

# Pop Up Science

**Transforming  
empty shops into  
creative spaces  
for science  
engagement**

**A Practical Guide  
by Ellen Dowell**

Pop Up Science  
By Ellen Dowell  
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# INTRODUCTION

In many parts of the world, you don't have to go far nowadays before coming across an empty shop. Since the 2008 global financial crisis and the rise of online shopping, some high streets are in danger of losing the bustling and vibrant energy that helps to form the heart of a community. According to the Local Data Company, in 2008 the average vacancy rate for retail units across Great Britain was 5%<sup>1</sup>. This rose to 14.5% in 2011 and, in June 2016, stood at 12.3%, with the vacancy rate for shopping centres slightly higher at 13.2%<sup>2</sup>. Since empty shops became a feature of our high streets, artists, entrepreneurs, chefs, community groups and commercial retail companies have been temporarily taking over these vacant spaces in a myriad of different ways, bringing life and creativity to forgotten corners of our towns and cities. One of the chief advocates for the pop up movement is Dan Thompson, an artist and expert in the reuse of empty shops, and the author of *Pop Up People* and *Pop Up Business For Dummies*. Thompson argues,

*“We need to revive, restore and ultimately reinvent our high streets, making them entertaining and enjoyable places to spend time. We need to recognise that the high street is a venue for events, an amphitheatre for family life, and make it a distinct place that’s worth visiting. And that’s where meanwhile use of empty shops comes in.”*

*Dan Thompson, The Empty Shops Workbook*<sup>3</sup>

Science and research organisations have been relatively slow to join the pop up movement. However, more recently, several projects have used empty retail units as venues for science engagement and interest in this approach to reaching audiences seems to be growing.

In February 2012 the University of Helsinki opened Think Corner<sup>4</sup> as part of World Design Capital in premises that used to be a shop selling baby products. Although not described as a pop up shop, Think Corner did engage public audiences with science and research in an empty retail unit. In October of the same year, creative learning organisation, Ignite, launched 3-2-1-Ignition\* at the Broadmarsh Shopping Centre in Nottingham and described it as the ‘world’s first science pop up shop’. Both projects were pioneers of the pop up science movement. Since 2012, there have been over 20 examples internationally of pop up science shops. Producers of

<sup>1</sup> <https://www.theguardian.com/news/datablog/2011/sep/08/high-street-vacancy-rates-retail>

<sup>2</sup> <http://blog.localdatacompany.com/43-increase-in-the-number-of-vacant-units-being-demolished-in-june-2016-compared-to-the-same-time-last-year-june-2015>

<sup>3</sup> [http://library.uniteddiversity.coop/Community\\_Assets/Empty\\_Shops\\_Workbook.pdf](http://library.uniteddiversity.coop/Community_Assets/Empty_Shops_Workbook.pdf)

<sup>4</sup> <http://213214149112.edelkey.net/Public/default.aspx?contentid=248816&nodeid=37598&culture=en-US>

nine of these projects have contributed case studies to this guide.

To be clear, a ‘pop up science shop’ as defined in this guide is the temporary use of a retail unit for science engagement. This guide is specifically about pop up science shops. There are some excellent existing resources about pop ups, empty shops and meanwhile spaces listed on page 75 which give a general overview of how to plan and run a pop up. If you are considering any kind of pop up shop project you should definitely read these. They cover planning, budgeting, liaising with landlords, marketing, staffing and lots of other practical tips. This guide focuses on the specifics of using a pop up shop as a format for science engagement. Although, necessarily, it tackles some of the same topics as general pop up resources, this guide attempts to address these topics from the clear perspective of public engagement with science.

It is worth clarifying that this guide is about ‘pop up science shops’, rather than ‘science shops’ which were first established in the Netherlands in the 1970s as a way to widen access to science and technology, and to involve communities directly in research.<sup>5</sup> Science Shops represent an approach to participatory research rather than any relation to conventional shops or retail units, however Science Shops are interesting approaches to engaged research and are explored further on page 71 in thinking about future directions for pop up science.

<sup>5</sup> <http://www.livingknowledge.org/science-shops/about-science-shops/history-of-science-shops/>

This guide begins by discussing The Potential of Pop Up Science, the reasons why pop up shops might be considered interesting and valuable approaches to science engagement. It then introduces five key areas of producing a pop up science project: Creative Planning, Collaboration, Making It Happen, Building a Buzz and Making It Matter, with Top Tips at the end of each section. The final chapter, The Future of Pop Up Science, explores how pop up science practice might continue to develop and evolve in the coming years. There are nine case studies of pop up science projects throughout the guide and over 50 mini case studies offering practical stories, hints and tips, based on the experience of these pop up science producers. The last section of the guide is an annotated Resources list.

# 10 REASONS TO DO A POP UP SCIENCE SHOP

**1. Reach audiences in places where they already spend time**

**2. Build relationships with a community**

**3. Collaborate with local people to create a project**

**4. Experiment with new engagement formats**

**5. Test an idea for a temporary time**

**6. Do something different/unusual/  
unexpected/surprising**

**7. Start a conversation**

**8. Address a current issue in an agile way**

**9. Tackle a challenging topic**

**10. Be brave, bold and take risks**

# THE POTENTIAL OF POP UP SCIENCE

Why go to all the trouble of finding and transforming an empty retail unit when there are perfectly good established locations for science engagement in museums, science centres, festivals and schools? There are a few good answers to this question, but the number one motivation for choosing a pop up shop, is to embed science engagement into a community setting, **reaching diverse people in places that are familiar to them and where they already spend time.**

There are many people for whom traditional science institutions, venues and events may not feel accessible, welcoming, comfortable or trustworthy. Pop up shops, on the other hand, have the potential to provide a non-threatening and relaxed space for science engagement. Shops are a pervasive feature of most communities and cultures, whose rules and conventions are intuitively understood. In these semi-public spaces, we know that we are allowed to gaze at the window displays, walk through the door, browse the contents, pick up items to take a closer look, ask questions of shop assistants and leave when our interest is spent. It is these ordinary, straightforward and unassuming acts that can be harnessed when creating a place for informal engagement with science in an everyday setting.

Shops and shopping centres bring together a cross-section of society. People from a range of backgrounds and communities shop in the same supermarkets, pharmacies, mobile phone stores and fast fashion outlets. This diversity is represented in age, ethnicity, gender, disability, religion, sexual orientation, culture, nationality, income, education, occupation, health and wellbeing and social, cultural and science capital<sup>6</sup>. A pop up science shop can therefore be a meeting place for cross-cultural engagement with the potential to support community cohesion and reach new and more diverse audiences.

In his book, *The Great Good Place*, Ray Oldenburg identifies ‘third places’ (distinct from the first and second places of home and work) as vital components of good towns and great cities.<sup>7</sup>

*“Third places exist on neutral ground and serve to level their*

<sup>6</sup> <http://www.kcl.ac.uk/sspp/departments/education/research/Research-Centres/cppr/Research/currentpro/Enterprising-Science/Science-Capital-Made-Clear.pdf>

<sup>7</sup> Oldenburg, R. (1989) *The Great Good Place*. Cambridge: Da Capo Press

*guests to a condition of social equality. Within these places, conversation is the primary activity and the major vehicle for the display and appreciation of human personality and individuality... The character of a third place is determined most of all by its regular clientele and is marked by a playful mood, which contrasts with people's more serious involvement in other spheres."*

*Ray Oldenburg, The Great Good Place*

Creating third places with a focus on science engagement, that are embedded in people's everyday lives and that expand on the knowledge, interests and values that visitors bring with them, may have the potential to build the science capital of a community. Third places for science engagement could provide an open and friendly environment for people to get to know scientists and researchers and value science as part of their everyday experience. Perhaps pop up science shops could serve this function, and they could certainly be a rich testing ground for experimenting with third places for science engagement.

The second good reason to embark on a pop up science project is to do something different - to **experiment, test and pilot new ideas, activities, collaborations and partnerships**. The explicit nature of a pop up is that it is temporary, appearing unexpectedly and open for a time-limited period. The exact definition of temporary when talking about pop up shops is probably in the range of one day to one year and anything in between. It is this transient nature of pop ups that creates the freedom to try bold and creative experiments that might be considered too risky for a more permanent project in a specific venue with established identity and audiences. However, any pop up that proves successful has the potential to be developed into a regular, sustainable or permanent version in the long-term.

Whether trying a proof of concept for a bigger project, testing a new relationship between organisations, experimenting with a novel approach to collaboration, exploring a potentially risky or taboo science engagement topic or prototyping a particular engagement experience, where better to take a risk on trying something new than a temporary pop up project? The empty shell of a retail unit provides a blank canvas for a huge range of different engagement experiences. The store can be transformed into a museum, a workshop, a gallery, a theatre, a playground or any number of other engagement 'worlds'. The familiar character of a retail unit allows for playful interpretation, perhaps subverting and distorting people's expectations of what a shop is and how people behave



in a shopping environment. Pop ups provide fertile ground for innovation, which is vital in all sectors but arguably particularly valuable for the field of science engagement which is a relatively young and emerging community of practice, still exploring ways of producing, evolving and critiquing work.

The third compelling argument for the potential of pop up science is to **start a dynamic conversation about a timely issue with a pertinent audience or community**. This approach is exemplified in one of the case studies in this guide. Timeless (on page 28), was a pop up shop that raised awareness of the scientific, social and political issues surrounding egg freezing, aiming to kick-start an informed debate with women in their 20s, 30s and 40s. The topic had been widely reported in the media following the news that some Silicon Valley companies were offering female employees egg freezing services, but the subject was often accompanied by misleading information and social taboos. The Timeless pop up, held in a retail unit in London's Old Street tube station, reached the professional women for whom the debate was most relevant, provided a platform for discussion and sparked an important conversation in a timely way.

There is an exciting potential for pop up science projects to address subjects with a critical relevance to society, and which may include controversies or societal taboos, in a brave, agile and imaginative manner. A sense of urgency to a debate may be generated through capitalising on the unique and surprising feeling of a pop up project and the short-term impact may suit tackling contentious issues in a daring way. Raising the issue of air quality in the most polluted district of a city, engaging people with energy security in a community close to a designated fracking site or robotics in a town reliant on industrial factories for employment, could all be examples of fruitful starting-points for a pop up science shop.

So, the potential of pop up science boils down to three central factors: the **audience** we choose to engage, the engagement **format** we choose to test and the scientific **content** we choose to explore. Embracing the transformation of empty retail units into spaces for science engagement means the potential of new and refreshing approaches to who we engage, how we engage and what we engage with.

# CASE STUDY: 3-2-1-IGNITION\*

Written by Rick Hall

## Quick Facts

Produced by: Ignite!

Location: Broadmarsh Shopping Centre, Nottingham

Dates: 15 October – 12 November 2012

Opening hours: 09:00 – 18:00 (10:00 – 17:00 Sunday)

Budget: £4300

Funders: RSA Catalyst Grant, Nottingham City Council

Shop facilitators: 5 per day

Visitors: 3300



*The 3-2-1-Ignition\* curiosity trail*

3-2-1-Ignition\* was one of the world's first pop up science shops, an early pioneer of taking creative science engagement to the high street. The project aimed to create an alternative learning space for school children and provide a place where all science questions could be asked by the public and answered in a collaborative way with help from students and experts.

We wanted to experiment with an alternative use of an empty retail space and show people how fun and interactive science can be. A local commercial letting agency offered us support and advice, helping with initial negotiations about renting the shop. We were able to collaborate with over 25 different partners who delivered different schools workshops and daily drop-in sessions. These ran alongside static activities and displays in the shop including a curiosity trail of weird and wonderful items with related questions and answers, a reading area with arts and science books and a cinema space screening lunchtime lectures and fun science videos. We also hosted a number of themed days in partnership with other organisations. Students from universities in Nottingham were recruited to volunteer in the shop. They delivered science busking and other activities as well as offering advice about careers and studying science related degrees. There was an extremely diverse range of visitors, with people of all ages and backgrounds getting involved and excited by the activities in the shop. Following the 3-2-1-Ignition\* pop up shop we have created a portable version of the project that has been taken to various festivals and events. The concept has further evolved into our Community Curiosity Labs, where young people and their families experience and initiate science enquiry and experiments based in their local community centre, library or sports club.

