



University of Dundee

Using An Evaluation Framework to Direct Public Engagement Work

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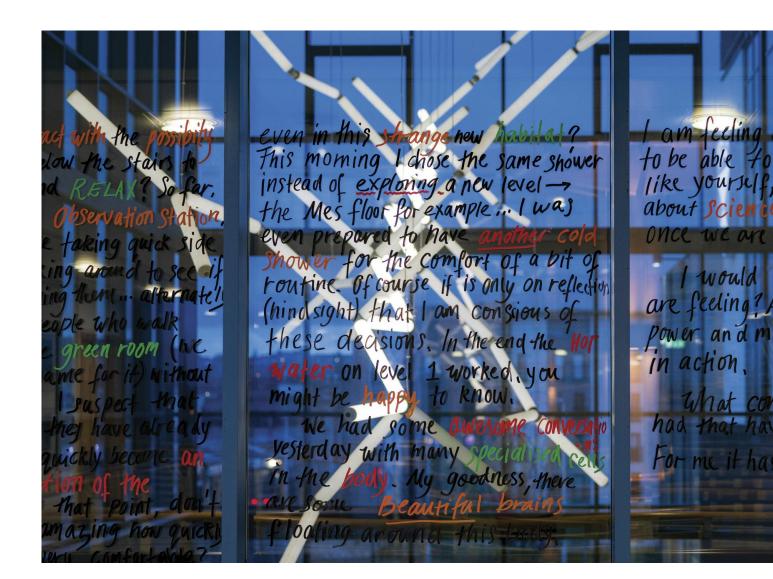
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University of Dundee School of Life Sciences





Using An Evaluation Framework to Direct Public Engagement Work

2017-2022 with Case Studies

Contents

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Forward	3
Evaluation Framework Outcomes and Indicators	4
Heatmap and Timeline	5
Partnerships	6
Community Engagement	9
Training and Participation	12
Science Art Collaborations	15
Engaged Schools	18
Embedding Public Engagement in University Culture	21
Closing Statement	24
Thank you!	26

L.E.

Forward

We are the School of Life Sciences Public Engagement team. This team encompasses the Schools Outreach Organiser and Public Engagement and Communications Officer as well as the WCAIR Public Engagement Manager and Public Engagement Officer and the Academic Lead. We provide support for the staff and students within the School of Sciences in engaging with the public, including training, resource development, administrative support, and specialist expertise. We have staff and student development, and social purpose at the heart of all that we do.

In 2017 we defined four main aims as part of our new Public Engagement with Research Strategy:

- > Build on our creative partnerships to deliver a high-quality, innovative engagement programme. This will inspire participation in and understanding of our research, making science relevant for everyone.
- > Engage a diverse range of people with our research.
- > Consult with our local communities to widen our reach and meet their needs.
- > Promote and support a culture of active participation in public engagement within our life sciences community.

In 2018, we worked with Evaluation Support Scotland to set up our evaluation framework. Some of the evaluation outcomes, and their associated indicators, were set to evidence the good work we were already doing. Some were set to drive us to improve our practice.

Over the past five years, we have used the framework to monitor our work. Each annual reflection gave us confidence in some areas but also pushed us to re-examine some of our long-standing practices and assumptions and refine the framework to meet changing needs.

Here we showcase how we used the evaluation framework to guide our work and in doing so, provide a flavour of the public engagement activities the School of Life Sciences undertakes. We demonstrate how we knew if we were being successful, where we had more work to do, and where we were unrealistic with our expectations.



Evaluation Framework Outcomes and Indicators

For public (including teachers & pupils)

Greater understanding of science

- "I understand the world of science"
- > "I understand the methodology of science"
- > No. of learning outcomes adequately achieved
- "I can explain [activity]"

Greater enthusiasm for science

- > "I feel enthusiastic about science"
- > No. of events that individuals come to
- > "I share what I have learned"

New skills

- > I can do/explain/teach [skill]
- > No. of repeat requests for skill training (inc. teacher CPD)
- "I have used [skill]"

Increase in pupil attainment

- > Number of learners continuing in science at next stage
- > Quality of classroom engagement/questions/projects

For staff and students

Staff and students have increased PE skills

- > "I can run a PE event safely"
- "I can reflect on what I did/what happened"
- "I know how to help people learn"
- > "I can explain my ideas in simple language"

