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Towards successful learning: Controversies and common ground

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Short bio:

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Proposal

Title: Development of the UNIPS online learning SOLUTION for university STAFF training

Abstract:

Due to a high demand of university pedagogical staff development courses in Finnish universities, the universities were faced with the problem of not being able to offer university pedagogy courses for everyone who wanted to study them. Additionally, ways to improve the already existing teaching were sought. As a solution, a web based learning platform called UNIPS (University pedagogical support) was created in collaboration with eight Finnish universities. The UNIPS solution was created on the basis of a previous solution, the UTUPS (University of Turku Pedagogical Support), which was developed for the same purposes at the University of Turku as the UNIPS. In this presentation, the UNIPS solution is introduced and experiences of its use from eight participating universities are presented.

Key words: Higher education, University pedagogy, Learning platform, Online teaching, Staff development

1. Introduction

In recent years, the demand for greater amount and more flexible staff development courses, called the university pedagogy courses in Finnish universities, has increased. To fulfil the needs of university staff, a digital learning solution UNIPS (University Pedagogical Support) was developed in collaboration of eight (out of a total of 14) Finnish universities. The Finnish Ministry of Education and Culture allowed the project a 1,86 million euros funding for years 2017-2019 as a government key project funding.

Earlier, in 2015, the University of Turku made a decision to fund a development project named UTUPS to create a learning platform for university pedagogical courses that would be open to all university staff and doctoral students for self-study and also offer some courses to earn credit points. During 2015-2017 the University of Turku Pedagogical Support, UTUPS, was created, tested and consolidated in use. In the beginning of 2017, the Finnish Ministry of Education and Culture assigned a funding to a project called University Pedagogical Support, UNIPS, to create a platform in cooperation with 8 Finnish universities, based on the previous UTUPS platform.

As an example of a typical university in Finland, the University of Turku offers 10, 15 and 35, together 60 credits (ECTS) pedagogical courses for those staff members, who can show that they have teaching at the university. Thus, we have not been able to accept those researchers and doctoral students, who do not teach at the university at the time they apply. Also, in many years, we have not been able to

take in all teachers (who currently have teaching) willing to participate in pedagogical courses due to high amount of applicants. Thus, we have been searching for a solution to offer more courses for a wider student group, including researchers and doctoral students, with a relatively small funding. The situation is quite similar in other small and middle size Finnish universities, so cooperation possibilities were searched for.

The aim of this paper is to introduce the reader to the UNIPS and the former UTUPS learning solutions by analysing the basic principles of the pedagogical and technical solutions, and presenting some first experiences from the testing and using of the environment. We will also set some visions for the future, especially concerning the continuity of the environment after the funding period.

2. Pedagogical and technical solutions for UNIPS

When designing the UNIPS and the previous UTUPS system, our focus was on producing good quality online material on higher education and providing an easy access for our staff members to that material, so they can obtain information through self-study on any university pedagogical topic they want in order to support their teaching. Our secondary focus was to incorporate guided study with credit points in our system, which would utilize online teamwork for collaborative improvement on pedagogical skill. We wanted also to address with our solution included the possibility to offer university pedagogy courses to our doctoral students, to create an environment for flexible studying, to create smaller sets of university pedagogy studies than previously and to enable the option of developing disciplinary specific courses.

The modules consist of both individual working and collaborative small group working in digital form. The individual phase introduces the learner to the most central journal papers of the topic and gives a possibility to reflect the topic in written format. The small group working phase supports the pedagogical principle of creating knowledge and developing pedagogical expertise in collaboration (Combéfis, Bibal, & Van, 2014). By selecting groups that have participants on different skill level, e.g. experienced teachers and more novice doctoral students, we can enhance the collaborative benefits of the group working. In small group working, the students will set questions to each other and comment each other's texts (in Google Docs), which will give them a possibility to reflect their own thinking and help each other to develop more elaborated conceptions. The more experienced members of the group can share their teaching experiences with the more novice ones and the novices can ask advice from the more experience ones. The members can also share feelings and solve problems together. The goal is to enhance conceptual development and change (Parpala, Lindblom-Ylänne, Komulainen, Litmanen & Hirsto, 2010) i.e. to help students to build their teaching expertise through getting familiar to educational concepts and discussing about them.

In the implementation of a new learning platform, the design decisions previously made are constantly evaluated in iterative cycles. In Hevner (2007) design science both the knowledge base and the environment effect design decisions. The UNIPS environment was mostly based on the pedagogical

goals discussed in this paper. The technical implementation of the previous UTUPS environment began in March 2015 and was ready in Autumn 2015 for preliminary testing. The basic structure of UTUPS was copied to the UNIPS environment. Only minor revisions have since been made to the core structure, as the feedback from students has been very positive. However, we seek to constantly evaluate and improve the platform.

