

# Variation in teachers' descriptions of teaching: Broadening the understanding of teaching in higher education

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## Abstract

In the present study 71 university teachers from several disciplines were interviewed in order to capture the variation in descriptions of teaching. Two broad categories of description were identified: the learning-focused and the content-focused approaches to teaching. The results showed that the relationship between the two approaches was complex and variation could be captured in detail only after considering the purpose of teaching. Within both of these categories 10 aspects of teaching were identified, which were further grouped into four broader ones, namely teaching process, learning environment, conception of learning, and pedagogical development.

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## 1. Introduction

During the last decade research into teaching in higher education has increased considerably. These studies emphasise that teaching does not automatically lead to students' learning, and hence attention has been increasingly given to the quality of teaching worldwide (e.g., Biggs, 2003). Teachers' approaches to teaching (i.e., how they teach) and the conceptions they hold about teaching (i.e., what they believe about teaching) have been the focus of several studies in recent years. Previous studies on approaches to teaching have identified two broad categories, the student-centred and the teacher-centred approaches to teaching. The *student-centred approach* is described as a way of teaching which sees teaching as facilitating the students' learning processes. The *teacher-centred approach* is described as a way of teaching in which students are considered to be more or less the passive recipients of information transmitted from the teachers to the students (e.g., Kember & Kwan, 2000; Trigwell & Prosser, 1996a, 1996b). Teachers face pressure to change their teaching practices to be more student-centred and the processes of students' knowledge construction should become the object of teachers' efforts (Ramsden, 2003; Vermunt & Verloop, 1999). Pedagogical training organised for university teachers has been shown to be effective in changing teachers' approaches towards being more

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student-centred. Postareff, Lindblom-Ylänne, and Nevgi (in press) as well as Gibbs and Coffey (2004) showed that a long training process (over 1 year) enhanced the adoption of a more student-centred approach to teaching.

The present study concerns the approaches to teaching and conceptions of teaching. Previous research on these phenomena and on their relationship will be introduced. The study analyses the descriptions of teaching from 71 academics. Instead of analysing individual teachers' descriptions of teaching or profiles of university teachers, the unit of analysis is broader, looking at the variation in teachers' descriptions of teaching on a general level. The aim of the study is to find categories of description and to identify different aspects of teaching.

### *1.1. Approaches to teaching and conceptions of teaching*

In the present study approaches to teaching are defined as strategies teachers adopt for their teaching, whereas conceptions of teaching are defined as beliefs teachers have about teaching and which underlie the purpose and the strategies in teaching.

On the basis of interviews of 17 lecturers in three university departments, Kember and Kwan (2000) proposed two broad approaches to teaching: content-centred and learning-centred teaching. The former focuses on the material or content and the latter focuses on the student and appropriate learning. The authors defined the approaches using one motivation dimension and five strategy dimensions. The motivation dimension separates the approaches in terms of whether *teacher's motivation* is an extrinsic or intrinsic part of the teaching role. The five strategy dimensions focus on whether *instruction* is about supplying notes or encouraging students to construct knowledge, the *teachers' focus* is on the whole class or individual students, the *teacher's assessment* is based on frequent tests or on more flexible means, *accommodation of student characteristics* occurs or not, and finally, the *source of experience/knowledge* is one's own experience or utilising student experience. Trigwell, Prosser, and Taylor (1994) found five approaches to teaching when interviewing 24 first-year university physics and chemistry teachers. The approaches were analysed in terms of the strategies the teachers adopted for their teaching and the intentions underlying the strategies. The five approaches to teaching ranged from a *teacher-focused strategy with the intention of transmitting information to students* to a *student-focused strategy aimed at students changing their conceptions*. These two studies show a similar categorisation of approaches to teaching: Kember and Kwan (2000) use the terms "learning-centred" and "content-centred" approaches, while Trigwell et al. (1994) talk of "conceptual change/student-focused" and "information transmission/teacher-focused" approaches. Conceptually these categorisations are very close to each other, since the one focusing on students and their learning is about ensuring that appropriate learning takes place, and the other category focusing on teachers and content emphasises teachers' performance and teaching material.

Some studies have examined approaches to teaching by applying quantitative methods. By using the Approaches to Teaching Inventory (ATI), which was developed to measure the ways teachers approach their teaching, Trigwell and Prosser (2004; Trigwell et al., 1994) detected two factors: the Conceptual Change/Student-Focused (CCSF) Approach and the Information Transmission/Teacher-Focused (ITTF) Approach. In addition, they found a significant negative correlation between the two factors. Based on these findings, they argue that these two approaches are two distinct categories. Meyer and Eley (2003) criticised this finding, based on their own quantitative analyses and suggested that the dimensionality of the ATI might better be interpreted as two mutually exclusive poles along a single continuum.

