

Learning Environment and Scheduling Challenges in Technical Studies at Savonia UAS

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ABSTRACT

The Savonia University of Applied Sciences in Finland started to adopt the CDIO system, principles in engineering education in 2010. After one year of CDIO, some challenges have been encountered. As a consequence of adopting CDIO, several new syllabuses have been formulated for 2011-2012.

Implementing an updated syllabus has brought some unexpected practical problems with availability and suitability of lecture and laboratory rooms, personal computers, test equipment, facilities and project data storage and with human resources.

Weekly schedules for both faculty and students had to change to deal with these problems. As these problems arose it was realized that some changes to the physical layout of teaching facilities would be needed. It was observed at the very early stage that it was vital to orientate students to be active participants and learners in the CDIO process since they had only one day of studies dedicated for CDIO project work.

Active future involvement from 3rd and 4th year students acting as tutors and as "junior experts" helping with projects should hopefully create an enthusiastic collegiate learning environment for 1st and 2nd year students working on their projects and will deepen the knowledge base of 3rd and 4th year students and should benefit both in improving their teamwork abilities.

To optimize utilization of facilities and working area, the present static eight week schedule is being modified to a more dynamic weekly schedule with a different timetable every week. Using this dynamic scheduling it is thought possible to optimize schedules for students, teachers and school facilities.

Relevance - Sustaining curriculum reform and Curriculum and program design

Keywords – resources, scheduling, learning environment