

Building School-University Partnerships Guide Book

A planning document for university and school staff





UNIVERSITY OF
Southampton

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Contents	Page number
Introduction	3
School-university partnership planning template	5
1. General information	6
1.1 Date	6
1.2 School recruitment	8
1.3 Researcher recruitment	9
1.4 Making contact	11
2. Intended outcome	14
3. What are we offering?	15
4. National curriculum links	16
5. Training	17
5.1 Training for researchers	17
5.2 Training for teachers	18
6. Safeguarding	19
7. Activities and structure	23
7.1 Depth of engagement	23
7.2 Activity type and timing	24
7.3 Planning your activity	25
7.4 Resources	29
8. Publicity	30
9. Costs and funding	31
10. Evaluation	32
11. Reflection	34
12. REF case studies: How to write successful impact studies	35
 Spotlights	
Collaborative planning — <i>Murder in the Medical School</i>	12
Building sustainable engagement programmes — <i>Discover Oceanography</i>	21
Types of interaction — ‘Meet the Researcher’	27

Contents (continued)	Page number
Top tips	36
Appendices	
1. The national curriculum and example curriculum links: Science, key stages 3 and 4	37
2. School-university calendar coordination tool	38
3. National ambassador schemes	39
4. Risk assessments	40
5. Example pre- and post-event pupil questionnaires	45
Glossary of terms	49
Useful links and contacts	52
Acknowledgements	54

Introduction

Public engagement with research

The last ten years have seen a series of attempts by policy makers to encourage universities to re-think and re-focus how they engage with wider society. Public engagement sits at the heart of these policy developments. Although public engagement shares many common themes and, indeed, activities with its sister activities Outreach and Widening Participation (WP), it has very different motivating factors. Outreach is primarily driven by recruitment of young people into higher education, with the WP agenda aiming to recruit and support pupils to whom there remain social or economic barriers to doing so.

Public engagement is, by definition, a two-way process driven by a social responsibility, involving interaction and listening, with the goal of generating mutual benefit.

In the 2010 Concordat developed by national research funding council RCUK, expectations were outlined for UK research organisations to have a strategic commitment to public engagement and outreach. It was also recognised that researchers should be recognised and valued for their involvement with these activities and enabled to participate through appropriate training, support and opportunities.

School-University Partnerships (SUPs)

Working within a school-university partnership is one approach to public engagement and can deliver many mutual benefits to all institutions and individuals involved. These include:

- Increasing pupil performance
- Sharing of professional knowledge to improve pedagogy of activities and workshops
- Understanding of where research fits in with the curriculum and the modern world
- Access to the researchers of the future
- Collection of data for impact or to prove efficacy of a particular approach
- Training for school and university staff

The nature of such a partnership also means that these benefits can continue for successive groups of pupils, teachers and researchers.

The successful formation of a school-university partnership poses a unique set of challenges and in 2013 the RCUK-funded School-University Partnership Initiative (SUPI) project began to attempt to address these. Nationally, 12 universities or HEIs were funded to work with local schools to investigate how successful partnerships could be created and maintained, and each has found different ways to address the initial call to '*support researchers' direct engagement with pupils, bring contemporary and inspirational research contexts into formal and informal learning and enhance and enrich the curriculum*'.

Talk to US!

Talk to US! is the University of Southampton (UoS) SUPI project receiving funding from RCUK between January 2012 and December 2016. This Guide Book was developed as part of the *Talk to US!* Project and is based on the findings in the evaluation of its sub-projects.

Talk to US!, hosted by the Southampton Education School, focused on 6 STEM-based disciplines some of which had existing engagement programs that they wanted to enhance and some of which started from scratch, forming 6 sub-projects. The lessons learned are also very much applicable to non-STEM disciplines.

The 6 sub-projects were: *Biological Sciences, Chemistry, Discover Oceanography* at the UoS Waterfront Campus, *Dragonfly Day* engineering workshops for female pupils,

'Now I know anyone can be a researcher no matter what age. If they just want to do something and they study hard, they're a researcher. So I could be a researcher if I put my mind to it.'

Pupil from local school

Introduction

Talk to US! (continued)

LifeLab at Southampton General Hospital (SGH) and *Murder in the Medical School* run by the Biomedical Imaging Unit (BIU).

Researchers and university staff were paired up with teachers from local schools with a view to producing workshops and supporting curriculum-based material that fitted into a particular model. This model was based loosely around the *LifeLab* programme and featured: introductory lessons around relevant subject material to be taught by teachers in school; a university visit day where pupils and teachers were able to use equipment or have experiences not available to them at school; following up with a project in school where pupils would produce academic style posters to be displayed at a celebration event at the end of the year.



School pupils examine the evidence during Murder in the Medical School, a workshop run by the Biomedical Imaging Unit.

In reality it very quickly emerged that this rigid approach did not fit every school or academic department involved for a variety of complex reasons and that flexibility and variety were more important. During the initial three years of the project it became clear that there was a very specific set of issues to overcome and knowledge needed to engage fully with this type of work. This document is an attempt to address some of those.

How to use this document

This Guide Book is intended to both enable university staff to initiate partnerships working with local schools and to aid school staff in making contact with a university they wish to engage with. The partnership is based around the creation of an initial activity. Ideally this activity will be planned in response to discussions between school and university staff to identify any mutual needs that can be met by partnership working. The planning template at the front of the document ([page 5](#)) highlights all the necessary steps.

Each section of the template has a corresponding section of advice and information in the Guide Book. Those with experience of partnership working or currently working within a partnership will be able to fill out the template by using these sections in a relatively light touch way. Those who are new to partnership working may wish to read each section of advice in full before continuing.

We recommend giving a copy of the Guide Book to your school/university contact. The majority of sections are relevant to all, particularly when planning collaboratively. Some advice, however, is more relevant to those coming from either a school or a university perspective and these sections are highlighted in **green boxes for universities** and **blue boxes for schools**.

Other opportunities

There is already a lot of public engagement and outreach work going on at the University of Southampton and not only in STEM disciplines! If you wish to offer your expertise to an existing event or to find out what is happening that might be of interest to you, see the [Useful links and contacts](#) section.

'They couldn't get over the fact that someone put this project on for them. They loved the fact that someone outside of our school was going to give them a day out, and link it to science and it was all different stuff that they'd never seen before. The fact that half the girls were scared of mud and ended up handling mud. It has more of an impact on those pupils because they don't go out very often.'

Teacher on Discover Oceanography

**School-University Partnership Planning Template for
[Event/Activity Name]**

1.1 Date	1.2 Schools involved	1.3 Researchers involved	1.4 Main contacts		
2. Intended outcomes					
3. What are we offering?					
4. National curriculum links					
5.1 Training for researchers			5.2 Training for teachers		
6. Safeguarding—general notes, training required, training attended?, DBS checks?					
7.1 Depth of engagement	7.2 Activity/activities type(s) and length(s)		7.3 Planning notes—timings, venue (e.g. room no.), risk assessment complete?		
7.4 Resources—requirements and sources					
8. Publicity—chosen methods, who will carry out, complete?					
9. Costs and sources of funding (see breakdown on page 32)					
10. Evaluation—objectives, methods			11. Reflection—aims met?, learning points		

1. GENERAL INFORMATION

1.1 Date

The timing of activities within the academic year is vital. Busy or quiet periods in the university calendar do not necessarily coincide with those in schools. Holiday periods are also different (for details see [Glossary](#)). If you are already working within a partnership it will be much easier to agree a date that suits both parties. The planning tool on the next page may be helpful in identifying possible mutually convenient sections of the calendar.

If a target school has been identified check availability with them before planning for a particular date. If you want to work with more than one school it may be necessary to set a date and then publicise this to the schools you want to work with. With either approach it is worth considering the following.

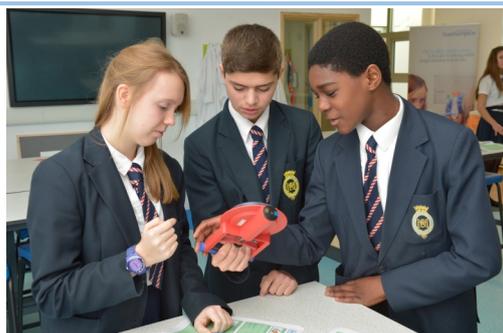
Schools will generally need at least 6-10 weeks notice to complete the relevant paperwork, gain management and parental approval, collect permission slips and rearrange the timetable. Some schools agree their calendar a year in advance and teachers may find it difficult to get permission to take pupils out for an event that is not already in the calendar. However, they may have more flexibility in arranging for activities to be held at the school. See [section 7](#) for more information about the advantages and disadvantages of various types of activity and venue.

Different times of year are more appropriate depending on the year group you are working with. The impact this has on how willing schools are to engage at particular times of year will vary from school to school. However, exam season (April – June) is generally a busy time for schools and it may be difficult to work with any year group during this time. For further details of key stages (KS) and age groups see the [Glossary](#).

Year 7	Settling in until Christmas.
Year 9	Starting GCSEs in some schools. In others there may be a gap between KS3 and KS4 which schools may welcome help filling.
Year 10	Studying for GCSEs. More time pressure from curriculum.
Year 11	Studying for GCSEs. Exams in the spring/ summer. Revision from Christmas onwards.

Unfortunately many universities do not have specifically designated facilities for working with schools. Pressure on available laboratory space or other facilities will be a factor as will the varying workloads of the PhD students and other academics involved.

If you are unable to be flexible on dates or have a specific time period in mind make this clear from the start.



School pupils measure their grip strength during a day at Life-Lab.

1. GENERAL INFORMATION

1.1 Date (continued)

The following tool, based on one designed by the University of East Anglia SUPI project, may be helpful in trying to identify mutually suitable blocks of time in the university or school timetable.

Below is an example of some of the pressure points in school and university timetables based on the experience of the *Talk to US!* project.

Month	Sept				Oct				Nov				Dec			
School	Red	Red	Yellow	Yellow	Black	Yellow	Green	Green	Black							
University	Green	Green	Yellow	Red	Red	Yellow	Green	Green	Black							
Month	Jan				Feb				March				April			
School	Black	Red	Red	Yellow	Yellow	Yellow	Black	Yellow	Yellow	Green	Green	Black	Black	Red	Red	Red
University	Black	Red	Red	Yellow	Black	Black	Green	Green	Green							
Month	May				June				July				Aug			
School	Yellow	Yellow	Red	Black	Red	Red	Red	Green	Green	Green	Green	Black	Black	Black	Black	Black
University	Green	Green	Red	Red	Red	Green	Green	Green	Green	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow

High pressure points are times when there can be little interaction between schools and universities, usually due to the lead-up and start to a new term, revision or assessment.

Medium pressure points are times when there can be some interaction but this will depend on teaching loads and administrative pressures. These periods are possibly more suited to discussions around the practicalities and content of activities rather than the activities themselves.

Low pressure points are good opportunities for interaction when teaching at the university slows or stops. These times are often the most appropriate for school pupils to visit the university due to greater availability of facilities.

Institution Holidays can be good times for strategic meetings depending on the availability of specific individuals. Understandably, however, some teachers and university staff will wish to protect this time and will therefore not be available.

Appendix 2 includes a blank version of this table for you to fill out with your partner school or academic department to identify the low pressure points for your partnership.

