

DIYLab at Oulu Teacher Training School, Oulu Finland

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First steps of DIY

At the beginning of school year 2014 – 15 the headmaster of lower secondary school in Oulu Teacher Training School, Pasi Hieta, introduced the DIY philosophy to the teachers.. He suggested to the teachers that they could participate in DIYLab project by finding a mutual group to teach with one or more teachers of that same group, sit down to plan together and find what they have in common in their curricula for that same group. Later on in the fall, the teachers were asked to sign in for the project, and there were 10 teachers participating in comprehensive school with groups from fifth, seventh and eighth grades.

The guidelines for the project were self-regulation, digital competence, community-based learning, multidisciplinary approach, research-based learning, curriculum integration, with reference to the new national curriculum of 2016. Life-long learning skills, new social skills needed in modern society, involvement, co-operation, building a future together, were highlighted as key issues to the project. The students are masters of their own learning process and they can produce learning material themselves.

Planning DIYLabs

There were combinations of health education and mathematics, physics and mathematics, history and geography, history and English, physics and biology, crafts, physics, chemistry, mother tongue and English. The students were given a topic within the learning task, and they were free to choose the method of learning and the way of presenting their results. In addition, a digital object was to be the goal for each group's presentation. Thus, the students were in an active role, producing material for learning instead of learning from the existing materials. The students had a chance to choose what they found interesting and they also formed their groups by themselves.

The group I worked with was a 7th grade group, and our topic was about immigration in American history, combining the contents of the curricula of history and English. We teachers had our own teacher conference where we went through the curricula of our subjects for 7th grade and picked up what we had in common. There were quite a few topics that we could include in our DIYLab project. It was necessary for us to be flexible, because part of the

matters on this theme would be taught in the 8th grade, so a decision was made that some of the 8th grade contents of English were moved to the 7th grade and there would be a deeper study period about these matters the following year, to cover the parts that have already been dealt with.

The students' results

A variety of interesting digital objects were created. There were a number of videos made by the students, some power point presentations, some word documents, some physical experiments documented with video, drama, eBooks, and all these were presented in their learning groups and shared in the DIYLaHub: <http://hub.diylab.eu/>. The students were able to use their own personal strengths and abilities in their work because they could choose their own work freely.

In the American history and immigration there was a number of different topics to choose from. As suggestions for the videos to be made there was the arrival of the first settlers in North-America, the Wild West and the establishment of order, the Gold Rush and Uncle Scrooge, industrialization and Henry Ford, and Ellis Island. The students were provided with mini-iPads or laptops to work with. The students were also supposed to write a research document, either in Finnish or in English, using the web pages of the Immigration institute, books and American letters as their resources.

One part of the project was to create a digital photo exhibition on American features in Finland, which made our young students have a more critical view on the world around us.

The students were happy with DIYLab work. They enjoyed the freedom to choose what they wanted to concentrate on, how they wanted to work, and what kind of work they were to produce. They were happy to produce something new.

Teacher's role

The role of the teacher was that of a group facilitator, initially, which meant that the teacher had to see that the groups were formed equally, that no one would be left out and that everyone would have an equal opportunity to work in the group. The teachers were there to help students with technical devices, too. In addition, the teachers helped students find more information from different resources, if necessary. It was remarkable how well the groups were formed and how well they started to work together and how well they knew how to use all the technical gadgets.

Teacher trainees participated in some of the projects. They helped students if there were some problems with understanding the study materials or producing their own texts. Also, the teacher trainees helped find interesting background information. This was part of the teacher trainee's regular teaching practice.

The new curriculum 2016

An important incentive for adopting DIY philosophy in our school was the fact that the new national curricula would be launched in two years. That meant that every school should arrange at least one multidisciplinary learning module a year, offering a clearly defined theme, project or course that combines the content of different subjects and deals with the selected theme from the perspective of several subjects. With DIY experiences, our school acquired good practice of how to organize multidisciplinary learning modules, with different subject teachers and students alike, taking part in the planning process also.

Further practice of DIY

One example of further DIY practice was last year, when the same history teacher as before and I had another project with another 7th grade. This time our theme was Finnish identity. The students visited the Northern-Ostrobothnian museum in Oulu, took some pictures there, and used them as starting point for their study. The students decided about the topics and methods by themselves. The documents were written either in Finnish or in English.

Beautiful power point presentations, word documents and posters were made. It is unbelievable what the students can do when they are given the chance. I am truly happy for the new curriculum, which gives us teachers more opportunities to work with DIY.

All in all, there is no doubt about the fact that DIY is in our school to stay. It gives space to all kinds of learners, learners from different nationalities and different abilities, and this way all can proceed at their own pace and learn the skills they will need in the future.