Studies on conceptions of teaching have showed, as well, a range of variation in university teachers' conceptions (e.g., Kember & Kwan, 2000; Prosser, Trigwell, & Taylor, 1994; Samuelowicz & Bain, 1992). For example, Kember and Kwan (2000) identified two major categories of conceptions: "teaching as transmission of knowledge" and "teaching as learning facilitation", the former consisting of the sub-categories "teaching as passing information" and "teaching as making it easier for students to understand" and the latter including the sub-categories "teaching as meeting students' learning needs" and "teaching as facilitating students to become independent learners". Conceptions of teaching have been shown to have an influence on approaches to teaching. Teachers, who conceive of teaching as transmitting information to students, approach their teaching in terms of teacher-focused strategies. On the other hand, teachers who conceive of teaching in terms of helping students to develop and change their conceptions, approach their teaching in a student-focused way (Kember & Kwan, 2000; Trigwell & Prosser, 1996a).

Researchers have discussed the role of interaction in teaching. Sometimes interaction has been placed between the student- and teacher-centred conceptions marking the transition from the teacher-centred category to the student-centred category (Kember, 1997; Samuelowicz & Bain, 1992). However, more recent research has not found evidence

of such an intermediate category. For example, Samuelowicz and Bain (2001) found that the intermediate category split into two major clusters, teaching-centred and learning-centred, with no evidence of a category positioned between them. They emphasised that it is the purpose and nature of the interaction that differentiates between the two orientations, not its mere presence or absence.

### 1.2. *Aims of the study – hypothesis*

Studies on approaches to teaching and conceptions of teaching have applied either quantitative methods (inventories) with large samples or qualitative methods (interviews) with a limited number of participants from only a few disciplines. In the present study the approaches to teaching and conceptions of teaching were examined qualitatively by using a large and multidisciplinary sample of academics.

The aim of the study was, first, to capture the variation in teachers' descriptions of their teaching in more detail and more broadly than in previous studies and to create categories of description which capture the variation and, second, to identify aspects of teaching in higher education through the analysis of the topics of teaching mentioned by the teachers in the interviews. More specifically, the aim was not to identify variation in approaches to teaching on an individual level, but on a general level.

Hence, it was hypothesised that more aspects of teaching will be identified than the two broad approaches found in previous research (e.g., Kember & Kwan, 2000; Trigwell et al., 1994) considering the differential teaching in the various disciplines.

## 2. Method

### 2.1. *Participants*

The participants of the present study were 69 teachers from the University of Helsinki and two teachers from the Helsinki School of Economics and Business Administration, the total number of participants being 71. Of them 21 were male and 50 were female. The teachers' age varied from 27 to 58 years ( $M = 40$ ,  $SD = 8.2$ ), while five teachers did not report their age. Forty-eight had participated in pedagogical training organised for university teachers, while 19 had no such training and four teachers did not report whether they had such training or not. The teachers from the University of Helsinki represented 10 faculties, namely the Faculty of Theology (6), Faculty of Law (10), Faculty of Arts (12), Faculty of Medicine (7), Faculty of Science (9), Faculty of Behavioural Sciences (5), Faculty of Social Sciences (8), Faculty of Agriculture and Forestry (8), Faculty of Veterinary Medicine (2) and Faculty of Pharmacy (2). In addition, two teachers from the Helsinki School of Economics and Business Administration represented the commercial sciences. Each of the faculties comprises several disciplines. Thus, the teachers representing the Faculty of Arts came, for example, from the Institute for Asian and African Studies, the Department of English, the Department of History, and the Department of Translation Studies. The teachers representing the Faculty of Science came, for example, from the Department of Chemistry and the Department of Computer Science.

