

# How youth organisations engage with the STEM Ambassadors programme



## Background: DigiLocal – John Bradford, CEO

DigiLocal is a registered charity based in Bristol. We were set up to provide young people who are under represented in the tech industry with the opportunity to discover and develop their digital talents.

We do this by supporting communities to run coding clubs, though we don't actually describe them as such. Instead, our clubs help young people to develop their problem-solving skills and resilience, supported by STEM Ambassador volunteers who all have a tech background.

Our clubs meet for an hour a week, all through the year. We don't break up for holidays. As long as the kids are around, our volunteers are available and the venues are open, our clubs will run. We run 11 in-person clubs in community venues and another eight clubs online every week.

Children start coming to us from age eight and they are welcome to stay with us for as long as they would like to – if they enjoy the sessions and make progress. **Many young people go on to volunteer to support the running of the clubs, they stay so long!"**



## The STEM Ambassador journey

I started volunteering myself as a STEM Ambassador around 15 years ago. I had a personal interest in increasing awareness of STEM subjects in schools, and I was working as an engineer at a university at the time. The STEM Ambassadors programme was the obvious route for me to take. So, when I began to run DigiLocal, it was clear that STEM Ambassadors would be the place to go to find accredited, DBS-checked volunteers to run our clubs.

All our clubs have two volunteer STEM Ambassadors for each session. I made the conscious decision that I didn't want youth workers, teachers or trainers running the clubs – I wanted real engineers who do it for a living. I knew that they could bring a different perspective to problem-solving and I wanted to show young people what real engineers look like.

We are quite a substantial user of STEM Ambassadors now, with each session being run by at least two people, if not three. **We have between 40 and 50 STEM Ambassadors working with us.** If anyone comes to us wanting to volunteer who hasn't come through the STEM Ambassador route, we will signpost them to our local STEM Ambassador Hub for their DBS checks and induction training. Some of our volunteers have been with us for four or five years now!

The way that we work with the STEM Ambassador programme is probably very different from most users. Instead of looking for people to sign up to run a one-off event, we ask our volunteers to make a regular commitment to running clubs. Most of them are happy to run a session every week.

# What do the STEM Ambassadors do for you?

**We provide our volunteers with a box of laptops, and they run our club sessions however they are comfortable doing it.** Some sessions are more free-form and chatty, others are quieter and more focused. It's partly down to the young people who attend and sometimes down to the volunteers and their personalities.

**The STEM Ambassadors bring their own problem-solving expertise and personal resilience to every session. They support the young people in diagnosing why their project isn't doing what they expected, and how to find a solution.** They also show the young people how to calmly step back when things don't work out, and to plan the next steps to moving forward. In this respect their specific industry expertise is less relevant than their general professionalism as engineers and scientists.

The basic model is that projects are all self-directed by the young people themselves – at no point will our volunteers tell them to “press this, do that...” or announce that, “today we are going to learn about XYZ...”. Instead, each club has its own Google classroom, in which there are between 60 and 70 project guides for young people to follow.

We recommend that all young people start with projects 1- 3 as an introduction to [the coding language] Scratch, which gives them the basic tools they need to get going.

After that, the volunteer might recommend what they move on to next. Sometimes the young people want to make their own games, which is where our volunteers really come into their own, helping with design, structure, where to start etc. They help the children to pick projects that will help them along the way to what they want to achieve.

**This means that in any one session, all our kids could be doing different things!**

For our online sessions, all cameras are turned off which means the STEM Ambassadors could be faced with a sea of blank screens! But, if a young person has an issue, they can share their screen and the volunteer can help them to work through their problems.

In the face-to-face sessions, the young people sit around tables together and they're able to look at their neighbours' screens to help each other when things go wrong.

## About STEM Ambassadors

STEM Ambassadors is a fantastic volunteer programme that has been running for over 20 years.

Our volunteers offer their time, passion and energy to visit schools, colleges and youth group organisations to deliver requests from teachers and youth group leaders who want to link STEM subjects to the real world of work.

Find out more at our [information session](#).



## Request an Ambassador

STEM Ambassadors can bring STEM subjects alive in your youth organisation and provide real-life examples of industry careers. The STEM Ambassador website allows you to request support from our amazing national network of STEM Ambassadors.

This allows you to bring different people, with different backgrounds and skills into your youth or community group, providing an amazing range of role models for the young people you work with.

Find out more at our [information session](#).



# What is the impact of STEM Ambassadors?

Without being over-dramatic, it's life-transforming for some of our young people. During the pandemic, we had some children who would attend four online club sessions a week and that was the only educational contact they had as their own schools were just handing out papers at the school gates.

Some of our young people have discovered through our clubs that computer science is something that they can do, and they are now thinking about studying it at GCSE and A level. One of our trustees, who used to come to sessions when they were younger, is now doing computer science at university!

For others, we find that the girls in particular come to the realisation that "yes, I can do this" – they see what they have managed to build, and we watch their confidence grow. The technology is demystified, they overcome the techno-babble and they thrive!

DigiLocal would not exist without volunteers, and we would not be as big as we are without STEM Ambassadors. They are fundamental to our sustainability and our success.

If anyone is ever looking to do any volunteering in the STEM world or looking for a STEM volunteer, I would say this: *If you're not using STEM Ambassadors, then you should be!*



## How to get involved

If you have been inspired to bring STEM alive in your youth organisation's activities and you'd like to request a STEM Ambassador, please visit [stem.org.uk/stem-ambassadors/request-stem-ambassador](https://stem.org.uk/stem-ambassadors/request-stem-ambassador)

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