Firstly, the decision between hosting an intranet solution and an internet solution had to be made. The main problem regarding having the solution built on our universities intranet was the scalability. In case we wanted to share the course materials at some point with people outside our university, we would have needed to expand to an internet website in any case. Therefore we decided to create a new password protected webpage for UTUPS, and reserved a domain for the purpose. UTUPS environment was built on top of WordPress CMS, which was chosen because it is a widely used open source system that offers powerful tools for quick standard website development. In our WordPress site we could add video material, links to course articles, simple tasks that had automated checking, as well as various other non-interactive elements. For the same reasons UNIPS was also built on top of WordPress and a new domain and a webpage unips.fi was created. UNIPS is protected by CC-BY-SA licence and there is an open access to the website and its materials.

3. How UNIPS works in practise

UNIPS is a common learning platform for University Pedagogical studies for UNIPS-partner Universities in Finland. All the visitors are welcome to use all the materials independently (self-study) and teachers and Doctoral Candidates of UNIPS-partner Universities are able to take small online courses, "modules" to get credits (guided study). The aim of the modules is to support University teachers by giving keys to reflect their thoughts and conceptions of teaching and learning in higher education. Most of the modules are about the basic concepts, theories and practises about teaching and learning. Some of the modules aim to support you to plan your teaching and some are about more specific topics like working life skills.

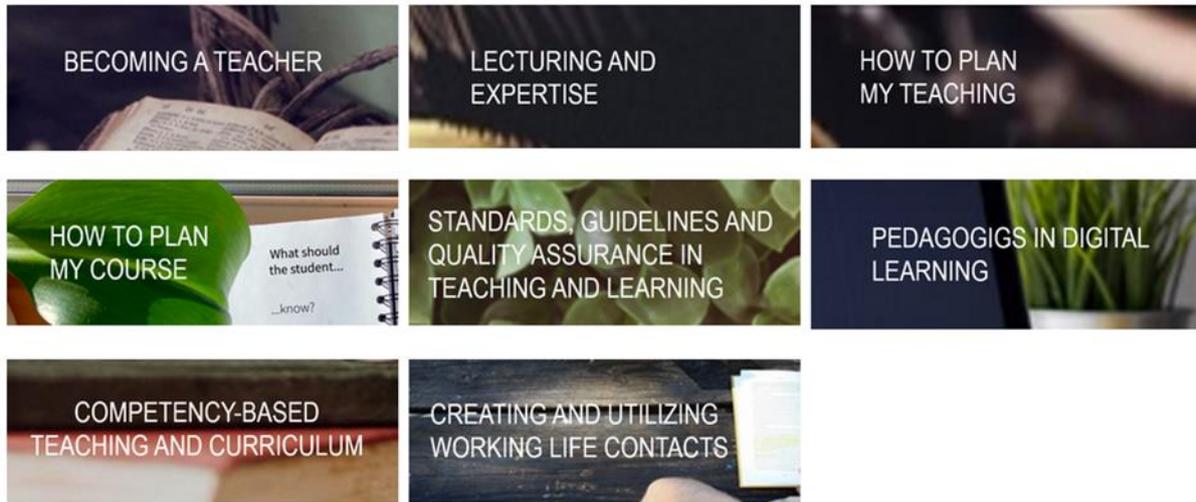


Figure 1. Available modules (more modules will be published in 2018-2019)

The self-study materials consists of videos, scientific articles, simple tasks and interactive exercises, and they are open for everyone for independent studying. The pedagogical and technical expertise of the Finnish UNIPS partner universities is utilized in the design, creation and implementation of new contents, and all the materials have been created to be easy to use and access, so that students can access information about the topic of her/his choice whenever needed. Learning materials have been created using various online tools that are embedded in the UTUPS platform.