1. GENERAL INFORMATION

1.2 School recruitment

You may wish to consider:

- Which schools are appropriate or will most benefit from a particular activity will vary depending on the **purpose** (see **section 2**) of your activity
- Distance — will there be any travel issues
- Age range and key stage (see **section 4**, **Appendix 1** and **Glossary**)
- Ability, for example, Gifted and Talented (see **Glossary**)
- Do you have a Widening Participation remit?
- Are you working within a particular subject specialism?
- Do you have a target group of pupils you want to work with? For example: pupil premium, boys, girls, SEN — see **Glossary**)

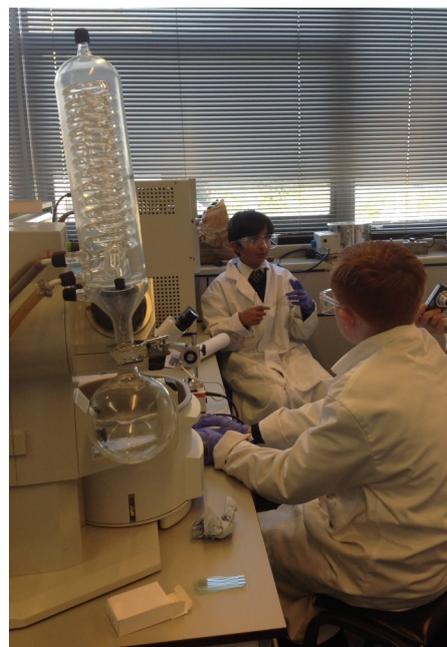
*Remember: (as mentioned in **section 1.1**):*

- Timing — there are times in the academic year that it is almost impossible to get pupils and teachers out of school, for example exam season. Equally there are times that work really well but these may differ from year to year.
- The school calendar — schools will generally need at least 6-10 weeks notice to bring pupils out of school to visit the university; many schools set their calendar a year in advance so it may be necessary to plan the timing of regular activities well in advance.



'I was surprised (how well I did) as I'm not good at Science.'

Pupil on Chemistry



School pupils complete a number of activities led by Chemistry PhD students based on their areas of study.

1. GENERAL INFORMATION

1.3 Researcher recruitment

Things to consider:

How will you contact the researchers?

Do you or your colleagues have any previous contacts? Can you ask supervisors or PIs to contact their students (postgraduate or undergraduate) on your behalf? Are there other departments or groups you can ask to put you in touch with researchers who may be interested? For example, Outreach, Student Ambassadors, those offering engagement training, graduate schools.

Is a recruitment event appropriate? If so what will this look like and who are you targeting?

How many researchers/ academics are needed?	
What backgrounds or specialisms will they need?	
What academic level should they be?	
Do you have clearance or agreement from supervisors or other higher management? Is this necessary?	
How will you contact researchers?	

Below are some of the questions you may be asked directly by the researchers you are trying to recruit. It would be useful to consider some of them in general when deciding which researchers to approach. If you have previously planned similar activities you will probably already have some colleagues in mind.

Why me?	Relevant expertise, experience or enthusiasm
What will I get out of it?	<ul style="list-style-type: none"> - New skills, communication etc. - Promotion prospects, CPD, CV - Public awareness of your field - Fun, job satisfaction - Impact - Department targets, required by some programmes - Pay (?)
What will it involve?	<ul style="list-style-type: none"> - Time - Input (see below) - Travel - Assessment - Funding (?)
What training will I need? (See section 5.)	<ul style="list-style-type: none"> - Activity specific (briefing) - Generic (e.g. 'Meet the Scientist') - DBS - Mentoring from experienced colleagues - National Curriculum (see section 4)
What input will I have?	<ul style="list-style-type: none"> - Planning (is activity bespoke or pre-planned?) - Delivery (leading sessions or tours) - General supervision

1. GENERAL INFORMATION

1.3 Researcher recruitment (continued)

Logistically it will probably be easier to leave the details of individual researcher recruitment to your main contact at the university. However, you may wish to be involved in deciding some of the details outlined in the tables on the previous page, such as which 'academic level' of researcher (see [Glossary](#)) you would like to work with or what specialism they should ideally have.

'Everyone should have a chance and it is valid to not want to go to university. Why should pupils be denied inspiring and interesting experiences that might encourage them to work harder at school just because they're not academic enough to come to university?'

Researcher from UoS Waterfront Campus at the NOC

School pupils examine the evidence during Murder in the Medical School, a workshop run by the Biomedical Imaging Unit.



1. GENERAL INFORMATION

1.4 Making contact

It can be difficult to get a response from schools, especially if you are attempting to contact them for the first time. Below are a few tips.

- The personal approach – using a named contact always works better than using a general title like ‘Head of Science’.
- Existing contacts – do you or any of your colleagues already know somebody at that school that could either be contacted directly or asked who would be the most appropriate contact? You could also try colleagues in your Faculty Outreach Team or the Education School if your immediate team doesn’t have a contact. If you do get contact information from a colleague, mention their name in your initial approach to make contact.
- Visiting in person or picking up the phone can be much more effective than an email.
- Find out where teachers might be, for example other events around the university, and go and meet them face to face.
- Different approaches work best with different schools. Persevere!

Making contact without the correct person within a large institution like a university can be difficult. Below are a few tips. For some contacts specific to the University of Southampton, see the [Useful links and contacts](#) section.

- Is there a schools section on the institution website?
- Is there a central Outreach or Public Engagement team at the university? If so they will be able to discuss what they offer and help to put you in contact with the right person.
- Picking up the phone can often be more effective than email but make sure you have a direct number rather than the general switchboard.
- Do any colleagues have any contacts within the university that could point you in the right direction?
- If you know which subject area you are interested in working with, try contacting the relevant department directly.



‘Ordinary people train to become doctors, nurses or researchers. Anyone can use a microscope.’

‘I thought researchers only used computers and books. However, I have found out that they do a lot of practical work.’

Pupils from local schools

School pupils examine their electrophoresis gels at LifeLab.

Spotlight: Collaborative Planning — *Murder in the Medical School*



The Professor's body was discovered here in the main corridor of the Biomedical Imaging Unit.

One of the key features of a successful partnership is collaborative planning. In order to attract schools and researchers and ensure that all concerned have a meaningful learning experience it is crucial that the needs of all those involved are met as much as possible. This may seem like an impossible task but it can be achieved by academics and teachers working together to plan the content to be offered.

One example of particularly successful collaborative planning is *Murder in the Medical School*, a forensics based workshop run by the Biomedical Imaging Unit (BIU) at Southampton General Hospital (SGH). Teachers from two schools were involved in the initial networking meeting where teachers and researchers met for the first time to discuss the structure and content of what could be offered. The project lead from the BIU had many different ideas of how the unit could be utilised by schools and what in school support could be offered. The

teachers from both schools suggested that they would like to develop lessons that fitted in with lessons they already taught, based around a forensics activity where pupils used the equipment at the BIU to solve a murder. It was agreed that the sub-project lead would be responsible for planning the workshop with input from the teachers.

Although arranging face to face meetings was difficult, all parties kept in email contact and the project lead kept the teachers involved in all the decisions he made, frequently asking them for their opinions and advice. The entire BIU team were also involved in the planning and resourcing of *Murder in the Medical School* and it was clear from what they produced that they had enjoyed the process.

Once the workshop had been delivered, the project lead met with his colleagues to discuss what they felt worked and what hadn't. He also met the teachers to discuss any changes that were needed. Focus groups were carried out with the pupils who had attended and the information was also used to inform any changes. After the workshop had been delivered several times to different schools the project lead decided to have a unit open evening to publicise the workshop to more schools.

'I would definitely recommend it to other people because we learnt loads of stuff. It's not one of those trips where you just go and do lots of writing; it's one that you can get involved with so it was really good.'

Pupil from local school

Spotlight: Collaborative Planning — *Murder in the Medical School* (continued)

Approximately 60 invitations were sent to local schools and colleges and 8 teachers and school science technicians attended the evening. Initially the project lead was disappointed by the relatively low turnout but the evening was a real success with the small numbers allowing for some really in-depth conversations between teachers and BIU staff. Several staff commented that they had gained or refreshed knowledge that they would now use in their teaching. Another unexpected need occurred which led to the project lead visiting various schools during inset days or department meetings to share ideas with entire science departments about how they could get the best from their usually small and aging stock of light microscopes.

'Everyone has different skills to draw on. You can help plan the subject material for an engagement activity without having to deliver the session yourself if you don't feel comfortable doing it.'

Chemistry researcher

The project lead also felt that further input from local schools would enhance what had already been produced and so the *Talk to US!* project manager put him in touch with a teacher from a third school. This teacher was completely new to *Murder in the Medical School* and was really enthusiastic about the material they were shown. During their initial meeting the new teacher and the project lead agreed that the teacher would plan a short scheme of work around the workshop and adapt some of the sessions from the workshop itself into introductory lessons at school so that pupils would have more time to spend on the practical work during their day at the unit. The teacher also re-worked the accompanying workbook to make it more 'pupil-friendly', just one way in which the project benefited from her knowledge, experience and expertise that would otherwise have been unavailable had the activities been developed without teacher input.

This process is ongoing but it shows that workshops and relationships can evolve over time. This ongoing process has produced a well-resourced and engaging workshop that meets the needs of pupils and teachers as well as providing valuable experiences for university staff. Due to collaborative working, all the staff at BIU now know how the workshop is run, making it far more sustainable and likely to persist even if key members of staff leave. Researchers and staff have learnt how to communicate their work to a new audience and there are now also several different points of contact between local schools and the BIU.

Pupils use high power light microscopes to view the ballistics evidence.



2. INTENDED OUTCOME

This may seem obvious but being clear about what you hope to achieve should inform all the decisions you make in relation to who you work with and what you plan. For example, your aims may be to:

- Foster a general understanding of what universities do and why this is important
- Enrich a particular area of the curriculum
- Increase attainment of underachieving pupils
- Offer unique experiences that pupils will not get at school
- Share your enthusiasm for your subject
- Inspire pupils in a particular group (e.g. girls, those from low income families) in a particular subject

Within universities 'recruitment' into Higher Education is often cited as the intended outcome for engagement but it is equally valid to plan engagement activities with a different purpose. Even if the intended outcome is recruitment this in itself is not sufficient to plan for successful partnerships or activities that will achieve this. It is important to think about which of the above you hope to achieve and how you will do so. Please note this is not an exhaustive list.

The LifeLab Showcase—examples of work from the new Early LifeLab programme planned in collaboration with local primary teachers.



The LifeLab Showcase—school pupils showcase the work they have carried out on the programme to their families and teachers, teachers and pupils from other schools and university staff and researchers.

3. WHAT ARE WE OFFERING?

Schools are often inundated with offers of activities from a variety of sources. The time pressures of the curriculum and the school calendar can mean that it is hard for teachers to secure any time off timetable for their pupils. When they do, why should they choose to work with you? It is worth thinking about:

Does your activity follow and/or extend the curriculum? (See section 4.)	
Are there any gaps or areas in the curriculum that it is difficult for schools to cover due to lack of facilities or expertise? (See section 4.)	
Is your activity something that can't be accomplished without you? If a school is coming to the university is the activity something they can't do at school?	
Are you making full use of your unique expertise or facilities at your disposal?	
Are there any additional benefits such as certification for the pupils or publicity for the school?	
Can you offer the teacher training or support materials to increase their knowledge or inform their teaching?	
Can you cover the costs incurred by the schools taking part (e.g. travel and teaching cover)?	
Do you have procedures in place to minimise the time commitment needed from school staff? For example, standard letters for parents, someone to book coaches for them.	

It is very easy to focus on what the outcome is for pupils or how working with the university can benefit a school. However, schools also have a lot of expertise to offer the university. For example could you...

- Offer advice on the curriculum in a wider capacity than the activity you are working on?
- Lead training sessions for researchers on how to engage with your pupils?
- Offer work experience or lesson observation opportunities for students considering a career in teaching?
- Allow researchers access to your classrooms and pupils to carry out research from a variety of different departments, not just in conjunction with one particular activity or subject?
- Work with researchers to plan research or apply for funding?