Staff and students have greater enthusiasm for PE

- > "I feel confident to do more of this"
- > No. of staff participating/Repeat participation
- Positive comments about experience
- > Variety of activities/novel approaches

Staff and students have increased access to useful resources

- > No. of (useful) resources
- "I am aware/know there are resources"/ "I know how to access resources"
- "I feel this is useful/the best resource for its intended purpose"

New perspective on topic in question

- > "I understand the public perspective on my topic"
- No. of new collaborations/partnerships

For School of Life Sciences Public Engagement Team

More meaningful PE activities

- "I feel this activity reflects the research taking place within the University"
- > Activities have explicit learning outcomes
- > Number of uses of each resource, idea or activity
- Consultation and development with audience or partner groups

More productive partnerships

- Length of time for partnership and number of projects/activities produced
- > Partnership agreement exists
- "I feel all partner goals are being worked towards and there is good communication in place"
- Instances of sharing outcomes externally

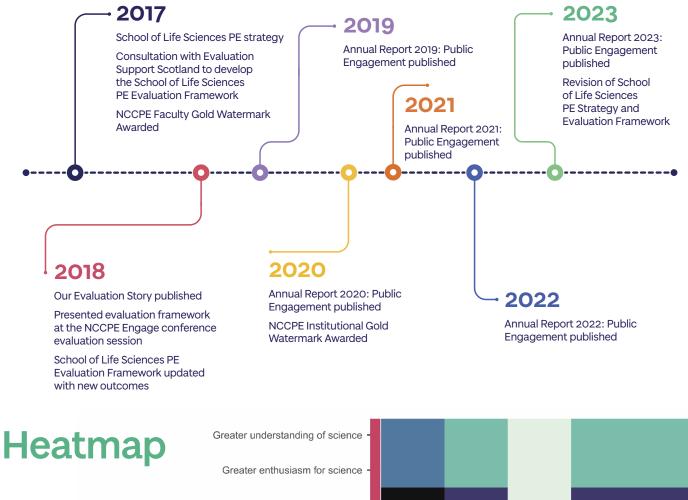
Wider participation in PE activities

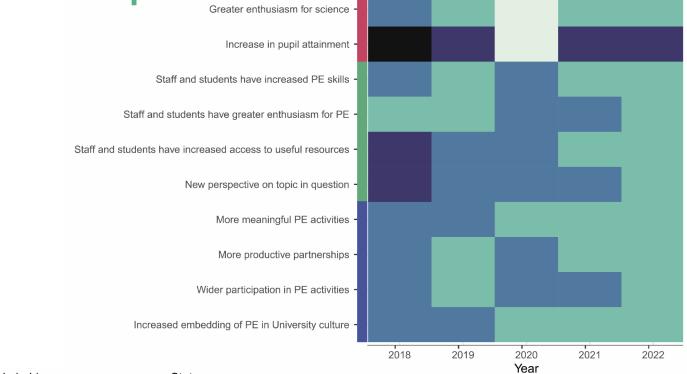
- Demographics of staff members and students taking part
- > Demographics of public engaged with
- > "I can see myself reflected in those participating"
- No. of people attending training sessions
- > Have the participants engaged before?
- > How did participants hear about us?

Increased embedding of PE in University culture

- Number of staff and students receiving nominations and wins for internal and external prizes and awards
- > Inclusion of PE in operational plans and policies
- > Number of PE case studies in REF submissions
- Number of requests for PE expertise in preparing grant applications

Timeline





Stakeholders



Status

Data exists but not recorded here

0-1 indicators evidenced

2-3 indicators evidenced

All indicators evidenced

N/A

Partnerships

Over the past five years, both our external and cross-university partnerships have evolved, with new ones being formed and existing relationships being strengthened. Examples include Girlguiding Dundee, Dundee Woman's Festival, the University Botanic Garden, and Stobswell Forum.

CASE STUDY Dundee Science Centre

Dundee Science Centre (DSC) has been collaborating with the university since its establishment in 2000. Over our evaluation period, the breadth and number of collaborative projects have grown, with our evaluation framework driving how we approach shared endeavours. Our working relationship has benefitted from our Academic Lead for Public Engagement joining their board in 2020.

