

Report on Panel 1: The first semester(s)' experiences

Prof. Dr. Marco Winzker, Bonn-Rhine-Sieg University of Applied Sciences

Input 1: Prof. Dr. Mats Hanson, KTH Royal Institute of Technology, Stockholm

Input 2: Prof. Dr. Manfred Hampe, Technical University Darmstadt

Chair: Prof. Dr. Marco Winzker, Bonn-Rhine-Sieg University of Applied Sciences

The first input to the panel was given by Prof. Hanson from the KTH Royal Institute of Technology in Stockholm. He reported about the situation of students entering Swedish universities, in particular the KTH and presented the project "Attract" that shall enhance the attractiveness of studies in science and technology.

Also, Prof. Hanson introduced SkolTech, which is a newly founded university in Russia near Moscow. It partners with MIT and other international partners to create an international learning environment. An early focus on real world problems shall motivate students already at the beginning of their studies.

As second input to the panel, Prof. Hampe from the Technical University Darmstadt presented their experience with the introductory phase in mechanical engineering. The Technical University Darmstadt offers demanding engineering projects to first year students. Every year a different challenge is selected and Prof. Hampe showed several examples in his presentation. With the experience of several project, the focus of the projects extended to also include interdisciplinary and international aspects.

After the presentations, the participants discussed the following questions

- What is the main problem in the first semester?
- What measures can be introduced to solve these problems?
- What are the obstacles to introduce the measures?
- How do we overcome the obstacles?

During this discussion it became clear that the participants have different views on the selection of the students, entering the university.

One approach is to select students before they enter university. This gives the faculty the chance to focus their efforts on these selected students and support them in reaching their study goal.

Another approach is to select students through exams, preferably during the first year of their studies. This gives students the chance to show their ability for university with their performance in these exams.

A further approach is to inform students about the approach of the university to teaching. This information is, whether the institution is a traditional university or a university of applied science. It could inform about the role of projects in the curriculum and it could be stated, whether problem-based learning is used.

Participants agreed that simple drop-out-rates are not sufficient as an indicator for the success of a study program. It could also be sensible when students decide early for a different subject, they feel

more comfortable with. Also the numbers cannot be compared to each other when only selected students enroll.

As a conclusion, the participants identified the following measures for a successful first semester experience

- Make students feel welcome
- Make study programs attractive to different groups of society
- Provide for different learning styles
- Promote independency and responsibility of students but also claim students engagement for their studies

References

For further information, the slides of the panel presentations are available at the conference website.