Pupils handle marine organisms from Southampton Water in the aquarium at the UoS Waterfront Campus at the NOC.

4. NATIONAL CURRICULUM LINKS

There is a very strict curriculum of study that applies to all state primary and secondary schools in England, Wales and Northern Ireland. In Scotland, however, there is no National Curriculum (NC) that has to be adhered to but a set of guidelines known as the 'Curriculum of Excellence'. See [Appendix 1](#) for more information about each of the curricula and guidelines and examples of subjects covered.

For your school-university partnership, have you identified...

The school subject/university specialisation you are working within?	
The direct section of the school curriculum that the subject matter of your activity relates to?	
Whether you can cover something that it is particularly difficult to cover in schools? (See Appendix 1 .)	
The key stage (see Glossary) of the pupils who will be involved?	
Which examination board the pupils are working on (this will effect pupils working towards GCSEs, AS levels and A levels)?	
The ability of the pupils you will be working with?	
The previous learning of the pupils in the relevant subject area?	
The assessment criteria – how do you know pupils have learnt what you intended?	

It is not always the case but many schools will be more likely to take part if the activities undertaken are curriculum related. This is especially true if you are hoping to work together on a longer term basis than just a one off workshop or visit, or if you would like to work with Key Stage 4 and 5 pupils.

If you do have a definite area of the curriculum you would like to cover you may need to be prepared to offer advice as the academic disciplines studied at universities do not always fit exactly with the way the curriculum subjects are structured within schools. However, the rewards for this can be huge and can be used with your classes year on year.



'I wish I had a me when I was younger at school, to show me all these good things and give me all these experiences.'

Chemistry researcher

Pupils investigate the anti-bacterial properties of different substances.

5. TRAINING

5.1 Training for researchers

Ideally, all researchers working with the schools involved in your engagement activity will have received some training, even if this is a brief session focusing specifically on the individual session they will be involved in. Some points to consider:

1. What training is needed?

- Communication – presenting, questioning etc.
- Knowing your audience, assessing knowledge (NC)
- Health and safety
- Evaluating
- Session specifically tailored to your particular activity
- Relevant internal procedures and software such as risk assessments, room bookings, EVOLVE, Agresso, invoicing etc.

2. Who needs the training?

The training that is offered will depend on the experience and level of those involved. For example, an undergraduate will have different training needs to a senior academic.

3. Is existing training available?

It is worth checking with the following to see if they offer the training you require:

- The HEI's professional development team
- Public engagement networks
- Doctoral college or graduate networks
- National bodies such as NCCPE
- Other societies or funders such as RCUK
- National ambassador schemes (see [Appendix 3](#))

For contacts specific to the University of Southampton, see the [Useful links and contacts](#) section.

4. Who will deliver training?

For example, teachers are the most experienced in the curriculum and therefore best placed to deliver national curriculum training; whereas a researcher's Faculty or School may offer specific equipment training; or a third party may offer, for example, Equality and Diversity or Health and Safety training (such as that offered by the MSLC).

5. Is there funding available for training?

The suggested contacts listed under question 3 are a good place to start when looking for potential funding sources. It is also worth asking the researchers head of group or, for postgraduate students, their faculty Grad School or the Doctoral College as their may already be funding set aside for them for training and development. Furthermore, subject-specific societies and trusts such as the Royal Society of Chemistry or the Wellcome Trust often have funding calls for public engagement and outreach which can include research development and training. See also [section 9](#).

6. Can the academics involved gain accreditation for the training either internally or from external bodies?

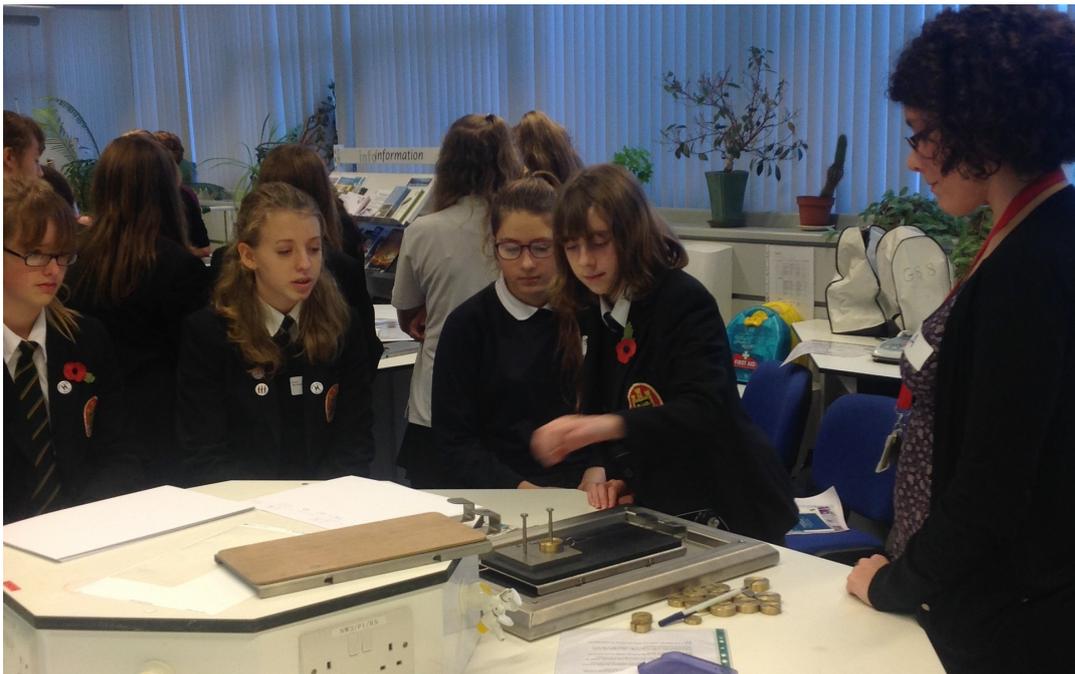
5. TRAINING

5.2 Training for teachers

Can you provide the teachers involved in the partnership with training opportunities? These may include:

- Subject knowledge enhancement related to the workshops you are working on
- Networking events to meet likeminded teachers or researchers with something to offer
- Details of any lessons and resources involved in teaching pupils to enable teachers to follow up their involvement in the classroom
- Research in the classroom e.g. techniques, procedures and development of ideas
- Information on training they may be able to access from other areas of the University (for example the Mathematics and Science Learning Centre)

It may be that you have identified a training need or a particular area for development that you would like your partnership with the university to address. If this is the case discuss it with the university staff that you are working with to give them the best opportunity to help you or your colleagues achieve this. Equally there may be an area in which you feel able to offer training to researchers.



'If you want your field to continue you need to find the researchers of the future. You also need everyone else to understand why your work is important.'

Engineering researcher

Year 9 pupils investigate friction during Dragonfly Day—a day of engineering workshops run by female engineering researchers for female pupils.

6. SAFEGUARDING

One particular training need that may be identified is safeguarding.

The University Safeguarding Children and Vulnerable Adults Code of Practice states that:

“It is important to plan the work of an organisation that has contact with children, young people and vulnerable adults in such a way as to minimise situations in which abuse may occur. Therefore at the University of Southampton all staff that have regular one-to-one contact with children, young people or vulnerable adults should adhere to the following code of conduct to ensure safety both for themselves and the young person.”

The University of Southampton ‘code of conduct’ referred to can be viewed in full at:

www.southampton.ac.uk/hr/services/safeguarding-children/index.page#pol01

Below is a user friendly guide to Safeguarding put together by the *LifeLab* team.

If a child or young person discloses to you that they have or are being abused by someone or you suspect a child or young person is being abused or neglected:

- Record and date any facts which support your suspicions.
- Inform the Designated Senior Person (DSP) for child protection. If this occurs during interaction with school pupils then a member of school staff will need to be informed immediately.
- Allow the child or young person to speak without interruption, accepting what is said, but do not ask probing or leading questions. **Do not attempt to investigate yourself.**
- Alleviate feelings of guilt and isolation, without passing judgement.
- Advise the child or young person that you will try to offer support but must pass on the information.
- Continue to record any dates or facts as you know them.

If you receive an allegation about a member of staff or yourself:

- Inform your Designated Senior Person (DSP) for child protection immediately.
- Record and date the facts.
- Try to ensure no one is placed in a position which could cause further compromise.

Please note: It will not be necessary for every member of staff involved to obtain a DBS check as long as they will not be left alone with any pupils or vulnerable adults. However, some schools require any adult entering the school to have one and if working with children will be a regular part of your work you may want to arrange one (see the [Glossary](#) entry for DBS and [page 29](#) for more information).

Working with young people

at



Child protection and safeguarding

6. SAFEGUARDING

Some more safeguarding tips...

You should:

- ✓ **Treat everyone with respect.**
- ✓ Provide an example for everyone to follow.
- ✓ Respect a young person's right to privacy.
- ✓ Recognise and allow for the needs of young people with learning difficulties and disabilities.
- ✓ Encourage young people and adults to point out attitudes or behaviour that they do not find acceptable.
- ✓ Avoid inappropriate physical contact.
- ✓ Remember that someone else may misinterpret your actions, no matter how well intended.
- ✓ Recognise that special caution is required in sensitive moments of counselling when dealing with bullying, bereavement or loss.
- ✓ Respect the cultural, religious and ethnic backgrounds of those that you work with.
- ✓ Remind anyone who comes to you that you will have to pass on any information they share with you.



You should not:

- ✗ Permit abusive peer behaviour (e.g. bullying, racial harassment rude or abusive language).
- ✗ Have any inappropriate physical, verbal or online contact with young people.
- ✗ Jump to conclusions about others without checking facts.
- ✗ Show favouritism to any individual.
- ✗ Be drawn into inappropriate attention seeking behaviour such as crushes or tantrums.
- ✗ Make suggestive remarks or gestures.
- ✗ Rely on your good name to protect you.
- ✗ Believe 'it could never happen to me'.
- ✗ Interview vulnerable or young people on your own.
- ✗ Promise to keep any information they share to yourself.



Spotlight: Building sustainable engagement programmes—*Discover Oceanography*

One of the key issues arising from the project is finding ways that partnerships can be maintained when a key individual leaves either the university or a particular school. This can be a significant problem and is largely due to the fact that involvement in projects of this nature tend to be on a voluntary basis rather than a specific part of a job role. This also causes difficulties in communication between individuals who already have extremely busy workloads, which can make arranging face to face meetings or agreeing the content of a given activity very difficult.

'The benefits to mixed-ability pupils in terms of their motivation and self-esteem are clear. The first group that were involved over a year ago still talk about it now...they got to see science in a different light and thought being out on the oceanography boat was amazing.'

Teacher from local school

Discover Oceanography has been running at the University of Southampton (UoS) Waterfront Campus based at the National Oceanography Centre (NOC) for several years. The programme involves going out on a research vessel with university staff to collect samples of plankton and other marine organisms as well as measuring the environment in which they live using secchi disks, temperature and salinity probes and sediment grabs. This programme has been extremely successful in

enabling pupils and teachers to gain a real insight into the research that happens at the UoS Waterfront Campus as well as providing a memorable learning experience relating to a local environment which cannot be replicated in the classroom.

One of the schools involved through the *Talk to US!* project has put together a scheme of work based on the activities that pupils carry out on the boat and was keen to implement this across Year 8. Unfortunately, in the first year there were some teething problems because the material covered on the boat trip did not entirely fit the content of the scheme of work that was written. However, in the second year, responsibility for coordinating and developing the *Discover Oceanography* programme was formally included within the role of a Senior Research Assistant, who had been involved with the programme from the beginning. This led to a shared vision and enabled the teacher involved in planning the scheme of work to thoroughly discuss the content of the lessons and boat trip with a member of academic staff who understood both the science behind what was being covered and the practicalities involved in taking school pupils out on the boat.

