The experiences of a STEM Ambassador

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I wasn’t sure quite what I expected when I got involved with the STEM (Science, Technology, Engineering and Mathematics) Ambassador scheme. I first signed up because I was interested in doing more scientific outreach activities as I think it’s important to communicate the excitement and relevance of science, but wasn’t sure how to start. The scheme provided me with both the contacts and the support to do further public engagement.

The scheme is a country-wide programme designed to help to inspire young people in STEM subjects. Although this is a national initiative, its main strength is that it is organized on a local level by regional ‘STEM Points’, my local one being the Oxford Trust.

As part of the programme, the local STEM Point ran the initial training, which consisted of brainstorming activities relating to science and technology and being given an introduction to the national curriculum. My local STEM Point runs these courses throughout the year, although mine was organized by my department, to train ten of us as Ambassadors. The Ambassador course also involves taking a CRB (Criminal Records Bureau) check, which makes it much easier for any STEM Ambassador to work with schools and science in the future.

Once trained, the amount of involvement is really up to you. To remain registered on the scheme, you need to take part in at least one event a year, but there is, of course, no top limit. Which events you do and how you take part is up to you, as your local STEM Point provides you with a monthly update on regional volunteering opportunities, which range from helping out with school science clubs to fielding questions in a local questions and answers session. Some of these activities are organized by the STEM Point, in which you act as an extra pair of hands and simply have to turn up and take part. Although other activities, such as helping out with a school science club, require more planning, these can be closer to your area of science. As part of the scheme, you can also choose to ‘go it alone’ and organize your own event with a school, youth club or other suitable group. Your local STEM Point can also help with your own activity by providing contacts.

Although most STEM activities are simple and require little planning, the highest demand for them is during school and after school, and hence during working hours. However, as a STEM Ambassador, you can organize your own events at weekends and evenings at times to suit you.

I’ve been an Ambassador for 3 years now and have done, on average, three activities a year through the scheme. This has ranged from giving talks to sixth formers on my research to running science stalls at the local science museums. The first one of these was called ‘The biochemistry of bread’ and involved baking lots of loaves in different ways (no yeast, no kneading) and putting balloons on conical flasks to measure what yeast needs in order to work. More recently, I’ve run stalls doing simple DNA extractions from fruit, my favourite being extracting DNA from a strawberry, as it gives a lovely blood-red solution from which to harvest the DNA.

Out of all the STEM activities in which I participate, it’s the talks to sixth formers that I enjoy the most. I talk about some aspects of my research and introduce them to bacteria swimming around in solution. I enjoy
introducing them to parts of the world they haven't seen before, but can relate to what they are learning in the school curriculum.

The highlight of the last 3 years was making a jelly baby explode live on Radio Oxford as part of National Science Week. It’s a really fun experiment and makes you realize how much energy there is in just sugar! It certainly wasn’t what I expected when signing up to the programme.

The STEM Ambassador scheme is a really great way to take part in public engagement, with plenty of support and networking to help you in exciting and engaging the biochemists of tomorrow.

**How do I become a STEM Ambassador?**

The first step is to register online at www.stemnet.org.uk. You will then receive an email from your local STEM Ambassadors contract holder offering you a range of induction dates. All STEM Ambassadors are required to attend a 2–3 hour induction session. This will familiarize you with the Programme and provide tips about working effectively with young people. At your induction, you will also complete an Enhanced CRB Disclosure application (required for all STEM Ambassadors). Once the application is submitted, you will receive an Enhanced CRB Disclosure within 3–4 weeks and can then begin to volunteer in schools with STEMNET.

To find out more or to register as a STEM Ambassador, please visit the STEMNET website at www.stemnet.org.uk

**How can we help?**

If you would like to run our own outreach grant, but are stuck for ideas and funding, you can apply for a Biochemical Society Education Outreach Grant. Whether creating a workshop for school students or speaking at a learned institution, the Biochemical Society is willing to provide grants of up to £1000 to help to run your event. For more information, visit www.biochemistry.org/Grants/EducationalGrants.