### 2.2. *Interviews*

The teachers were interviewed during the years 2003 and 2004 and participated in the interviews on a voluntary basis. They all received an inventory related to teaching and marked on the inventory if they wanted to participate in an interview. The interviews were semi-structured, lasted from 26 min to 80 min and were conducted by the first author and two research assistants. The structure of the interviews as well as the strategy of interviewing was settled between the interviewers to make sure that all interviews followed the same principles and guidelines. The interviews were recorded and transcribed verbatim. The themes of the interviews dealt broadly with teaching-related issues, and the analyses concentrated on the teachers' descriptions of (a) themselves as teachers, (b) their teaching practices, and (c) the most important elements in their teaching. These open-ended questions allowed the teachers to talk freely and openly about their teaching. The interviewers asked some clarifying questions if the responses were not detailed enough or if something remained unclear to the interviewer. Although the themes of the interviews were directed primarily towards examining the teachers' approaches to teaching, the teachers also described their conceptions of

teaching. When analysing the transcripts, descriptions of conceptions of teaching were not omitted, since they were closely intertwined with the descriptions concerning approaches to teaching.

### 2.3. Analyses

The interviews were analysed using the method of content analysis. First, to capture variation in the teachers' descriptions of their teaching all teaching-related descriptions from the transcripts were listed and then any variation in these descriptions was explored. Two broad categories of description clearly emerged from the data. However, a third category of unclear descriptions was created because not all descriptions could easily fit into either of the two categories. After a closer analysis most of these unclear descriptions could be categorised as representing either of the two broad categories. However, some descriptions could not be categorised into either category because they were not seen as defining the approaches to teaching, but instead concerned, for example, motivation and interest in teaching. In addition, if the descriptions were not clear enough they were omitted from the results. The analysis of the unclear expressions will be further explained in the section 3.

The analysis of the interview transcripts was conducted by both authors. The first author analysed independently all the interviews, while the second author analysed 30 randomly selected interviews (42% of the 71 interviews). The two broad categories of description were identified by both authors. Furthermore, both made a list of unclear descriptions. First, the analyses of the 30 interviews which both authors had analysed were compared. The authors had placed almost all the descriptions under the same categories of description, the inter-rater agreement being over 90%. Next, all unclear descriptions were reanalysed together. The decisions to categorise these descriptions into either of the two categories or omit them from the results were arrived at together. Next, the two broad categories of description were analysed in detail in order to identify different aspects of teaching. Both authors had identified similar aspects, but the final form and the labels were developed together. However, one aspect, pedagogical awareness, was identified by only one author because of its different nature. Hence, of the 10 aspects identified, both authors identified nine, the inter-rater agreement being 90%. However, the other author considered the 10th aspect to be important enough to include in the categorisation. Finally, the 10 aspects were grouped under four broader aspects in order to clarify the structure of the findings. This was done with the authors co-operating together.

## 3. Results

Only two broad categories of description clearly emerged from the data when analysing the variation in the descriptions of teaching, contrary to our expectation: (a) The *learning-focused approach*, in which the purpose of teaching was to improve students' learning and an emphasis was placed on continuously improving the teacher's own teaching; (b) The *content-focused approach*, in which the purpose of teaching was on transmission of knowledge and repeating traditional and familiar ways of teaching. Within these two categories there was variation in how clearly or strongly the descriptions reflected a learning- or content-focused approach to teaching.

The analysis of the variation in the descriptions of teaching revealed a complex relationship between the learning- and content-focused approaches. The two approaches shared some similarities which were at first categorised as "unclear expressions". After deeper analysis, variation could be identified in terms of the *purpose* of teaching. However, sometimes teachers did not clearly express the purpose of their teaching, and thus not all such descriptions could be categorised into either of the two broad categories.

The two categories of description were analysed in detail in order to find different *aspects* of teaching. First, descriptions which reflected the learning-focused approach were analysed. Ten aspects of teaching were found. When analysing the descriptions which reflected the content-focused approach, it was observed that the same 10 aspects emerged from the interview data. As a result, 10 aspects of teaching were identified from both the learning- and content-focused approaches. The 10 aspects, were further grouped under four broader aspects to clarify the structure of the findings. These broad aspects were the following: (1) *teaching process* including planning of teaching, teaching practices, and assessment practices; (2) *learning environment* including teacher's role, students' role, interaction, and atmosphere; (3) *conception of learning*; and (4) *pedagogical development*, including development of one's own teaching and pedagogical awareness.