Traditionally, *Discover Oceanography* sessions have often only included the sampling techniques on the boat, but schools have requested that visits last for a whole day to justify the admin involved in organising bringing pupils out of school. Planning these extra sessions had been a bit 'hit and miss' in the past, but having an internal contact who was familiar with the rooms, sessions and expertise available proved invaluable.



Pupils identify the plankton they have collected from Southampton Water.

Spotlight: Building sustainable engagement programmes—*Discover Oceanography* (continued)

Several different sessions including plankton identification, aquarium food web activities, a lecture on the nature of oceanography and other practical activities have been planned and can be offered to schools to supply a tailor made visit for each school. This also enables classes to be split between the boat and onshore activities, improving the pupil experience. Having time to think about and execute ideas has also led to further extension of the project, including the production of a *Discover Oceanography* 'mini MOOC' (Massive Open Online Course) which uses materials from the scheme of work, boat log and teacher workbook which has been a work in progress for several years.

As the permanent appointment of the Senior Research Assistant is independent of the project, any resources or planning that happen as part of *Talk to US!* will be sustainable after the funding has finished, particularly once the website is up and running. If this individual leaves their position then their replacements will have a clear framework to continue this work and an incentive to do so. With the exception of *LifeLab*, and the co-ordination of *Dragonfly Day* which is managed by the university Outreach & WP team, *Discover Oceanography* is the only project working with *Talk to US!* with dedicated staff and independent funding streams. However, if the desired culture change is achieved then it is more likely that appointments of this nature will be made in other departments.



School pupils examine the mud samples they have taken from Southampton Water on board R.V. Callista during a Discover Oceanography day.

7. ACTIVITIES AND STRUCTURE

There are several possibilities in terms of types of activity you choose to fulfil your intended outcome. There are advantages and disadvantages to each and there may be a difference between what you would ideally like to do and what is logistically possible. Some projects may include multiple types of activity, e.g. an introduction/follow-up session at school followed/preceded by a university visit.

Workshops at the university. Arguably, pupils visiting the university to take part in an activity has the most impact. It is an experience outside the everyday which allows teachers and school pupils to see what facilities are like at a university. Enabling school pupils to work with researchers in a university setting is often very powerful in terms of enabling them to understand what research really entails. It also helps them to view the researchers as human beings rather than being intrinsically different to their view of themselves. However, getting pupils and teachers to the university can be difficult to arrange due to the time pressures of the school curriculum and the incompatibilities of the school and university academic years. Due to these factors **it is important that activities that take place at the university make full use of facilities or equipment that are not available at school.**

Workshops in schools. University staff visiting schools can remove the logistical difficulties of getting pupils and teachers out for the day. It may also mean that larger numbers of pupils can be reached through repeating the session with a number of classes or by leading assemblies. Mentoring activities where there is prolonged, in-depth engagement with the same pupils for a specific purpose may also work best if university staff visit the school. This is also true of any training that may be offered to teachers unless it relates to a particular piece of equipment or facility that can only be accessed at the university. Engaging pupils in their own environment may also be beneficial, especially at the beginning of a partnership, in avoiding feelings of intimidation. However, there is a danger that researchers will be viewed as ‘just another teacher’ if they cannot offer something different.

7.1 Depth of engagement

Not every activity will involve the same level of engagement. Often there is a trade-off between the depth of engagement possible and the numbers of pupils involved. Each level of engagement is valuable when used in the right context.

Minimal engagement: Pupils are observers of a demonstration, followers in a tour or the audience of a lecture. There is relatively little opportunity for them to actively take part, ask questions or learn anything through their own investigation. Good as an introduction or spark of inspiration.

Light touch engagement: Pupils take part in one-off planned practical workshops, record their opinions and learning or take part in discussion groups.

Active engagement: Pupils take part in proactive problem solving workshops, produce resources for other learners or complete follow-up content to support their learning in a particular session. Teachers and researchers are given more opportunities to implement training received.

In-depth engagement: Pupils, teachers and researchers work together to co-develop research projects. These can focus on pupils as researchers in the classroom, and enable teachers to carry out research into their own practice or contribute to researchers’ academic output.

‘If it’s pitched at the wrong level it goes beyond them (the pupils). Mostly they’ll still be polite and appreciative but it will be a waste of time. They will all switch off and then you’ve lost them. It has to be appropriately pitched which I know is difficult.’

Science teacher from local school

7. ACTIVITIES AND STRUCTURE

7.2 Activity type and timing

Activity type	Advantages	To consider...
Tours	Can be useful to set the scene or for showing particular processes such as samples processing in the hospital pathology lab.	Why are you doing a tour? Often they are used as time-fillers and provide relatively little educational value. Pupils will get a 'feel' for the university and your department on the way to your session.
Lecture/ presentation activities	Relatively few resources needed. Can cover a range of topics from subject specific lectures (good way of giving a 'university experience') to talks on careers, GCSE options, HE information etc.	Possibly only suitable for higher ability pupils. Must be relevant and use a hook to spark interest or relate to everyday life. Lectures will have most impact in a lecture theatre so pupils can experience university an environment different to a classroom.
Workshops led by researchers based on their own work	Pupils interact with researchers on a personal level to dispel some of the stereotypes they have about academics. Creates meaningful experiences and makes academic research relevant to the pupils' lives. Researchers learn how to communicate their research to different audiences and potentially spark interest in their particular field.	Researchers will need to plan a workshop based on their own work. They may need training to ensure this relates to the curriculum and enable them to deliver the session in a confident and appropriate manner.
Pre- and post- visit lessons or other consolidation	Further embeds researcher-led sessions/content from university visit days into the classroom. These can be teacher- or researcher-led. Once they are written they can be used with other schools.	For schools to make full use of these they must be directly related to the curriculum that schools would otherwise be teaching.
Challenge/ project type activities	Pupils experience what it is like to be a researcher and as a result gain a better understanding of the research process. They also improve communication skills and understanding of the particular subject area. Working closely with researchers on this type of work can also help change pupil perceptions of who researchers are.	For schools to make use of these they must be directly related to the curriculum that schools would otherwise be teaching. These can also be used with science clubs.
Pupils and teachers directly involved in research/data collection	Pupils and teachers gain a better understanding of the research process and a sense of ownership. Researchers can keep in touch and involve schools in the final findings of their work.	This can be a complex and time consuming process. However, if successful, it can deliver huge benefits for all involved.

7. ACTIVITIES AND STRUCTURE

7.2 Activity type and timing (continued)

Session length	Advantages	To consider...
Short session	Fits into a lesson/assembly slot or minimises the length of time pupils are out of school as well as pressure on facilities. Can be a very effective way of getting a particular message across in a concise way or to introduce a program of activities. Planning for a short session can help consolidate thinking about what it is that needs to be achieved.	Some schools will be reluctant to complete paperwork required to bring pupils out for a short session.
Whole day event	Allows a program that can cover a variety of related topics and include differing types of activity. Produces the feeling of a university experience. Enables the building of a scenario from low engagement introduction to in-depth research activity.	Do you really need a whole day? Is there a danger of dead time or time-filling activities? Intensive planning needed especially if accommodating large numbers from different schools or using researchers from different faculties. Schools may need to leave mid-afternoon so you will not have a whole working day.

7.3 Planning your activity

Area	To answer	Notes
The activity	What will your activity be?	
	Are there opportunities for: <ul style="list-style-type: none"> • Independent working, • Group work, • Practical work/writing, • Discussion, • Numeracy, literacy, ICT? 	
	How will you structure the activity? <ul style="list-style-type: none"> • Hook to spark pupil interest and link to discover existing knowledge. • Main activity. Does it include several of the above opportunities? • Plenary to wrap up session and assess what pupils have learnt. 	
	What will the staff involved be doing?	

7. ACTIVITIES AND STRUCTURE

7.3 Planning your activity (continued)

Area	To answer	Notes
Logistics	Numbers (see below)	
	Where will your activity be?	
	How many sessions or activities?	
	Transport	
	Do you need a pre- or post-activity visit to the school?	
Other things to consider	Could you add value to existing initiatives rather than planning from scratch?	

Numbers

Different activities or facilities make it possible to accommodate different numbers of pupils. It is worth bearing in mind that school classes are usually 30 or lower. For timetabling and other logistical reasons some schools will prefer to bring whole classes to an activity. However, if this number of participants will impact upon the quality of their experience it may be worth considering other options. For instance, running the activity two days running for 15 pupils each day or splitting the class and running two concurrent activities.

Year 8 pupils use the fume cupboards in the Chemistry teaching labs to investigate fossil and renewable fuels.



Talk to US Spotlight—Types of interaction:

‘Meet the Researcher’

As part of the *Biological Sciences* workshop a ‘Meet the Researcher’ session was planned to enable pupils to discuss a few areas of research in more detail with researchers currently working in that field. This was based on the extremely successful section of the *LifeLab* day called ‘Meet the Scientist’. The aim was for the sessions to be as informal as possible and so we arranged for the researchers to join the school pupils in the lounge area just after they had finished their lunch.

Around ten researchers volunteered, most of whom had helped the pupils complete the lab work they had carried out that morning. The pupils were split into groups of three and given ten minutes with three of the researchers, who were men and women of a variety of ages and nationalities who had taken different paths into research and were at different stages in their careers. Each researcher began by introducing their research and talking about the science involved and some of the techniques they used. Many of the researchers had brought a prop along with them or showed a short film to better illustrate their work.



A Meet the Scientist session in the LifeLab classroom at Southampton General Hospital. Researchers lead a ten minute session with a group of approximately eight Year 9 pupils.

During the planning stages, some of the researchers had stated that they were worried about how they would initiate discussion with school pupils. They were unsure what the pupils would have already been taught in the relevant areas and therefore what level of scientific language they should use. Feedback from similar events had also identified problems with ‘awkward silences’. At *LifeLab*, training is provided to the researchers who take part in the ‘Meet the Scientist’ sessions. This involves information on questioning techniques and the national curriculum led by teachers from local schools and the researchers are given guidance on how to put together an ‘elevator pitch’ so that their explanations of their work are succinct and well thought out. These sessions now run regularly and are hugely popular. A training session was arranged to support the researchers who would be involved in the *Biological Sciences* ‘Meet the Researcher’ session but many of the researchers were unable to attend.

Talk to US Spotlight—Types of interaction:

‘Meet the Researcher’ (continued)

Despite this, the event was a huge success and many pupils stated that this was the session they had enjoyed the most. One pupil in particular was inspired by a researcher who works on skin conditions such as eczema. The research had a personal connection due to the pupil’s personal experience of skin conditions. The pupil commented that, “She made me inspired – I want to do that.”.

Most of the researchers involved in this session had been working with the pupils in the labs that morning and the day before. This had enabled the pupils to meet the researchers and work with them on a personal level before being asked to engage with the more academic side of their work. There were several researchers who had clearly built a good rapport with some of the pupils during this time in the lab and this meant that the conversation during the ‘Meet the Researcher’ session was more natural. We also asked the pupils to think about some generic questions that they might like to ask a researcher before the session started so that they were not put on the spot when asked if they had any questions. The pupils were also able to meet the researchers in small groups and so the interaction felt much more like a natural conversation than it would with larger groups of pupils.

On this occasion all these factors meant that the need for training was removed to some extent by the ease with which the interactions were able to occur. It is often not possible to assemble so many researchers at once, not just for the ‘Meet the Researcher’ session itself but for the preceding lab sessions as well. This activity was a one off but if input from researchers is needed on a more regular basis, as with the ‘Meet the Scientist’ sessions at *LifeLab*, then training is definitely needed as researchers will not have had the chance to engage with the pupils before the session and will also be leading much larger groups. Training is also vital for recruitment purposes to ensure that this activity is sustainable.



