academic culture;

**Three Key Messages**

- The challenges of devising and delivering effective training and professional development for public engagement are not unique to public engagement.
- We need to move our thinking from the training intervention to the individual learner: putting the learner first.
- Putting the learner first means helping learners identify relevant existing skills and experience, understanding their longer-term career aspirations, and understanding the broader research culture the learner finds themselves in.

**Note about the authors:** Helen Featherstone leads on public engagement with research at the University of Bath (a research-intensive university in the South West of England) and has a specialism in developing and delivering high quality training and professional development; one of us (David Owen) is a consultant specialising in developing new systems insight into public engagement across the sector. He is an associate with the National Coordinating Centre for Public Engagement and University of Bristol.
Introduction

Over the past decade public engagement (PE) has become increasingly recognised as an important part of the UK life-cycle of research and a feature of the university landscape. For example, it is now more frequently cited in institutional strategies with a doubling in the number of institutions that have developed separate strategies for public engagement (RCUK, 2016; Hill, 2015; Owen et al. 2016). Researchers are increasingly likely to see public engagement as an important part of their role (Vitae, 2017; TNS BMRB, 2015) and there has been a growth in both institutional and departmental recognition and support (Owen et al. 2016). A recent survey by Vitae (2017) highlighted that it was leading the pack of competing priorities (after publication) that researchers feel recognised and valued for from their institutions.

In the past ten years, we have seen ongoing investment in creating a culture of PE within the research community, and their institutions, for example through the creation the Beacons for Public Engagement\(^\text{14}\) (2008), the National Coordinating Centre for Public Engagement\(^\text{15}\) (2009), Research Council UK (RCUK) Catalysts for Public Engagement with

\(^{14}\) https://www.publicengagement.ac.uk/nccpe-projects-and-services/completed-projects/beacons-public-engagement

\(^{15}\) https://www.publicengagement.ac.uk
Research\textsuperscript{16} (2012), the Wellcome Trust Institutional Strategic Support Fund\textsuperscript{17} (2012) RCUK Public Engagement with Research Catalyst Seed Funds\textsuperscript{18} (2015), and most recently the UK Research and Innovation (UKRI) Strategic Support to Expedite Embedding Public Engagement with Research\textsuperscript{19} (SEE PER) programme (2017)\textsuperscript{20}. There have also been a number of broader policy shifts such as the inclusion of impact in research assessment which some suggest has acted as a catalyst for further embedding engagement in research (Watermeyer, 2012; Kings College London and Digital Science, 2015; TNS BMRB, 2015; Townsley, 2016; NCCPE, 2016). In their review of the evolving policy and practice of research engagement Duncan and Manners (2014) posit that despite these efforts public engagement is still largely seen as an add-on or peripheral activity, but that we are now at a ‘tipping point’ where our universities stand on the edge of placing societal engagement at the heart of research. It is notable that during this time, despite a shift in culture to a point where engagement is more valued and recognised, we have seen very little movement in the overall number of researchers engaging (TNS BMRB, 2015).

So what is needed to take us beyond our current standing? And what is next for public engagement should we breach this tipping point? It is widely recognised that culture change cannot be imposed on a professional community. It takes time to change deeply embedded

\textsuperscript{16} https://www.publicengagement.ac.uk/nccpe-projects-and-services/completed-projects/catalysts-public-engagement-with-research
\textsuperscript{17} https://wellcome.ac.uk/what-we-do/our-work/institutional-strategic-support-fund
\textsuperscript{19} https://www.publicengagement.ac.uk/nccpe-projects-and-services/nccpe-projects/strategic-support-expedite-embedding-public-engagement-with-research-see
\textsuperscript{20} For a timeline of investments up until 2016 see https://www.publicengagement.ac.uk/sites/default/files/publication/state_of_play_final.pdf also see Kevin Burchell’s literature review (2015) for Factors affecting public engagement by researchers which provides a much richer overview: https://wellcome.ac.uk/sites/default/files/wtp060036.pdf
organisational practices, behaviours and values, and long term commitment to deepen and sustain those changes (Duncan and Manners, 2014; Bolden, et al 2008; Dawson and Andriopoulos, 2009). Typically, “change initiatives” in Higher Education, are accompanied with a range of incentives including funding, measurement, benchmarking, reporting, professional development and, in some instances, penalties. An earlier review we conducted for the Wellcome Trust and UKRI suggested that the change tools being used in public engagement are somewhat softer than those used in other change initiatives, such as those put in place for researcher development, teaching excellence, or equality and diversity (Owen et al. 2016). While it was beyond the scope of this earlier work to assess the success or otherwise of these initiatives, we did note some differences compared with our (public engagement) culture change story. For example, we found that there is very little by way of penalty or repercussion for institutions that do not put in place measures to support public engagement. This can be compared to the Athena Swan award which is more clearly tied to external funding. We also noted that investment in the quality of public engagement, is significantly less than say initiatives linked to promoting excellence in teaching (Owen et al, 2016; Trowler, 2013). A third aspect that we identified in this work, and the one we would like to focus on in this commentary, is the role of professional development in both driving change, and potentially stifling it.