## 3-2-1-Ignition\* Top Tips

- Don't worry too much about lead-in times - there is value in the adrenalin rush of ad hoc opportunities
- Trust your audience to raise unexpected questions
- Do it! This is one of the most exhilarating experiences in public engagement you will ever try

More information about 3-2-1-Ignition\*:  
[www.ignitionpopupshop.wordpress.com](http://www.ignitionpopupshop.wordpress.com)

# CASE STUDY: THE HEART AND LUNG REPAIR SHOP

Written by Ellen Dowell

## Quick Facts

Produced by: The Curious Act, National Heart and Lung Institute, Imperial College London

Location: Kings Mall, Hammersmith, West London

Dates: 7 – 20 July 2014

Opening hours: 11:00 – 17:00

Budget: £19,982

Funder: Wellcome

Shop facilitators: 7 – 11 per day

Visitors: 2752



*Visitors watching beating heart cells at the work bench*

The Heart and Lung Repair Shop was a flagship public engagement project from the National Heart and Lung Institute, exploring the function, maintenance, disease, treatment and repair of the heart and lungs. The motivation behind the project was to embed science engagement in a community setting where people could connect with researchers as part of everyday life.

We were inspired by both the pop up shop movement in the UK and the 826 stores in the US, that combine fantastical storefronts with writing spaces for young people, including the Pirate Supply Store in San Francisco and the Booklyn Superhero Supply Company. We imagined what a repair shop for the heart and lungs might be like, what products it would sell and what services it would offer. Collaborating with five designers, we developed exhibits and installations inspired by real research to transform our empty retail unit into the imaginative and playful world of the repair shop. There was a work bench with lab equipment where visitors could look at beating heart cells under a microscope, a maintenance area where people could check their lung capacity and fictional products including oxygenated and deoxygenated blood, vasculature on a roll and varieties of tinned stem cells. All the activities, installations and fictional products were designed to stimulate conversation between visitors to the shop and the 64 researchers who facilitated the engagement experience during the two-week opening. Over 20 scientists created 'Shop Demos', short talks, demonstrations and workshops about their research and we held two evening events debating the future of heart and lung research.

## The Heart and Lung Repair Shop Top Tips

- Research best practice in other relevant fields to inform your project
- Collaborate with professional designers to create high quality activities
- If you are engaging people with health research be careful how you frame the experience to avoid people expecting medical advice

More information about The Heart and Lung Repair Shop:  
[www.imperial.ac.uk/heartandlungrepairshop](http://www.imperial.ac.uk/heartandlungrepairshop)

# IS A POP UP SCIENCE SHOP RIGHT FOR YOU?

Before you start planning your shop, try asking yourself the following questions:

**Are you trying to reach new audiences who perhaps wouldn't otherwise engage with science?**

By embedding science engagement in a shopping centre or high street you are creating opportunities for people to engage with science as part of their everyday lives, this means that you are likely to reach some people who don't usually choose to engage with science.

**Would you like to establish, build or develop a relationship between your research or your organisation and a local community?**

Running a pop up science shop will provide opportunities and reasons to connect with members of the community where the shop is based including local businesses, libraries, local councilors, youth groups, schools, local press and media.

**Are you willing to put in the time and energy to make the project happen, find solutions to problems and stay positive when things go wrong?**

Setting up a pop up shop can be difficult, time-consuming, risky and unpredictable. You are bound to come across problems you have never encountered before and you will need to stay positive, keep motivated and find creative solutions to overcome hurdles

**Are you willing to take a risk and do something different?**

A pop up shop is a temporary opportunity to try out new ideas. Embrace this opportunity and have a go at something different.

**Do you have, or can you recruit, a supportive team of partners, collaborators, advocates and volunteers?**

Creating and running a pop up shop can involve a lot of work and it is important you have the right team of people who are hands-on, good at problem-solving, invested in the project and can take ownership over different aspects.

**Do you have some financial support?**

Budgets for pop up shops can vary wildly but you are likely to need at least some financial support to design and build your shop, pay collaborators and facilitators, promote the shop and evaluate and document the project.

# CREATIVE PLANNING

Even in the short history of pop up science shops, there have been many different approaches to initiating projects, presenting content and creating experiences for visitors. Pop up science shops have been organised by universities, educational companies, design companies, science centres and charities. There have been shops with very broad content, involving many different science experts, topics and activities, and there have been shops exploring focused themes or provoking specific conversations and debates. Activities have included talks, workshops and demos, interactive and digital installations, craft activities, games, performance and fictional product displays.

No doubt the future will bring a multitude of new approaches to using empty shops for science engagement, because the pop up format is a perfect testing ground for novel ideas. The temporary nature of a pop up shop is an opportunity to try doing things differently, find out what works and absorb learning, enabling change, adaptation and evolution in approaches to engagement. This section of the guide aims to support creative planning for pop up science and stimulate experimentation.

## The Theme

The theme for your shop could be as broad as ‘curiosity’ or as specific as ‘the Higgs Boson’ but whatever it is, you will need to think about how to give your shop a logic or narrative that enables visitors to make sense of their journey or encounter. Visitors’ first step in this journey is likely to begin with the name of your shop. Good pop up shop names might be intriguing, easy to remember, not too long, simple to spell or pronounce and giving an indication of the content, but perhaps without being too obvious – you are probably trying to reach people who aren’t necessarily interested in science after all. If you are going to use social media to spread the word about the shop, it’s worth making sure you can create a simple, memorable hashtag from the name.

It may be helpful to think about the theme of your shop in terms of ‘umbrella themes’ and ‘sub-themes’. For example your umbrella theme might be The Future of Food and your sub-themes could be Agriculture, Nutrition, Genetic Engineering, Food Security and Sustainability. In isolation, the sub-themes are very broad topics but within the context of the umbrella theme they help to create a logical narrative and content framework for the engagement experience. This doesn’t mean your shop necessarily needs to have ‘departments’ dedicated to exploring each sub-theme in turn. Your theme/s should conceptualise the content of your shop in a way that is helpful for everyone involved in it’s development, clarifying your sense of purpose and making sure that you all know the boundaries of the subject you are exploring.

In addition to the content theme of your shop, you also need to consider the ‘world’ you are creating for your audience. Is the world of your shop a laboratory, a supermarket, a boutique, a coffee shop, a museum, a gallery, a playground or a combination? What is the atmosphere and tone of the experience? And how does this world relate to the activities that you intend visitors to do - looking at exhibits, watching talks, playing games, having conversations, taking part in experiments, contributing opinions?

## 👍 The Intergalactic Travel Bureau

"The design was retro futuristic. Everything in the shop was vintage. We had a 1960s heavy metal desk, a rotary phone and an old typewriter. Travel agents were dressed smartly and wore vintage hats."



## 👍 The Heart and Lung Repair Shop



"Although The Heart and Lung Repair Shop was a great name in some respects (it was catchy and easy to remember), it was also really problematic because people assumed they could come to the shop and be repaired! They expected us to be giving medical advice about heart and lung conditions, so we often had to advise people to go and see their doctor if they had any concerns about their own health."

## 👍 Knowledge°room (Wissens°raum)

"We aimed to create a cross between a workshop and a living room with a homely, non-threatening atmosphere. We decorated the walls by spray painting our logo, creating an improvised feel that was not intimidating but with a clearly recognisable design."



# The Shop

It is important to think about how you will remove barriers for your audience to encourage and enable them to comfortably cross the threshold into your shop. These may be physical barriers, for example a shop with a heavy door that has to be opened will be less inviting than a unit with an open entrance that reduces the distinction between the inside and the outside of the shop. But not all barriers will be physical, the concept of a pop up science shop is already unusual, if not odd, for shoppers, so making the space look and feel friendly and inviting (rather than exclusive and intimidating) is essential. Think about what makes any shop intimidating and uninviting: closed doors, aloof shop assistants, people feeling worried about breaking expensive and precariously displayed items?

You don't want the first reaction of a visitor to your shop to be "that looks weird" or "that's not for me". Instead, how can you encourage passers-by to think "that looks fun and interesting", "they look friendly" and "what are they doing? I want to find out..." You might use a flyer stand placed just outside the shop to enable people to find out more before committing to walk through the door. If you have shop windows, this could be a great opportunity to design a display to spark people's curiosity or you could print vinyl signs to create a striking shop front.

It is worth considering the first thing that visitors will encounter when they enter your shop and how you can use this to entice them in. Perhaps by having something visual at the entrance to capture their attention. Think about how your audience will journey through the space of your shop. Is there a place you would like them to start (such as a welcome area where they are given an introduction to the project) and somewhere you would like them to finish (such as a place for them to give feedback about their experience of the shop). Or can the elements of your shop be experienced in any order? Is your shop split into different areas for different activities, for example a workshop area or a talks area. Is the space divided based on different aspects of the content? For example a shop about the senses might have sections for sight, hearing, smell, taste and touch. How will your visitors navigate around the shop? What signage will you need? Be careful about trying to control the visitor experience too much, find exciting ways to work with – rather than against – their expectations of the space as a shop.

Don't forget about the people facilitating your shop. Think about their role and how you want visitors to interact with them. Do you want to support your shop facilitators to come across as approachable and friendly? In which case think about having good quality name labels for everyone. Do you need your visitors to instantly recognise shop facilitators in the space? Think about what they will wear and how they might stand out. You could use printed t-shirts or aprons, ask facilitators to wear particular colours or take a more creative approach to 'costume' based on the theme of your shop.

## 👍 Timeless

“Think about the impact your presence can have beyond those who visit, and try to design for this. We noticed how many people reacted to the windows and the flyers but did not enter the shop and whilst we cannot measure the impact of bringing the question of egg freezing and fertility to the front of people’s minds, we have anecdotal accounts that the very presence of the shop stimulated discussion and debate.”



## 👍 The Heart and Lung Convenience Store

“We placed a large game at the entrance to the shop, a transparent dome with moving balls inside called The Heart and Lung Lottery which engaged people with the environmental impacts on lung health. Visitors playing the game were directly visible to people passing by the shop. The visual image of the game, the noise it made and people laughing as they tried to catch the balls was a great way of attracting more visitors through the door.”



## 👍 The Heart and Lung Repair Shop

“When designing the shop we fell in love with perforated hardboard (or Pegboard). We found it a brilliantly versatile material. Using metal hooks bought from shop fitting suppliers, we were able to create shelves and displays that could be moved around very flexibly and we used hooks in combination with bulldog clips to hang signage.”



## 👍 Think Corner / Think Differently

“The shop was aimed at people who would not normally engage with university research, therefore we minimized university-related signage and branding that might discourage the very audiences we wanted to reach.”



## 👍 The Heart and Lung Convenience Store



“We had aprons printed with the shop logo which scientists could wear on top of their own clothes and we made name badges every morning for the facilitators coming in that day.”

## 👍 Cool Chemistry

“We employ a graphic designer, who has helped us to develop a locally recognisable brand which people have come to associate with high quality, fun, free science events. We operate on an absolute shoestring but still manage to produce some stunning displays by thinking laterally and begging and borrowing. For example we have recycled a designer furniture store’s own Christmas decorations several times having managed to buy them at a discount!”



