Pop-up Library Makerspace: Academic libraries provide flexible, supportive space to explore emerging technologies.

The word Makerspace is a general term for a place where people get together to make things, create things and learn together. Antony Groves presents a look at a recent university library experiment hosting a pop-up makerspace. Working with local edtech leaders MakerClub and colleagues the library organised a two-hour workshop which offered the opportunity for students and staff to explore emerging technologies.

The 2015 NMC Horizon Report predicted the increasing adoption of makerspaces by libraries, arguing that these creative spaces for hands-on work will “further position libraries as gateways to new skills, in addition to new knowledge” (2015, p.1). Although there is a growing body of literature relating to makerspaces, much of it refers to permanent spaces located in public libraries, school libraries and US institutions. Plenty of examples can be found in UK HEIs; The Fabrication Lab, The Digital Hack Lab, The Shed, but these are often spaces within a particular department.

Academic libraries seem ideally placed to offer inter-disciplinary extra-curricular makerspaces, but with increasing pressure on space, resources and expenditure is this feasible? The following post will present a case-study from the University of Sussex Library where a different approach was taken to meeting these challenges. This involved working with local providers and colleagues on campus to successfully create a temporary pop-up makerspace in the Library’s Open Learning Space.
The maker movement is undoubtedly gaining momentum, in 2015 Makezine welcomed over 1.2 million people to their maker faires around the world. From arts and craft through to computer hacking, maker faires give people the opportunity to create and learn with likeminded individuals in a supportive environment; something that will sound familiar to everyone working in the HE sector. Makerspaces enable this activity on a smaller scale, as Roslund and Rodgers explain (2013, p.9):

The word Makerspace is a general term for a place where people get together to make things. Makerspaces might focus on electronics, robotics, woodworking, sewing, laser cutting, programming, or some combination of these skills.

The University of Sussex annual Mobile Technologies Week, a week of extra-curricular events aimed at the whole academic community, provided the perfect opportunity to experiment with a temporary Library makerspace. Working with local edtech leaders MakerClub and colleagues in the Technology Enhanced Learning team, a two-hour workshop was organised to take place in the Library’s Open Learning Space, a flexible area used for teaching and study. The session was created so that no prior knowledge or skills were needed to participate and was open to all students and staff at the University.

The workshop provided an introduction to robotics, coding and 3D printing, giving participants the opportunity to explore these emerging technologies by using a mixture of professional kit and craft to build a robot arm and operate it using a piece of code. MakerClub delivered the session and provided all of the necessary hardware: laptops, servos, Arduinos, BreadBoards and the constituent parts of a pre-printed robot arm. This helped to minimise many of the costs associated with makerspaces, particularly the ‘fees’ relating to the use of these
Image credit: Author

In addition to the usual stakeholder groups, specific student societies likely to have an interest in the makerspace were also targeted. As a result the session was fully booked with students from seven of the twelve academic schools attending along with staff from five different units. Feedback was unanimously positive: 87% of respondents rated the workshop five out of five and answered that they would attend another pop-up makerspace event. The remaining 13% gave the workshop four out of five and said that they might attend again depending on content.

Of the students that left feedback, 75% described themselves as rarely or occasionally using the Library with only one student answering that they had used the Open Learning Space before (and by inference only one student may have attended previous workshops in this room). These statistics highlighted the appeal of the makerspace from both the library and participant perspectives; it attracted students and staff from a wide range of disciplines to an essential part of the campus that many were not already making full use of. This was summed up perfectly by one particular piece of student feedback:

> The workshop was really, REALLY fun. I loved it (it kind of helped me be more confident); please do more of these. The Library is a great place for workshops like these; I find most university buildings belong to different schools/departments, whereas the library is for everyone.

The library is indeed for everyone, and with increasing student numbers that presents challenges with how to use and manage the space. However as this case-study shows, makerspaces do not have to be permanent and can ‘pop-up’ at times and locations that are most appropriate. If there is not a suitable space in the Library, mobile makerspaces can even venture out across the campus (Moorefield-Lang, 2015). As Darren Jones writes, “a makerspace is an area where people can come together to create things, experiment and learn together” (2013, para.2). So whether it’s a fab lab, hack space or maker club, the approach to creating a pop-up library makerspace is the same as creating within it: find a suitable space, find some willing collaborators, and build something exciting!