After completing the LifeLab ‘Meet the Scientist’ training a Cancer Research scientist leads her first session with 10 Year 9 pupils and their teacher.

‘I know now that they (researchers) are working to improve our everyday lives.’

‘Research is not boring and repetitive but is entertaining and productive.’

‘Research is a long process, which takes a lot of dedication.’

‘She made me inspired – I want to do that. If I do work hard, I can do that and it won’t be so scary.’

Pupils from local schools

7. ACTIVITIES AND STRUCTURE

7.4 Resources

You may wish to consider:

- What rooms or labs will you need?
- Will you need space to store belongings or a space for lunch?
- What consumables you will need to complete the activities?
- What equipment will you need?
- What stationary will you need?
- What teaching materials will you use? Worksheets, electronic presentation, smart board, film clips etc.
- Do you need to discuss with a technician? Can they help you set up?

'The evolution activity was a real success, the pupils were fascinated by it. They felt really trusted that they were able to handle real skulls that were usually kept in locked cabinets.'

Teacher on *Biological Sciences*

Essential Documents

- Standard letters
- Information pack – joining instructions, meeting points, travel arrangements, contact list
- **Risk Assessments** – you will need one for each activity you complete. Most institutions will have a template system and generic ones will exist for moving a group of pupils around campus. You will need to share these with everyone involved, including the teachers/school(s). See **Appendix 4**
- **DBS** – Disclosure and Barring Service Advanced Disclosure replaced the old CRB check and will be required by any university staff who will be working with pupils while unsupervised by teachers or other school/university staff with DBS. You can find information on how to apply at: www.gov.uk/government/organisations/disclosure-and-barring-service



Pupils Identify the plankton samples they have collected from Southampton Water.

8. PUBLICITY

Whether externally as a way of recruiting schools or internally to raise the profile of engagement across the university, publicity can be invaluable. However, it can be an extra cost so it is worth thinking carefully about what you want to achieve. There are various departments within the university that will be able to help you produce publicity material such as digital communications and the print department.

Method	Advantages	Disadvantages
Flyers and posters	Allows you to focus on a particular area or event you wish to publicise. Can be distributed widely by post or email and displayed in strategic places.	Some time commitment and small cost implications. Large scale mailing may also be time consuming.
Emails	Small time and cost implications. Can be targeted to specific individuals/organisations. Electronic flyers can be used to make them more eye catching. Can reach a large number of people.	Relatively low success rate unless very specifically targeted or intended for raising general awareness rather than actual participation.
Web content	Good for internal publicity. Flexible in terms of content. If done well can add to 'buzz' around a project or event.	Out of date quickly. Time consuming to keep up to date. Can be difficult to arrange depending on institutional restrictions. Must be easy to find.
Newsletters	Raises general awareness of your partnership or other engagement work and inspires others to take part. Can ask different people to contribute including pupils and teachers.	Time commitment to produce regularly. Cost implications particularly if printing physical copies.
Case studies	Raise general awareness of your partnership or other engagement work and inspire others to take part. Can be used in different ways once produced – newsletters, web content etc.	Can be politics involved if expressing something from a particular point of view if aim is to produce a realistic representation of issues rather than just celebrate something you have been involved with.
Social media	Up to date information to make people feel more involved. If done well can add to 'buzz' around a project or event.	Time commitment to keep updated regularly. Relies on there being enough happening to keep it looking interesting.
Celebration events or showcases	Create a very positive atmosphere and provide concrete examples of why people should get involved. Increase profile by inviting school management, parents, senior academics etc.	Time consuming to organise. Potential cost implications for catering, room hire etc.
Networking	Allows you to reach a large amount of people. Also helps you be more aware of what else is going on that may be relevant. Can be done at events and conferences you may be going to anyway. Face to face contacts and word of mouth are often the most successful method of getting your work noticed.	Returns are often not immediate.

9. COSTS AND FUNDING

You will need to consider every aspect of your planned activity and any associated costs. Having sufficient funding to cover the costs incurred by schools as a result of participation in your activity, particularly travel and staff cover is a further incentive for them to do so. If you need to apply for specific funding to support your partnership or activity contact your **Public Engagement with Research Unit** (for Southampton contacts see the [Useful links and contacts](#) section). Below are some typical items that incur costs to consider.

University			Schools		
Item	Cost	Source	Item	Cost	Source
Time/staffing			Time/staffing		
Venue hire			Cover		
Consumables			General support		
Catering			Travel		
General support (student ambassadors etc.)			Other		
Travel					
Publicity					
Other (DBS etc.)					

'Their (the pupils') gels were very good... some were better than first year undergraduates.'

Genetics researcher

Year 9 pupils load electrophoresis gels with different genetic samples at LifeLab.



10. EVALUATION

There are several different ways to approach evaluating a partnership or specific activity. Not all of these will be applicable in every case. When considering what and how to evaluate it is important to be realistic about what can be achieved and be clear what you would like to measure. For example:

Have the school pupils learnt what you wanted them too?

Do pupils or teachers have a better understanding of what academic research is?

Have you changed pupils' perception of their own education in the relevant subject?

Have you changed the number of pupils considering coming to university?

Will teachers change their practice as a result of engaging with your activity?

Have you inspired teachers to further their own academic careers?

Does the engagement work you have done deliver impact for the REF?

Ethics: It is important to be aware that evaluation activities that include focus groups or questionnaires, particularly when pupils are involved, may require ethics approval. This could include the need for parental consent and the anonymity of participants.

Area of evaluation	Method	Advantages	Disadvantages
Outcome for the pupils/ quality of activities	Show of hands, thumbs up/ thumbs down, bottle tops/ buttons in buckets labelled 'good', 'okay', 'poor'	Quick and easy. If use a physical method (e.g. bottle tops) these can be counted and recorded.	Assesses enjoyment rather than learning outcomes. May not be honest unless is anonymous.
	Verbal questioning as plenary to assess understanding of subject material	Quick and easy. Can be fun e.g. a quiz.	Difficult to record or gather data. Unlikely to represent whole group.
	Focus groups	Decide focus in advance. Possible to gather more in-depth information, opinions and experiences.	Smaller numbers possible than questionnaires. Can be logistically difficult. Needs to be soon after engagement for pupils to recall things fully.
	Questionnaires (see examples in Appendix 5)	Recordable and measurable responses. Allows focus on a particular area of interest.	Time for preparation and analysis needed. Questions need careful planning. Can be logistically difficult. Need pre- and post-intervention data to provide evidence of impact. Pupils may not put thought into answers.
	Assessed work on return to school	Levelled responses. Allows focus on particular area of curriculum. May be attractive to some schools.	Preparation required and time to mark. Can be logistically difficult. Might not work for some schools if little spare lesson time.

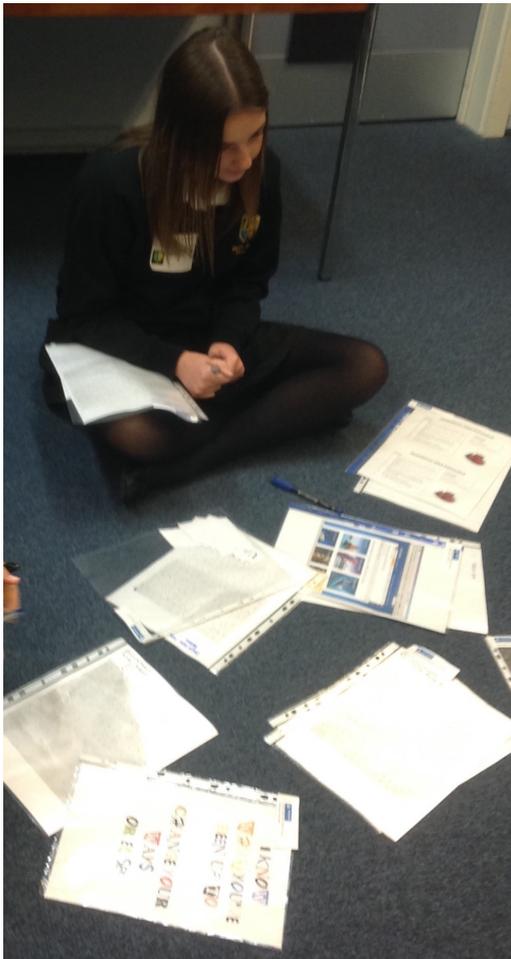
10. EVALUATION

Area of evaluation	Method	Advantages	Disadvantages
Outcome for the pupils/quality of activities (continued)	Tracking e.g. progress at school or applications to university.	Provides data based on fact rather than opinion. For university applications software already exists (HEAT).	Logistically very difficult. Not easy to prove a causal link.
Outcome for the teachers and researchers	Focus groups/ interviews	Can set questions in advance. Possible to gather more in-depth information, opinions and experiences. Opportunities to follow lines of enquiry as they arise. Constructive feedback from professional to improve activities/deliver what schools need.	Can be logistically difficult to arrange.
	Questionnaires	Recordable and measurable responses. Allows focus on a particular area of interest.	Likely to be very few in number so won't provide a large data set. Preparation required and time to analyse. Need pre- and post-involvement questionnaires to provide evidence of impact.
	Tracking e.g. career progression	Provides long term impact data based on fact rather than opinion.	Logistically very difficult. Not easy to prove a causal link.
	Papers or research published	Provides evidence of value which can be used to support individual careers and effect culture change in wider area of SUPs.	Must be well thought out from the beginning of an intervention if there is to be a valid research outcome directly relating to work done through the partnership.
University recruitment	Questionnaires	Provides recordable data on opinions directly after engagement.	Opinion doesn't necessarily translate to actual attendance at university. Preparation required and time to analyse. Need pre- and post-involvement questionnaires to provide evidence of impact.
	Tracking e.g. progress at school or applications to university	Provides data based on fact rather than opinion. For university applications software already exists (HEAT).	Logistically very difficult. Not easy to prove a causal link.
Impact in REF	See page 35 .		

11. REFLECTION

Reflection is essential in creating successful sustainable partnerships and meaningful engagement experiences. Teachers in particular will already be reflective practitioners but due to time constraints this is often overlooked. After each planning meeting/session delivered to pupils it is worth considering the following both in terms of the activity carried out and the partnership as a whole:

- Did you achieve what you set out to? How do you know? (See [section 10.](#))
- What worked well? What didn't work well? Why?
- How could things be improved for next time?



Pupils collate their evidence and then take part in a case conference to work out who murdered the Prof. in a forensics based workshop at the BIU, Murder in the Medical School.



'I was worried I wouldn't understand but once we were doing the activities the scientific words made sense and I was surprised at how much I got by the end. They used long words but they explained what they meant. I was there to learn that stuff and them speaking to us like that made me feel like an adult.'

Pupil from local school

12. REF CASE STUDIES

How to write successful impact studies for REF based on school/university partnership working

An NCCPE analysis of 4 star REF14 impact case studies based on public engagement in general identified some key common factors. In all of these case studies the reasons behind the following were made apparent:

WHY was the engagement activity undertaken? What problem did it set out to resolve?

- **Dissemination** — Maximising the reach of the research into potential communities. Increasing awareness.
- **Engagement** — Creating meaningful and significant encounters with the research, tuned to the specific needs and interests of the user.
- **Involvement** — Using the insights and expertise of the user to inform outputs.

WHO did you work with and why? Name groups specifically and give reasons why they have been identified.