# The Experience

A large part of your creative planning will be focused on what people will actually do in your shop and how they will spend their time there – the visitor experience. There are many different approaches to creating this experience but in a pop up science shop one of the dominant activities is likely to be conversation. Therefore, the central question you might want to ask yourself is ‘how do we create activities in the shop that stimulate and provoke conversation and discussion?’. This may be by sparking curiosity through showing demos or science busking activities, it may be by harnessing the visitor’s imagination and creativity, inviting them to contribute to exhibits or installations, and it may be by asking them to offer their opinions, perspectives or stories about particular topics or questions.

A pop up science shop is a particularly good environment for having one-to-one conversations, allowing time for a dialogue to emerge, questions to be asked and answered, and stories to be told. It is worth considering how the activities in your shop can support this style of engagement and ensuring that you have enough scientists or science facilitators in your shop to enable rich and rewarding conversations with visitors. The nature of a pop up science shop is about taking science engagement to unexpected places where it can be experienced as part of people’s everyday lives. Therefore, visitors may benefit from a more guided experience than science engagement in a traditional context, to accompany them through the unfamiliar placement of the encounter.

When planning your visitor experience, think about the possibilities to make links and connections with the community where you are based and the place where your shop is sited. Even simple ways of relating your science content to the local community will help to root the project in it’s location. You might want to think about how the activities in your shop change at different times of the day, on different days of the week, and how they might differ on weekdays compared to weekends.

## Intergalactic Travel Bureau

“Visitors were offered consultations with scientists to plan their dream space vacation and then chose a postcard to send from their favourite planet.”



## 👍 3-2-1-Ignition\*

“We hosted a number of themed days such as Nottingham Hackspace Day when hands-on hacking activities filled the shop, a Brain Day where students from the University of Nottingham created a Psychology Fun Fair and we celebrated Ada Lovelace Day with a girls only workshop with the aim of inspiring the next generation of female scientists.”



## 👍 Timeless

“The ‘Eau so Pressured’ perfume range was designed to highlight research findings around the issues that cause women to delay having children. Scents included ‘NO MONEY NO BABY’, ‘PROMOTION OR PROCREATION’ and ‘MR RIGHT NOT MR READY’”



## 👍 The Heart and Lung Convenience Store

"All of our activities were designed to stimulate conversation and debate between researchers and the public. This was made explicit in various voting installations, one asking people to choose which of four different research challenges they felt was most important, one inviting their opinions on which factors have the most impact on quality of life and one was voting on a scale from strongly agree to strongly disagree on various statements such as 'people who make unhealthy lifestyle choices should pay more for their healthcare' or 'the government should introduce a sugar tax to help reduce obesity'."



## 👍 EXplora Science

"We set up 15 minute demonstrations of interesting scientific phenomena where young people were challenged to explore the phenomena, provide explanations and develop the activity into an experiment. With an experienced science teacher drawing out ideas we were able to get plausible explanations for how a hairdryer can keep balls suspended in a flow of air, the reason that ice melts differently depending on the surface that it is in contact with and how a spinning bicycle wheel has a peculiar reaction to any attempt to move it sideways"

## 👍 Think Corner / Think Differently

“We wanted to create an evolutionary Tree of Life showing as many species as possible. Visitors chose an animal, drew it on a postcard and then stuck it in position.”



## Creative Planning Top Tips

- Come up with a strong name for your shop
- Clarify your sense of purpose by creating a simple content framework detailing what your key themes and sub-themes are
- Think about what the ‘world’ of your shop is and what atmosphere you want to create for your visitors
- Try to remove as many barriers as possible for people entering the shop – a Pop up science shop is an unexpected concept so people may be uncertain or wary about it initially
- Consider the journey visitors go on in the shop and what might entice them through the door
- Encourage one-to-one conversations



**“ This was a gem of a place to stumble upon whilst dragging the kids round the shops. They enjoyed all the hands-on activities, and the people running the event were so positive and energetic about each activity. It made science fun and showed lots of different ways to research and find out more ”**

**Visitor to Think Corner / Think Differently**

**“ It lets parents participate in their children’s learning which is fantastic. Well done. Such a refreshing change to another coffee shop being opened ”**

**Visitor to 3-2-1-Ignition\***

# CASE STUDY: KNOWLEDGE°ROOM (WISSENS°RAUM)

Written by Heidrun Schulze and Barbara Streicher

## Quick Facts

Produced by: ScienceCenter-Netzwerk

Location: Vienna, Austria

Dates: Eight pop up shops have been produced since 2013, each for 2-3 months

Opening hours: 2.5 days per week, usually Thursday 15:00 – 19:00 and  
Friday/Saturday 10:00 – 18:00

Budget: Approx. €50,000 per knowledge°room

Funders: City of Vienna, private sponsors

Shop facilitators: 2 per half-day shift

Visitors: Approximately 800-1500 per location (10,000 visits in total for eight locations)



*Children disassemble computers in a workshop led by students of computer sciences*

The knowledge°rooms were conceived as easily accessible and inclusive places for interactive science engagement, reaching audiences who would not usually visit museums and science centres. Visitors were encouraged to be curious and to actively participate in science activities, leading to increased confidence in science learning.

Our vision of the 'knowledge°room' was to create a space which would be open to everyone, located in a local socio-economically disadvantaged neighborhood, in an empty shop with no entrance fees, and with plenty of activities exploring science. We wanted to provide people with the opportunity to freely engage with science in an open and encouraging atmosphere and meet others from their neighborhood, promoting dialogue between different social groups. Explainers, mainly students of various backgrounds, were trained to facilitate activities for a diverse audience regarding age, gender, language, and educational background and to encourage visitors to get involved. In the first knowledge°room we started with 'classic' exhibits, experiments and discussion games, but the programme has continuously expanded over the subsequent eight knowledge°rooms. Now we also have a tinkering zone and workshops on cultural and social topics, such as music, writing and languages. The project is a constant learning experience for us. Each location is different, not only the room itself, but the neighborhood, the audiences, the network of local organisations and the activities. We try to change the ways that we facilitate activities and motivate our audiences in order to gain new insights into the relationship between interactive science communication, informal learning and the empowerment of disadvantaged groups.

## Knowledge°room Top Tips

- Make contact with local organisations and initiatives in advance to make your project known and reach target groups
- Create an open, friendly and respectful atmosphere, where visitors enjoy spending time and where they can engage with science through their interests and at their own pace
- Build a diverse team of facilitators and train them in intercultural communication

More information about knowledge°room:  
[www.science-center-net.at](http://www.science-center-net.at)

# CASE STUDY: TIMELESS

Written by Amanda Gore

## Quick Facts

Produced by: The Liminal Space

Location: Old Street Station, London

Dates: 29 February – 5 March 2016

Opening hours: 08:00 – 20:00

Budget: £80,000

Funder: Wellcome, LSE (London School of Economics and Political Science)

Shop facilitators: 4 per day

Visitors: 1264



*The Timeless shop displayed ranges of fictional products that were designed to look like beauty products, as a way to impart information and stimulate discussion around social egg freezing sciences*

Timeless was a fictional beauty brand with a unique range of provocative beauty products designed to impart information about egg freezing. The project was created to unlock the facts around egg freezing whilst also raising public debate on how these advances in biomedical science may impact on the world of work, relationships and wider society.

We are a creative engagement consultancy and our work uses art and design to educate, engage and inspire people on important strategic and social issues. This project began when we read reports of companies in Silicon Valley including egg freezing in women's benefits packages in an apparent bid to help them further their careers or 'balance' the conflict between pursuing motherhood and career. We quickly discovered that egg freezing is a rapidly growing industry offering a compelling promise that is shrouded in misinformation. There was a lack of clear information and rigorous discussion on the issue, and we wanted to address this information gap by igniting conversations, removing some of the taboo that shrouds the topic of fertility, and stimulating informed discussion about reproductive choices, and the implications of egg freezing on society. Timeless aimed to target female audiences aged 20s - 40s, but be accessible and informative to all. By popping up in a busy location in central London, the intention was to engage busy people unexpectedly through a creative intervention in a public space. A programme of talks by leading experts in reproductive medicine and gender politics were also held in the shop. Additional project outputs included a website, original data on public views about egg freezing created in partnership with a market research company, a short documentary, and a series of public engagement workshops.

## Timeless Top Tips

- Make sure you are clear on the audience you want to reach before you choose your location or start designing
- Don't expect the shop alone to do all the work - think about how you can promote it, what the shop 'assistants' can add to the experience, and where you are signposting people to
- Invest in high production values so that your shop immerses and engages the public - the more visually appealing it is the more likely people will cross the threshold

More information about Timeless:  
[www.time-less.org](http://www.time-less.org)

# COLLABORATION

A pop up science shop, like all science engagement projects, is an interdisciplinary endeavour requiring expertise in both science and creative engagement. Being embedded in a high street or shopping centre creates the need for a third dimension of expertise in local knowledge and community engagement. With tasks including designing exhibits and activities, delivering workshops, talks and demos, facilitating the visitor experience, spreading the word about the project to local people, and involving the community in the development of the project, a pop up science project is likely to benefit from a diverse team with multiple skills.

Previous pop up science shops have involved research scientists, clinicians, students, volunteers, science communicators, designers, artists, filmmakers, community champions, schools, youth groups and adult education colleges. The potential for collaboration to enhance, add value and increase the impact of a pop up science project is virtually limitless. This section of the guide discusses the potential of collaboration for pop up science and offers practical suggestions for how to form and manage collaborative partnerships.

## Science Collaborators

The specific roles that science collaborators take may range from working on the development of activities and advising on the accuracy of scientific content to delivering workshops, talks, debates and demos and direct facilitation of the visitor experience.

If your pop up shop is being organised by a university or science organisation then you are likely to have scientists directly involved from the outset. If your project is being produced by a community, education, arts or cultural organisation then you may need to invite scientists to collaborate with you. Either way it is important that the scientists you work with feel ownership over the project, whether through developing specific content for the project or because they are highly invested in the engagement subject of your shop. There are many potential benefits to scientists from participating in a pop up science shop, as there are in any engagement project. These range from very tangible benefits such as collecting data or identifying new research directions to the broader benefits that come from the opportunity to discuss and reflect on research from new perspectives.

Involving science collaborators may be essential to creating a programme of events and activities throughout the duration of your project. If you are inviting lots of different scientists to get involved then it is vital to have a clear framework within which different groups and individuals can create different kinds of content for the shop. If you are asking people to develop talks, how long should they be? Will the presenter be able to show images or draw on a blackboard or whiteboard? Can they bring in props or demonstrations? If you are asking people to develop workshop activities, how many people at a time will be doing the workshop? Can they use 'wet' messy activities? Will they have access to power?

If your project relies on having a certain number of scientists or facilitators available to engage

with visitors during opening hours then clear communication about shifts, schedules and rotas will be essential. Whether you have the same people facilitating the shop over the entire duration of its opening or whether you have new groups of people coming in every day, briefing them at the beginning of their time in the shop will be important.

### 👍 3-2-1-Ignition\*

“We partnered with over 25 different organisations to deliver workshops and drop-in activities in the shop. These included the British Geological Survey who ran a workshop about mining for gold, the Society of Biology who attempted a world record memory experiment and South Nottingham College who delivered an electricity and circuits session.”

### 👍 The Heart and Lung Repair Shop



The project was intended as a platform for as many researchers as possible from the National Heart and Lung Institute to have a go at public engagement. Different research groups facilitated the shop on different days which worked really well as scientists could provide each other with peer support.”

### 👍 Cool Chemistry

“We have developed a mutually beneficial relationship with The University of Kent’s science outreach team who say that they would usually find it difficult to reach the audiences that we manage to engage with.”



## The Heart and Lung Convenience Store

“We wanted to include senior researchers in the project who couldn’t necessarily spare the time to spend a whole day in the shop, so we invented Skype a Professor. Visitors entered a photo booth with a screen inside, and could chat to different professors throughout the day, who were each working in their own offices. This worked brilliantly when our internet connection was good, unfortunately it was quite intermittent.”