Recent reports have shown how training and professional development can both further public engagement with research, by advancing participation and confidence, and also act as a potential barrier to engagement through a perceived lack of availability or relevance (Owen et al, 2016; TNS BMRB, 2015). Informed by Owen et al, 2016, UKRI’s Strategic
Support to Expedite Embedding Public Engagement with Research (SEE PER) programme invited calls for two types of project from institutions: Embedding projects and Challenge projects. The former aimed to “enhance and embed an institution’s approach to supporting PER, building on the learning from the Beacons for Public Engagement, RCUK PER Catalyst and Catalyst Seed Fund programmes”, the latter “Proposals which address a specific challenge in supporting PER effectively, building on the challenges identified in the recent State of Play report and which expand the existing knowledge base about ‘what works’ in effectively supporting PER” (SEE PER call guidance). Owen et al (2016) identified several challenge areas with five being prioritised for SEE PER: governance, middle management commitment, researcher motivation, quality of PER, and take up of training and CPD. The take up and impact of training and continuing professional development was the focus of three projects funded through SEE PER (UKRI, 2019).

In this article we will share some of the key learning to emerge from one of these projects situated at the University of Bath. We will outline why professional development emerged as an important priority for our work in supporting researchers, the challenges we sought to overcome, and the lessons that we have learned in the processes of trying to address those challenges. We highlight some “quick wins” such as reframing our language about CPD and training, piloting co-produced training and developing self-assessment tools. We have also invested in longer term development plans for example, rethinking how we develop our training so that it really puts the learner first and rethinking how we evaluate our CPD offer. We end the paper with some recommendations for future work in this area.
Together we bring two perspectives to this commentary: one of us (Helen Featherstone) leads on public engagement with research at the University of Bath (a research-intensive university in the South West of England) and has a specialism in developing and delivering high quality training and professional development; one of us (David Owen) is a consultant specialising in developing new systems insight into public engagement across the sector. We are both committed to, and work towards, embedding public engagement into the culture of universities. In Helen’s case, her own institution, and in David’s case, in the wider sector. We spend time opening out public engagement as something that anyone can do to improve their research.

The interventions we described earlier that have been used to embed a sector-wide culture of public engagement are not prescriptive about what “counts” as public engagement with research. The definition developed and used by the National Coordination Centre for Public Engagement is very broad and allows for all forms of academic / non-academic interactions to be “counted”. This broad definition allows institutions to develop their own priorities and rationales for supporting public engagement with research. We recognise that each institution will have their own take on what counts as public engagement and that there are associated areas of activity with different labels (for example: Public, Patient Involvement), so for this article we will use the term “public engagement” in the way the NCCPE do.

21 https://www.publicengagement.ac.uk/about-engagement/what-public-engagement
Finally, we want to stress that the points we raise in this article are very much a work in progress as we have only just begun to reframe and implement our practice, and to evaluate it. The points we raise have been informed by our professional experience, the literature, the support of a peer group and advisory board, and critical reflection on all this data. We present this article as an opportunity to “think aloud”, we feel this is an effective way to both share our practice and also invite you to share yours as part of an ongoing conversation.