Evaluation Framework Outcomes and Indicators addressed:

More meaningful PE activities

- > "I feel this activity reflects the research taking place within the University"
- > Activities have explicit learning outcomes

Staff and students have increased PE skills

- > "I know how to help people learn"
- > Variety of activities/novel approaches

Our partnership has ensured that the content used by DSC is accurate and reflects the research taking place in Dundee. In turn, our staff and students have acquired additional skills to contribute and create content that is pitched at the right level. Also, the collaborative projects have allowed us to share a wide range of our science through a variety of activities and novel approaches. Projects that exemplify this are the Home Learning Programme, Science @ Home kits, and the exhibit, the Microbe Zone.

The University of Dundee insured that our science was accurate, that the themes of the week were relevant, and the topics were right for those who were interacting with them.

Carlene Cura, Development and Fundraising Advisor, Dundee Science Centre about the Home Learning Programme and Science @ Home kits.



Evaluation Framework Outcomes and Indicators addressed:

More productive partnerships:

- > Partnership agreement exists
- > "I feel all partner goals are being worked towards and there is good communication in place"

Partnership agreements have played a crucial role in facilitating the progression of projects with DSC and ensuring their success. Before we submitted our 2017 application to the National Coordinating Centre for Public Engagement (NCCPE) for a faculty Watermark, we didn't use formal agreements with partners. However, now, we have appropriate documents, whether it's a Memorandum of Understanding or a Service Level Agreement, for each project we collaborate on. This documentation can either be at an organisational or project level, and helps clarify everyone's responsibilities, including legal and governance aspects, and keeps our projects running smoothly.

The introduction of MOUs and SLAs has positively impacted the working relationships between DSC and the University. It has streamlined the partnership working and ensured a consistent quality approach to the strategic and operational delivery, ensuring a positive experience for both organisations and ultimately the audiences we serve.

Lorraine Lemon, Head of Business Development, Dundee Science Centre

Evaluation Framework Outcomes and Indicators addressed:

Wider participation in PE activities:

- > Demographics of public engaged with
- > How did the participants hear about us?

DSC has allowed us to connect with audiences that we would not otherwise be able to reach. The science centre team welcomes tens of thousands of visitors annually to their building allowing the research outcomes of our scientists to be accessed by a wide variety of people. In addition, the community networks that DSC is part of also allow children who would not typically engage with us, or our science, to do so as well. The Science @ Home kits and STEM Club serve as prime examples of this widening access initiative. These projects specifically target local children referred to DSC by educators, family



support workers, and other individuals who identify them as potential beneficiaries of club attendance or kit distribution. These efforts are especially vital in cases where financial constraints might otherwise hinder people's participation.

Statistics

176 children (aged 5 - 11 years) STEM Club attendees from local communities

644 children received Science @ Home kits (~60% of kits went to those within the 20% most deprived zones in Scotland and ~90% of kits to children in the 40% most deprived zones)

11,350 separate users of the **Home Learning Programme** (49% came via referrals from platforms commonly used by teachers, with 88% of users based in the UK, 30 March - 28 June 2020)

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29,674 visitors to the Microbe Zone (1 April - 31 December 2021)

Summary

The evaluation framework provides us with the starting point for any partnership activity we undertake. It guides how we approach projects to ensure that they are meaningful and meet the needs of all involved. Project agreements don't need to be complicated or formal, they simply set out the shared goals and timelines.



Community Engagement

One of the key strategic outcomes defined in the School of Life Sciences Public Engagement with Research strategy was "**expanding sustainable networks between local schools, community groups and Life Sciences staff and students involved in public engagement**".

CASE STUDY Stobswell Forum

The School's Wellcome Centre for Anti-Infectives Research has cultivated a long and successful partnership with the Stobswell Forum. The Forum is a Neighbourhood Representative Structure, which is a Dundee-specific term for a community council. They represent an inner-city area of Dundee that faces a diverse set of challenges and opportunities. The area faces struggles around unfit housing and substance misuse but has an active group of community activists who have achieved a great deal in the last 5 years. Opening opportunities for local people is one of their key strategic aims, and they see engagement with us as an excellent way of achieving that.

Evaluation Framework Outcomes and Indicators addressed:

More productive partnerships

- > "I feel all partner goals are being worked towards and there is good communication in place"
- > Length of time for partnership and number of projects/activities produced

When we began working with the Forum, with our strategy fresh in our minds, we knew that we wanted to develop a long-term relationship. Starting the collaboration with a long view meant that the Forum was able to spend time working out what would really benefit their community, rather than just accepting "provision" of science at events held in the area. Having a member of our team join the Forum, and be present at all meetings, means that we are seen as a part of the community, not an external.