## Timeless

“The project was supported by a team of six advisors who were experts in fertility science and gender politics”

## EXplora Science

“Many of the volunteers in the shop came from the forensic and applied science course of a local college. They were a terrific asset, although needed some coaching in how to engage with young people and draw out the scientific meaning in the exhibits. The pop up shop could not have run without their help and, for subsistence payment only, they stayed for a long and tiring day.”



“ We need more pop-ups like this - a hugely educational space with knowledgeable staff and engaging content/interactive design ”

Visitor to The Heart and Lung Repair Shop

“ The shop style event made it great to explore and helped open up the conversation ”

Visitor to Timeless

“ It’s great that we can do everything ourselves here, and that we may get dirty and things may break – and nobody is getting angry about it! ”

Visitor to Knowledge°room (Wissens°raum)

# EXAMPLE TEAM STRUCTURE FOR A POP UP SCIENCE PROJECT

Effective coordination of your team of collaborators will be key to the success of your project. Is there a producer or project manager who will bring together all the different elements of the project? Will individual people or smaller teams take responsibility for particular aspects of the shop? Will you have a science advisory group to help to check the science content of the project? This is an example team structure for a pop up science project but some of these roles could be combined, split, overlapped or omitted.

**ARTISTS, DESIGNERS AND MAKERS:** responsible for designing the shop and creating installations and activities

**SCIENTISTS:** responsible for overseeing the science content of the shop, collaborating to create activities or creating activities directly

**FACILITATORS:** responsible for delivering events and activities in the shop and facilitating the visitor experience

**PHOTOGRAPHERS AND FILM MAKERS:** responsible for documenting the project

**CREATIVE PRODUCER:** responsible for overseeing the project, coordinating the involvement of other collaborators and guiding the overall vision

**SHOP ASSISTANTS:** responsible for the practical day-to-day running of the shop

**GRAPHIC DESIGNER:** responsible for creating the visual identity of the project and designing signage, flyers, posters and other promotional material

**EVALUATOR:** responsible for evaluating the project

**MARKETING AND COMMUNICATIONS COORDINATOR:** responsible for press, social media and promotion

# Creative Collaborators

Walking into an empty retail unit with yellowed walls, stained ceiling tiles and a floor thick with dust, knowing that you have to transform it within a few weeks, can be daunting to say the least. However, with a team of creative collaborators who understand the potential of a lick of paint, how to utilise different materials and spatial design, the process can be exciting and even fun. Figuring out the layout of your shop, the visual style, colour scheme, the fixtures, fittings and furniture and designing installations, exhibits, signage, posters, flyers and giveaways (such as badges, stickers and postcards) will all benefit from collaborations with designers or visual artists.

It's not just the look of your shop that will benefit from the involvement of creative collaborators. There may be all kinds of ways to maximise the impact of your project through working with people who have particular creative engagement skills. You might want to make films of your shop or work with a photographer to get really high quality images to document it, you might want to work with experts in running debate events or craft workshops, designing game experiences or cookery classes. Think about the theme of your shop, the science topics you are exploring and what kind of creative engagement experts might help you to create high quality and innovative activities for your audience.

It's important to involve your creative collaborators in the development of the project as early as possible to benefit from their experience and expertise when coming up with engagement ideas. If you are bringing together science collaborators and creative collaborators to work together then it is doubly important to start the process early, to give time for people to meet and exchange perspectives.

Knowing how to find the right creative collaborators to work with can be a challenge but there are lots of creative people out there who would jump at the opportunity to work on an interesting pop up science project. You could start by making connections with nearby art schools, colleges or degree courses at universities. There may be local creative industries networks, studios or well-connected organisations and there are various mailing lists and websites where you can advertise temporary freelance roles, see the Resources section for some ideas of where to advertise for collaborators.

## Knowledge°room (Wissens°raum)

“Our team is made up of a project manager with a background in diversity management, supported by project assistants. An artist designs the room, a community worker develops contacts with people in the local area and a social science researcher monitors the project continuously. Playful science content is provided by multiple partners and a team of young explainers are trained in playful science learning, acting as facilitators and role models.”

## 👍 3-2-1-Ignition

“We worked with students from the Theatre Design course at Nottingham Trent University. The entire second year group took on the interior design of the shop as a collective project and transformed the shop within a week on a tight budget.”



## 👍 The Heart and Lung Repair Shop



“We partnered with Theatre of Debate, who have expertise in running interactive debate workshops, to deliver one secondary school workshop and two adult evening debate events about future challenges for heart and lung repair”

## Community Collaborators

For a pop up science shop, working with the community may be the most important, but also possibly the most time consuming, form of collaboration in your project. The primary reason for choosing a pop up shop format is likely to be the ability to engage people in their community with the potential to reach underrepresented groups for science engagement. A project like this provides an opportunity to make all kinds of community connections, with schools and colleges, libraries, businesses, cultural organisations, local councilors, politicians and policy makers, youth and community groups and residents groups. Unless you already have strong existing links and relationships with the community where you are planning to pop up, each of the community collaborations that you make is likely to take time and effort to make personal connections, build trust and negotiate ways of working together. Therefore, you may want to prioritise the community collaborations you make, focusing on the ones that will have the most impact on the success of your project and the people you hope to engage.

There is a broad spectrum of ways that you could create community collaborations. You could work with community champions or gatekeepers who can support, promote and advocate for your project, thereby helping you to build trust within the community and reach particular audience groups. You

could consult with the community by running focus groups with local people to share your plans and receive feedback. You might connect with community groups by inviting them to use your shop space as a place to gather, hold meetings, workshops or events. Or there may be more creative ways for you to make links with groups, for example a local book club could tailor their reading list around the science themes of your shop for the duration of the project or a local choir could compose a song for your shop and perform at an event. It may be an opportunity to do a citizen science project linked to the themes of your shop, inviting members of the community to contribute, collect and analyse data for a research study. Or could you find ways to co-create content for the shop with community groups, perhaps by bringing your science, creative and community collaborators together for meetings or workshops to develop exhibits, installations or activities. Any community collaboration approach is likely to create buy-in to your project from local people and improve your shop's likelihood of successful engagement.

## 👍 Knowledge°room (Wissens°raum)

"We contacted local audience groups (schools, youth centres, adult education institutions, migrant and community initiatives) before the opening, in order to make the project known, invite them to the shop and explore possibilities for cooperation. We participated in local outdoor events, such as neighborhood festivals, held graffiti workshops where young people could contribute to the design of the shop, went on the street with mobile experiments and had science shows, performed by young visitors in front of the shops."



*A neighbors' network of migrant women plays a discussion game on smart mobility*

# 10 TOP TIPS FOR MAKING COLLABORATIONS WORK

1. Make sure that everyone is excited about the core purpose of the project
2. Discuss the contributions of different people and the project milestones in advance
3. Ensure everyone genuinely has the time to do the project
4. Be aware that collaborators may use different language and have different ways of thinking
5. Listen to each other and ask questions to develop an understanding of each other's perspectives
6. Be open-minded to other people's point of view
7. Appreciate each other's strengths
8. Avoid hierarchies
9. Create a relaxed and friendly working environment and don't be afraid to ask 'stupid questions' to help understand each other
10. Gain collaborative insight by sharing working processes or visiting each other's places of work

## 👍 Cool Chemistry

“We held a creative workshop where we asked children to imagine being a scientist and draw themselves at work or the experiments they would do. We displayed over 300 artworks in shop windows along the street for a week afterwards and asked local businesses to choose prize winners. This was to encourage people to think for longer about the event and to give local businesses a sense of involvement.”



## 👍 The Heart and Lung Convenience Store

“We got in touch with the pub across the road from the shopping centre and asked to piggyback on their weekly pub quiz by making it heart and lung themed during the two week opening of our shop. We asked scientists to come up with ideas for quiz questions and worked with the pub’s quizmaster to integrate them into the quiz format. We also held a discussion in the half time break with the scientists and the quiz teams.”

## Timeless

“In advance of the shop we ran a series of workshops at London School of Economics for students and the general public which helped the development of parts of the shop.”

## Collaboration Top Tips

- Create formats, platforms and frameworks within which collaborators can contribute to the content of the shop and take ownership over particular aspects
- Conduct thorough briefings with collaborators who are facilitating the shop experience and communicate clearly about expectations, rotas and shift times
- Work with collaborators who have skills and expertise that will maximise the impact of your project
- Kick start collaborations early to give time for them to develop
- Put the time and effort in to build trust and negotiate ways of working
- Explore meaningful ways to involve the communities that you intend to engage through collaboration, consultation and co-creation



“ A fascinating insight into the world of a university. Such a great idea and would love to come back time and time again ”

Visitor to Think Corner / Think Differently

“ Thank you! Incredible! To have all this information at hand so interesting and informative. My heros these people doing good research. Forget pop up retail we need more pop up education ”

Visitor to The Heart and Lung Repair Shop

“ Our experience was brilliant! Wish we had this all year long with various science disciplines. Thank you! ”

Visitor to The Heart and Lung Convenience Store

# CASE STUDY: THE INTERGALACTIC TRAVEL BUREAU

Written by Olivia Koski

## Quick Facts

Produced by: Guerilla Science

Location: 37th Street, Manhattan, New York

Dates: 12 – 21 July 2013

Opening hours: 11:00 – 18:00

Budget: \$10,000

Funder: The American Physical Society

Shop facilitators: 3-5 per day

Visitors: up to 500 per day



*Planning a space vacation at The Intergalactic Travel Bureau*

The Intergalactic Travel Bureau was a retro futuristic travel agency where visitors could plan a space vacation with a scientist, take a virtual tour of the universe and send a postcard from their favourite planet. The project was intended to spark conversations about physics, space science and technology with people who don't think of themselves as science-interested.

We first produced the Intergalactic Travel Bureau as an activity for the Royal Observatory in Greenwich in 2011 and Figment Arts Festival in New York in 2012. It was in New York that we made contact with the nonprofit arts organisation chashama who work with property owners to activate unused spaces for arts projects and they provided us with the retail unit for our pop up shop in Manhattan. We used artist Steve Thomas' vintage-style space travel posters to create the right look for our travel agency and astronomer Hanno Rein's Exoplanet app allowed visitors to virtually explore planets in the milky way and beyond. It was very satisfying to meet so many different types of people from all walks of life. The highlight was talking to an Iraqi man through a translator about a strange thing that happened to him as a teenager. He said that a bright light lit up the entire sky of his hometown and nobody knew what it was. He was still thinking about it 20 years later – we told him it was probably a meteor. We have since brought the Intergalactic Travel Bureau to San Francisco, Washington, D.C., and other places within New York City. While those one-on-one conversations are priceless, we're interested in finding ways to reach people on a larger scale. We created [postcardsfromspace.com](http://postcardsfromspace.com) to bring the experience of sending a postcard from space online and we are publishing a Travel Guide to the Solar System with Penguin Books.

## The Intergalactic Travel Bureau Top Tips

- Design the experience around an every day interest
- Don't assume people will trust you, especially if you're giving something "for free"
- Enjoy the ride!

More information about the Intergalactic Travel Bureau:  
[www.guerillascience.org/the-intergalactic-travel-bureau-takes-on-manhattan](http://www.guerillascience.org/the-intergalactic-travel-bureau-takes-on-manhattan)

# CASE STUDY: COOL CHEMISTRY

Written by Xanthe Pitt

## Quick Facts

Produced by: Discovery Planet

Location: Cliftonville, Margate.