The role and place of professional development for public engagement with research

Reflecting on our practice over the last seven years (for Helen) and ten years (for David) the dominant dogma driving our work in training and professional development is weighted towards increasing participation in public engagement with research. We develop formal training which is often focused on introductory training, helping researchers to make sense of the agenda, highlighting what counts as public engagement, and some basic principles of good practice. We have also developed and delivered training on more sophisticated topics for example, ‘evaluation’ and ‘advanced methods’ which are frequently in response to a request from a researcher or department who have come to realise they have reached the boundaries of their skill and knowledge and have identified the need to progress further. We have used pilot activities, led by us, as a way of driving good quality practice and providing opportunities to learn through doing. But these are labour-intensive as they require effort to encourage people to participate, stay involved and invest the time to really
develop their practice. The reality of on-the-ground embedding work, is that it is hard to make spaces in which the professional practice of public engagement with research is addressed and recognised. This could be a feature of how, at an individual level, public engagement practice evolves slowly through repetition and reflection resulting in incremental advances. We also find that the need to be supportive of people taking their first steps into public engagement, particularly as this is something not universally recognised as an essential aspect of academic practice, means that standards of public engagement can be below what would be ideal or considered ‘best practice’. In such circumstances we find that discussion of ‘quality’ is rarely addressed as often as we feel it could be, or is sometimes limited to a question of ‘is it good enough’? Without a clear and subjective measure of what is ‘good enough’, we often rely on a mix of professional and personal judgement. We may ask ourselves will this proposal advance the goals and objectives of the research in a mutually beneficial way for those involved? Are there any ‘red flags’ or ‘warning signs’ that need to be attended to? How can we bring them into awareness of the project team prior to an activity taking place?

Aside from the occasional times where individuals and teams recognise their need for advanced training and development, the majority of the support on offer to researchers to promote quality is informal and responsive. It takes place in one-to-one conversations, in passing, in corridors, and outside of formal meetings. We exchange ideas, offer access to networks and people who can help or support their work, but most frequently we are the first port of call for testing ideas and offering advice and guidance which we hope will improve the overall quality of the work. Much of this work happens below the radar and is
not often thought of in terms of developing someone's professional practice. Therefore if we were to ask researchers “have you had training that supports your public engagement?” (as happens in surveys investigating attitudes and behaviours associated with public engagement) it is highly likely that they would say “no”, unless they had also attended some of the formal training sessions that we offer.

We recognise that we are using a variety of terms: training, learning, professional development somewhat interchangeably. As we outline later in this article, the terminology is still a tricky area and one in which we are beginning to grapple with. We did not find a simple solution that would accommodate the breadth of activity we devise and deliver, so have tended to use the range of terms throughout this article, reflecting own language and current practice. As a rule of thumb we tend to use ‘training’ when referring to a particular intervention (e.g. a training workshop), and ‘professional development’ to encompass a broader set of interventions (e.g. including public engagement activities, one to one conversations) that may enrich a person’s professional skills or career. Finally we refer to ‘learning’ as something which emerges from activities, actions and interventions.

An additional challenge is that this is all taking place in some form of vacuum. Yes, we often urge the people we work with to focus on mutual benefit and to evaluate their practice. But the systems and processes that really recognise and reward good quality are missing. There are few established extrinsic motivations for doing public engagement well. The ecosystem for developing and advancing good quality public engagement is less developed than say it is for research and teaching. In both research and teaching we have a rich set of external
measures and metrics such as the National Student Survey or systematic module-by-module evaluation for teaching, publications, funding awards, numbers of studentships, QS rankings, and other aspects that make-up the culture of world-leading research and teaching. Institutions draw on these, alongside established traditions and recent achievements to create narratives of quality that resonate both externally and through the institutions themselves. Staff draw on these to not only measure success, but also to drive professional development. In comparison to Universities, other large publicly funded institutions such as the BBC, museums and other cultural organisations, have clearer and more established measures for quality that must be adhered to as part of their commitments to the public. In doing so, they arguably become a custodian of high quality engagement, by for example, becoming recognised internationally for their programming, in the same that way that some universities are recognised for their research or teaching. Whilst the inclusion of impact in the Research Excellence Framework (REF) and the development of the Knowledge Exchange Framework (KEF) is changing our relationship with public engagement and bringing into focus cultures of excellence, these practices are largely emergent, and in some cases there are still profound questions over their utility for those outside of the Higher Education sector (NCCPE, 2019).

Challenge CPD at the University of Bath

The University of Bath Public Engagement Unit was established with RCUK Catalyst funding (2012 – 2015) and was very successful in creating a positive, embedded culture of public
engagement with research which continues now. The Public Engagement Unit is an inward-facing unit that works to build capacity and capability for public engagement. The Unit has four strategic strands of work which work together to support researchers:

1. Public Engagement in Practice: opportunities to try public engagement by participating in organised programmes, small-scale funding for researcher-led PE, and innovative programmes led by the PEU.