Table 1 summarises the variation in the descriptions of teaching within the 10 aspects of teaching which are grouped into the four broader aspects. In what follows, the two categories of description, the learning- and the

Table 1  
Variation in the descriptions of teaching

| Learning-focused approach to teaching                                                                                                         | Content-focused approach to teaching                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 1. Teaching process                                                                                                                           |                                                                                              |
| 1.1. Planning of teaching                                                                                                                     |                                                                                              |
| Students' needs, prior knowledge and expectations are the starting point when designing teaching                                              | Teachers' own interests are the starting point when designing teaching                       |
| Teacher brings students into the planning process if possible                                                                                 | Teacher makes an exact schedule and designs the content of the course by him/herself         |
| The plan is not too precise; there is space for changes according to the situation                                                            | There is little space for flexibility or changes                                             |
| 1.2. Teaching practices                                                                                                                       |                                                                                              |
| Improvising is a way to construct teaching uniquely to suit different audiences                                                               | Teaching proceeds according to the exact plan the teacher has made                           |
| Knowledge is constructed together with the students                                                                                           | Teacher transmits the knowledge to the students                                              |
| Teaching concentrates on large entities                                                                                                       | Teaching concentrates more on facts and details which are pointed out by the teacher         |
| Teacher is aware of students' different ways of learning and uses varying, activating teaching methods in order to enhance students' learning | Teaching method is selected on the basis of what is most comfortable for the teacher         |
| 1.3. Assessment practices                                                                                                                     |                                                                                              |
| Assessment is directed to measure students' deep understanding of the phenomena                                                               | More traditional forms of assessment are used which are comfortable for the teacher          |
| Teacher uses varying forms of evaluation (e.g., oral or written)                                                                              | Teacher cannot or is afraid to use a variety of forms                                        |
| 2. Learning environment                                                                                                                       |                                                                                              |
| 2.1. Teachers' role                                                                                                                           |                                                                                              |
| Teacher encourages students to be critical and active                                                                                         | Teacher points out the important contents                                                    |
| Teacher is a facilitator and has an equal and casual relationship with the students                                                           | Teacher has a more distant relationship with the students                                    |
| Students learn from the teacher and vice versa                                                                                                | Students learn from the teacher, teacher is the expert                                       |
| Teacher has a positive attitude towards teaching                                                                                              | Teacher sees teaching as an obligatory part of being an academic                             |
| 2.2. Students' role                                                                                                                           |                                                                                              |
| Teacher sees students as active participants                                                                                                  | Teacher sees students as less active recipients and listeners                                |
| Students are capable of finding answers by themselves and process the knowledge                                                               | Little can be expected from students                                                         |
| Students are individuals with individual needs                                                                                                | Teacher sees students as a large crowd of people                                             |
| Students are responsible for their own learning in that they have to find the answers by themselves                                           | Teacher is responsible for students' learning                                                |
| 2.3. Interaction                                                                                                                              |                                                                                              |
| Interaction between teacher and students and among students improves students' learning outcomes                                              | Interaction does not enhance students learning                                               |
| Knowledge is constructed through interaction                                                                                                  | Teachers cannot or are afraid of using activating methods                                    |
| Interactive elements are used with all group sizes in order to enhance students' learning                                                     | Interactive elements are not used with large groups                                          |
| 2.4. Atmosphere                                                                                                                               |                                                                                              |
| Good atmosphere supports learning; 'Easy to ask' and a safe atmosphere encourages students to present their views                             | A more dominant atmosphere                                                                   |
| Atmosphere is constructed together with the students                                                                                          | Teacher tries to create a good atmosphere through good performance or through being humorous |
| 3. Conception of learning                                                                                                                     |                                                                                              |
| Learning is about insights, application of knowledge, developing views, critical thinking, deep understanding                                 | Learning is more about memorizing facts or remembering the course content                    |
| Learning is a process in which the students construct their own views of the phenomena                                                        | Learning is about remembering the right answers or solutions                                 |
|                                                                                                                                               | Right answers can be found through reading the course literature                             |

(continued on next page)

Table 1 (continued)

| Learning-focused approach to teaching                                                 | Content-focused approach to teaching                                                                                |
|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| 4. Pedagogical development                                                            |                                                                                                                     |
| 4.1. Development of one's own teaching                                                |                                                                                                                     |
| Teacher is motivated in developing him/herself as a teacher                           | Teacher is less motivated towards development of his/her own teaching                                               |
| Development of one's own teaching improves students learning outcomes                 | The aim is to get better positions or wage increases                                                                |
| 4.2. Pedagogical awareness                                                            |                                                                                                                     |
| Teacher is aware of his/her pedagogical skills and has processed his/her own teaching | Teacher has not reflected on his/her teaching practices deeply and is not aware of what kind of a teacher he/she is |

content-focused approaches to teaching, are presented within each of the 10 aspects. Quotations from the data illustrate the variation in the descriptions of teaching. Finally, the similarities and variation in the descriptions of teaching are dealt with in depth.