Dates: 25 - 26 September 2015

Opening hours: 10:00 – 17:00

Budget: £2000

Funder: Royal Society of Chemistry

Shop facilitators: 6 per day

Visitors: 750



*Transforming a former bed shop in Margate into Cool Chemistry*

Cool Chemistry was a pop up laboratory showcasing experiments with an ultra low temperature theme. The event aimed to be highly accessible, breaking down barriers to participation and inspiring people who do not usually have access to innovative learning experiences. The project engaged local organisations through the production process, demonstrating that the community can pull together to tackle local issues.

Discovery Planet is a community interest company based in Thanet, Kent and was set up as a creative response to the significant challenges faced by our local area, which is one of the most deprived local authorities in England. We wanted to use science as a regeneration tool to counteract negative perceptions, promote community cohesion and engender a sense of pride in the area. We know that locally there are significant barriers to participation in enriching cultural activities and that educational outcomes are poor. We wanted to demonstrate that educational opportunities could be made accessible to the most marginalised members of society. Having been awarded a grant from the Royal Society of Chemistry, we secured a former bed shop in a prominent position on the main shopping street in Margate. We installed signage and decorated the windows to make a big splash and announce the event well before opening. Over two days the physical sciences outreach team from the University of Kent delivered six, 45 minute interactive chemistry workshops. Billowing liquid nitrogen clouds were visible from the street attracting passers-by who found it irresistible not to step inside. After each show we handed out ice-pops as a fun way of getting people to think about the changing molecular structures from liquid to solid. We also held creative workshops encouraging young people to imagine themselves as scientists then displayed their drawings in surrounding shop windows.

## Cool Chemistry Top Tips

- Consider the barriers people might experience to attending and what you can do to overcome them
- Make sure your content is high quality and presentation is excellent
- Keep very tight control over your budget

More information about Discovery Planet:  
[www.facebook.com/DiscoveryPlanetRamsgate](https://www.facebook.com/DiscoveryPlanetRamsgate)

# MAKING IT HAPPEN

Anyone can have a great idea for a pop up science shop, but the real skill and energy come into play when making the project a reality. There are bound to be problems, things will take much longer than expected and plans will fall through, so staying positive and being flexible are essential.

This section of the guide offers practical advice about project managing a pop up science shop, however, many of these aspects are just the same as running any pop up project so don't forget to read the general pop up and empty shop guides too, detailed in the Resources section.

## Finding an Empty Shop

The search for the right vacant retail unit to use for your pop up science shop will be defined by your priorities for the project. Is it most important that your project happens in a particular location so that you can engage with a specific community? Or is it more important that you find a shop you can use rent-free to keep your costs down? The size of the unit, whether you want to be based in a shopping centre or on a high street and the potential footfall will all be factors in your decision. One of the simplest ways to look for your empty shop is to go and visit the location that you would like your project to take place in and make a note of all the empty shops in the area. Vacant retail units should have the phone number of the letting agent advertised somewhere on the shop front so you can approach them about the project and ask them to pass on your information to the landlord. Other approaches might be to contact the manager of a shopping centre directly or going through a local council, community organisation or commercial agency that links pop up projects with empty spaces. A list of useful contacts for finding empty shops is included in the Resources section on page 75.

A pop up science shop is more unusual and unexpected than most pop up shops and this can be used to your advantage when trying to persuade a landlord to support your project. Highlight the fascinating content, the collaborators, partner organisations and funders involved and the relevance to the local community. Once you have found the right empty shop for you, try to put a formal agreement in place with the landlord as soon as possible and maintain good communication with your contact for the retail unit to update them on project developments.

### Knowledge<sup>o</sup>room (Wissens<sup>o</sup>raum)

"We have run seven pop up shops in different districts of Vienna. We found empty retail units by contacting a wide network of local organisations, e.g. district management, non-governmental organisations, economic chamber shopping street management and agencies for the management of empty shops. We paid a reduced price on the basis of 'intermediary usage' contracts. It was difficult to find suitable empty shops, because most owners don't want to let a shop at a reduced rent."



## Think Corner / Think Differently

“Securing the shop was the biggest challenge we faced. We spent a long time investigating empty units across the city. Three properties fell through for reasons beyond our control, which heavily delayed the project. In the end we decided to rent a shop unit in a central but relatively quiet mall next door to the city’s main shopping centre. The University required us to carry out surveying and electrical testing on the unit and obtain agreements over the payment of utility bills. The lease was only signed on the day that keys were handed over due to delays finalising paperwork.”

## The Heart and Lung Convenience Store

“We had a positive relationship with the manager of the shopping centre who was very supportive of the project. It had taken a long time to establish this relationship initially for our previous pop up shop The Heart and Lung Repair Shop, which had increased footfall, proving a direct benefit to the shopping centre and making things easier the second time around. We were lucky to be offered our pick of the empty retail units in the mall and chose one in a great location, right in front of the food court and the escalators from the carpark.”

## Budgets and Funding

In theory a pop up science budget could be anything from a hundred pounds (or less) to a hundred thousand pounds (or more). If you are running your project for just a day or two, working with collaborators happy to volunteer their time, in an empty shop given to you for free, using materials and activities that have been found, borrowed or recycled, and marketed at no cost through social media and word of mouth, then the only things you may need to actually pay for are some loo roll, tea and a packet of biscuits. However, longer and more ambitious projects are going to cost significantly more.

Making a detailed and accurate plan of your budget well in advance of the project is essential. Here is a (non-exhaustive) list of some of the costs you may want to consider:

**Fees:** Paying the producer/project manager, creative collaborators (artists, designers, photographers, film makers), evaluators, shop assistants etc.

**Furniture and Shop Fittings:** Tables, chairs, shelving and other fixtures

**Equipment and Materials:** To create exhibits, installations and activities

**Printed Materials:** Flyers, balloons, postcards, vinyl signage for the retail unit, evaluation materials,



**Consumables:** Consumables for activities and experiments, pens, paper, stationary, printer ink for printing daily programmes or last minute signage, tea, coffee, toilet roll, first aid kit, fire extinguisher.

**Expenses:** Travel expenses and subsistence for people helping to run the shop.

**Insurance:** If you are running the project as part of a university or other organisation then you are likely to be under their public liability insurance, but check and make sure you are covered.

**Rent, Rates and Utilities:** You may be lucky enough to have use of a retail unit rent-free but there might still be other costs to consider.

**Contingency:** It is good practice to have at least a 5% contingency in your budget and particularly useful in a pop up project where you're more likely to encounter the unexpected.

Many pop up science projects will be supported by some kind of funding, whether from a university or science organisation, local community scheme or from a science engagement funder. See the Resources section on page 75 for useful links to science engagement funding schemes.

Sponsorship is another funding possibility, particularly organisations who could offer you goods or services that you need for your project for a reduced cost or in-kind. In return you could offer to put their logo on the front of the shop or include an advertisement in your flyer or daily programme.

## **Think Corner / Think Differently**

"Get quotes in writing. We had verbal agreements regarding installation fees but the final costs were three times what we were expecting."

## **The Heart and Lung Repair Shop**

"We asked a local hotel to sponsor the project and received six nights free accommodation. This meant the producer did not have to commute into West London for the beginning of the two-week project, making the experience much less stressful!"

## **Health & Safety**

Producing a project for an empty retail unit has its challenges and health and safety is one to take seriously. If the shop has been vacant for some time, then even some of the basic requirements such as adequate lighting and clear fire exits may need attention. It's worth drafting your risk assessment well in advance of your shop opening to allow time to address any concerns and show it to health and safety experts. You may also want to meet a health and safety officer at the property to check you have covered everything. Make sure you know where the fire evacuation point is, how to find the nearest first aider and who to contact in a medical emergency or if you have a security issue. If you are based in a shopping centre ensure people working in the shop have the phone number of the security office.

# THE GET-IN AND THE GET-OUT

In the UK theatre industry the installation of a show in a venue is called a ‘get-in’ and the uninstall is called a ‘get-out’, although you may prefer to use the slightly more fun Australian terms, ‘bump-in’ and ‘bump-out’. These periods can be the most exciting but also the most stressful and exhausting parts of your project so it is worth having a clear but flexible plan and thinking through the details in advance.

## THE GET-IN

**Crew/Volunteers:** The get-in can be lots of fun. Putting up signs, stocking shelves, installing activities, painting and tidying are quite satisfying jobs leading to the excitement of the shop opening. This means that you can probably persuade people to volunteer their time to help out but be sure to keep up moral in small ways like ordering pizza if people are staying late and maintaining a cheerful atmosphere.

**Priorities:** Create a schedule of your get-in and know what your priorities are. What are the ‘must-do’ jobs that have to be done before you can open and what are the ‘nice-to-do’ jobs that could be left until after the opening day if you run out of time?

**Safety:** Decide on the practices and policies to maintain a safe working environment for both the get-in and the get-out. What are reasonable hours of working and how late can you be in the premises? Is lone working acceptable or should there always be at least two people in the shop? If people are doing manual handling how will you ensure safe procedures are adhered to?

## THE GET-OUT

**Crew/Volunteers:** The get-out generally takes much less time than the get-in but is also much less enjoyable and a bit more like hard graft. Because of this, you might decide to pay a small crew for a day to get it over and done with.

**Pack-up:** A pop up science project is a temporary event but it would be a sad end to spend your get-out simply filling a skip with the contents of your shop. As much as possible, try to reduce the waste created from the project. If there are elements of the shop that can be re-used, make a plan for where they can be stored and organise transport to get them there. If materials can be recycled, find out the best way to do this or look into donating useful leftovers to other people, shops or organisations in the community.

**Clean-up:** Make sure you find out from the landlord of the retail unit what state they expect you to leave the shop in. If you have been allowed to paint walls and drill holes, can you leave these as they are or do you need to fill the holes and re-paint to leave the unit as you found it? It is good practice to try and leave the space in a better condition than you found it to show that you have been good tenants and looked after the shop.

While running a pop up science project enables you to create an accessible project, it also has a high level of unpredictability in terms of the visitors who might walk through your doors. Think about the security of your shop and put a plan in place should you encounter any anti-social behaviour.

If individuals or groups are bringing their own workshops or activities into the shop, request a risk assessment from them in good time and if you are using any specialist science equipment such as microscopes then make sure these are correctly supervised, risk assessed and stored after use.

Depending on the content of your shop, there may be ethical considerations or aspects of the experience that visitors could have emotional, cultural or political sensitivities to. Ensure you have thought through the possible perceptions that visitors could have about the shop content and how you will respond to any negative or critical reactions.

A pop up science shop is likely to be an intensive and demanding project so managing the stress and exhaustion levels of people involved is vital. Factor in regular breaks for everyone working in the shop and try to make sure the pressure and responsibility of the project is shared between organisers rather than all landing on the shoulders of one person.

### **3-2-1-Ignition**

“We were naive about security and had a laptop stolen.”

### **The Intergalactic Travel Bureau**

“A guy came by the shop one day. He had alcohol on his breath. His behavior was okay, we spoke with him outside the shop and he was friendly. He came back the next day, and was extremely belligerent. He was shouting and cursing at us, and we had to lock the door. We called the police, and it took them a very long time to show up. In the meantime the man urinated on the front of the store. The police came and spoke with him, and eventually took him away. It was a little scary. It’s one of the issues of opening in an urban area where anyone and everyone is welcome. It’s important to have protocols in place and rules for engagement to protect your staff.”

### **The Intergalactic Travel Bureau**

“In terms of health, it was a very long run and I probably didn’t rest enough during the 10 day project. I was on site every day. It was important for the success of the project, but in retrospect I probably should have closed the shop one or two days. It did not need to be open continuously.”

## Managing the Day-to-Day

If you are opening your pop up science shop for more than a couple of days then you will want to think about how to organise the daily routine of your shop. Research the best opening times: when do other shops in the area open and close? When are you likely to get the highest footfall? Is it important to be open during school hours, after school, at lunchtime, after 5pm to catch people on their way home after work?