2. Professional Development: programmes, workshops, online guides, and one-to-one conversations about all aspects of public engagement e.g. funding applications, creative thinking, practical delivery and evaluation.

3. Reward and Recognition: Vice-Chancellor’s Award for Public Engagement, inclusion in generic job descriptions, inclusion in probation and promotion criteria, and internal communications to raise the profile of public engagement and the people who do it.

4. Leadership: holding the agenda for the university, ensuring public engagement is integrated into other aspects of university systems, contributing to national discourse, and peer review.

Under the professional development strand the Public Engagement Unit has developed, delivered and commissioned a wide range of training and development activities and interventions. Unlike the other three strands of work which have developed into a regular annual programme, the professional development strand continues to be responsive, ad
hoc and changes annually based on need and feedback. Since 2012, participation in the professional development interventions has been varied and reflects the national picture in that there appears to be a mismatch between supply, demand and the value of formal training. Researchers who are not active engagers are not aware of the training available and see lack of formal training as a key barrier to engaging the public with research, and those who are active in public engagement tend not to view the formal training they have received as contributing to their confidence in engaging the public. Training is asked for / offered, but not taken up. We have found that researchers tend to value ‘just in time’ training and support, including one-one coaching conversations, however we suspect that these types of interactions are not often formally recognised (and therefore not reported) as part of professional development.

This current situation has been problematic for us in being able to identify where best to prioritise our limited time. The time we spend on developing and delivering training interventions is disproportionate to its actual and perceived value. Adapting, or developing new, activities and bespoke support takes time and resource. Frequently, when we deliver these sessions it can be hard to ensure attendance, with many people dropping out at the last minute because of other pressures on their time. There are also times where we are unable to support these activities due to our limited capacity. This means that researchers are undertaking public engagement while feeling underprepared; creating risks in terms of visitor / audience / participant and researcher experience. The latter can result in non-participation in public engagement in the future.
In 2017 we were awarded funding from UKRI through their competitive SEE PER call outlined above. We proposed to look at Continuing Professional Development (CPD) under the ‘challenge’ strand. As part of our ChallengeCPD@Bath proposal we promised to make 'quick wins' - changes to our existing programmes of CPD - based on what we were learning through the overall programme of work. The ChallengeCPD@Bath programme provided us with the space to critically analyse training and CPD for public engagement with research and to understand the barriers and enablers to participation with the intention of increasing uptake, with the (much) longer term aspiration of improving public engagement practice. The analysis was used to: develop guidance, improve the quality of provision, and inform the development of new forms of professional development within the University of Bath and with the National Coordinating Centre for Public Engagement.

The following sections draw out some of the key lessons we have learned before going onto explore where next.

*Training for public engagement can be too narrowly defined*

From our initial work it became clear that any training intervention should be viewed as being one part of an ongoing process of professional development, fitting into a wider ecosystem of support, which includes both formal and informal support and experiences.
There were two key aspects to this, the first relates to what we count as training, and the second to how support links in with professional identities.

In preparing for this project the Public Engagement Unit developed a model reflecting a range of characteristics about the different types of training intervention (for example: one-off intervention vs ongoing support; independent vs linked to practice; and linked to the Researcher Development Framework (RDF) vs not linked to any framework etc). The model has 12 dimensions which we speculated could be affecting the uptake and value of the training (see Table 1 below). For example, we think based on our experiences that uptake of training is more likely if it is linked to a practical public engagement opportunity. Depending on the learner and their needs, they may value training that relates to a stand-alone skill (i.e. taking photographs, speaking with the media), whereas others may value training that is more explicitly embedded in their research practice.

<table>
<thead>
<tr>
<th>One-off activity</th>
<th>Ongoing support</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stand-alone</strong></td>
<td><strong>Part of broader CPD programme</strong></td>
</tr>
<tr>
<td><strong>Closely linked to practical PE</strong></td>
<td><strong>No link to upcoming PE opportunity</strong></td>
</tr>
<tr>
<td><strong>Entry-level</strong></td>
<td><strong>Advanced</strong></td>
</tr>
<tr>
<td>Stand-alone skill</td>
<td>Embedded in research</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Internal provider</td>
<td>External provider</td>
</tr>
<tr>
<td>Individual</td>
<td>Group</td>
</tr>
<tr>
<td>Linked to RDF or other accreditation</td>
<td>No link to broader framework</td>
</tr>
<tr>
<td>Advancing the institutional agenda / goals</td>
<td>Supporting the individual’s agenda / goals</td>
</tr>
<tr>
<td>Linked to stage in career</td>
<td>Linked to levels of experience of engagement</td>
</tr>
<tr>
<td>Badged as professional development</td>
<td>Not overtly badged at CPD</td>
</tr>
<tr>
<td>Skills based</td>
<td>Attributes based</td>
</tr>
</tbody>
</table>