- **Publics** — General public, communities of place, communities of interest or experience etc.
- **Policy** — Policy makers, regulators, funders etc.
- **Practice** — Charities, business, public sector etc.

HOW did you engage with the groups you identified? Which model of public engagement was used?

- **'Classic'** — Working specifically to 'reach' a particular chosen group.
- **'Mediated'** — The focus is still on your chosen group but also involves some direct engagement with an intermediary organisation, for instance, to increase capacity or generate assets which can then be used by the chosen group in the longer term.
- **'Blended'** — Where engagement with the public is one thread in a more complex picture of engagement activity.
- **'Bolt-on'** — The primary focus is engaging with practitioners or policy makers but there is some public facing activity, usually to disseminate results or raise awareness.

What impact was achieved?

- **Conceptual** — Communicating meaning or creating meaning leading to impact on attitudes and values, knowledge and understanding or leading to enjoyment, inspiration or creativity.
- **Instrumental*** — Changes in policy, products or services to better reflect a public's needs or interests, achieve economic return, improve access to resources, aid decision making.
- **Capacity building** — Build on or gain new skills, improve health and wellbeing, change behaviours or professional practice, facilitate collaboration or progression.

* easiest to evidence

Top Tips

1. Make it **relevant**.
2. Ask yourself **'Why?'** in relation to everything you do. If the answer is 'to fill time' you need to rethink it.
3. **Think outside the box** – don't just do what you've always done.
4. Be **flexible**. Be prepared for the coach to be late or different pupils to the ones you were expecting. Always have a Plan B.
5. Be **realistic**. Plan for what is achievable.
6. Be **patient**. For the majority of those involved, engagement is an additional responsibility and as a result responses to emails etc. may not always be immediate.
7. Always keep the **school calendar** in mind.
8. **Don't leave things to the last minute**.
9. **Stay positive**. Things may not always go to plan due to things outside of your control. This does not mean the partnership has failed.
10. Make sure there is a **shared agenda** and that everybody involved knows what this is. Be prepared to reiterate this as necessary.



Year 9 girls investigate the visible light section of the electromagnetic spectrum during a Dragonfly Day workshop.

Top Tips: Making Contact with Schools

The university is already working in partnership with over 300 schools & colleges through its ITE teacher training courses. Strong relationships have been built up and the staff know each other well so they are a great first port of call! See **Useful links and contacts**.

Top Tips: Making Contact at the University

As well as the university-wide contacts listed in **Useful links and contacts** at the end of this book, each faculty and a lot of subject/research groups have their own school & colleges liaison or outreach teams too.

 Searching 'Soton Outreach' in an online search engine brings up links to the most active subject-specific public engagement & outreach teams.

 Go to the subject/research groups' website and look for the 'outreach' tab (you may have to press the right-hand arrow as it is often the last tab!).

E.g. School of Chemistry: www.southampton.ac.uk/chemistry/outreach/index.page

Faculty of Engineering & the Environment:

www.southampton.ac.uk/engineering/outreach/index.page

APPENDIX 1. THE NATIONAL CURRICULUM AND EXAMPLE CURRICULUM LINKS: SCIENCE, KEY STAGES 3 AND 4

The National Curriculum overview (England, Northern Ireland and Wales):

www.gov.uk/national-curriculum/overview

The National Curriculum details

England: www.gov.uk/government/collections/national-curriculum

Northern Ireland: www.ccea.org.uk/curriculum

Wales:

www.gov.wales/topics/educationandskills/schoolshome/curriculuminwales/arevisedcurriculumforwales

Teaching guidelines for Scotland, the 'Curriculum for Excellence':

www.educationscotland.gov.uk/learningandteaching/thecurriculum

Useful breakdown of the different systems for England, Northern Ireland, Scotland & Wales at primary level:

www.theschoolrun.com/primary-education-England-Scotland-Wales-NI

Examples from the KS3 and KS4 Science Curriculum that either lend themselves to linking with REAL and CURRENT research or are difficult to teach in school due to their abstract nature, complexity, lack of resources or large number of keywords. Note that this is by no means an exhaustive list and for other suitable topics see the links above and, of course, discuss with teachers!

- How scientific methods and theories develop over time, the importance of peer review and communication of results to a range of audiences
- Prefixes and powers of ten for orders of magnitude (e.g. tera, giga, mega, kilo, centi, milli, micro and nano)
- The nitrogen cycle
- Evolution
- Eukaryotic and prokaryotic cells
- The process of discovery and development of new medicines
- Classification
- The heart
- DNA replication & protein synthesis
- Mitosis & meiosis
- Ionic, covalent, and metallic bonding and intermolecular forces
- Bonding of carbon and resulting compounds: diamond, graphite, fullerenes, graphene
- Electrolysis of molten ionic liquids and aqueous ionic solutions
- The reactivity series: extraction and purification of metals
- Evidence for composition and evolution of the Earth's atmosphere
- Electromagnetic waves: velocity in vacuum, energy transfer, wavelengths and frequencies from radio to gamma-rays, velocities differing between media, absorption, reflection, refraction effects and uses in the radio, microwave, infra-red, visible, ultra-violet, X-ray and gamma ray regions, hazardous effects on bodily tissues
- The Earth's magnetic field
- Radioactive nuclei: emission of alpha or beta particles, neutrons, or gamma rays, related to changes in the nuclear mass and/or charge, half-life, irradiation, contamination and hazardous effects, waste disposal, Nuclear fission, nuclear fusion and the sun

APPENDIX 2. SCHOOL-UNIVERSITY CALENDAR COORDINATION TOOL

Month	Sept	Oct	Nov	Dec
School				
University				
Month	Jan	Feb	March	April
School				
University				
Month	May	June	July	Aug
School				
University				

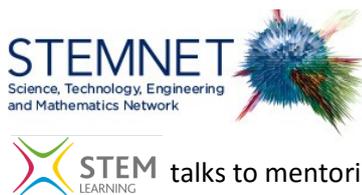
Notes

Key

- Hol/  Holiday
- HP/  High Pressure points
- MP/  Medium pressure points
- LP/  Low pressure points

APPENDIX 3. NATIONAL AMBASSADOR SCHEMES

The STEM Ambassador Scheme (*STEMNET*)



STEMNET (as of August 2016 merging with STEM learning) is a national organisation which creates links between employers (including universities) and educators. As part of this it manages the UK's network of over 30,000 STEM ambassadors. Ambassadors volunteer with a huge range of activities from careers talks to mentoring school projects, delivering demonstration sessions to helping with mock job interviews, from providing technical advice to judging competitions and more.

Ambassadors are recruited from those working in a wide range of STEM-based careers and professions including environmental scientists, civil engineers, marine biologists, medical physicists, pharmacists, energy analysts, architects, apprentices, zoologists, set designers, climate change scientists, farmers, geologists, nuclear physicists, technicians, pharmacists and many more.

As well as an induction sessions, the following training is offered to all registered ambassadors for free:

- **Extension Training.** The STEM Ambassadors Extension Training covers communication skills, body language and vocal inflection, and will also help you start to think about designing an activity. It is available as either a two-hour face-to-face training session, or as an online training.
- **Powerful Practicals.** We know that the more interactive and hands-on you can make your activities, the more engaging they will be. The Powerful Practicals training looks at how you can turn your good ideas into a practical activity. The training is available either as a two-hour face-to-face training, or as an online toolkit.
- **People Like Me.** Developed by the Women in Science and Engineering (WISE) campaign, the People Like Me approach is an initiative designed to speak to girls aged 11-14 on their terms and demonstrate that STEM is very much for "people like them". The two-and-a-half-hour People Like Me Training for STEM Ambassadors covers the underlying principles of the approach as well as practical advice on how to run effective activities with girls. It is based on the engagement research report 'Not for People Like Me'.

Teachers, schools and colleges can request ambassador participation/offer volunteering opportunities for specific events and access free services, expert advice and support, for example with extra-curricular clubs.

The network is managed regionally, collating requests from schools and organising STEM clubs and other events, and disseminating these regular updates of volunteering and training opportunities to local ambassadors. In Hampshire the regional STEMNET ambassador network is managed by the Winchester Science Centre:

www.winchestersciencecentre.org/ambassadors/overview

Find your regional STEMNET contact here: www.stemnet.org.uk/regions

STEM Learning offer teacher CPD: www.stem.org.uk (For Southampton area information contact the MSLC.)

Student Language Ambassador Scheme (*Routes into Languages*)

Routes into Languages is a national consortium of 67 universities funded by HEFCE which has been working together to increase and widen participation in language learning in schools, colleges and universities since 2006. Partner universities organise a wide range of activities aimed at motivating and enthusing learners to continue with their languages and at raising aspirations and attainment. **Many activities have also enabled, indirectly, teacher networking, curriculum support and joint working within universities, i.e. schools of education working together with Modern Languages departments.**



One of the key strengths of Routes is their Student Ambassador Scheme which sees language degree students participating in and co-ordinating activities in schools. The scheme has reached such maturity that students who were first enthused to study languages by a visit from a Routes student ambassador have now become MFL teachers bringing their pupils to current Routes activities.

For more information and to get involved see:

www.routesintolanguages.ac.uk

Many universities also offer a student ambassador scheme of their own — see [Useful links and contacts](#).

APPENDIX 4. RISK ASSESSMENTS

Health & Safety Risk Assessment: A Basic Guide

Each school, university, institution and even university school or faculty has its own risk assessment form and submission procedure — please contact your appropriate health and safety officer to find the details you need. However, the process of identifying risks and ensuring they are accounted for is the same. Use the steps below and the estimation matrix overleaf to help you through the process. An example of a completed risk assessment form detailing hazards that are relevant to most engagement activities follows.

1) **Identify all hazards, hazard events, and reasonably foreseeable worst case consequences.**

Each of these will form an item on your risk assessment form.

A **'hazard'** is something with the potential to cause harm (i.e. injury or ill-health). A **'hazard event'** is the incident where the harm from the hazard occurs. A **'hazard consequence'** is the nature and extent of the harm caused. **'Worst case'** means it is not necessarily the most likely consequence that should be considered but **'reasonably foreseeable worst case'** means that far-fetched, improbable hazards and consequences need not be considered.

2) **Estimate inherent risk for each hazard. 'Inherent' risk** is that without any controls applied.

Use the risk estimation matrix overleaf. In estimating risk, also consider factors that could exacerbate risk, such as reasonably foreseeable emergencies, inexperience, lone work, new & expectant mothers, waste disposal, potential effects on others such as contractors or visitors, etc. These may be included in other items on the risk assessment form or be written as items themselves.

'Risk' is the likelihood of the hazard event and the reasonably foreseeable worst case consequence combined. **'High'** risks must be reduced before an activity/task can commence or continue. **'Medium'** risks must be reduced as much and as soon as is reasonably practicable. **'Low'** risks, by definition, do not require controls.

3) **Devise controls for each hazard. A 'control'** is a measure taken to reduce risk.

As a general principle, the 'hierarchy' of control that is to be applied (from most to least preferable) is: avoid the risk; substitute something less hazardous that gives the same or similar outcomes; 'engineering controls' i.e. equipment and articles that mitigate or contain a hazard; 'safe system of work' i.e. a prescribed work method; and 'personal protective equipment' (PPE) e.g. gloves, safety glasses, respirator, boots, etc.

Other controls that should be considered are: training, supervision, planning for reasonably foreseeable emergencies, health surveillance, validation and maintenance of any engineering controls, and correct specification of any PPE.

4) **Estimate residual risk for each hazard. 'Residual' risk** is that with controls applied.

Estimate as in point 2). The objective is for all residual risks to be low as far as is reasonably practicable.

