

2nd International Conference on Higher Education Advances, HEAd'16, 21-23 June 2016,
València, Spain

Compact Freshmen Welcome Seminar for Engineering Students

Andreas Diehl^a, Lilli Wolff^a, Thomas Fuhrmann^{a*}, Michael Niemetz^a,
Stefanie Mörtlbauer^a, Sandra Dirnberger^a

^aOTH Regensburg, Faculty of Electrical Engineering and Information Technology, Seybothstr. 2, 93053 Germany

Abstract

The Faculty of Electrical Engineering and Information Technology of the OTH Regensburg developed and implemented a compact freshmen seminar for the afternoon of the first day of study. The intention of this seminar is to help the freshmen during their transition between school and study without losing lecture time in the first semester. The concept was tested with one small study group at the beginning of the summer semester 2015. To rate the impact of the seminar and to find aspects for continuous improvement an evaluation method was developed and used. Due to the good student resonance during the first run, this introduction seminar was held again in the winter semester 2015/16. It is planned to integrate this seminar as a regular session for all freshmen of the faculty curriculum and monitor the long-term effects of student motivation and success.

© 2016 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Peer-review under responsibility of the organizing committee of HEAd'16

Keywords: Engineering Education; Freshmen Seminar

1. Introduction

The German Universities of Applied Sciences face the challenge that the freshmen heterogeneity is increasing. Almost each student has his or her own individual educational path. This ranges from very young adults who are 17 or 18 years old and have just finished their school education to professional practitioners in their mid-thirties who finished school at least fifteen years before. The freshmen within this heterogeneous group have different experiences, different knowledge and different expectations linked with their study courses.

* Corresponding author. Tel.: +49 943 941-1002; Fax: +49 941 943-1419.

E-mail address: thomas.fuhrmann@oth-regensburg.de

The morning of the first day at the OTH Regensburg starts for all freshmen with welcome presentations given by the University President and the Lord Mayor of Regensburg. After these general opening speeches to all new students, the day continues in the faculties with specific information presentations. During these sessions, the dean and members of the students' council present a broad range of essential information ranging from organizational basics to specific hints and typical challenges for newcomers. During this short time, a huge amount of information is delivered to the freshmen. However, experience gives the impression that they are not able to gather and understand all important facts and their study success impact. For example, we see many students who face difficulties with mastering their exam preparation efficiently and effectively, which leads to high failure rates in the first exams. A survey about how to optimize the introductory phase of the existing bachelor programs at the faculty also showed that 62% of the surveyed students believe that the visited introduction event was no valuable guidance for them (Dirnberger, 2014).

To improve this current situation it was decided at the Faculty of Electrical Engineering and Information Technology to offer an additional introduction seminar as of the summer semester 2015. The regular lectures for the freshmen traditionally start on the second day of the semester, leaving unused the afternoon of the first day for academic studies and giving the impression of a school-like environment. Therefore, it was decided to carry out the new introduction seminar during this time. The success of the seminar was evaluated to improve the program for the winter semester 2015/16 with about 350 beginners and to enable a continuous improvement and adaptation to beginners' needs. Due to the positive resonance of the students, this introduction seminar was also carried out during the winter semester using a slightly modified and improved concept.

In this work, we describe the background and the motivation our freshmen welcome concept. First, we give an overview of some other seminar concepts in Section 2. Challenges for freshmen and our seminar goals are depicted in Section 3. In Section 4 we explain the concept applied in the first run in summer 2015 and the modifications made for winter 2015/16. The evaluation approach for the seminar is shown in Section 5. In Section 6, we summarize our results and give an outlook to further planned activities.

2. Freshmen Seminars at Other Universities

The idea of offering freshmen seminars to reduce dropout rates and increase motivation is not new. Many other universities developed study introduction concepts for freshmen to boost their motivation, eliminate knowledge deficits and therefore reduce the dropout rate. Most of the programs are quite time consuming, lasting for several days or are integrated as a weekly lecture in the first semester. Typically, a mixture of lectures and small projects is offered during the first semesters to show connections between theoretical knowledge and practical applications (Madhu, 1993; Standridge et al., 2006; Rothe, 2015; Reith et al., 2015). A similar approach starts with an introduction week, carries out additional trainings and projects during first and second semesters (Mackensen et al., 2015).

While all these concepts on the one hand address the identified deficits, they also reduce on the other hand the lecture time available for technical content during the first semester. Therefore, the benefit of increased learning effectivity provided by the freshmen introduction seminar has to be weighed against the importance of the lecture hours that are lost. Therefore, our intention is to provide a compact seminar with all necessary content to the freshmen without reducing lecture time and changing semester structure by making use of the first study day afternoon. With this approach, we do not lose lecture time, because the first lectures for the beginners are scheduled for the second day of the semester. The detailed concept for this approach is explained in the following sections.

Download English Version:

<https://daneshyari.com/en/article/1107117>

Download Persian Version:

<https://daneshyari.com/article/1107117>

[Daneshyari.com](https://daneshyari.com)