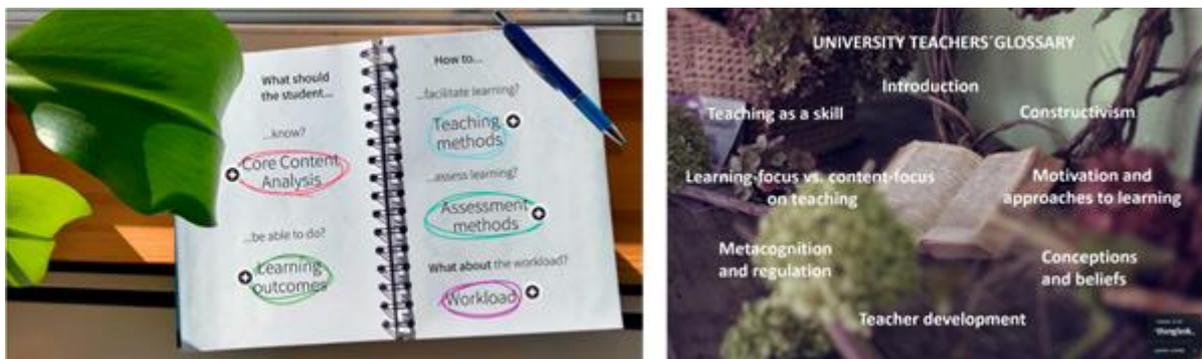


Figure 2. Examples of the self-study materials

Teachers and Doctoral Candidates of UNIPS-partner Universities are able to take small online courses, "modules", to get credits (guided study). The guided studies (see Figure 3) consists of two periods; an independent period and teamwork period including collaborative learning. Students are asked to contact their own Universities for information regarding guided studies, which are based on the self-study materials, because there are some differences between the ways the modules have been arranged in Universities. Studying takes place on UTUPS platform and submission of assignments via Moodle Learning Management System.

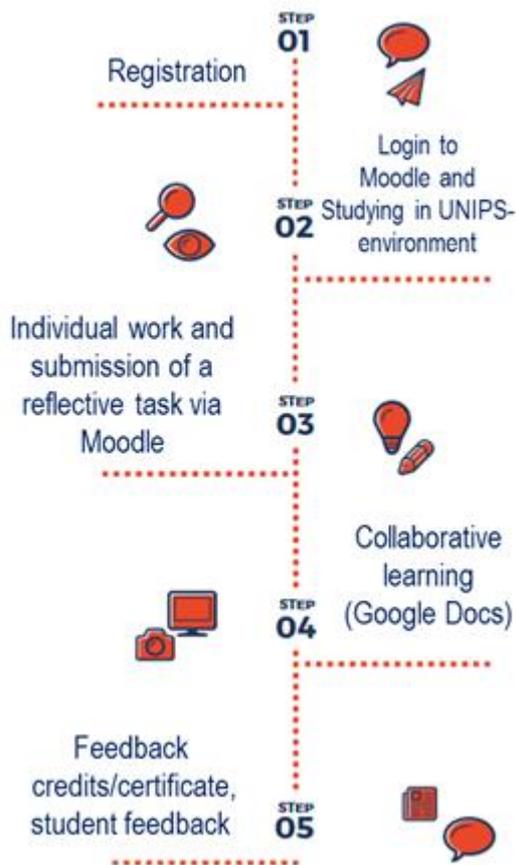


Figure 3. Guided study in practise

4. Challenges in planning and creating UNIPS learning solution

There has also been some challenges when planning, creating and developing the UNIPS learning solution. In the beginning of the UTUPS project, a lot of time was spent for finding and choosing the right online platform for the learning environment. The aim was to find a platform that would be safe and easy to access, use and update. One option was to use the Moodle platform or intranet of University of Turku. One big question was that are we aiming to create materials only for the staff of our own university or are we moving towards “a culture of sharing” and trying to find a platform that would be easy to share with others in the future. Also a modern look and possibility to embed different online tools were important features we were looking for. Finally a solution was found and WordPress was chosen. When UNIPS project started, WordPress proved to be a good base for the collaborative learning environment of several universities.

Another challenge especially in the beginning of the project was to combine the pedagogical and technical expertise needed for the creation of the learning solution. The people working on the project had a pedagogical background but no experience or education in technology. That's why the learning environment was built by learning by doing, which is a slow way in this kind of processes. A "common language" was not always easy to find with IT-experts. The channels of social media proved to be excellent support services for this kind of project aiming to create something new. However, when the UNIPS project started these problems were mostly solved because the previous (UTUPS) learning solution was already built and in active use. In addition, we got a lot of more resources for both pedagogical and technical support. The third challenge encountered was also related to technical issues. The possibility to embed different online tools is also a challenge because it is not guaranteed how long time the tools exist and will be updated by their creator companies. Of course the online-materials should be saved in many forms but unfortunately there has been some situations when there has not been a backup copy and the material has been disappeared with the tool it was created. All the Universities don't have access to same research articles and finding literature for modules has also been challenging.

