YouthLink Scotland

Case Study

Digital Skills 4 Girls - Codebase

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#DigitalYouthWork

Digital Skills 4 Girls - CodeBase

CodeBase's Digital Skills 4 Girls programme runs creative activity sessions using digital technology for girls and non-binary young people. CodeBase's community of technical experts and connections with other youth workers are valuable resources for running the project

Digital Skills 4 Girls

Digital Skills 4 Girls is a programme that holds monthly creative technology activity sessions for girls and non-binary young people, run by Claire Wheelan through the technology incubator CodeBase in Edinburgh. Through this programme, speakers provide a broad range of sessions that allow young people to be inventive with technology and make decisions in creative projects. Coding and computing are a key focus, with activities such as making video games that provide chances to code using no-code tools and be creative with pixel art. Tools are often selected that are free and browser-based so that young people can continue to work on their projects after sessions. However, sessions with additional hardware that young people would not be able to access otherwise, such as sessions on 3D printing or robotics, are also held.

The programme grew out of low female participation in Prewired, a weekly, self-directed coding club in Edinburgh that lets young people work on their own projects where Claire is a Board Member. Pre-pandemic, on average approximately 10% of attendees at Prewired would be girls, with, for example, one girl being reluctant to attend because she felt there were too many boys there and it was too noisy. Digital Skills 4 Girls hopes to act as a springboard to encourage girls and non-binary young people into this programme, by offering sessions in similar spaces to Prewired and encouraging girls to get into creative tech activities, with sessions that are more directed and speaker-led than Prewired.

Claire highlights that the benefits for young people who attend Digital Skills 4 Girls go beyond developing digital and STEM skills.Anecdotally, participants, who are often shy when sessions begin, grow in confidence, with opportunities to present what they have created in the sessions, talk to grown-ups, and to find what they can achieve in a short space of time. This is supported by the female and non-binary demographic for the sessions, which provides an environment where these young people can come out of their shell.

The sessions could also help the girls and non-binary young people see technology roles as part of their future. Most session hosts are women, often in their early thirties or younger, whom participants could be able to identify with and see as examples of where digital can take you, which is especially important in a male-dominated technology sector.

Young people's problem-solving skills also develop in the sessions. Coding provides opportunities for participants to think about how to make their projects work, and the approach taken in the sessions is to encourage young people to question what they are doing and help them talk through issues they encounter rather than providing them with solutions.

Claire finds that young people enjoy the sessions, with a core group of repeat attendees and friendships formed. Whilst session topics can be challenging, young people get to feel proud of what they have achieved. A recent session building circuits boards for LED lights to put in greeting cards is an example of this; whilst there was initially some confusion, half an hour in everyone was participating enthusiastically, and there were lots of beaming faces at the end.

Cyber resilience and staying safe online

Whilst cyber resilience is not a specific aim of Digital Skills 4 Girls, it is a thread that can be picked up in the day-to-day course of the sessions. For example, young people ask why they have to use a designated wifi network for young people rather than the general one available in the building, leading to discussions around digital technology and safeguarding procedures. There are measures that restrict the content young people can access, as the sites young people want to access is one issue Claire has found with delivering digital youth work. For example, they are limited from going on YouTube, with unsuitable videos, rather than following session plans. Likewise, when accessing the Digital Skills 4 Girls laptops, they get to see what a secure password looks like. Digital Skills 4 Girls has also held specific sessions with hosts focusing on specific online safety issues such as what you tell people online, bias, and what you think and expect from others.

The Digital Skills 4 Girls attendees often have a strong pre-existing understanding of cyber resilience and online safety issues. This may be due to technologically-inclined parents, who are speaking to young people about these issues at home, also encouraging their children to attend Digital Skills 4 Girls. However, even though young people are aware of what is safe, it is hard to know if they are actually putting safe behaviours in to practice, especially once they reach the 13 to 14 age groups when they may feel they know better than their parents. Claire also flagged that an app available to parents to safeguard young people, by preventing the sending and receiving nude photos, may be underused as parents may be reluctant to believe it is an issue that could affect their child.

Learning from the project

Claire has found that Digital Skills 4 Girls sessions in Edinburgh are often undersubscribed; it is possible more early marketing of the programme could have been beneficial for encouraging uptake. Participants are often signed up by their parents, and so most commonly tend to be ages 10 and 11 rather than the older ages (up to eighteen) that the project also targets. However, the sessions work to get young people to buy in to the programme, and once involved in a session they tend to be very excited by their projects, and enthusiastic to show their parents what they have achieved afterwards. Participants from state schools are also less common, and Digital Skills 4 Girls is working with local libraries to encourage this.

Digital Skills 4 Girls plans for mixed ability groups of young people, as levels of digital experience vary hugely. Session speakers are asked to provide a basic version of an activity that everyone can see through to being a completed project in the session, whilst also having additional steps to take for those with more advanced skills. Back up activities are also planned in case of technology going wrong last minute.

Claire finds the CodeBase community invaluable for informing the Digital Skills 4 Girls sessions, providing access to expertise and meaning the project is incredibly supported with technology. Accessing teaching resources from other sources has also been useful, and has also provided youth workers opportunities to learn whilst preparing and teaching sessions. Likewise, Claire finds being in a community of youth workers is important for digital youth work. This can help provide information around what to do if concerned about a young person in a session that uses digital technology, for example, portraying a character they've developed as suicidal. This can be particularly important for youth workers given the role they play that often means they get a different insight into young people's lives than teachers or parents.

Through its creative sessions, CodeBase's Edinburgh-based Digital Skills 4 Girls programme aims to encourage girls and non-binary young people to participate in digital technology activities. Whilst uptake remains a challenge, participants are excited by the projects they get involved in, and communities of youth workers and technical experts mean the programme can access key support.

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