**Table 1: Dimensions of formal CPD identified**

In our early fact-finding it was noted that focusing on ‘training’ in isolation, without looking at the broader culture of research work and careers may be problematic. For example, it is
not uncommon for an academic to identify primarily as a Historian, a Physicist, a Dentist or any of a multitude of other disciplines and thus to ground their professional status and identity within their disciplinary community rather than their institution (Blackmore and Blackwell 2003). Academics who feel their community comprises their academic peers in their global research group, rather than their institutional colleagues down the corridor, may turn to these colleagues around the globe for support, training and cultural permissions about how to progress. This can result in a loose connection between CPD at individual, departmental and institutional levels because individuals are not in the habit of looking for support locally. CPD and training can also be met with significant resistance within academic communities in particular because of its link to what is seen as an obsession with measuring performance (Stefani, 2013) in line with a growing encroachment on higher education and academic freedom (Bozalek et al, 2014; Mockler, 2013; Kneale P et al. 2016; Dill, 2005).

Although not as prevalent today as ten or twenty years ago (Vitae, 2017) some argue there is a reverence for the doctorate degree and a presumption that it prepares researchers for other roles encompassed by the academic profession, such as management, leadership, and teaching (Pilbeam 2009, Brew 1995).

The Factors Affecting Public Engagement by UK Researchers study (TNS BMRB, 2015) highlighted formal training as a key mechanism to reducing the barriers to engagement for researchers. However, we found that the focus on formal training alone is unhelpful, and that we should think more holistically about the learning journeys of individuals. For example, how people get started and then progress and how to transfer skills from different parts of individual’s lives including work, leisure and volunteer roles. When we focus on
formal training as an intervention which leads to participation, not only is this a mechanism which the communities we wish to engage with largely agnostic to, we risk narrowing the influence of our work, losing the focus on quality, reflection and continual learning.

**Positioning training and Continuing Professional Development**

It has been beneficial for us to re-think how researchers get started in public engagement, how they progress and therefore where we place our learning interventions. There are several dimensions to this, first we must recognise how different interventions will be tailored to the level of confidence, experience and competence of the learner in relation to public engagement; second, we must recognise the academic career stage the individual is at and is aspiring to progress to; and thirdly we must consider the workplace environment including their opportunity to practice and gain support from peers and seniors. One advantage of the one-to-one coaching conversations that are so frequent in our work is that our support can be tailored appropriately across all of these dimensions simultaneously.

In our discussions about experience and competence we found two frameworks that particularly resonated. The first frame was called the four stages of competence, or the "conscious competence" learning model. Originally developed by Gordon Training International in the 1970s this model relates to the psychological states involved in the process of progressing from incompetence to competence in a skill:
• **Unconscious competence:** The skill has become "second nature" and can be performed easily. The individual may be able to teach it to others, but not necessarily.

• **Conscious competence:** The individual understands and knows how to do something. However, using the skill or knowledge requires concentration, there is heavy conscious involvement in executing the skill.

• **Conscious incompetence:** Though the individual does not understand or know how to do something, they recognize the deficit, alongside the value of a new skill in addressing the deficit. The making of mistakes can be integral to the learning process at this stage.

• **Unconscious incompetence:** The individual does not understand or know how to do something and does not necessarily recognize the deficit. They may deny the usefulness of the skill or training to develop the skill. The individual must recognise their own incompetence, and the value of the new skill, in order to take steps towards next stage.

The second frame was adapted from Miller (1990) and further developed by St. Emlyns (2018). Known as Miller’s Pyramid, it is a way of ranking competence both in educational settings and in the workplace.
Exploring these frameworks brought to light ethical considerations around practicing public engagement as a mechanism to enhance professional skills and competencies. In particular where this benefit for researchers is implicit or undisclosed to community partners and members of the public who are therefore playing a key role in the education and upskilling of researchers. This is largely an under-researched area, but to draw a parallel with student-community engagement, some studies have found that community partners engage with these schemes, not because they primarily want to benefit from the resource and knowledge that the university has to offer, but because they see it as part of their core mission to work with students as future leaders and influencers, and educate them about the needs of their service users and communities (Stoecker, 2009).