How many staff or volunteers will you need for your pop up science shop to run smoothly? Make sure there are enough people to cover breaks and busy periods so that your shop staff maintain energy and don't get exhausted. Are there particular installations and activities within your shop that need to be supervised? If so, how are you going to guarantee that you always have enough facilitators in the shop? Who is responsible for topping up any consumables for activities, giveaways or the behind the scenes areas of your shop such as the staff toilets or kitchen? If you have different groups coming into the shop to facilitate each day then you will need to organise daily briefings and a rota for lunch breaks.

Think about the practical tools and equipment you might need in the shop on a daily basis. It's always useful to have a basic toolkit of tape, glue, cable ties, scissors, a stapler, a hole punch, a screwdriver, pliers and a hammer. Do you need a printer and laminator for handouts, programmes and last minute signage? Make friends with the staff in neighbouring shops and if you are based in a shopping centre, with the cleaners, security guards and maintenance staff – you never know when you might need to borrow a vacuum cleaner or a step ladder!

## TRAINING

Consider whether or not you will offer training to your shop facilitators, and if so, what kind of training that should be. Think about how much time you can ask your shop facilitators to spend on training and ask them what they would find most useful. Would bringing people together for a training workshop be feasible, or would a document, link or video that you can send out be more practical? You may wish to offer training on the basics of interacting with visitors and encouraging conversations, on how to use simple, non-technical language to talk about the science content of the shop or training specifically tailored to delivering talks, demos or workshops. You may decide that a simple briefing in the shop is enough and 'on the job' training with experienced people available to offer support and answer questions is the most useful approach.

## EXplora Science

“It was difficult to manage the flow of people so that visitors did not have to wait to enter the shop. The space allowed only 35 people plus staff at any one time so sometimes we had queues of people outside the door.”

## The Heart and Lung Repair Shop

“The majority of the people facilitating the shop and interacting with visitors were scientists and clinicians from Imperial College, but they were different people every day and we wanted them to focus on engaging with visitors, rather than giving them lots of practical responsibilities. We realised that we would need paid shop assistants to ensure the smooth running of the shop and to take on tasks such as evaluation, topping up flyer stands and other exhibits and keeping things clean and tidy. We employed three MSc science communication students who not only performed the shop assistant role excellently but also volunteered during the set-up week, doing everything from painting and cleaning to putting together flatpack furniture.”



## 3-2-1-Ignition

“We had to match the opening hours of the shopping centre which meant long days for staff and volunteers.”

## Making It Happen Top Tips

- Start planning your location early but stay flexible for as long as possible
- Make a detailed and well-researched budget plan
- Be organised! Make schedules, check-lists and policies for each stage of the project
- Take health and safety seriously
- Make sure you have enough staff, facilitators and volunteers to ensure the daily smooth running of the shop
- Make friends with your neighbours

# CASE STUDY: THINK CORNER / THINK DIFFERENTLY

Written by Caroline Gillett & Eliot Marston

## Quick Facts

Produced by: The University of Birmingham

Location: Pavilions Shopping Centre, Birmingham city centre

Dates: August 25 – September 13 2014

Opening hours: 10:00 – 18:00

Budget: £25,000

Funders: University of Birmingham, EPSRC Impact Acceleration Account, Wellcome Institutional Strategic Support Fund

Shop facilitators: 3 – 5 per day

Visitors: 2500



*The Think Corner / Think Differently shop in Birmingham city centre*

Think Corner / Think Differently was a University of Birmingham public engagement project bringing science and research into the heart of the city. The key aim of the project was to raise awareness of research undertaken at the University and to provide an opportunity for people to interact with researchers in a friendly, welcoming and interactive environment.

We wanted to demonstrate the relevance of our research to everyday life and reach an audience who wouldn't usually venture onto the University campus, which is several miles out of town. Importantly, we also wanted to encourage and support our researchers to undertake public engagement (perhaps for the first time) away from campus by providing them with a ready-made platform. This included a flexible space, equipment, modest funding for additional resources or collaborations, some administrative support and promotion of their activities as part of a wider programme. We believed this would reduce barriers to participation in engagement allowing researchers to focus on preparing and delivering their activity without worrying about the full logistics of organising a public event. Three to five different research groups were in the shop each day, engaging people with everything from exploding volcano models and art therapy workshops to tweeting robots. Overall, we created a space and portfolio of activities that the public responded to in an incredibly positive way. We didn't get everything right but we adapted as we went and as an experiment it was a really fantastic experience.

## Think Corner / Think Differently Top Tips

- Brief researchers on the need to be proactive - visitors can be quite timid or unsure at first
- Get creative with your evaluation – it's a lot easier if people want to give you feedback because you've made it fun
- Consider minimising official university branding - members of the public can find this off-putting rather than enticing

More information about Think Corner / Think Differently:

<https://thinkpe.wordpress.com/perspectives/case-studies/pewg-events/think-corner-our-city-centre-research-pop-up-shop/>

# CASE STUDY: EXPLORA SCIENCE

Written by Stuart Twiss

## Quick Facts

Produced by: EXplora Science, Technology and Discovery Centre

Location: High Street, Poole

Dates: 9 – 21 February 2015

Opening hours: 09:00 – 16:00

Budget: £2000

Funder: Royal Society of Chemistry

Shop facilitators: 4 per day

Visitors: 1217



*EXplora Science take over the Borough of Poole pop up shop*



The EXplora Science pop up was a temporary science technology and discovery centre with hands on experiments and demonstrations. The project was intended to raise the profile of EXplora, a charity with a long-term plan to open a permanent science centre in Dorset.

We wanted local people in the community to hear about EXplora and develop an ongoing relationship with us. We also aimed to demonstrate to potential sponsors that we had the capacity to deliver an approach that engaged young people in science and inspired them and their parents. The Borough of Poole advertised an empty shop as a pop up opportunity and we requested a fortnight, before and during the half term school holidays. We expected the idea of the pop up would appeal to primary schools for the last week before the holidays and for family visitors during the half term week. Experienced science teachers and educators on the EXplora board of Trustees helped to source fixed exhibits and developed new activities that provided an inspiring environment for the pop up shop. We wanted to create activities that helped visitors to establish themselves as an enquiry team, working together to tackle simple challenges and solve problems throughout their time in the shop. Some of our simplest activities had the highest levels of engagement, especially those using everyday materials that could be replicated at home. These included making string telephones (some of which were over 100 metres long), spaghetti towers and domino chain reactions with wooden blocks. We had young people stay for over two hours and many returned to enjoy the experience after first calling in with their schools.

## EXplora Science Top Tips

- Create a varied experience with demonstrations, fixed exhibits and activities that leave people free to develop the action themselves
- Have a mixture of exhibits that are low maintenance alongside those that need support and refreshing throughout the day
- Mentor and support staff/volunteers and take their feedback on what is working and why

More information about Explora Science:  
[www.explorascience.co.uk](http://www.explorascience.co.uk)

# BUILDING A BUZZ

There isn't much point in producing an incredible pop up science shop if the people it is intended to engage with don't hear about it, don't talk about it and don't visit. Finding a way to spark people's interest and excitement in the lead up to, and during, the shop opening is crucial for a successful project. There are many creative and authentic ways to do this that can add value to the project and extend engagement with the themes and content of the shop.

This section of the guide offers suggestions on how to spread the word about a pop up science shop, get people talking about it and effectively market the project to its intended audience.

## Starting a Conversation

One of the great areas of potential for a pop up science shop is in opening up a dialogue with your audience about the area of science that your project is exploring. You may be focusing on a particularly topical issue that you would like to gather public opinion on, or you might have a range of questions or provocations linked to the content of your shop that you would like to pose to your audience. You can start this discussion before your shop opens as a way of generating interest in the project and engaging with a wider audience.

Starting a conversation online using films, animation, podcasts, blogs and social media is an easy win and can be a great way to involve different collaborators, getting the people you are working with enthused about the project as much as your audience. You might also want to think about ways to build a buzz about your project more directly in the location where your shop will pop up. Working with community groups, schools or local libraries in the lead up to your shop opening to run workshops or discussions could be a great way to get local people talking about the project.

### The Heart and Lung Repair Shop

"We made a short film promoting the shop opening and the local business improvement district agreed to play it on a big screen in the square next to the shopping centre where we were based"



## Timeless

“As part of the project a short documentary was produced, highlighting the personal, social and societal issues around the topic of egg freezing, helping to start a conversation in advance of the shop opening.”

## The Heart and Lung Convenience Store

“We worked with the digital radio station Fun Kids to create a set of six short heart and lung themed audio features about the science behind the shop, voiced by six scientists who were collaborating on the project. The features were aired in the weeks leading up to the shop opening and reached a broadcast audience of 254,000.”

## Reaching Your Audience

By doing a pop up science project, it's likely that you are aiming to engage with an audience who live, work, study, shop or otherwise spend time in the area where your shop will be located. To effectively reach this audience it might be worth identifying different groups and coming up with ways to target these sections of your audience specifically. You might want to invite particular groups for dedicated sessions in the shop, such as workshops for schools or youth groups, scheduled talks for local employees on their lunch breaks or after work, or morning sessions for older people or parents with preschool children. There may be special interest groups that you could invite, such as patient groups, if your project is health related, or environmental groups, hobbyists or campaign groups, relevant to the content of your shop.

Depending on how long your shop will be open, you may decide to hold a preview or launch event and invite press, supporters and local community champions who can help to spread the word about the project. If you're planning to do this, make sure you send invites out in good time, manage responses, think about a programme for the event and whether you will provide refreshments.

Consider how you can tell people in the surrounding neighbourhood about the project. Local businesses may be happy for you to leave flyers and put up posters. Libraries or community centres might have noticeboards or screens displaying local events. There could be local community meetings that you could speak at, or ask for announcements to be made about the shop.

One of your greatest promotional assets is likely to be the shop itself, so create signage or a window display that communicates some key information including dates and opening times. Having a flyer stand outside the shop in the weeks before the opening is a simple way to spread the word. While the shop is open you might want to have volunteers flyering outside the shop to give passers-by information.

## Intergalactic Travel Bureau

“Getting people to come in to the space was more challenging than expected. It felt like being a street preacher. Many people ignored us. Offering something “for free” can make people suspicious. Were we evangelists? Scientologists? What did we want from them? The best way to attract visitors was when the store was busy and passers-by could see something was going on there and their curiosity was sparked.”



## Cool Chemistry

“We find that engaging the hardest to reach groups takes painstaking work and perseverance. We literally walk the streets handing out flyers and talking to small grassroots organisations. Word of mouth recommendations are very important and engagement does not happen overnight as building up a local reputation and a following takes time.”

## Think Corner / Think Differently

“When footfall was good, such as during school holidays and at weekends we had little problem getting people curious enough to enter the shop. At other times the mall was very empty and it was difficult to encourage people in. Flyers were effective, however we ran out of these towards the very end of the project.”

## Cool Chemistry

“We invited local schools and community groups, such as older people’s groups and organisations whose service users have learning disabilities.”

“ Really love the concept of subverting everyday experience to communicate and engage with science ”

Visitor to The Heart and Lung Convenience Store

“ Loved how quirky and fun it was. Was just passing through town and popped in, so glad I did. It was really enjoyable and interesting ”

Visitor to Think Corner / Think Differently

“ I wish this was on for longer, there are so many of my friends that I want to bring to this. It's such an important conversation ”

Visitor to Timeless

## Press & Media

Think about the medium that is most likely to reach the people you want to engage with and prioritise your efforts there. Is it local radio, free newspapers, mailing lists, blogs, social media, listings websites, online forums, residents' newsletters or community magazines? Make sure you send a press release out in good time before the opening. It's worth creating some appealing imagery for the project as this will make for a more engaging media story and, as soon as you have photos of the shop, send a few of the best to your press contacts. Get in touch with local newspapers, magazines and newsletters and offer to be interviewed about the project. Have a good social media presence and link to the popular social media accounts relevant to your audience and the local area. Try to encourage individuals or organisations that have a strong social media presence with your audience to support the project. You might want to tell the 'behind the scenes' story of your shop so take photos of the development and get-in and share them with your social media followers. If you're working with practicing scientists, perhaps they could discuss their relevant research in magazine articles, on blog posts or as contributions to podcasts.

