

Hungary - Maker Pedagogy

The main aim of our project is to educate students in vocational training according to 21st century economic requirements in such way they obtain the needed professional knowledge in the changing economic situation in Europe. To reach these aims the knowledge and use of ICT tools, robotics and digital tools are necessary. Technology has transformed so many different aspects of our lives and the workspace is no exception. The skills today's workers need to possess to succeed in the job market are wildly different from those required from previous generations. Makerspaces provide people with an opportunity to work with new technologies, use them to bring their ideas to life, develop their problem-solving skills, and give themselves the best chance to succeed in a constantly changing world.

In Hungary the Vocational Training Centre has a Digital Workshop where students know some professions and the process of production either in traditional way or with the help of 21st century robotics and other kind of modern technology. They presented Maker Pedagogy that is a new trend used in this Vocational Training Centre.

Makerspaces provide hands-on, creative ways to encourage students to design, experiment, build and invent in science and engineering. The maker movement is about teaching and learning that focuses on student centred inquiry that is the purpose of the learning. It is necessary to change education now more than ever as we are facing an educational system in crisis and a global economy has problems in the field of labour supply as well.

The Digital Workshop in the Vocational Training Centre is the place for bringing together students, educators and industry partners to collaborate in the cycle of learning in order to create new innovations in the world of education. We can see the mix of a traditional classroom and virtual environment, which can affect and improve teaching and learning processes.

With Maker Space Pedagogy we want to show the students that they do a valuable job, they can be successful in their jobs and they should be proud of their creative thinking and result of their work.

In digital workshop everybody can work individually, they can learn and use the modern digital technology (CNC, robotics, 3D printing). The participants can strengthen their innovation skills, teachers motivate them for learning, creativity, individual and teamwork.

All these give them possibility to set up an own goal, create a clear picture about the future by giving them a competitive professional knowledge.

Diversity of activities are critical to the design, making and exploration process. A possible range of activities might include cardboard construction, prototyping, woodworking, electronics, robotics, digital fabrication, textiles and sewing.

Educators and administrators can help guide the process and generate the space that works best by researching, brainstorming and clearly articulating their needs, while keeping in mind inevitable changes in the future.