

## **Inspirational session 23**

### **Session's theme: Retention**

**Paper number:** 32

**Presenters:** Kristine Lysnes, Harald Aage Saethre, Anders Huseboe

**Presenters' Organisation:** University of Bergen

**Session's chair:** To be announced later.

### **Session title: Evaluation of the complete learning environment of the second semester**

#### **Abstract:**

The bachelor programme in Mathematics at the University of Bergen (UiB) struggles with a high drop-out rate between the second and third semester. We wanted a tool to find out why the rate was highest after the first year and if there was something in the second semester that could explain this. The tool we traditionally use for evaluation is only for specific courses. How then can we learn about challenges our students experience that lies outside one specific course? And how can we learn how the different courses influence each other positively/negatively and work together to form a complete semester?

To try to answer these questions, we initiated a pilot project in the spring semester 2012, where we used a focus group of students in their second semester of the bachelor programme. We interviewed this group to find out how the semester work as a complete learning environment; academically, practically and socially.

The aim of the project was to give the Department a tool to identify the challenges students experience. When we know the challenges, we can use this information to make changes to ensure the students a good learning environment and to ensure they see the purpose and maintain their motivation for further studies. What we ultimately hope to achieve is to reduce the drop-out rate. The results from the focus group gave us both additional and completely new information compared to the traditional evaluation methods.

Results will be used to improve both the learning environment and the information we give to the new students. Our results, experiences, methods and questions from this project can easily be transferred to other study programmes. Most bachelor programmes at UiB experience the highest drop-out rate after the first year, and a focus group can give valuable information on how to improve the learning environment.

## **Inspirational session 23**

### **Session's theme: Retention**

**Paper number:** 44

**Presenters:** Päivi Kinnunen, Erkki Pesonen, Maija Marttila-Kontio

**Presenters' Organisation:** Aalto yliopisto

**Session's chair:** To be announced later.

### **Session title: Computer science students retention and experiences of the first study year**

#### **Abstract:**

The challenge for the Finnish higher education is to recruit intelligent and motivated computer science students and then keep the retention rate high throughout the bachelor and master level studies. The challenges of keeping the retention high both at the course level and degree level are evident both in Finland as well as abroad.

This ongoing study takes a deeper look at what exactly happens during the first two study years; how students experience studying computer science, how their knowledge and abilities evolves and at what point of studies some students decide to leave the computer science major and why. The general research goal of this project is to find out in what ways we could develop the computer science curriculum and the teaching and studying practices so that students who have chosen computer science as their study major will succeed in their studies.

We have set four research questions: How do computer science students experience the first study years at the university? At what point of studies some students decide to drop out and why? How does computer science students knowledge about computer science evolve during the first study years? How the curriculum and the teaching practices can be developed based on the knowledge of the students experiences and their learning?

We have a longitudinal research design in order to be able to observe students several times during their studies. This enables us to observe how the experiences change and the understanding and skills evolve over the years. We are collecting both qualitative and quantitative data from Aalto University and the University of Eastern Finland.