During the coronavirus pandemic, the University couldn't interact in person, but the Forum knew we had the skills to run Zoom meetings and we kept them online. We had the confidence to help in this way without worrying about our own desire to just talk about research. When social distancing restrictions were lifted, the community had a positive view of us and invited us to bring one of our existing art exhibitions, and then to create a 7-storey piece of science art locally.

Our collaboration continues, with new medicinal gardens in the early stages of co-development deepening the knowledge of research conducted in Dundee.



CASE STUDY Stobswell Forum

Evaluation Framework Outcomes and Indicators addressed:

Greater Enthusiasm for Science

> Number of events that individuals come to

With the cost-of-living crisis, communities have been running events to provide free food and entertainment for their people. Being embedded in Stobswell means that we are now a part of the regular roster of local 'Family Food and Fun' events. This presents a challenge, as we need to devise different activities for each session as many people come to all of them – but it is a good challenge to have. Having repeat attendees is beneficial to us, as it not only allows us to gauge their ongoing enthusiasm but also serves as compelling evidence of our deep integration within the community we are dedicated to serving. Our evaluation strategy has underscored the significance of consistently encountering repeat attendees, as it unequivocally demonstrates their unwavering enthusiasm.



I liked everything especially the science.

Family Food and Fun visitor

Evaluation Framework Outcomes and Indicators addressed:

New perspective on topic in question

No. of new collaborations/partnerships

Our sustained work with the Forum has meant that they have introduced us to other groups with local connections, those that the University did not have before. These connections have amplified the benefits of our work even further. The onward connections include:

- Open Close Dundee, who partnered with us to create a huge piece of art locally. This has raised our profile hugely, giving a very visual anchor for science locally, while also being the cornerstone of the Craigie Street regeneration project
- > 3 **Dundee City Councillors**, and the wider Council, which led to that piece of art being pictured prominently in the Council's 10-year plan document
- > **BeFriends**, a local befriending charity who have now visited our labs with a group of young people, none of whom had visited campus before
- Morgan Academy, the local high school with an incredibly diverse pupil base, has visited our buildings for engagement activities. We are also exploring having researchers present in the Stobswell Connect shop, very near the school, during lunchtimes over periods when pupils are making their subject choices
- Sustrans, the Eden Project Dundee, and the UNESCO City of Design team, who we hope will work with us on expanding our medicinal gardens locally increasing the reach of our research

Statistics

5 years participation in 'Stobfest'	
2,450 visits to the Dundee Print Collective exhibition in Arthurstone Library, Dundee	-
> 5000 likes on various art posts on Instagram	•

Summary

Having an evaluation framework that encouraged us to look beyond individual events, and take a long-term view, has paid huge dividends for our community engagement process. The University is seen as being an engaged and invested part of Stobswell, and we are excited about the possibilities that the next 5 years can bring for this strand of our work centred on social purpose.



Opportunity **Training and** to Build Trust Stronger participation Communication Skills New Insight on Research Providing training for our New Ways to staff and students not only Communicate Motivation Research improves their public engagement skills, and enthusiasm for participating, Public but also makes them better Engagement **Provides** Fresh Chance to scientists, and sometimes. Perspective Influence can provide other Policy unexpected benefits. Way to Meet New People Confidence in **Public Support Public Speaking** Space for Light Bulb

Moments

Evaluation Framework Outcomes and Indicators addressed:

Staff and students have increased PE skills

- > "I can run a PE event safely"
- > "I can reflect on what I did"
- > "I can explain my ideas in simple language"

Wider participation in PE activities

> No. of people attending training sessions

Our initial aim in setting evaluation outcomes and indicators for training was to ensure that our training provision adequately prepared staff and students to deliver public engagement in a safe, engaging, and reflective way. The indicators we defined mainly consisted of statements around these areas, with others reflecting on knowledge of the resources available. The thinking behind these indicators was that training sessions were the ideal place to flag up the breadth of resources available to staff and students and to ensure that they were aware of the support they could access from the PE team.

We quickly became aware that we were not gathering data on staff skills and awareness in an adequate way. This awareness prompted us to be more intentional about the format of our

training, inserting slides about health and safety, resources, and evaluation into all our training materials. Without the evaluation framework, we would have missed this step, and our training provision would have been incomplete and inadequate.

The session has given me more resources to think how I prepare for the next event. How I might go about explaining (less jargon, relating better to what matters to the audience)...".

