

The Maker Movement gains ground in Dutch libraries.

The new library is a workshop! So, there you have it. You no longer just dive in a book, but you are going to work, make and create yourselves by digital manufacturing tools and using other skills of the 21st century. Jeroen de Boer, project manager of Frysklab, affiliated with Bibliotheekservice Fryslân (BSF), explains why libraries embrace the maker movement.

What is the maker movement?

“The American entrepreneur and author Chris Anderson argues that a new industrial revolution is imminent. Increasingly entrepreneurs make use of open source design and 3D printing. Basically this allows them to produce from the comfort of their own home and using their personal computer. In fact, basically all means of factory manufacturing are now available to ordinary people. They can make specific products for interested customers. Through crowdfunding they can find money and the internet makes it possible to offer and sell their products. Anderson calls it the maker revolution.”

So it's a grassroots movement?

“Yup. People experiment in garages and attics, just like the great inventors of the past. With one crucial difference: the Internet. In the past decade we have learned to collaborate virtually, to share knowledge and to make things. Now we want to put those combined skills into practice.”

Isn't it just amateurism?

“The maker movement is maturing and formalizes. It started in the mid-nineties with hackerspaces, where computer programmers could share knowledge-infrastructure with each other. Besides programming and hacking they were also engaged in creating physical projects. The leading 3D printer from Makerbot for instance started development in a New York hackerspace. Around 2005 maker spaces started becoming en vogue: spaces where real objects are made from digital designs. Maker spaces no longer wanted to be associated with hackers, a term with a sometimes negative connotation. Maker spaces often have an educational focus, aimed at children

and young people. We are now one step further and develop FabLabs: maker spaces designed to meet all kind of needs.”

What are the conditions for a FabLab?

“The American professor Neil Gershenfeld is founder of the FabLab concept. He had his laboratory of the Massachusetts Institute of Technology at its disposal, and with his students discovered that you can really make almost anything by using a certain set of machines and design tools. He wanted to share this available knowledge and capabilities with the rest of the world. Gershenfeld put he conditions which FabLabs must meet in the so-called Fab Charter. The labs must be accessible for everyone for a certain amount of time and feature the same basic set of tools and instruments. FabLabs also share their knowledge with the global FabLab network and entrepreneurship and self-motivation are stimulated. FabLabs are informal learning environments for 21st century skills such as sharing and collaboration, and develop problem solving skills and entrepreneurship.”





And now BSF has its own FabLab?

“Yes, Frysklab. This is a mobile FabLab we have set up from the library. The library is also the FabLab licensee. In Friesland, a rural province in the northern part of The Netherlands, we face a number of local challenges. Children have less development opportunities outside regular education than in many other parts of The Netherlands. Also young people in Friesland leave school without a diploma more often. At the same time companies find it difficult to find qualified personnel. As a library we want to contribute to a solution for these issues. We want to encourage children and help companies to provide them with qualified personnel.”

Isn't good education primarily a task for schools?

“Of course. But we notice that schools often have limited knowledge of new technologies such as 3D printing. Therefore we can have added value for them. We want to make the next step and we can with Frysklab. As a library we notice the need for dedicated knowledge and we want to stimulate innovation. In the United States, but also in Europe, FabLabs and libraries are increasingly starting to co-operate. The library is a natural knowledge habitat. In Europe, we are the first library with it's own FabLab. And we move on. Together with schools and local businesses we are seriously looking into the possibility to set up a long-term educational program to include digital fabrication in the curriculum. We have started with a pilot for the upper primary and lower secondary education to find out what the results are. Not as an extra program, but integrated in the existing curriculum.”

Does each FabLab take the local or regional situation as a starting point?

“FabLabs share their knowledge globally, but you can see that they are an engine for local development. In Friesland we focus a lot on innovation in the fields of water technology, sustainable energy and creative craftsmanship. Therefore these focus points are most important for FryskLab too. For instance: we want children and young people to design and produce prototypes for water turbines using 3D printing technology. In this way we train young developers and entrepreneurs, but also make Frisian companies aware of the skilled young people we have in Friesland. From a library view we are the connection between them.”

Can you give examples of other FabLabs?

“In The Netherlands the maker movement is very active. We have more than 40 official FabLabs and dozens of maker spaces. At the moment there are close to 500 FabLabs in 70 countries worldwide. FryskLab is the first FabLab that was conceived from a library in Europe. Protospace in the city of Utrecht has a lab that is affiliated with the University of Utrecht and focuses on research into printing human tissue. De Waag in Amsterdam, Holland's first FabLab, focuses on fashion and design. Besides FryskLab there are also other Dutch libraries that have set-up their own FabLabs, for instance in Middelburg, Apeldoorn and Lelystad “

How do you explain the popularity?

“Maker Spaces provide an informal learning environment to develop 21st century skills. In a FabLab you are now able to create things that previously could only be achieved by mega corporations. Small business owners have the ability to produce for a niche market. This small and innovative entrepreneurship fits the tradition of Friesland and the Netherlands. “

More information?

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