Pop up science shops are still unusual and therefore potentially newsworthy, particularly if you are tapping into a current media interest, issue or debate. Depending on the theme of your shop you may be able to get national or even international media interested in the story of your project.

### Timeless

"The new data that was produced from our public opinion poll gave a great story for mainstream press and we found that connecting with our partner and funder's PR and public events teams was very beneficial. Having a story for different media platforms proved a successful way of bringing people into the store and connected to a variety of audiences across both mainstream and specialist media and, notably received a large number of comments and opinion pieces. In total 54 pieces of coverage were secured across print, online, TV and radio. Media tracking tools showed that online coverage was seen by 335,000 people, and that the articles were shared on social sites 2,540 times – mostly on Facebook. In addition, during the week the pop up was open, 243,752 people were directly reached by Twitter and the Timeless account was listed in the top 10 influencers of #fertility on Twitter."



## Intergalactic Travel Bureau

“We got really great press and media. And we worked very hard to get it. It’s a constant hustle. I recommend having someone not involved in the production of the experience managing press and marketing. You need to reach out to everyone you know, bloggers known and unknown, media outlets far and wide. If you have a good story, a good hook, you’ll get coverage. The story should not be “scientists doing science for the public.” It’s got to be more interesting than that. Like planning space vacations. Some kind of stunt that involves science. We also had really good art and visuals, which bloggers and media organisations love. It helped us to get attention. Think visually! Work with a graphic designer.”

## Cool Chemistry

“Facebook and Twitter proved to be very useful tools, both for publicity and collecting feedback. At one point our post reach for Facebook was 19,000+ and we decided we had better warn the local police in case we were inundated. Luckily that only translated to 750 visitors!”

## Building a Buzz Top Tips

- Plan ways to get people talking about your project before the shop opens
- Reach out to particular audience groups in distinct ways
- Use the retail unit itself to communicate key information to passers-by
- Ask local people, groups, businesses and organisations to help spread the word
- Create appealing imagery to send out with the press release
- Encourage your collaborators to do interviews and discuss the science themes of the shop through articles, blog posts and social media

# CASE STUDY: THE HEART AND LUNG CONVENIENCE STORE

Written by Ellen Dowell

## Quick Facts

Produced by: The Curious Act, National Heart and Lung Institute, Imperial College London

Location: Kings Mall, Hammersmith, West London

Dates: 19 October – 1 November 2015

Opening hours: 12:00 – 18:00

Budget: £29,883

Funder: Wellcome

Shop facilitators: 7 – 12 per day

Visitors: 3088



The shop front



The Heart and Lung Convenience Store was the National Heart and Lung Institute's second pop up, experimenting with empty shops as spaces for creative engagement with research in a community setting. The project explored the future of heart and lung healthcare and how medicine is becoming more personalised, more accessible and more convenient.

We wanted to find out what the public think about our research and stimulate discussion and debate about topics such as personalised medicine, rapid diagnostics, how the air we breathe affects our health and the potential of wearable devices and apps to revolutionise future healthcare. Through idea generation workshops with researchers and designers, we turned the idea of a convenience store on it's head, developing activities including a pick and mix activity of bacteria found in the lung microbiome and a Heart and Lung Lottery scratch card showing the interplay of genetic, environmental and lifestyle risk factors. We showcased 3D printing technology, printing 'replacement veins or arteries while you wait' and used an app to show people their heart rhythm, which was then printed and added to a Hammersmith Heart Rhythm Skyline. Fictional products included diagnostic tissues that turn blue if you have the flu, DIY genome sequencing kits and intelligent infection ID kits. Over 90 scientists and clinicians spent time in the shop, discussing their research with visitors. Many people enjoyed telling their own stories and we learnt that engagement is as much about listening as talking. Undertaking the project has changed the way we think about the places where engagement happens - too often we expect people to enter potentially intimidating spaces rather than meeting people where they already spend time.

## The Heart and Lung Convenience Store Top Tips

- Use your pop up shop to pilot and test new ideas
- Design exhibits and activities that can be re-used at other events
- Allow plenty of opportunities for one-to-one conversations

More information about The Heart and Lung Convenience Store:  
[www.imperial.ac.uk/convenience-store](http://www.imperial.ac.uk/convenience-store)

# MAKING IT MATTER

A pop up by its very nature is not sustainable, it is a temporary happening, something surprising and out of the ordinary. This is what makes a pop up science shop special. However, it makes sense for any project that takes a lot of time and energy to produce, to be exploring opportunities to have some kind of lasting effect and continued journey. Previous pop up science shops have often led to both planned and unexpected outcomes and developments, engaging with audiences in broader and deeper ways.

This section of the guide is about what happens beyond the pop up period and how to maximise the learning, legacy and impact of a project.

## Legacy & Impact

When planning your pop up science shop, if you can take time to think about what you would like to happen after the project is completed and factor these aspirations into the design of the project then you are much more likely to achieve your desired legacy and impact. You might want the pop up shop to...

- raise awareness of a particular area of research
- stimulate an ongoing relationship with the community
- change visitors' perceptions of science
- develop a relationship with particular collaborators or partner organisations
- bring policy makers and members of the public together over a relevant issue
- test a collection of different engagement ideas
- engage patient groups with ongoing health research
- establish a culture of public engagement within your organisation

...or any number of other outcomes.

There are some simple ways to make the most out of your project, such as filming talks that take place in the shop and uploading them to YouTube to reach a secondary audience or designing activities that are portable so they can be re-used and recycled at other events after the shop has closed. More sophisticated approaches to legacy and impact may involve how you continue to work with your collaborators after the project, who you invite to the shop and what conversations you spark with your audience.

### 3-2-1-Ignition

“The legacy of the pop up shop has been the portable version that we took to a dozen or more festivals and community celebrations and that in turn has led us to Community Curiosity Labs which are a combination of citizen science and developing of science capital.”



## 👍 Knowledge°room (Wissens°raum)

“In the second knowledge°room, we had a group of 20-30 regular visitors, kids between 6 and 12 years old, who came every day from the neighboring youth centre. At the beginning they were a rather wild bunch, who could not focus themselves for longer than 5 minutes, could not keep to the rules and were not really interested in science. However, over a couple of weeks, they gained confidence in talking with the facilitators, first about personal issues, but more and more also about science-related



*A 'junior explainer' facilitates the experiment 'sink or swim' for an adult visitor.*

topics. Based on these personal relationships they became more curious about science and began to actively participate in experiments and other activities, even if it took more time. Some of them even assumed new roles as junior explainers who were keen to pass on their know-how to other visitors. A highlight was the closing event of the knowledge°room – a science show on the public square nearby, where they showed their favorite experiment to friends, family and passers-by.”

## 👍 The Heart and Lung Convenience Store

“The project has had a significant impact on embedding public engagement into the culture of the National Heart and Lung Institute. As a result of being involved, researchers feel more confident and positive about public engagement, appreciate the importance of it and are motivated to do more. Their attitudes towards collaborations between artists, scientists and engagement professionals are more positive, they appreciate the benefits of these partnerships more clearly and the project enabled them to gain ideas about broader approaches to engagement. Some researchers said that interactions with visitors had given them a new perspective on their work and new ideas for research directions or priorities.”

## Evaluation & Documentation

Pop up projects tend to be inherently risk accepting and experimental, therefore evaluation to capture learning, mistakes and achievements is particularly valuable. There are a handful of previous pop up science evaluation reports publicly available, listed in the Resources section at the end of this guide.

As with any good project evaluation, you will need to decide on the key objectives you would like to achieve, then develop an evaluation strategy to collect evidence to understand if and how these objectives have been met. There are many data collection methodologies that you may decide to use including observations, online surveys, video interviews and social media analysis, but you may also want to think about methods that particularly suit the pop up science shop setting. You could ask your visitors to write a shop review and give the experience a star rating, you could use a shop loyalty card to track repeat visitors by stamping people's cards when they come into the shop on different days, with the incentive of a giveaway, or you could use supermarket style token voting to ask people to rate different aspects of the shop.

It is worth thinking about evaluation at the point at which you design the activities and experiences for your shop. If you can subtly collect useful evaluation data through engaging interactions with visitors then it's a win win. For example, if you're interested in visitors' opinions, attitudes or ideas on particular topics then you could capture this data by asking people to vote on different scenarios, respond to statements or answer questions. You can ask people to contribute to debates by writing their thoughts and sharing with the community of people visiting the shop. It is also possible to collect anonymous data such as gender, age and postcode through visitor participation in experiments, games and installations, as long as you are adhering to good data management practice. The more evaluation data you can collect through the range of activities in the shop, and the more invisible your evaluation is, the less it will feel like an onerous task for the visitor.

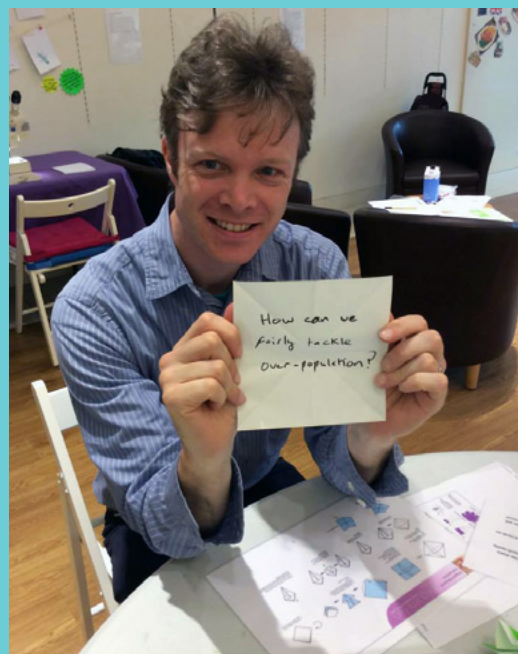
Sometimes it can be difficult to prioritise capturing high quality documentation of a project when you are immersed in the hectic intensity of project planning and delivery, but it is definitely worth making the effort to do this. Having excellent photographs and video footage of your pop up science shop will provide a lasting documentation that will be invaluable in the long run in all kinds of ways you may not be able to predict. Ask someone to be your project photographer and arrange different days for them to come into the shop so that they capture the range of engagement activities happening over the project. Creating a short film of your pop up science shop is the ideal way to remember the project and communicate what you did to anyone who didn't visit in person.

### EXplora Science

"At the end of each day the science demonstrators and volunteers reviewed every activity, taking into account observations, visitor questionnaires and visitor book comments. Changes to the location, equipment, materials and presentation of exhibits and demonstrations were made as a result of this formative evaluation."

## 👍 Think Corner / Think Differently

“Whilst we still had traditional questionnaires, we were able to collect a lot more data quickly through using a bright post-box for comment cards and created a colourful installation with origami paper shapes. We turned the feedback into an activity that participants wanted to take part in.”



## 👍 The Heart and Lung Repair Shop

“The useful thing about running a project in a retail unit, is that you have a very clear threshold that visitors cross to enter the experience. We made the decision to count every single person who entered the shop using a manual handheld tally counter that was passed between different facilitators in the shop so that one person was always responsible for counting visitors. This means we have very accurate visitor numbers.”



# Popping Up Sustainably

Popping up sustainably may seem like a contradiction in terms but there can be ways of thinking usefully about pop up science shops as a means to create ongoing and sustained engagement. A pop up science project might be a way to kick-start a relationship with a particular audience group, leading on to something more permanent or regular. You might carry on developing and delivering science engagement activities for the location, community or audience group using different venues or a space where doing regular pop up events is feasible.