5) **The risk assessment must be read and signed by the risk assessor (person completing the form), users (anyone carrying out the tasks) and the responsible manager/supervisor approving the form.**

- Health & safety risk assessments must be 'suitable and sufficient' i.e. cover all relevant issues and include enough detail. They can be generic, provided they remain 'suitable and sufficient'.
- It is activities/tasks that should be risk assessed, and not, as such, substances (but rather use of substances), or equipment (but rather use of equipment), or locations (but rather activities therein), or people (but rather what they do).
- Certain hazards require additional regulatory and technical detail (e.g. ionising radiations, biological agents, genetic modification, noise, hazardous chemicals, etc.).
- Health & safety risk assessments need to be reviewed periodically (at least every two years or sooner if inherent risk is high) and also after incidents, after significant changes to the activity/task, if staff raise any concerns, if there is a relevant change to the law or to other relevant standards, or if there is anything to suggest the assessment is not suitable or sufficient.

APPENDIX 4. RISK ASSESSMENTS

Health & Safety Risk Estimation Matrix

High risk: Requires controls to reduce risk before activity/task can commence (or continue).

Medium risk: Requires controls to reduce risk as much and as soon as is reasonably practicable.

Low risk: All risk should be reduced to this tolerable level, so far as is reasonably practicable.

Reasonably foreseeable worst case consequence Likelihood ³ of hazard event	Minor superficial injury; or slight and temporary health effect	Moderate significant injury or illness ¹ ; or temporary minor disability	Major serious injury or illness ² ; or significant or permanent disability	Critical fatal injury or illness; or substantial and permanent disability	Catastrophic fatal injury or illness for multiple persons
Likely high probability, 1 in 10 chance or higher, once in two weeks or longer for activities on a daily basis	medium risk	high risk	high risk	high risk	high risk
Possible significant probability, 1 in 100 chance or higher, once in six months or longer for activities on a daily basis	low risk	medium risk	high risk	high risk	high risk
Unlikely low probability, 1 in 1,000 chance or higher, once in four years or longer for activities on a daily basis	low risk	low risk	medium risk	high risk	high risk
Rare very low probability, 1 in 10,000 chance or higher, once in a decade or longer for activities on a daily basis	low risk	low risk	low risk	medium risk	high risk
Almost never extremely low probability, less than 1 in 100,000 chance, once in a century or longer for activities on a daily basis	low risk	low risk	low risk	low risk	medium risk

¹ 'Significant injury' could include, for example, laceration, burn, concussion, serious sprain, minor fracture, etc.

'Significant illness' could include, for example, dermatitis, minor work-related musculoskeletal conditions, partial hearing loss, etc.

² 'Serious injury' could include fracture or dislocation (other than digits), amputation, loss of sight, penetration or burn to eye, electric shock, asphyxia, or any injury leading to unconsciousness or requiring resuscitation or admittance to hospital for more than twenty-four hours. 'Serious illness' could include, for example, requiring medical treatment after chemical, biological or radiological exposure, severe debilitating musculoskeletal conditions, severe dermatitis, asthma, etc.

³ For likelihoods in between the listed values, use the higher likelihood to estimate risk. These probability definitions are only a guide.

APPENDIX 4. RISK ASSESSMENTS

Example Risk Assessment Form: Cover Page/Declaration

General Health & Safety Risk Assessment Template

Work activity / task	Talk to Us Centre for Biological Sciences sub project session
-----------------------------	---

Assessor(s)	Lindsay Wager	Responsible Manager		Date	3 rd July 2012
--------------------	---------------	----------------------------	--	-------------	---------------------------

Faculty / Service	Education	Academic Unit / Team	CfBS/ Edu	Location	Highfield Interchange, University Road MSLC,
--------------------------	-----------	-----------------------------	-----------	-----------------	--

Brief description of activity / task	Pupils moving around a potentially busy campus undertaking a carousel of taster sessions
---	--

Additional notes (eg, references, persons at risk, risk factors, etc) [optional]	
---	--

Declaration by responsible manager: I confirm that this is a suitable & sufficient risk assessment for the above work activity / task.

Signed		Print name		Date	
---------------	--	-------------------	--	-------------	--

Declaration by users: I confirm that I have read this risk assessment, will implement the controls outlined herein, and will report to the responsible manager any incidents that occur or any shortcomings I find in this assessment.

Signed		Print name		Date	
Signed		Print name		Date	
Signed		Print name		Date	
Signed		Print name		Date	
Signed		Print name		Date	
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Signed		Print name		Date	
Signed		Print name		Date	

Note: Some risk assessment procedures may require a 'Method Statement' to accompany the risk assessment form. This is generally a single A4 page briefly outlining the activity for which the risk assessment is being carried out.

APPENDIX 4. RISK ASSESSMENTS

Example Risk Assessment Form: Hazards

Hazards, hazard events, and reasonably foreseeable worst case consequences	Inherent risk (no controls) from matrix (mark with X)		Controls (measures to reduce risk)	Residual risk (with controls) from matrix (mark with X)	
	High	Medium		High	Medium
Accident en route	High		<ul style="list-style-type: none"> Transport booked through reputable coach company. If schools are making their own way to the university they are responsible for ensuring the health and safety of the group. 	High	
	Medium			Medium	
	Low	X		Low	X
Participant misses outbound transport	High		<ul style="list-style-type: none"> School staff to check participants on and off buses. School staff to ring parents of any 'no shows' to check reason. 	High	
	Medium			Medium	
	Low	X		Low	X
Participant misses return transport	High		<ul style="list-style-type: none"> School staff to check visitors back on buses. Any remaining participants will be the responsibility of university staff; if necessary a taxi can be ordered. 	High	
	Medium			Medium	
	Low	X		Low	X
Vandalism of coach company property	High		<ul style="list-style-type: none"> Clear indication in joining instructions that pupils will be expected to pay for any damage caused. A copy of the university insurance policy has been circulated. 	High	
	Medium			Medium	
	Low	X		Low	X
Substance abuse or misconduct during journey and time spent at the university	High		<ul style="list-style-type: none"> All participants to complete and sign the code of conduct; all incidents to be referred to Outreach Office; procedures in place to send a participant home if in breach of code of conduct. Teachers will be accompanying participants on the coaches. 	High	
	Medium			Medium	
	Low	X		Low	X

APPENDIX 4. RISK ASSESSMENTS

Example Risk Assessment Form: Hazards (continued)

Hazards, hazard events, and reasonably foreseeable worst case consequences	Inherent risk (no controls) from matrix (mark with X)		Controls (measures to reduce risk)	Residual risk (with controls) from matrix (mark with X)	
	High	Medium		High	Medium
Fire/Emergency Procedure	High		<ul style="list-style-type: none"> Visitors, student helpers e.g. ambassadors and staff will be briefed on emergency procedures including fire alarm at start of event. Emergency exits and fire assembly point identified at start of event. Register to be taken upon exit. 	High	
	Medium	X		Medium	
	Low			Low	X
Serious illness on part of participant	High		<ul style="list-style-type: none"> Participants declare any known medical conditions/allergies on consent forms completed prior to the event taking place and university and school staff informed of these in advance. University and school staff made aware of how to seek medical assistance (designated first aiders, emergency numbers). 	High	
	Medium			Medium	
	Low	X		Low	X
Vandalism or damage to university property	High		<ul style="list-style-type: none"> Clear statement in code of conduct and joining instructions that any damage must be paid for. University's standard procedures in terms of marking property etc. A copy of the university insurance policy has been circulated. 	High	
	Medium			Medium	
	Low	X		Low	X
Accident en route from one venue to another or participant goes missing en route	High		<ul style="list-style-type: none"> Groups will be advised to use safest route and pedestrian crossings. Keep teams together, brief student helpers on emergency procedures. Pupils will be accompanied by university staff, student ambassadors and teaching staff. 	High	
	Medium			Medium	
	Low	X		Low	X
Incident associated with unauthorised access to restricted areas	High		<ul style="list-style-type: none"> Warning about access to restricted areas to be included in programme and information on this to be included in briefing at the start of the event. Student ambassadors and participants to be made aware of fire procedures and nearest exit. Register to be taken at fire assembly point immediately on exit. 	High	
	Medium			Medium	
	Low	X		Low	X

APPENDIX 5. EXAMPLE PRE- AND POST-EVENT PUPIL QUESTIONNAIRES

Talk to US! pre-activity pupil questionnaire: [Event/Activity Name] [Date]

5. Does anyone in your family have a degree?

YES NO

If you have answered YES, please state who:

6. Have you visited the University of Southampton with your school before?

YES NO

If you have answered YES, please describe the activity:

7. What do you think the term 'research' means?

8. Why do you think universities carry out research?

9. Do you think the scientific research at the University of Southampton is directly relevant to your everyday life?

YES NO

Please explain your answer:

Thank you for completing this questionnaire. We hope you enjoy the visit!

APPENDIX 5. EXAMPLE PRE- AND POST-EVENT PUPIL QUESTIONNAIRES

Talk to US! post-activity questionnaire: [Event/Activity Name] [Date]

School:	
Year Group:	
Name:	
Date of Birth:	
Your home postcode:	

1. Please rate the activity leaders for today's visit:

Excellent	
Good	
Undecided	
Average	
Poor	

Please briefly explain your answer:

--

2. How do you think workshop leaders can improve their workshops for future classes?

--

3. Please state three new things you have learnt from today's activities:

1	
2	
3	

4. Do you have any questions about university or research that haven't been answered today?

If so, please write them here.

--

5. What do you think the term 'research' means now?

--

6. Did anything from the visit today surprise you (this can be anything at all, not just about the workshops themselves)?

Please explain your answer:

--

APPENDIX 5. EXAMPLE PRE- AND POST-EVENT PUPIL QUESTIONNAIRES

Talk to US! post-activity questionnaire: [Event/Activity Name] [Date]

7. Do you think the scientific research at the University of Southampton is directly relevant to your everyday life?
YES NO

Please briefly explain your answer:

8. How do you feel about learning Science in school?

I love it	
I like it	
I'm not sure	
I don't like it	
I hate it	

9. How confident are you at carrying out scientific investigations at school?

1 2 3 4 5 6 7 8 9 10

Not at all confident

Very confident

10. How interested are you in studying Science subjects after you finish your GCSEs?

Very interested	
Quite interested	
Unsure	
Not very interested	
Not interested at all	

11. How interested are you in going to University after school (to study any subject)?

Very interested	
Quite interested	
Unsure	
Not very interested	
Not interested at all	

Thank you for completing this questionnaire.

Glossary

Levels of academic qualifications

Undergraduate	Postgraduate				
	<i>Masters student</i>	<i>PhD, also referred to as Postgraduate Researcher (PGRs)</i>	<i>Early Career Researcher (ECR)</i>	<i>Academic</i>	<i>Professor</i>
First degree (Bachelors or Masters)	More research based than first degree	Specific area of research, gain title 'Dr.'	Working under more senior academic	Independent researcher	Overseeing specific areas of research

National Curriculum Key Stages

Key Stage	EYFS (Early Years Foundation Stage)	KS1	KS2	KS3	KS4	KS5
Year Group	Reception	1 & 2	3-7	7-9 (in most schools)	10 & 11 (some schools start in year 9)	12 & 13
Age Range	4-5yrs	5-7yrs	7-11yrs	11-14yrs	14-16yrs (13 if in year 9)	16-18yrs
Other Info	Start primary school (or infant if separate from juniors)		Start of juniors if separate to infants	Start of secondary school	GCSEs	AS/A levels

General school term dates

Term	Autumn term	Autumn half-term	Spring term	Spring half-term	Summer term	Summer half-term
Rough Dates	1 st week in September to week before Christmas	Usually mid October	1 st full week of January to week before Easter	Usually late February	Week after Easter to 3 rd week in June	Usually mid May

General university term/semester dates

Term	Autumn term	Spring term	Summer term
Rough dates	Last week in September to mid December	1st full week in January to late March	Late April to mid June
Semester	Semester 1		Semester 2

Glossary (continued)

AHRC — Arts and Humanities Research Council (UK).