Reflecting on these frameworks also gave rise to questions about the license to practice public engagement with research, and how this is assured. Currently, the “license to practice” comes via the post-doctoral research degree, peer review and ethical procedures and though there is an engagement lens to the researcher development framework (Vitae, 2011), arguably the processes are less robust for public engagement with research than
they are for say pure research. It raises questions about the need for training at post-doctorate levels or into the undergraduate curriculum, and also with so many researchers coming to public engagement through many different paths and career stages it highlights a weakness in our current quality assurance mechanisms for those already practicing.

After considering the experience and competence in public engagement, the second consideration is that of the academic career stage and how this might map onto the level of experience of public engagement and the roles that researchers are expected to play within their community for example as head of department, supervisor, early career researcher etc. The optional nature of public engagement means that we cannot expect researchers at a more advanced staged in their career to be more competent engagers; and this has implications for the support that is offered through more usual peer / academic community development. In reflecting on these dynamics, it emerged that we needed a more sophisticated map of the professional development needs of researchers which reflects both their public engagement AND academic career development.

A third and final aspect relevant to the positioning of CPD is the manner in which we create an environment for researchers that is conducive to learning. Through our involvement in the Catalyst programme, we have been fortunate to have our support for researchers evaluated by external consultants (https://www.ukri.org/files/legacy/scisoc/Engaged360BathCatalystFinalReport.pdf/). One key finding we have taken away from this and subsequent evaluation is that we generate
value for researchers through enabling collaboration, connecting people and facilitating their learning and reflection. The skills and capacities that are brought by members of the Public Engagement Unit (and indeed all enablers of public engagement) are an important aspect of how this is done. In speaking with researchers about what they value about this support a number of things come to the surface including:

- **Credibility**: a deep and rich understanding of the university, HE sector, Research Councils and public engagement through research and practice. Well-connected outside of HE.
- **Supporting learning**: helping individuals to reflect on their practice, asking probing questions and promoting self-enquiry.
- **Reflexivity**: using reflective practice to inform and develop the work of the Public Engagement Unit as well as individual actions.
- **Belief**: deeply held, and evidence-based, conviction that public engagement brings benefits to research, researchers and the research environment.
- **Boundary working**: working in a way that interacts with many different communities within and beyond the university to translate, facilitate, mediate, network and broker.
- **Social and emotional intelligence**: working in a way that recognises, and influences, both yours and others’ feelings and behaviours.
- **Collaboration**: working with others to achieve mutual benefit.
- **Organisational memory**: Sharing what has been done before, and helping others learn from it.
Others we have spoken to have reflected on how specific aspects of our support, particularly the seed fund which provides a small pot of money for researchers to pilot new engagement activities, provides a low-risk space to experiment and learn; whilst also developing skills and confidence in securing funding for public engagement with research.

**Putting the learner at the heart of CPD.**

Through our ChallengeCPD@Bath project we have been challenged to radically reframe our thinking on training for public engagement. Anyone who develops high quality training interventions will already take into consideration the needs of the trainee. We were the same. However, the depth and complexities of those needs have not always been given due attention. It is not enough to simply ‘guesstimate’ where your learners are in their public engagement practice and to fill a gap. It has been noted that trainees and trainers hold different assumptions about what makes for effective training (Silva and Bultitude, 2009). Learners bring competencies and experience from other parts of their professional, leisure, domestic and volunteer roles which could be transferred to a public engagement context. Understanding the longer-term career aspirations of the learners will also influence how professional development is viewed, used and acted upon. Finally, taking into account the institutional and disciplinary cultures of research and public engagement will also affect participation in, and use of, training interventions.
In response to this, we have decided to really put the learner at the heart of our future professional development activities. This will take a three-pronged approach. In the first instance we are piloting co-produced training development processes: putting out a call to researchers to make suggestions as to what format and content they feel they need and then working with them to make this a reality. We will also develop tools for self-assessing the skills needed for public engagement. These will surface existing skills that can be brought into public engagement and identify gaps in need of further development. We are undertaking reflective interviews with a selection of researchers who are highly experienced in public engagement (unconsciously and consciously competent, or in the shows, does categories) to help develop these and using the NCCPE’s draft good practice principles of Public Engagement to inform the development of the tools. Finally, we are going to experiment with partially decoupling engagement skills training and development from the practice of public engagement by embedding these ideas into other professional development interventions (for example, probation programmes for early career researchers) or reframing the offer as something more generic such as “leadership”. Many of the skills we associate with being necessary for public engagement are not unique to public engagement - they are by their nature ‘transferable’ to a wide variety of fields and likewise drawn from a wide variety of fields. By reframing our training and support to reflect the primary needs of the researchers (progression in the academic practices of research and teaching) we are hoping that we will see greater uptake, participation, and perceived value. There is a risk for us in that the link to the practice of public engagement is lost, and we are simply seen as providers of training. However, our intention is to develop training that
‘leads by example’ in that it is engaged (publicly) in its delivery so that participants can experience the benefits of learning within a diverse group and simultaneously develop other engagement skills.

