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Strategic Pedagogic Development at the Chalmers University of Technology

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Abstract

This paper focuses on how directors of academic institutes within a large university, Chalmers university of technology, think about and regard questions concerning pedagogical development and research. The aim is to find out how the directors intend to integrate pedagogical issues and pedagogical discussions in the institutes and into the teachers' teaching and learning activities. The directors of the institutes are a very important group to reach since they have the operative responsibility, control and surveillance of what is going on. The method used in this project is interviews with open questions. The intention is to highlight the pedagogical questions within the institutes with a specific interest in how the directors regard the organizational development of pedagogical issues. Furthermore there is an intention to throw light on parameters which are important to notice when starting up strategic pedagogic development. The goal is to start a process directed at sustainable, strategic, pedagogical development at Chalmers.

Introduction

Higher education has changed a great deal lately, and will probably continue to change rather drastically in the near future. Today about half of the total amount of students in Sweden continue to study at the university. At the same time there is a change going on towards a social as well as ethnic multiplicity. These changes will very likely have an influence on the universities ways of teaching, learning and examining students. This can be seen in today research about flexible learning using new pedagogy and new technique, Ayers [1], in a strive for offering the students good learning resources which triggers good student understanding and learning. Trowler [2] expresses it like "So that higher education "diet" is digestible by the new types of students". Therefore it seems very logic and wise to invest in pedagogical development, and teacher competence development, at our universities to provide for the ability among university teachers and staff to meet the changes coming in the near future. The university staff need to be able to meet the needs and demands from the new types of students. In Sweden there is today necessary for the teachers to take pedagogical courses. In addition there is a need for teachers to get time to reflect on the new teacher role that will be needed in the future universities. But it is not only the teachers that need to change their roles, also the students will need to change and to take more responsibility concerning their studies and their own learning. And furthermore the whole thing is about more overall, systematic and long-term, sustainable changes within the universities concerning the pedagogic activities and the students learning possibilities. In this view of how to organise and develop the universities overall, long term

ability to support peoples learning and development it seems very natural to speak about *strategic, pedagogic development.*

This paper is a result of a project carried out at Chalmers, autumn 2004 – spring 2005, at the Centre for digital media and higher education. The background was that the Centre for digital media and higher education in 2003 got the commission to look at the pedagogical activities at Chalmers with the intention to start a new pedagogical teacher network. I myself was asked to take care of this project in autumn 2003.

Parallel with being project leader I was at during the same period joining a national course concerning strategic pedagogical development at universities. This national course which was started and financially supported by the Council for renewal of higher education. This paper thus mirrors my project results from interviewing the directors of the Chalmers academic institutes viewed with eyes influenced by following the strategic pedagogical development course together with people from more than 10 universities all over Sweden.

It has been shown by Trowler [2] that it is of great importance how the pedagogical activities are organised within a university for the possibility to create opportunities for pedagogical development. A good anchorage of the pedagogical questions at all university levels, both among the university leaders and among the teachers, is needed. Trowler [2] speaks about a "bottom-up-perspective" and points out the importance of working together with the teachers and identify their needs.

Chalmers university of technology has developed a strategy program for 2004-2007 [3] which contains visions about Chalmers education programs and the teaching and learning activities. However this strategic plan is not well known for the teachers and it is not a plan that the directors of the Chalmers institute use or discuss with the institutes teachers.

In November 2004, at the time when Chalmers university were undergoing a big organizational change, I decided to interview all directors (15 all together at that time) of the new academic institutes about their opinions of how to make pedagogical development questions a natural part of the institutes activities and discussions at their meetings. At this time, November 2004, the directors of the institutes were busy with writing the activity plans for the coming year 2005. Thus I thought it would be a very suitable time to interview the directors. I had a hope that this perhaps in some way could influence the directors to think about and write something in their activity plans how to integrate pedagogical development guestions in the institutes work.

