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Research Domain: Learning, Teaching and Assessment

# Freedom versus responsibility in higher education: Towards enhancing student participation and deep learning approaches (0100)

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#### Abstract

During the last decades university education in the Netherlands changed towards guiding students through their first years, rather than giving students unguided freedom. Student retention, drop-out and transfer to another institutes is likely to be reduced by providing students with structure while maintaining student responsibility at a high level. This study describes a practice of involving students and teaching staff in the process of the improvement of the quality of the teaching and learning process. Two science departments at two research universities in the Netherlands were studied. Interviews with teaching staff, student representatives and educational directors were held to identify the core issues for improvement. The identified elements for potential improvement of the teaching and learning process at the two departments could be classified into five categories; 'study skills', 'knowledge transfer', 'assessment', 'relatedness', and 'feedback'.

#### Outline

#### Background and context

During the last decades university education in the Netherlands changed towards guiding students through their first years, rather than giving students unguided freedom. The change was fuelled by a change in the funding system. Increasingly university institutes are financed by the throughput and output. This means that for higher education institutes in the Netherlands it became financially interesting to stimulate students to study effectively and to finish their studies in time, however, without diminishing the quality of education. Therefore it also became of increasing importance to try to decrease loss of tuition revenue from students dropping out or transfer in other institutes (cf. Tinto, 1987; Bean, 1980). Gradually the emphasis on student learning strategies and on students spending enough time and energy on their studies became relevant in higher education in the Netherlands. Nowadays both teachers and students stress the importance of improving the quality of education and to provide students with more structure in the first year while maintaining student responsibility.

In this study elements of the educational process potential for improvement are examined in two higher education institutes in the Netherlands. These institutes expressed their concern about student participation and student learning strategies in the programmes (cf. Bok, 2006). The learning strategy of a large part of the student population at these institutes was characterized by the staff as surface learning (Pintrich & Garcia, 1991). Furthermore student participation and responsibility was perceived as low. Often, student began to study just a few weeks previous to the examinations, instead of using the entire course time. Overall students were focused at rote learning, while they should put emphasis on understanding the concepts and theories. This resulted in many students not passing and being forced to redo the examinations. Also, part of the students decided to postpone the first examination altogether because they didn't master the contents well enough. These are major threats to the educational productivity of the institute measured by the output-input ratio (Hough, 1991). Often, students began to understand that their learning strategy has been ineffective at the end

of the first year. So, especially during the first year, students should be motivated to profit from the designed learning activities.

The study was guided by the following questions: 1) What do the stakeholders (students, teaching staff, and educational directors) perceive as relevant elements of the educational process potential for improvement?

2) Which elements of the educational process are most urgently to be improved, and which elements are most likely to be most effective when improved?

# Method of study

For the purpose of this study two science departments at two research universities in the Netherlands were studied. Teaching staff, student representatives and educational directors were interviewed during the spring of 2010 to identify the core issues of improvement in the teaching and learning process within the departments. First the general ambitions and goals of the teaching staff and the educational directors were categorised in order to identify potential issues and topics. Secondly, elements for improving the teaching and learning process at the two departments were identified . The elements identified were discussed during group meetings with teaching staff, student representatives and educational directors.

# Preliminary results

During the interviews the staff and educational directors explicated their ambitions as to university education and student learning. Three concerns come to the fore:

- Students should develop effective study strategies towards deep learning of the topics.
- Students should seriously participate in all provided meetings and learning activities.
- A higher level of quality should and could be met.

The element identified for potential improvement of the teaching and learning process at the two science departments could be classified into five main categories: 'study skills', 'knowledge transfer', 'assessment', 'relatedness' and 'feedback'. Below, for each category three suggestions for improvement are described on which the stakeholders agreed as a potential benefit for the teaching and learning process.

## Study skills

- Offer assignments congruent with the level of knowledge and insight of the students. The level of the assignments should gradually increase in complexity and decrease in regulation over time.
- Provide study materials and assignments which stimulate students to feel responsible for their own learning.
- Reduce non-committal attitudes and demand realistic goals for students.

## Knowledge transfer

- Closely relate assignments in the course to previously acquired knowledge of the students.
- Explicitly formulate and explain the relations between the subject matter, the academic competences, the authentic (research) problems in the disciplines in combination with the main threads running through the curriculum.
- Provide assignments and (research)projects in which emphasize explicitly relations between subject matter and current research/ professional practice.

## Assessments

• Provide students with examples of assessment exercises and with the 'correct' answers and discuss the more difficult elements of these tests during the meetings.

- Use formative assessment tools to stimulate students to study the materials from the start of the course and to equally divide the study load over the course period.
- Make the formative assessments a requirement for taking part in the course examination (summative assessment).

### Relatedness

- Strengthen the link between disciplinary research and teaching.
- Provide authentic methods and techniques used in the discipline.
- Develop a well-functioning tutoring system during the entire curriculum.

## Feedback

- Provide 'just-in-time' feedback to exercises and projects.
- Apply a variety of different instructional formats and assignments to foster the diverse backgrounds and learning styles of students.
- Gradually stimulate peer feedback during assignments and self study activities.

#### Implications

The enhancement of the teaching and learning process is a constant concern for all higher education institutes in order to minimise student retention, drop-out and switching to other institutes. This study describes a practice involving the teaching staff as well as students in the process of enhancing the quality of the teaching and learning process. Furthermore the study provides possibilities for potential improvement. In the next phase of the project the teaching staff will re-evaluate their own teaching and will incorporate the identified elements in their courses.

#### Literature

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