Your pop up science shop could begin a conversation about a particular topic that is continued online through forums, blogs and social media. Sustainability may come from the testing and development of engagement methodologies that are reused, expanded and shared. The project may evolve in all manner of ways beyond the initial shop experience that may be intentional or completely unpredictable. Consider what your project might look like if it did achieve long-term sustainability and stay open-minded to potential opportunities for development.

## Intergalactic Travel Bureau

“We created [postcardsfromspace.com](http://postcardsfromspace.com) to bring the experience of sending a postcard from space online, we are producing a stage show in London, developing a virtual reality Intergalactic Travel Bureau app and publishing a Travel Guide to the Solar System.”

## The Heart and Lung Convenience Store

“We worked with the British Heart Foundation on a pilot project called Science in Store to test the feasibility of using their furniture and electrical shops as venues for pop up research engagement.”

## Making It Matter Top Tips

- Define what impact you want the project to have and design ways to maximise that impact
- Think about ‘easy wins’ to reach a secondary audience
- Find creative ways to integrate evaluation into the engagement experience
- Prioritise high quality documentation
- Consider what sustainability might look like
- Be open to unanticipated outcomes and developments

# THE FUTURE OF POP UP SCIENCE

Pop up shops have become a common feature in towns and cities across the world, and yet the pop up science movement is only just beginning to find its stride. We can hardly claim to be at the vanguard of this cultural phenomenon and so perhaps as science engagement practitioners we shouldn't simply jump on the pop up bandwagon. Instead, how might we appropriate pop up shops in a genuinely innovative way to bring science and research to the heart of local communities? Can we go beyond simply informing audiences, and find deeper, more meaningful ways to use the pop up shop format to engage with the public? Should we move from making engagement experiences 'for' audiences to making engagement experiences 'with' audiences? And how can we integrate more sustained and sustainable engagement into the planning and design of pop up science projects?

There are a number of current initiatives related to science engagement that may be useful to consider alongside, and in combination with, pop up science practice. These are contexts, agendas and approaches that are driving the sector to develop and deepen engagement with audiences and participants. The six examples below are brief provocations intended to stimulate ideas about how the practice of pop up science might go beyond informing, inspiring and entertaining audiences and instead take a sophisticated and ambitious approach to embedding science and research into community settings. Integrating one or more of these engagement approaches into a pop up science shop could be a way to innovate by increasing the involvement of communities in the development of projects, and including the expertise and concerns of community participants in a research and engagement process.

## Impact

The 'impact agenda'<sup>8</sup> is a growing influence within universities and is concerned with the difference that research can make to society. The increasing importance that funders of academic research are placing on impact means that many scientists are looking for ways to reach and collaborate with particular stakeholders to whom their research may have value and relevance. Could a pop up science shop provide an accessible space for exchange and interaction between researchers and a geographically located

<sup>8</sup> <https://www.publicengagement.ac.uk/explore-it/what-are-policy-drivers/measuring-impact>

community of stakeholders? And does pop up science have the potential to increase the impact and reach of certain academic research projects creating mutual benefit for both scientists and participants?

## PPI

Patient and public involvement in research (PPI)<sup>9</sup> is about recognising the value of involving the public in health research to improve research outcomes, including treatments, services and their implementation. Members of the public who are involved in this research may include patients, as experts in their own conditions, carers, service users and potential patients. Involvement in research can incorporate various different methods and approaches including helping to set research priorities, advising researchers or directly carrying out research. Could it be useful to think about pop up science in relation to involving community participants in particular health research projects? And might a pop up science shop work as a setting for PPI, perhaps located close to a hospital or doctors practice?

<sup>9</sup> <http://www.invo.org.uk>

## Co-Production

Co-production<sup>10</sup> is a process of developing projects, initiatives and services with people rather than for, or to them. When a project is co-produced, the implication is that it is developed and delivered equally between professionals and participants. Would a co-production approach to a pop up science shop help to root the project in the community where it is taking place, making it more relevant and responsive to the interests of local people? And could the shared ownership of the project with community participants lead to a more sustained engagement and lasting project legacy?

<sup>10</sup> <http://www.nesta.org.uk/publications/co-production-catalogue>

## Science Capital

Science capital<sup>11</sup> is a concept, based on Pierre Bourdieu's notion of cultural capital, representing all of a person's knowledge, attitudes, skills and experiences related to science. The concept of science capital can be applied to anyone but has been specifically implemented by researchers to understand why some young people feel science is 'for them' and others do not, and how this links to science-related career aspirations. There is much current interest within science engagement and informal science learning in developing initiatives that help to build the science capital of young people, often with particular focus on how science is present in their everyday lives. Could the accessible, familiar and everyday format of a shop be a place that could effectively build science capital within a community? Might pop up science shops provide

<sup>11</sup> <http://www.kcl.ac.uk/sspp/departments/education/research/Research-Centres/cppt/Research/currentpro/Enterprising-Science/01Science-Capital.aspx>



pathways for building science capital that are accessible to people and communities who may not feel that more traditional approaches such as attending museums and science festivals are ‘for them’?

### Citizen Science

Citizen science<sup>12</sup> is when scientific research, data collection and analysis is carried out by members of the public. Projects are often but not always led by professional scientists and can be participatory, collaborative or co-created with the public. Citizen science has established approaches using online platforms to analyse large data sets as well as environmental research, such as tracking habitat changes and species numbers, but citizen science can be applied to any area of research. Would using pop up science shops as hubs for citizen science initiatives be an effective way to generate interest and participation in scientific research within local communities? Could the combination of citizen science with pop up science improve research, engagement and impact for both scientists and participants within certain projects?

<sup>12</sup> <https://ecsa.citizen-science.net>

### Science Shops

Science Shops<sup>13</sup> were first developed in the Netherlands in the 1970s to carry out research in response to problems experienced by society. They are entities, often attached to universities, from which staff and students offer research expertise and knowledge in response to community concerns at little or no cost. The Science Shop approach to research is bottom-up and participatory, with researchers working alongside citizens and communities. The involvement of citizens as experiential experts means that they can highlight pertinent research questions and problems that professional scientists may neglect. Although Science Shops are not generally housed in actual retail units, might it be a logical step to reach communities through the use of empty shops? Would combining pop up science with the concept of Science Shops be a useful way of embedding participatory research into local places?

<sup>13</sup> <http://www.livingknowledge.org>

These six initiatives and agendas offer ways of starting to think about what the cross-pollination of particular research and engagement approaches with pop up science might mean. The potential of empty shops to provide accessible, familiar and non-intimidating spaces has yet to be fully realised in the field of science engagement. There are certainly constraints to consider, such as the need for participants to be a geographically located community or at least a community of people who regularly frequent a particular location. The temporary duration of a pop up still creates a challenge for sustained engagement, participation

and relationships with communities, and there is also the issue of scalability, given that a pop up shop is only likely to have the capacity to engage a limited number of people. Nevertheless, the value of harnessing the opportunities of vacant retail units as a practical physical format for achieving participatory, collaborative and co-created research and engagement is worth further exploration. Wherever the future directions of pop up science lie, as long as creativity and experimentation remain at the heart of the practice we have much yet to discover about the transformation of empty retail units for science engagement.

# RESOURCES

## General Pop Up Shop Resources

### Pop Up Business for Dummies

<https://www.emptyshops.files.wordpress.com/2012/09/developing-your-pop-up-plan1.pdf>

*Online excerpt of the book Pop Up Business for Dummies by Dan Thompson*

### Transported Pop Up Shops Handbook

<http://www.culturehive.co.uk/wp-content/uploads/2015/06/Transported-Pop-Up-Shops-Handbook.pdf>

*A practical guide to planning a pop up shop*

### Pop Up People

[www.emptyshops.files.wordpress.com/2012/06/popuppeoplereport.pdf](http://www.emptyshops.files.wordpress.com/2012/06/popuppeoplereport.pdf)

*A report on pop up culture including case studies of various cities, written by Dan Thompson*

### Utilising Empty Shops: Best Practice Guide

[www.whatdotheyknow.com/request/118063/response/294135/attach/4/Best%20Practice%20Guide%202010.pdf](http://www.whatdotheyknow.com/request/118063/response/294135/attach/4/Best%20Practice%20Guide%202010.pdf)

*A practical pop up shop guide produced by Wolverhampton City Council including case studies*

### Empty Shops Information Pack

[www.bedford.gov.uk/business/economic\\_development/strategies,\\_plans\\_and\\_research/empty\\_shops\\_strategy\\_\\_pack.aspx](http://www.bedford.gov.uk/business/economic_development/strategies,_plans_and_research/empty_shops_strategy__pack.aspx)

*A practical pop up shop guide produced by Bedford Borough Council including case studies*

### Benefits to Landlords

[www.meanwhitespace.com/media/media/downloads/Benefits\\_Landlords.pdf](http://www.meanwhitespace.com/media/media/downloads/Benefits_Landlords.pdf)

*A document detailing the benefits to landlords of allowing temporary use of vacant propertystrategy\_\_pack*

## Finding Empty Retail Units

### 3Space

[www.3space.org](http://www.3space.org)

*A non-profit agency working to unlock the potential of empty commercial property*

### Meanwhile Space

[www.meanwhitespace.com](http://www.meanwhitespace.com)

*A social enterprise working to make use of vacant commercial space*

### Appear Here

[www.appearhere.co.uk](http://www.appearhere.co.uk)

*A platform for booking retail spaces in locations around the world, also with a collection of how-to guides [www.appearhere.co.uk/guides](http://www.appearhere.co.uk/guides)*

### We Are Pop Up

[www.wearepopup.com](http://www.wearepopup.com)

*A European network for creative retail collaboration and pop ups*

### Pop Up Space

[www.popupspace.com](http://www.popupspace.com)

*A property consultancy specialising in commercial space for pop ups*

## Recruiting Creative Collaborators

### Arts Jobs

[www.artsjobs.org.uk](http://www.artsjobs.org.uk)

*The Arts Council's free mailing list advertising creative job opportunities*

### Axisweb

[www.axisweb.org](http://www.axisweb.org)

*A network supporting contemporary arts practice including a searchable artists database, a platform to post opportunities and a programme connecting creative people with empty property*

## Funding

### NCCPE Health, Science & Engineering Funders List

[www.publicengagement.ac.uk/plan-it/funding/health-science-engineering](http://www.publicengagement.ac.uk/plan-it/funding/health-science-engineering)

*The National Coordinating Centre for Public Engagement (NCCPE) list of health, science and engineering engagement funding schemes*

## Pop Up Science Shop Evaluation Reports

### 3-2-1-Ignition\*

[https://ignitionpopupshop.files.wordpress.com/2013/01/3-2-1-ignition\\_-pop-up-shop-final-evaluation-report-170113-reduced-file.pdf](https://ignitionpopupshop.files.wordpress.com/2013/01/3-2-1-ignition_-pop-up-shop-final-evaluation-report-170113-reduced-file.pdf)

### The Heart and Lung Repair Shop

<http://www.imperial.ac.uk/media/imperial-college/medicine/nhli/public-engagement/theheartandlungrepairshopevaluationreportfull.pdf>

### The Heart and Lung Convenience Store

<http://www.imperial.ac.uk/media/imperial-college/medicine/nhli/public-engagement/heart-and-lung-convenience-store-evaluation-report.pdf>

## Relevant Journal Articles

Knowledge<sup>o</sup>room – science communication in local, welcoming spaces to foster social inclusion

[https://jcom.sissa.it/sites/default/files/documents/JCOM\\_1302\\_2014\\_C03.pdf](https://jcom.sissa.it/sites/default/files/documents/JCOM_1302_2014_C03.pdf)

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