Course participant

Evaluation Framework Outcomes and Indicators addressed:

Increased embedding of PE in University culture:

Inclusion of PE in operational plans and policies

Talent and Development (formerly Organisational and Professional Development) keeps track of training for university staff and research postgraduate students. We provide various training courses that are not offered through this route. This meant that when staff and students wanted to evidence their training, it was not from a single source. To centralise training records, we established a process to ensure all our offered courses are recorded in the university systems. This relationship also led to us offering our training courses to the wider university through Talent and Development.

Evaluation Framework Outcomes and Indicators addressed:

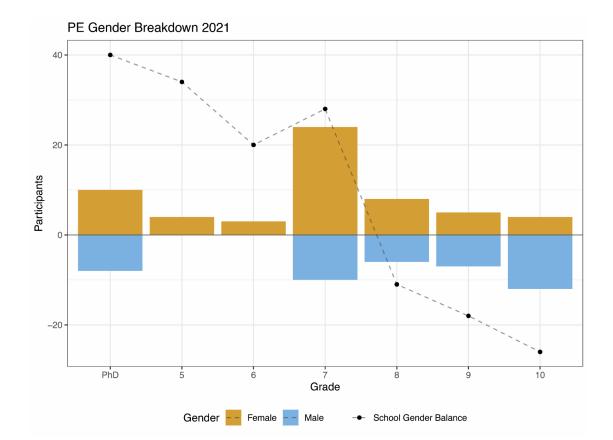
Staff and students have greater enthusiasm for PE

Number of staff participating & repeat participation

Wider participation in PE activities

> Demographics of staff members and students taking part

We always thought we were good at tracking staff participation in public engagement, but we found we only gathered very basic data in an ad hoc way. By prioritising data collection in our evaluation framework, we became methodical. We check in with different research divisions across the School of Life Sciences on a regular basis and keep more careful GDPR-compliant records of participants. Our efforts have allowed us to track repeat participation to see who was most engaged and active. To boost reporting, we introduced the 'Science for All' badge as an incentive, which significantly increased reporting rates. We now have robust evidence revealing that women contribute more to public engagement activities than men. We also note that most people who participate engage with one event per year.



Statistics

Talent and Development courses run for colleagues and research postgraduate students
 University Schools and Directorates engaged in training

450 staff and student trained as part of their induction process

Summary

While we believed we were good at training and staff support for engagement activities, the framework revealed areas needing attention. It prompted us to collect data systematically, providing a comprehensive view of participation in the School of Life Sciences. This process highlighted areas where we must enhance staff and student motivation and support, and additionally, and importantly, highlighted the number of



events we can typically expect staff and students to participate in on an annual basis and revealed we are not immune to the gender participation gap commonly observed across the field.

Science Art Collaborations

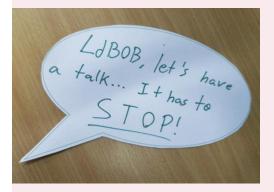
The School of Life Sciences has a long-standing relationship with Duncan of Jordanstone College of Art and Design (DJCAD) through LifeSpace Science Art Research Gallery. When LifeSpace opened in 2014, the exhibition programme was structured based primarily on DJCAD research. Evaluation of the public engagement impact LifeSpace had prior to our evaluation framework was relatively limited. The new framework allowed us to focus on both the artistic process and content, and how we measured it across all our activities.



Evaluation Framework Outcomes and Indicators addressed:

Greater enthusiasm for science:

- > "I feel enthusiastic about science"
- > "I share what I have learned"



We set up each of our science art projects with easy ways for the public to show enthusiasm. Our first project, following development of the evaluation framework, Para-site-seeing, was primarily on social media and very much encouraged comments and conversation. When the work moved to an in-person form, we gave our audience a physical place to engage with LdBob, our parasite. We received over 100 speech bubbles with messages over the exhibition. Thanks to this indicator, this was the first time we had used a scheme like this in the gallery, and we have used similar approaches ever since.

LdBob: STOP taking advantage of people's/animals' BLOOD CELLS! OK?

Para-site-seeing visitor

Having an indicator recognising the value of sharing their responses to our work has proven increasingly vital in the age of social media. Our large-scale mural project in Stobswell was not only shared by Dundee City Council in their 10-year plan document but also by many hundreds of people on social media, particularly Instagram. Another piece, for our medicinal garden, received over 19 million views on TikTok when the artist shared content. Without this indicator, we would not have been ready to watch for this kind of feedback and benefit from the strong evidence it provides.