All of the directors were positive and accepted to become interviewed. All 15 interviews were carried out during November 2004. The directors were asked to describe their thoughts and opinions about the following nine questions:

1 In what way do you want your own institute to work with questions concerning pedagogical development? What thoughts do you have about this?

2 How can you see that the pedagogical development questions could become a natural part of the institutes daily work?

3 How do you regard the questions of the need for teacher competence development in order to be able to meet the future university situation with new ways of teaching and learning?

4 How would you like to describe the pedagogical development questions in the activity plan for 2005?

5 Who will have the responsibility to work with the pedagogical development questions at your institute?

6 Which forum is there today at your institute where the teachers can discuss pedagogical questions?

7 Do you have any plans, any new forum etc, where the pedagogical development questions can be discussed?

8 How do you regard the fact that the Centre for digital media and higher education (CKK) has got the commission to try to start a new pedagogical teachers network at Chalmers? Do you have any suggestion of a teacher at your institute that could join such a network?

9 In what way would you like to take advantage of the support and activities from the Centre for digital media and higher education?

Results

The interviews with the directors were very positive and constructive. From the interviews it is obvious that the directors are interested in questions concerning pedagogical development. However in most institutes pedagogical discussions are still only discussed at the "coffee break". The interviews resulted in a lot of suggestions and ideas about how to start to work more active with pedagogical development.

Pedagogical network

Most directors tell that they are positive to the idea of starting a new pedagogical network at Chalmers. However it is not obvious how such a network should be arranged and who, which persons, that should work within a pedagogical network at Chalmers. A majority of the directors thought that the vice directors should have the responsibility for pedagogy, communication, teaching and learning.

Teachers working in team

In some of the institutes the teachers already work in teams. At other institutes the teachers still work all alone and have normally no discussions with colleagues about their teaching, and the students learning. Several directors asked the question - How could you succeed to make teachers give priority to pedagogical questions without any economical incentive and a heavy burden of work for the teachers. Some directors also pointed out the need for teacher competence development.

Information and communication technology (ICT)

Some of the directors told that the teachers take several initiatives to use modern ICT in their teaching. However, one problem the directors pointed out is the insufficient technical infrastructure at universities, which is not good enough to support ICT initiatives. One director had the opinion that the only argument that can trigger a teacher to start using ICT is that the use of ICT makes the course better and facilitates the students learning. A special discussion was held with each director about using a virtual learning environment (learning platform, learning management system etc) as a complement to campus teaching and learning. A majority of the directors was positive to use such a virtual learning environment as a complement to traditional teaching and learning.

Pedagogical competence

Today all Chalmers institutes ask applicants for a teacher post to write their pedagogical portfolio. This is sent to a pedagogical expert to give an opinion about the applicant's pedagogical skills.

One director pointed out the importance of the possibility for a teacher to qualify himself, and to get some reward for this qualification.

Wishes from the Chalmers institutes concerning cooperation between the institutes and the Centre for digital media and higher education

Several of the directors had ideas and suggestions how to collaborate. Some examples:

- Pedagogical courses
- Concrete supervision in daily teachers work
- Guidance in how to supervise doctoral students
- Guidance in how to write pedagogical expert opinions
- Short courses/seminars/workshops on demand from the institutes
- Supervision, pedagogical and technical, and how to use and pedagogically take advantage of modern ICT in teaching and learning

Discussion

The director interviews show that there is a need for pedagogical development both among the leaders at Chalmers as well as among the teachers. In addition it is obvious that different institutes have different needs for pedagogical support and development.

One aim of this project, as mentioned, was to investigate the possibilities for the institutes to, in their activity plans, integrate strategies for working with pedagogical development, and to start cooperation between the institutes in order to find mutual interests in pedagogical development.

Teacher perspective

To work as an university teacher is demanding and means to be able to adapt to big and fast changes, Bauer [4]. But it also means a positive challenge and good possibilities to both individual and professional development. Universities are exciting working places and there is a continuous development going on.