Pedagogical challenges in online teaching and learning

One typical challenge in online learning is the quality of interaction. Experiences of teaching in UNIPS are in line with previous research (e.g. Kim, Kwon, & Cho, 2011; Pollard, Minor & Swanson, 2014; Richardson, Maeda & Caskurlu, 2017) that has shown that a sense of social presence is crucial when all the teaching and learning happens online. It is known, for example, that social presence is related with students' satisfaction and perceived learning (Richardson et al. 2017). In addition, social presence of teacher or instructor is crucial as well (Pollard et al. 2014). One of the biggest challenges in UNIPS has been (and still is) finding the tools for collaborative online discussions. There are a lot of tools available but finding a tool that would encourage in "deep and authentic" discussions instead of superficial commenting to fill the requirements to pass the course. Some social media channels might enable this kind of discussions but those were not included in possible options because of the requirement of registration.

Another typical challenge in online-learning is the high dropout rate and we have faced the same challenge in UNIPS. From this point of view the easy registration with all the benefits can also be a challenge. On the other hand, it may be worth to consider, is the term "dropout" valid in online learning or are we facing new kind of challenges that are related more with teachers' or actually even more with learning environments' abilities to engage students from the very beginning of the studies. Of course, engaging students is important always in learning focused teaching but immediate actions can be crucial when arranging online courses. According to experiences of teaching in UNIPS it is important to try to engage the students immediately in the beginning of the module. To give an example, the dropout rate decreased when we simply added a task that students had to present themselves in the beginning of the module. This may have increased the sense of social presence. One way to increase the social presence of the teacher has been welcome videos, where the teacher is presenting her or himself and telling about the module, for example the aims and the learning

outcomes. Videos have been recorded in informal situations emphasizing the open atmosphere and interaction between teacher and the students. In the videos the teacher can talk straight to the students and for example encourage them to contact the teacher in case of any questions etc. Another thing that has been noted to be important is that the teacher is actively in contact with students by sending motivating messages and information about the deadlines and other practical things. Furthermore, it is important that the student feels that s/he is given personal feedback instead of feedback based on the general criteria only.

We also found out that scheduling the tasks and deadlines evenly throughout the course can reduce the risk for dropouts. It seems that it is better to have a few smaller tasks and deadlines already during the course than one big task and a deadline for it at the end of the course. If some of the tasks is too laborious, there is a risk that some of the students decide to discontinue the course. We feel that it is important to plan both the schedule and the contents of the tasks to distribute evenly and to inform the students about the requirements of the course already when the registration for the course is open.

5. Conclusions and future work

In the UNIPS solution of 8 universities, each university provides other universities with materials for at least one module. The modules are, however, developed in cooperation, i.e., in addition to the university that is responsible for the module, there has been at least two other universities participating in the planning and developing of the module. The individual partner universities are locally responsible for offering the guided studies with credit points for their own students, but all content creators offer example guidelines to other universities on how to organise them. These instructions include, for example, tips how to organise groups, what kind of ideas can be evolved in the group discussions and what would be the pitfalls to avoid in each module.

The guided study modules have been completed cumulatively over 500 times at the University of Turku with the previous UTUPS and current UNIPS environments. The student feedback of the system has been very positive. Therefore we can conclude that the UNIPS platform is a welcome addition in our University ecosystem, as a medium for offering university pedagogical courses. Additionally, the UNIPS materials that are now available for all teaching staff at all times, is a resource that has been previously unavailable for teachers in our university, at such convenience. Naturally in addition to the UNIPS environment, our university still offers traditional pedagogical courses that include contact teaching to support the teachers' pedagogical understanding. Curriculum work is needed to be able to embed the modules as a part of other University pedagogical studies. Also, it is important to promote the new modules in Universities.

One further goal for the environment is to enable the offering of disciplinary specific courses, but this has not yet been realised. The platform provides an opportunity for that and we hope that in the future it will be utilised in a way that gives teachers possibilities to develop and organise courses on specific disciplines or topics. The previous UTUPS and the current UNIPS solutions have thus far

provided to be effective, well-liked and cost-efficient in offering university pedagogical staff development courses for university teacher, other staff and doctoral students. The platforms will be further developed on the principles described above and also new solutions will be searched, if needed. The continuity of the solution after the funding period is guaranteed by the real need, well prepared basis, and good usability of the environment. There has been already interest from the other universities that are not participating in the currently funded project to participate in the UNIPS. The solution is hoped to become a common base for all Finnish universities to collaborate in organising the university pedagogical training. Also, European partners will be sought for in the future.

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