BBSRC — Biotechnology and Biological Sciences Research Council (UK).

BIU — Biomedical Imaging Unit.

CPD — Continuing Professional Development.

DBS (Disclosure and Barring Service) — Formally known as ‘CRB checks’. Members of staff, researchers or students who will be left alone with school pupils must have a current Advanced Disclosure DBS Certificate. These can be applied for through an employer or in person. There may be a cost associated with this. When working with school groups it is usually possible to ensure that there is always a teacher or other member of school staff present with the pupils at all times. However, it may also be helpful for a few members of the university team running the activity to have DBS. More information can be found at: www.gov.uk/government/organisations/disclosure-and-barring-service

DSP — Designated Senior Person.

EAL — English as an Additional Language.

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

EPQ (Extended Project Qualification) — Optional qualification equivalent to half and A level, often of a research nature in the form of an individual or group project.

EPSRC — Engineering and Physical Sciences Research Council (UK).

ESRC — Economic and Social Research Council (UK).

EVOLVE — Education management software.

FE — Further Education e.g. at a college or 6th form.

FSM (Free School Meals) — Secondary pupils from low income families and those on certain benefits are eligible for free school meals (all primary aged children now get FSM). Often used as a target group for intervention.

G & T (Gifted and Talented) — Pupils who are performing at high levels of achievement in multiple subject areas or disciplines. They are also expected to display certain characteristics such as independence.

HE — Higher Education e.g. at a university.

HEFCE — Higher Education Funding Council for England.

HEI — Higher Education Institute e.g. a university.

HEAT (Higher Education Access Tracker) database — Used by universities to track which pupils are applying for their courses including information on whether applicants have taken part in any outreach activities during their school career.

ICT — Information and Communication Technology.

ILlAD — Institute of Learning, Innovation and Development.

ILILC (ICT & Links into Languages Conference) — Annual ‘hands on’ conference for MFL teachers in which a wide range of practical ideas and activities demonstrate how ICT can support language learning inside and outside school. Created as a result of the Routes and Links into Languages projects.

Impact — Within a university context, it will be assumed that discussions on ‘impact’ relate to the REF. In relation to the REF, ‘impact’ is defined as ‘*an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia*’ (HEFCE et al 2012).

ITE — Initial Teacher Education.

MFL — Modern Foreign Languages.

MOOC — Massive Open Online Course.

Glossary (continued)

MRC — Medical Research Council (UK).

MSLC (Mathematics and Science Learning Centre) — Situated at the University of Southampton, the MSLC provides a range of professional development programmes and projects for teachers and support staff in schools and colleges across the South of England. This includes short courses, research projects and education and industry partnerships (see [Useful links and contacts](#)).

NC — National Curriculum (see [section 4](#) and [Appendix 1](#)).

NERC — Natural Environment Research Council (UK).

NCCPE (National Co-ordinating Centre for Public Engagement) — National centre hosted by the University of Bristol and the University of West England which helps universities and the public engage with each other by offering training, advice, tools and funding through its various projects.

NOC (National Oceanography Centre) - NERC-owned national research centre which hosts one of the world's largest groups of scientists and engineers devoted to research, teaching and technology development in ocean and Earth science. Located at the University of Liverpool and the University of Southampton Waterfront Campus.

Outreach — Activities which showcase what the university has to offer. Within universities this usually has recruitment as its ultimate aim as well as meeting the WP agenda.

Plenary — A session (e.g. talk/workshop), usually at the beginning or end of a conference or series of talks/workshops/sessions which all participants attend, even if they attend separate talks/workshops/sessions etc. during the rest of the event; the end of a lesson or workshop which is used to draw together and possibly assess all the learning from that session.

PPE — Personal Protective Equipment.

Pupil Premium — Additional funding for publicly funded schools in England intended to raise the attainment of disadvantaged pupils. Funding is awarded for each pupil eligible for Free School Meals and those looked after by the local authority.

RCUK (Research Councils UK) — Non-Departmental Government Body that manages the seven individual research councils that co-ordinate and fund research in the UK. The seven research councils are: AHRC, BBSRC, EPSRC, ESRC, MRC, NERC and STFC.

REF (Research Excellence Framework) — The Research Excellence Framework (REF) is the system for assessing the quality of research in UK higher education institutions. The results of the 2014 REF were published on 18 December 2014 and can be viewed at: www.ref.ac.uk. The next REF will be in 2020.

SEN — Special Educational Needs.

SGH — Southampton General Hospital.

STEM — Science, Technology, Engineering and Mathematics.

STFC — Science and Technology Facilities Council (UK).

SUP — School-University Partnership.

SUPI (School-University Partnership Initiative) — RCUK-funded project co-ordinated by the NCCPE involving 12 universities across the UK. This Guide Book has been written and produced through the University of Southampton SUPI project, *Talk to US!*.

Teaching Alliance — a group of schools lead by a lead school called a **teaching school**. Teaching schools are outstanding schools that work with others to provide high-quality training and development to new and experienced school staff.

TNS — The Centre for Transnational Studies.

WP (Widening Participation) — This is a national agenda which aims to offer opportunities and support to groups within the population who are under-represented in Higher Education due to a wide range of social and economic barriers.

UoS — University of Southampton.

Useful links and contacts

National contacts for training, funding, advice and more

National Coordinating Centre for Public Engagement (NCCPE):

www.publicengagement.ac.uk

Wellcome Trust (regular large and small scale funding calls):

www.wellcome.ac.uk

RCUK Public Engagement: www.rcuk.ac.uk/pe

The Brilliant Club (WP scheme taking researchers into schools to teach EPQs):

www.thebrilliantclub.org

Searchable database of REF 2014 impact case studies (for help with grant writing, funding proposals and impact evaluation):

www.impact.ref.ac.uk/CaseStudies/

E.g. University of Southampton REF 2014 impact case study, 'Public engagement with deep ocean research': www.impact.ref.ac.uk/CaseStudies/CaseStudy.aspx?Id=42992

Wellcome Trust report 'Factors Affecting Public Engagement By Researchers':

www.wellcome.ac.uk/PERSurvey

Speakezee (national network of academic speakers for public engagement and news feed of live public events):

www.speakezee.org

University of Southampton — Making Contact

Southampton Education School ITE—Existing Partnerships with Schools:

Primary: 023 8059 6231, Secondary: 023 8059 2413, FE: 023 8059 3564

Web: www.southampton.ac.uk/education/postgraduate/itt.page

Email: partnership@southampton.ac.uk

Public Engagement with Research Unit: 023 8059 4189 (internal extension 24189)

Web: www.southampton.ac.uk/per

Email: peru@southampton.ac.uk

Postal address: *Room 2052, Bldg 27, The University, Highfield, Southampton SO17 1BJ*

Schools and Colleges Outreach, WP & Recruitment Team: 023 8059 4737 (ext. 24737)

Web: www.southampton.ac.uk/schools-colleges

Email— Pre 16: outreach@southampton.ac.uk

Email— Post 16: liaison@southampton.ac.uk

Student Ambassador Scheme: 023 8059 9010 (internal extension 29010)

Web: www.southampton.ac.uk/studentambassadors

Email: ambassador@southampton.ac.uk

Useful links and contacts

Southampton — Training and Development

MSLC — STEM CPD for teachers & technicians in the South East: 023 8059 8810 (internal extension 28810)

Web: www.southampton.ac.uk/mslc

Email: mslc@southampton.ac.uk

Fax: 02380 598811

Postal address: *Mathematics and Science Learning Centre, Level Three, Building 29, The University of Southampton, Highfield, Southampton SO17 1BJ*

ILiAD — UoS professional development & enhanced learning team

Web: www.southampton.ac.uk/iliad

Professional Development: 023 8059 3471 (internal extension 23471)

Email: iliaddev@southampton.ac.uk

Student education and MOOC enquiries: 023 8059 3253 (internal extension 23253)

Email: iliad@southampton.ac.uk

Doctoral College — UoS doctoral training & researcher development: 023 8059 3253

Web: www.southampton.ac.uk/doctoral-college

Email: doctoral-college@southampton.ac.uk

Postal address: *Doctoral College, University of Southampton, University Road, Southampton SO17 1BJ*

PERu training opportunities, both internal (book via Gradbook and/or Staffbook) and external: 023 8059 4189 (internal extension 24189)

Web: www.southampton.ac.uk/per/support/training.page

Email: peru@southampton.ac.uk

Postal address: *Room 2052, Bldg 27, The University, Highfield, Southampton SO17 1BJ*

Winchester Science Centre — training for STEM Ambassadors and CPD for teachers

Web: www.winchestersciencecentre.org

Email: stemnet@winchestersciencecentre.org

Bright Club — where researchers become comedians! Public engagement, comedy writing and public speaking training opportunities

Web: www.brightclubsouthampton.wordpress.com

Email: brightclubsoton@gmail.com

Watch previous performances on youtube! Search 'Bright Club Southampton'.

More Public Engagement in Southampton!

The Science Room @ The Art House: www.sciroom.org

Researchers' Café: www.southampton.ac.uk/per/university/researchers_cafe.page

Ask the Expert and Explore with US talks and workshops:

www.southampton.ac.uk/schools-colleges/subject-specific-talks.page

Acknowledgements

The *Talk to US!* project has been a collaboration between many institutions and individuals. Both the lessons learned and passed on here via the Guide Book and the success of the projects involved could not have been achieved without the support, commitment, enthusiasm, ingenuity and hard work of all those involved.

We would therefore like to express our thanks to everyone that has been a part of this project.

Schools

Bitterne Park School
Chamberlayne School
Chichester Free School
City of Portsmouth Girls' School
Crestwood Technology College
Eggars School
Hamble Community Sports College
Havant Academy
Hounslow School
Mayfield School
Mountbatten School
New Forest Academy
Ormiston Shelfield Academy
Park Community School
Redbridge School
SEEDS (Home Education Group)
St. George College
Thomas Hardy School
Thornden School
Upper Shirley High School
Westgate School
Wildern School
Wyvern School

University of Southampton

Biological Sciences Research Group
Biomedical Imaging Unit at Southampton General Hospital (SGH)
Chemistry Research Group
The Discover Oceanography team and all at the UoS Waterfront Campus and the NOC
Faculty of Engineering and the Environment outreach team and researchers
The LifeLab team
The MSLC team
The UoS Public Engagement with Research Unit (PERu)
Southampton Education School
The UoS Outreach and Widening Participation (WP) team

RCUK and the NCCPE

This is the *first edition* Guide Book, printed in 2016, and we would like **your** feedback to help us shape the improved *second edition*.

What worked well?

What could be improved?

Please get in touch and let us know!

We are also collecting *stories* of where the Guide Book is being used *all over the world!* If you have used this resource we would love to hear how: email us at the addresses below, go to

www.sotontalk2us.org.uk or even send us a postcard!

Talk to US!

c/o Jessica Spurrell & Prof. Marcus Grace

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University of Southampton

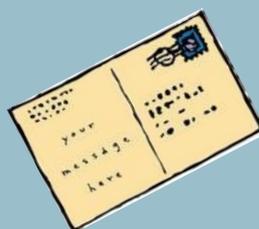
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Developed by the University of Southampton Talk to US! project (an RCUK-funded SUP1), hosted by the Southampton Education School, in collaboration with local secondary schools.

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For more information go to:
www.sotontalk2us.org.uk

Look out for the online version of this resource, due to be launched 2017!

Southampton Education School