

# Engaging students in building better digital services

Pauliina Kupila<sup>1</sup>, Ulla Lehtonen<sup>2</sup>

<sup>1</sup>University of Helsinki, P.O. Box 53, 00014 University of Helsinki, Finland, pauliina.kupila@helsinki.fi

<sup>2</sup>University of Helsinki, P.O. Box 53, 00014 University of Helsinki, Finland, ulla.m.lehtonen@helsinki.fi

## Keywords

Innovation, technology, mobile application, student-centred, social theory of learning

## 1. Summary

University students use a number of Social Network Sites (SNS) in their everyday life (Usuel et al. 2009). For example Facebook and WhatsApp are used to create own circles and groups to help in connecting with other students. The University of Helsinki does not recommend educational use of Facebook since we cannot require the students to sign up for user accounts in SNSs.

The Digital Teaching and Learning Environment project of the University of Helsinki develops new teaching and learning services in order to create a uniform and user-friendly learning environment. The services are developed using the agile approach and with the attitude "mobile first". Both teachers and students are engaged in planning and testing of the services.

As a new way to catch ideas and feedback from students we have invited students to participate in a Student Panel, which meets about three times a semester. The incentive to participate in the panel is the chance to influence on the planning of new digital services. The panel members will serve as early adopters of our services.

Before launching the Student Panel, we organized a student workshop for innovating new digital student services. One of the ideas presented was the Opinder. It is a mobile application, which helps students to communicate with other students in the same courses. The Opinder is connected to the student information system (SIS) and it shows the courses a student has registered to. Students can create events, and invite other students from their courses to join the events. As students get to know each another, they can create own groups and make direct invitations to the groups. Students can also chat with one another.

## 2. STUDENT-CENTRED APPROACH

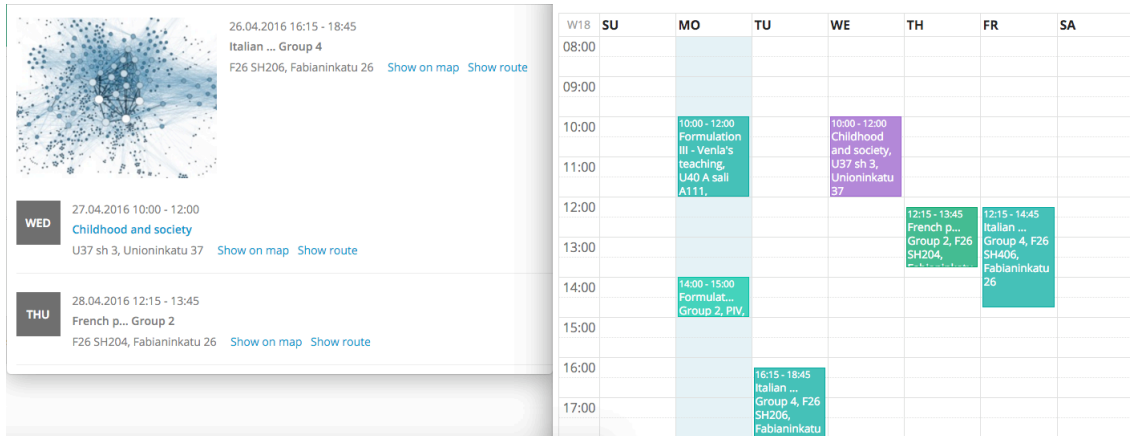
The Digital Teaching and Learning Environment project's focus is on students, and we are very interested in students' opinions on the new services. We take part in student events and co-operate with the student union. As our working method is agile, we test our services on students continuously. We carefully follow their feedback on improvements and possible missing details in our services. This student-centred approach is also one of the top priorities in the new strategy of University of Helsinki (2017 - 2020). (2016)

### 2.1. Student Panel

The purpose of the Student Panel of the University of Helsinki is to let students guide our development of digital services. At the same time, we want to challenge ourselves and the University to try out new approaches to the teaching and learning environment.

The Student Panel has 15 members from different faculties. The panel members will provide the project with feedback on upcoming digital services, and brainstorm new digital student services and mobile applications. The Student panel has the power to change our plans and priorities on developing digital services. The Student Panel gathers about three times in semester, and so far it has met five times.

In the very first panel meeting we introduced My Studies, the new digital service we had developed. At that point My Studies provided the student with a list of upcoming lectures and an ability to add them to his calendar. Our question to the Panel was, is this enough or should there be a calendar view. Contrary to our expectations, the students saw the calendar view as an important feature. With that in mind, we implemented it in our next development sprint. According to our user tracking the calendar view is more frequently used than the list of lectures; thus, the Student Panel had a right instinct on the needs of the students.



**Figure 1.** The list of upcoming lectures and the calendar view

In the future we hope the Student Panels receives an even more stable position in the development of our digital services. The ideal student panel would have its own budget and a power to decide which services will be developed and which will be put aside.