Love it and so pleased to have been involved in making it happen. I grew up in black and white Dundee, I much prefer the technicolour version.

Councillor Lynne Short



Evaluation Framework Outcomes and Indicators addressed:

More meaningful PE activities:

- > "I feel this activity reflects the research taking place within the University"
- > Number of uses of each resource, idea, or activity

Our 2018 Para-site-seeing open call yielded several fascinating approaches from local artists, but none had tied their work closely to the brief we had prepared. With our strategy, we were able to build this research link as an important part of the scoring matrix, influencing the artists we picked and allowing an excellent project to take place.

By the time of the coronavirus pandemic, we knew how to set up artist/scientist interactions, so when we started our next LifeSpace project with the artist, Emily Fong, we knew we could continue even with the other huge challenges we were facing.

Focusing on the number of uses of each project has also had a major influence on how we work. We now consider the longer life of projects, rather than one-off shows. "Para-site-seeing" toured to Dundee Science Centre after its initial exhibition thanks to this focus. While there, it reached over 10 times as many visitors as it had in LifeSpace. Our Dundee Print Collective work has also toured, reaching an audience in Stobswell in a free-to-visit venue used by community groups.

Evaluation Framework Outcomes and Indicators addressed:

Staff and students have greater enthusiasm for PE:

Number of novel approaches

Working with artists opens a huge variety of new ways of working. Artist Emily Fong, for instance, ran a series OF workshops for senior members of staff, before staging an 'occupation' and living in our building for a week which helped to generate enthusiasm for the project.

In the workshops, the scientists were free to talk about their work in a different way and had to consider new ways of explaining its purpose. For our Dundee Print Collective project, a whole new team formed itself as they discussed scientific and artistic challenges. Knowing that novel approaches are positive meant that we were able to encourage and support what might have initially seemed unusual ways of working and reap the huge benefits of each of these projects. I really loved coming into work and finding everything that had changed from one day to the next - we're so used to the same day-to-day routine - it really made my week. Scientist

Statistics

>1,500 visitors to LifeSpace for our in-gallery exhibitions including members of the community in Stobswell, International researchers at conferences and several hundred Girl Guides!

>10,000 visitors to our touring content
 >19 million likes on a Tiktok made by Chloe Fitzpatrick, one of our artists

Summary

Having a formalised strategy and evaluation framework in place has been incredibly valuable for our science-art collaborations. It has empowered us to choose projects that really help us to develop artistic outputs in a way that will achieve our desired outcomes. It has also helped us to focus on what the positives are that we should be measuring, giving us confidence as projects developed that our process was correct.

The framework has let us do daring, innovative projects, where we could take the positives from the process while the final form was still in development. This gave these projects the time and space they needed to flourish without the pressure of being forced to do an exhibition by a specific date, the only previous indicator of success.



Engaged Schools

Local schools have been a key audience for as long as the public engagement programme in the School of Life Sciences has existed. Working with young people ensures that we are engaging and inspiring the next generation of scientists, and supporting teachers allows us to link the curriculum with real-time research happening in Dundee. Our evaluation framework has several outcomes focused on teachers and young people to ensure we are monitoring our outreach work and achieving everything we set out to do.

CASE STUDY Animating Science

Animating Science is a joint project between the School of Life Sciences and Dundee Contemporary Arts (DCA) in which primary school classes are paired with a scientist and an animator who support them in creating a short stop-motion film on a science topic of their choice. Running since 2016, we have engaged schools in Angus, Dundee, and Perthshire, with each class collaboratively creating a stop-motion science film over a 4–6-week intensive period.

Evaluation Framework Outcomes and Indicators addressed:

Greater understanding of science

- > I can explain [activity]
- > I understand the world of science

Animating Science is a unique project that encourages pupils to engage with science topics through the medium of animation. The main output is a short film, and while it was tempting to allow the film to speak for itself, this indicator encouraged us to find other ways to evaluate the pupils' understanding. We found that encouraging pupils to present their film during a 'screening premiere' event gave us another opportunity to gauge their understanding and were universally impressed with the ease with which they handled difficult scientific jargon and processes. We may have missed this valuable information if we had not set this indicator in our framework.