**Evaluating training and CPD**

A lot of the discussion points we have raised in this paper are still largely works in progress. As mentioned earlier we have only just began to reframe and implement our practice, and are not in a position to evaluate these changes. As part of this work we have reviewed our existing approaches to evaluation and, supported by a review of the literature, started to form a new approach to the evaluation of CPD.

The evaluation of public engagement CPD that we located in the literature is largely focused on responses of participants towards the extent that the one-off training met their specific goals and needs at the end of the training intervention. Where these evaluations exist, they tend to report improvements in:

- communication and organisation skills;
- levels of confidence to engage the public;
- generating new ideas and ways of working;
- enhanced teamwork and interpersonal skills;
greater understanding of the benefits and relevance of public engagement to their academic role.

(Illingworth, S. & Roop, H, 2015; Review of formal training for ChallengeCPD; 2018)

One of the key challenges we are still grappling with is how to effectively evaluate the impact of training and CPD over time. Holliman and Warren (2017) was one of the few published studies we found to return to researchers twelve months after the initial interaction asking about the usefulness of the training, how it had been applied and whether researchers would recommend the training to their peers. One helpful concept which we stumbled upon in the process of our work on the ChallengeCPD project, and may be widely known to others, was ‘training transfer’. Put simply, this looks at the extent to which training received by employees can be, and is, applied on the job. The literature on ‘training transfer’ focuses attention on the role of training in changing behaviour in the workplace, and the enabling conditions for learners to apply their training in the workplace.

Given the proliferation of training transfer studies in various disciplines, Burke and Hutchins (2007) conducted an integrative and analytical review of factors impacting transfer of training. They looked at the literature across management, human resource development (HRD), training, adult learning, performance improvement, and psychology and identified the primary factors influencing transfer—learner characteristics, intervention design and
delivery, and work environment. The learner variables which have been fairly well established as having important influences on transfer include:

- Cognitive ability
- Self-efficacy,
- Pre-training motivation,
- Negative affectivity,
- Perceived utility,
- Organization commitment variables.

Factors pertaining to intervention design and delivery, which are in our experience more typically researched and evaluated:

- Needs analysis (formative)
- Learning goals
- Content relevance
- Instructional design
- Self-management strategies

And finally, work environment influences, such as:

- Link with organisational goals or strategies
- Transfer environment
The work on training transfer has helped us to realise that our conventional evaluation framings and tools tend to focus almost exclusively on the intervention (i.e. the actual training) without considering transfer elements, such as the opportunity to practice and the broader environment in which learning can be applied. We’ll be exploring this further in the future.

**Conclusion**

The changes that we have seen to institutional and departmental culture in recent years, where public engagement is now more likely to be valued, have laid the groundwork for greater confidence in how we work with researchers. Our focus has shifted from “proving” public engagement and legitimising it, to deepening its contribution to research through facilitating environments that foster high quality practice. In recent years, we have come to recognise that training for public engagement encompasses a much broader set of activities than a one-off workshop called “Introduction to Public Engagement”. There is a greater breadth of interventions that contribute to how someone may develop confidence, gain experience and competence including for example those run by the PEU such as one-to-one coaching conversations, access to pilot funds for innovation and opportunities to practice or those that exist outside of our sphere of influence, for example disciplinary conferences, peer to peer support.
Through our work on ChallengeCPD we have learned that we need to become more effective at aligning our work with the professional pathways of researchers. In doing so we recognise that the links between competence in engagement, research expertise and career stage do not always neatly overlap. Someone may have had a host of experience in engagement, but be at an early stage of their research careers, for example. It follows that training and support needs differ not just in relation to someone’s confidence and skills with the practices of public engagement with research (i.e. patient public involvement, working with the media, participatory research), but also in relation to their discipline or institutional role. For example, a head of department, or someone with strategic oversight of public engagement will invariably need support that relates not to the practice elements of engagement, but its leadership across a wide variety of practices.