However being a university teacher still in many institutes means to be very alone in your daily work. The only appreciation that might get is the students feedback on your teaching. To be able to work together at the institutes there is a need for regular meetings where you are allowed to discuss your teaching and pedagogical questions together with colleagues. As a teacher you need a mutual platform from which you can discuss and reflect on pedagogical questions and development. You need a dialog and a mutual terminology, as in all disciplines, which all teaching staff is familiar with in order to avoid misunderstandings in discussions. Implication is very central in pedagogical development, Trowler [2]. It is very valuable to be challenged from others perspective and ways of thinking and acting. How can an institute create a "Community of practice", Wenger [5].

But how do the university teachers look at their own competency and profession? What factors decide how the teachers regard their own teaching. How do they teach, and when are they satisfied/disappointed? What is encouraging to the teachers? Of course different teachers give different answers but some thoughts and opinions are possible to identify: Regarding time the teacher's time for research does almost always mean a collision with the teachers time needed for teaching. This fact is often referred to as an argument for not having enough time to work with pedagogical development. Another common view among teachers is a will to really offer students good teaching and learning. However at the same time they emphasize that they do not have enough time to do excellent teaching. Many teachers say that he working load must be sensible.

The next, logic question to ask is how to support and prepare the university teachers to all the changes coming and all new demands that will be present in the future universities, Bauer [4]. There is not only one way to work with pedagogical development – there are several!

Another question is the need to use a more obvious student focus in the universities. The students roles need to be discussed and the students need to be more involved in the courses. The universities need to identify what the students are good at doing, engage them and judge how much time it will take. If the students are more closely engaged in the courses this naturally leads to more interest and feedback from the students.

An interesting and motivating possibility for the teachers might be to start pedagogical research about their own teaching. This can be very motivating and can offer an interesting and structured way of evaluating chosen pedagogy in a course. The results can be published, there is a possibility for research communication and the teacher gets a rise in competence when publishing research results.

Another teacher activity that recently has become common at universities is the activity to write your own pedagogical portfolio. This can help the teacher to reflect on the teaching activities. It can also be used when applicating for a new employment.

Student perspective

It is important in all education planning to regard in what ways, in short term or long term, the decisions taken influence the students learning. There is a need for more research and more knowledge about such processes. It is very important to decide and highlight the student roles. The aim of all teaching is to offer good resources and good planning which gives the students better understanding and learning experiences. What roles and what responsibilities could students have in a course and in the learning process? Actually it is rather surprising how little students are expected to act in the universities today.

Organisational perspective

How the organization looks and work is crucial for the possibilities to work with pedagogical development. There is several publications which are discussing organization at universities. Trowler [2] suggests that universities should be regarded as learning organisations. He tells that universities are not ordinary organizations. Universities are at the same time very specialized and very heterogeneous between subject disciplines. You can look at them as very loosely connected systems of very autonomous unities. The university of today is more heterogeneous than ever before. Trowler [2] states that if you are going to work with changes and anchorage you need to understand the culture to be able to see, and maybe also see through, the organizations complexity.

Ray Land [6] refers to and discusses several researchers work in his paper. Among others he mentions the authors Becher and Cohen & March as researchers who have highlighted the complexity in universities as organizations.

Pedagogical development

It is the mutual opinions of the context we are part of that join us together as a group, and which makes changes and development possible. Further, good arguments are needed to motivate to start a change. The teacher's need to see some advantages – what's in it for me!

Conclusions

My personal opinion is that we at Chalmers should start to collaborate with and support every institute "individually". Today there is very differing needs at the various institutes regarding pedagogical needs, support and development. To get acceptance and engagement from the directors as well as from the teachers I think we will have to start with questions of interest for the teachers, start where they feel a need to start. I am convinced that the changes have to come from "inside" the institutes, from the members of the institutes, in order to succeed to build a long term, sustainable, pedagogical development within each institute.

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