...the benefit of stop motion animation is that the pupils are doing it, practically, with their peers – it takes so long to make that it forces them to engage longer and deeper, giving them 'processing time'. I would never have thought about combining Art, Literacy, ICT and Science through an animation project.

Stewart Dallas, Teacher P6/7 Dunning Primary School from Pilot evaluation 2017/8.

Evaluation Framework Outcomes and Indicators addressed:

More meaningful PE activities:

> Consultation with audiences and partner groups

After two years of piloting the Animating Science project, we decided to have an in-depth consultation with our audience: namely, the teachers involved. Through a series of interviews and written evaluations, we delved into the project and the ways in which it was useful to them. Among the feedback was the observation that one of the strengths of the project, in their eyes, was that it took place over several weeks and allowed the pupils to engage repeatedly with scientific information as they planned their films. This aspect really strengthened the science learning, and the input allowed us to ensure that we always gave the project enough time for good science engagement to take place. Without prioritising consultation in our framework, we would not have gained this insight, and the project would have been weaker for it.

I would have never considered asking the University about help with science and having scientists in school. I didn't know that they came out to schools or that you could visit them. I think we do need 'expertise' and also career role models for our young learners... my sincerest thanks for the work that you have done with our P7s. I have never seen them so motivated and engaged in a project; some of the highest quality Inter -Disciplinary Learning that I have ever seen

Laura Ferguson, Acting PT Woodlands Primary School from Pilot Evaluation 2017/18

Evaluation Framework Outcomes and Indicators addressed:

More productive partnerships

> Instances of sharing outcomes externally

While we were producing many great films and receiving positive feedback from the teachers and pupils involved, we weren't doing a great deal with the learning we were generating. Thanks to this indicator we pushed ourselves to find ways to share the lessons learned with external audiences, bringing presentations and posters to several conferences including the Scottish Learning Festival, and the NCCPE Engage conference. Currently, the School of Life Sciences is working on an interactive online guide to share the project's resources more widely. Additionally, our partnership has led to a Talent and



Development course, 'Animate Your Research,' delivered by both DCA and School of Life Science staff, and the integration of science animation into undergraduate education and assessment. These outcomes create a sustainable legacy of outputs from the project and will allow more audiences to benefit from the learning we have generated.

CASE STUDY Animating Science

Statistics

	spin-off animation projects
	films created
0	

200 students engaged across 6 different schools

Summary

It is especially important when undertaking a new and unique project to ensure you use your evaluation framework to guide its development. Without familiar touch points, you can easily miss the valuable learning coming out of the project,



so grounding yourself with a framework that ensures good practice such as built-in opportunities for evaluation and feedback is essential. Our evaluation framework allowed us to check in with the progress of the project at several key stages and ensure we were both capturing and maximising the positive outcomes, even ones we had not foreseen at the start.

Embedding public engagement into University culture

When we mapped our evaluation framework back to our School of Life Sciences Public Engagement Strategy, we noted that we had not included ways to measure how we embed public engagement into university culture. We made an amendment (ca. 2018) to our evaluation framework to address this by focussing on two areas:

- > Documentation such as reports, operational plans and policies, and grant applications
- > Reward and recognition of public engagement through celebration of public engagement, internal and external awards nominations, and within School policies

Evaluation Framework Outcomes and Indicators addressed:

Increased embedding of PE in University culture

 Number of staff and students receiving nominations and wins for internal and external prizes and awards

Alongside our School and University awards for public engagement, we proactively and successfully nominated staff and students from the School and University for external awards from organisations including the Microbiology Society, the Royal Society of Edinburgh, and the Royal Society of Biology. More broadly, we introduced "Science for All" badges in 2019 to be given annually to anyone who has contributed to public engagement in the University in relation to science.

I have enjoyed the challenge of off-the-wall questions and new perspectives from people of all ages

Science for All badge Self-Nomination



Evaluation Framework Outcomes and Indicators addressed:

Increased embedding of PE in University culture

> Inclusion of PE in operational plans and policies

To ensure the success and sustainability of public engagement in the School of Life Sciences, we integrated thinking and awareness into various operational aspects. We reviewed and enhanced public engagement incorporation across our processes, especially focusing on representation within the school's reporting structure. We now have public engagement representation at divisional meetings, a report at every School Research Committee meeting, news in the monthly 'Dean's Message,' and regular updates to the Dean during catch-up meetings with the Public Engagement and Communication Officer. Some of our operational changes also influenced university-wide processes, such as the creation of a public engagement section in the risk assessment database in 2017 and the evolution of our initial pilot information-sharing meetings into the University-wide Public Engagement Network.