Our involvement with UKRI SEE PER programme has shown us the resonance of the academic discipline more profoundly than in our work previously. Whilst the Researcher Development Framework (Vitae, 2011) and the NCCPEs Draft Good Practice Principles for Public Engagement Involving Universities (NCCPE, 2018), provide a helpful framing for progression and quality; learning comes to life when it is located within the professional practices of the discipline itself. As we tailor our support for researchers we are learning to be mindful of the discourse of engagement that exists within the academic discipline itself. Whether this be architecture, dentistry or physics these discourses and their related practices are a living and breathing thing. It follows, that we must not get ‘too close’ to the
disciplines so as to stifle innovation. For some academics we work with the joy of public 
engagement and our support is to step out of the confines of the discipline and to think 
about their work differently, and cross institutional and disciplinary boundaries.

Putting the learner first requires us to build on their previous professional and personal 
experience, and to recognise how training helps and supports researchers in realising their 
own goals, alongside the goals of the institution and the profession itself. We have also 
learned to be more mindful of our own bias, and how this influences our work. For example, 
as enablers we tend to prefer participatory learning approaches, whereas some of the 
research communities we work with prefer to read materials, distill and then discuss. Our 
co-produced training scheme is one example of how we have sought to address this, placing 
the learner at the heart of the development of interventions, we will evaluate this work and 
share our learning from this in the future.

Finally, we are keen to improve our work on evaluation of our training, not least to improve 
our offer but also to help us articulate the value to senior managers and stakeholders within 
and outside of the institution. Where we have commissioned external evaluations of the 
support we offer, time and time again, we see that our support for institutional and 
individual learning is the aspect that we are most valued for. We have not, however, 
mapped this across the things that matter most to our institution: research quality, career 
progression, funding, and reputation. Attributing our support for these ends, is difficult, but 
one way in which we hope to improve is to broaden the scope of what we evaluate on a day
to day basis. For example, when it comes to training and professional development, looking at the learner characteristics and the environment much more deeply than we have before. We do still need to evaluate the intervention, but taking a longer term view of this could also be helpful. Ultimately we want to become a trusted place that researchers return to and engage with across their research careers, sourcing or co-creating appropriate tools and resources at appropriate points in their own development, allowing them to develop competencies and helping them identify the transferability of their skills in public engagement with research. Monitoring and measuring our contribution to these outcomes remains a pressing challenge, especially given the need for long term assessment and the inter-dependencies between our work supporting researchers and many others.
References


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Appendix H – screen shots of the Public Engagement Knowledge Hub
Welcome screen

Topics for the different modules. Other titles not visible on this screen shot: “How do I manage my event?”, “How can I facilitate a workshop?”, and “How can I evaluate my engagement?”
The topics and activities within each module are based on our extensive experience of delivering face-to-face training in group or one-to-one settings. They reflect the everyday conversations we have and the overall approach we take when supporting academic colleagues.
Am I doing public engagement?

Using this example you can see how it reflects our live approach to facilitating learning. We illustrate the module with Bath examples throughout. We use questions to help learners reflect on their own public engagement work. We try to challenge our learners. We’ll do all we can to help, and if we can’t help someone we will point them to other areas of support within the university.

Firstly, is your idea for public engagement connected to your research?

For the Public Engagement Unit to support you, your proposed activity needs to be related to your research.

It can be connected to any stage of the research process - it’s never too early or too late to engage the public in your work.

Click on the + buttons in the diagram below to see how public engagement has been woven into different stages of research in projects here at the University of Bath.

Example of one of the activities in “Am I doing public engagement?”. Learners can click on the + sign to read examples of PER at different stages of the research cycle. They can then choose to click yes or no (the green boxes at the bottom of the screen).

If they click yes, they move onto a question about how essential the engagement activity is, helping the learner to differentiate between engagement that enhances and enriches research and that which is essential (eg participant recruitment).

If they click no they are taken to a page to help them think about if/how they could adapt their engagement to link to their research:
If the learner still can’t link their ideas to their research then we point them to other places within the university that could support them. We don’t want our learners to be abandoned!