## 2.2. Opinder

As stated, the idea of the Opinder was picked up from a student workshop as one of the new digital student services. We decided to test the idea, and our first step was an interactive prototype. We showed the prototype to students on our four campuses and asked for their opinion. Since the students welcomed the idea of the Opinder, we started developing the application in June 2015 with an ambitious goal to come out with Opinder in September at the beginning of the academic year.

The Opinder Beta was launched at the Opening Carnival with limited features: Opinder allowed the students to create events and invite other students to join the events. Again, the students were excited about the idea, but the use of the Opinder remained scarce. We had an interesting product idea, however it had too few features available to attract actual users. Thus, we were at the crossroads: either to develop the Opinder substantially or end the whole project.



**Figure 2.** Product Owner and a group of students discussing the concept of the Opinder

In order to find out whether our efforts in developing the Opinder were worthwhile, we started a pilot study with the Faculty of Social Sciences in February 2016. The students used the Opinder for a month and we gathered afterwards to discuss its pros and cons (Figure 2). The students still believed in the idea of the Opinder, but they felt that the current service wasn't good enough. The biggest lack was the inability to communicate with other students.

Based on the feedback, we agreed on adding a chat feature to the Opinder. This feature will be published in May and piloted by the Faculty of Medicine and the Open University. If the pilot is a success, we will continue our development in order to finally publish Opinder 1.0. Table 1 summarizes the features of Opinder prototype, beta and 1.0.

**Table 1.** Opinder features

Opinder prototype (mock data)	<ul style="list-style-type: none"> <li>• Search for students and teachers by courses and location</li> <li>• Create events, invite others to join (by course and individual user)</li> <li>• Offer tutoring events to students (for teachers)</li> </ul>
Opinder beta September 2015	<ul style="list-style-type: none"> <li>• Search for students and teachers by courses</li> <li>• Create events, invite individual students to join</li> </ul>
Opinder beta May 2016	<ul style="list-style-type: none"> <li>• Search for students and teachers by courses</li> <li>• Create events, invite individual students to join</li> <li>• Chat with individual users</li> </ul>
Opinder 1.0 (future plan)	<ul style="list-style-type: none"> <li>• Search for students and teachers by courses and location</li> <li>• Create groups, add users to groups</li> <li>• Create events, invite others to join (by course, group and individual user)</li> <li>• Chat with groups and individual users</li> <li>• Offer tutoring events to students (for teachers)</li> </ul>

As we have involved students in the development of the Opinder, we will make use of them by conducting a survey and interviews. We will adapt the questionnaire used by Arteaga Sánchez et al. (2014) to conduct a survey about Facebook usage in academic purposes. We have changed the focus of the questionnaire on the Opinder and translated it into Finnish. We foresee that the Opinder will support informal learning through increased communication, and facilitate the students in creating communities of practice (Wenger 2009).

### 3. CONCLUSIONS

Engaging students by several ways helps us to improve the digital services of the University of Helsinki. We will get new ideas and useful feedback that students need and desire. After conducting the survey on the use of the Opinder we will make decisions on further development based on our findings and conclusions. Our hypothesis is that the use of the Opinder will support the students in connecting with other students and in building networks. These social networks will support the students in information discovery and sharing.

As the code of our digital services will be published open-source, we hope to see university students, staff and partners in cooperation also internationally to develop functionality of service.

### 4. REFERENCES

- Arteaga Sánchez, R., Cortijo, V., Javed, U. (2014). Student's perceptions of Facebook for academic purposes. *Computers & Education* 70(2014), pp. 138-149.
- University of Helsinki website (2016). *Strategic Plan of the University of Helsinki. Global impact in Interaction 2017 - 2020*. Retrieved February 15, 2016, from: <http://strategia.helsinki.fi/en/#landing>.
- Usluel, Y. K., Mazman, S. G. (2009). Adoption of Web 2.0 tools in distance education. *Procedia Social and Behavioral Sciences* 1(2009), pp. 818-823.
- Wenger, E. (2009). *A Social theory of learning. Contemporary theories of learning*, pp. 209-218.

## 5. AUTHORS' BIOGRAPHIES



Pauliina Kupila is a Master of Social Sciences and a qualified teacher. She has been working as educational technology specialist at University of Helsinki since 2000. During that time her main duties have been teacher training, project management and development. Currently she is the product owner of Opinder and My Studies in the Digital Teaching and Learning Environment project.

(LinkedIn: <https://fi.linkedin.com/in/pauliinakupila>)



Ulla Lehtonen is a Master of Science (Tech) and a Bachelor of Social Sciences. She has worked at the University of Helsinki for a decade as educational technology specialist, head of academic affairs and planning officer. Thus her main duties have varied from teacher training to administration, student admissions, quality management, and project management. Currently she is the product owner of My Teaching and a number of smaller services in the Digital Teaching and Learning Environment project.

(LinkedIn: <https://fi.linkedin.com/in/ullalehtonen>)