Evaluation Framework Outcomes and Indicators addressed:

Increased embedding of PE in University culture

> Number of requests for PE expertise in preparing grant applications

We used to receive sporadic requests for grant application support, but we aimed to establish a consistent approach. We developed guidance for grant applicants, aiding with funding requests, including lay summaries. Public engagement was also incorporated into the School of Life Sciences grant resource planning alongside research facilities. More recently, procedural changes involve our finance team contacting us when grant applications include public engagement funding, creating additional checkpoints for applicants to seek support. The evaluation indicator also ensured we recorded requests and followed up with applicants to ensure they received adequate support if their applications were successful.

The SLS PE team provided me with invaluable help and feedback on both writing lay summaries and to construct a section of my applications dedicated to increasing opportunities for research experience for school age children and undergraduate summer students. Being able to work with them to co-create those aspects of my programs greatly elevated the applications for long term research funding for my group which was ultimately successful and gives my group a foundation for building our impact beyond the lab.

Will Farnaby

Evaluation Framework Outcomes and Indicators addressed:

Outcomes for staff and students

- > Number of (useful) resources
- > More meaningful PE activities
- > Number of uses of each resource, idea, or activity

More productive partnerships

> instances of sharing outcomes externally

We started documenting participation and outcomes in public engagement events and research outputs in Discovery, the University of Dundee's research repository, for institutional and broader-level recording. This means that we can now access metrics related to resource access. his documentation now also feeds into reports to facilitate grant holder submissions to ResearchFish, a widely used online reporting system by our funders.

Statistics

8 national awards for University staff and students recognising excellence in public engagement
~70 University staff and student members of the Public Engagement Network
209 records in the institutional repository which brings together information about researchers, research centres, projects, outputs, professional activities and events
214 risk assessments in School of Life Sciences Public Engagement Risk Assessment Database
400 "Science for All" badges presented to our staff, students, and partners

Summary

We've experienced an increase in researcher requests for support, notably in 2022, signalling our integration into the university's culture. Our public engagement strategy and evaluation framework served as the foundation for the University's Public Engagement Strategy (launched in 2019) and the University Public Engagement Evaluation Framework. Our prior involvement in the NCCPE Watermark process contributed to the University earning the Institutional Gold Award in 2020. Additionally, we've developed and led public engagement teaching at both undergraduate and postgraduate levels. The formation of the Public Engagement Network has further strengthened our efforts, fostering collaboration and connections with experts across the university and the local community which has benefited a range of projects. Our freely accessible documentation and resources have expanded our influence beyond traditional channels and allowed us to have a global reach.



Closing statement

The initial evaluation framework ensured that evaluation was an integral part of our projects, aligning our work with our overarching public engagement strategy right from the outset. This framework allowed us to recognise and enhance our strengths while actively addressing areas for improvement. It necessitated adjustments to our approach as we strived to meet our established outcomes and indicators, all while ensuring our public engagement strategy aims were being met.

Along the way, we captured unexpected insights from our partners and audiences, deepened our integration within the university, and shared our knowledge with others. Some outcomes and indicators were revised or removed when deemed no longer relevant, while new ones were added as our practices evolved.

Now in 2023, we have an updated evaluation framework aligned with our updated public engagement and scholarship strategy; both of which have been shaped by our evaluation work of the past 5 years; and a good sense of how it can help drive best practice. **We look forward to the next 5 years of evaluation work and being able to go about our practice intentionally and thoughtfully.**

VISITOR

and Amy

Organiser

nunications Officer

Thank you!

If you want to learn more about the breadth of exciting public engagement work undertaken by our staff and students, please look at our annual reports that detail the diversity of approaches and projects we have been part of.

None of our work would be possible without all the staff and students who have participated in public engagement events and activities, our partners, funders, and colleagues in other areas of the University.

Public engagement requires many different groups of people for them to take place and for them to be a success. Our colleagues come from campus services, health and safe**ty**, finance, contracts, research and innovation services, cleaning services, administration support, and many more. It is important to recognise that public engagement by scientists is the result of teamwork.

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'Science For All Takes Many Hands'

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If you would like to discuss our public engagement work please do get in touch.

Email: SLS-PublicEngagement@dundee.ac.uk

#whyengage



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