

TRANSCRIPT EASE SUMMIT VIDEO — FABLAB BREMEN LISA SCHRAMM

Hi I am Lisa from the Fab Lab Bremen in Germany. We are an open high-tech workshop for manufacturing almost anything. Anything for everyone. Due to its central location it is accessible for all citizens. We aim for a diverse lab with people from all social strata that then thrives through interdisciplinary and transgenerational exchange.

So what can you do in a FabLab? Probably you have all sorts of wild ideas running through your head, and you don't really know how to realize them. So you will come to us and we'll try to come up with a more concrete form. After that we'll digitally produce your prototype with our machines.

We use Open Source Software in the Lab to secure the accessibility for all. You can create and prepare your files at home or at the lab as well as edit them whenever needed. All of our technical equipment has a repertoire of open source software installed and is free to use.

We use a wide range of digital manufacturing tools in the lab and are constantly expanding our machinery pool. A real allrounder is the laser cutter, it manages a lot of different materials and you get results really fast. The 3d printers are also a substantial FabLab technology, you can really produce anything with them.

Here are almost all the machines listed that we have at the lab at the moment, and you can see via the connection, that visualized the link between software and hardware, that you can almost operate all the machinery by only using two open source programs. A 2d programme called inkscape, and a 3d programme called tinkercad. If you manage to use them, you can almost produce anything.

We have a bunch of different formats that we host in the lab, we have an open lab day twice a week. It is open for everybody, the community comes together, helps each other out and creates new things. You don't have to be a member of our registered non-profit association to swing by and try everything out. We only charge the cost price. These snippets are actually a little glimpse into our workshop in Bremen.

Twice a week containing four workshopslots we have a programme called DigiLab. DigiLab is an Open Lab Day for Kids and Teens, basically an Open Lab Day that is educationally guided. The adolescents can earn badges that qualify and empower them to work in the Lab freely outside of DigiLab. We do everything from microcontrolling, over block based programming, to using all our machines preferably combing multiple techniques.

Once a month we have a FLINTA* Open Lab Day. That is a LGBTQ+ safe space, with no mansplaining.

We also run the FaBuLoUS Research Project in our FabLab. FaBuLoUS is the abbreviation for FabLabs as educational and learning spaces to support schools. It is a collaborative project and unites the disciplines of aesthetic education, computer science education, social science, and science education in a common question for schools and FabLabs. The question is: How can offers for educational processes of children and adolescents be designed in and with FabLabs and which processes of change can be observed through this.

Apprentices come by once a week to be in a creative environment and try out new hands-on things and getting to know new technologies.

We host all sort of different formats with school classes on a very regular basis.

We believe it is very important to make a social impact, therefore we provide holiday care to relieve working parents.

These are extracts of videos that were produced during our last holiday program, where the kids would produce stop motion or ar/vr videos of a storyline that they developed based on a novel. The set design was produced using FabLab technology.

We use various pedagogical methods that illustrate and make our media concept tangible. At the heart of our media concept is the mediation of working independently. Solving occurring problems by assisting in a sense of self-help oriented aid. Giving the learners a confidence that they can tackle a project all on their own empowers them.

It is key that functions and processes are perceived hands on. We always hand whatever we are working with to the participants and let them figure out how it might work just by observing it. We try to not interfere the process of exploring so there is no anticipation of the learning process.

Giving space and granting freedom to explore, always aiming to support, encourage, and be there for any upcoming questions, rather than taking creative processes and steering something into a direction.

We emphasize on finding solutions through exchanging thoughts and knowledge with others, peer to peer learning and group projects.

The FabLab is a place to experiment, to encourage processes, and enlighten curiosity towards exploration, imagination, and invention.

We also teach how to deal with failure, because it is crucial and it'll always happen.

Thank you very much for tuning in, FabLab Bremen is signing off, bye.