### 3.1. Teaching process

#### 3.1.1. Planning of teaching

The descriptions of teaching revealed that the planning of teaching was considered an important aspect of teaching and that there was variation in the ways teachers planned their teaching. Descriptions which reflected the learning-focused approach to teaching showed that taking prior knowledge, needs, and expectations of students as the starting point when planning courses, and even making the plan together with the students, were important in teaching. Many descriptions revealed that teachers did not want to plan every course similarly, but to take the students' needs and expectations into consideration when planning. According to these descriptions, the course plan needed to be flexible in that it could be easily changed, if needed, during the course:

Usually I don't plan exactly what I say but instead I always take the audience into account. I have different kinds of materials and I always think whether they [students] are interested in this or not. If they don't show much interest I choose some other one instead of that. (A 44-year-old female teacher, Faculty of Arts.)

The descriptions concerning the planning of teaching in the content-focused approach to teaching revealed that some teachers wanted to make an exact plan with no room for extensive changes during the course. Some descriptions showed that goals of teaching were addressed without considering students' opinions. The descriptions reflected that the schedule and the content were designed carefully because otherwise teachers were uncertain about their ability to conduct the teaching. In addition, some descriptions revealed that attention was not given to students' unique backgrounds and expectations. According to some descriptions, clear rules concerning the course were set by the teachers themselves:

The way I teach is kind of a standard method: I try to prepare as thoroughly as possible because I don't like to perform in front of an audience and it makes me nervous. The more I get nervous the less I'm aware of the topic, so I need to prepare it as well as possible ... giving a lecture is stressful indeed. (A 36-year-old female teacher, Faculty of Agriculture and Forestry.)

#### 3.1.2. Teaching practices

Teaching practices in the classroom in the learning-focused approach to teaching stressed the importance of constructing knowledge together with the students. Through improvisation the needs and expectations of different audiences could be taken into account. In some descriptions, varying the teaching methods according to the situation was mentioned. Thus, methods and content could be changed according to what was most suitable for a certain audience. Many descriptions showed an emphasis on the importance of concentrating on larger entities rather than on the details:

I like to improvise when I teach; usually I don't prepare slides or other materials. Maybe one could say that I'm dependent on the situation in a way that I try to match my teaching with what the audience expects. (A 58-year-old female teacher, Faculty of Theology.)

In contrast, teaching practices in the content-focused approach to teaching reflected the need of transmitting detailed information to students that is important from the teachers' point of view. Some descriptions revealed that learning was made easy for students by giving them detailed notes of the lecture. The teaching method was selected on the basis of what was most comfortable for the teachers without considering how it affects the students' learning. Furthermore, in some descriptions, a fear of using activating methods was expressed and the use of traditional forms of lecturing was favoured:

I feel that I am at my best when I have the opportunity to talk myself, but it is a very teacher-centred way of teaching. I have never learned how to make students work in groups. I have had trouble getting rid of the role in which I tell how things are. (A female teacher, age not mentioned, Faculty of Arts.)

### 3.1.3. *Assessment practices*

In most descriptions of teaching, assessment of students' learning was not mentioned as an important aspect of teaching. However, in some descriptions which reflected the learning-focused approach, assessment was mentioned as an important aspect. These descriptions revealed an intention to measure students' deep understanding of the phenomena through the use of various evaluation methods (e.g., oral or written):

I use learning diaries because I don't like [paper and pencil] exams. I don't believe in them. I don't like to teach facts. Students can learn the important facts by themselves. I try to concentrate on the big picture. (A 42-year-old female teacher, Faculty of Social Sciences.)

A few descriptions concerning assessment practices reflected the content-focused approach to teaching. These descriptions revealed that more traditional forms of assessment were used because teachers did not know how to use other kinds of assessment methods. Assessment methods were selected on the basis of what was most comfortable for the teacher:

My courses almost always include some sort of an examination at the end of the course. Some may think it's not pedagogically correct. I have never known how to use learning diaries, but maybe I can learn [to use them] when I understand the principles. (A 36-year-old male teacher, Faculty of Law.)

## 3.2. *Learning environment*

### 3.2.1. *The teacher's role*

The teacher's role reflected in the learning-focused approach to teaching was associated with the importance of an equal relationship between teacher and student. In many descriptions it was mentioned that the teacher's role was to motivate students and encourage them to critically construct their own knowledge. In some descriptions it was emphasised that the teacher does not have all answers, but instead, he or she can learn from students as well:

I know something and you know something, and then we put it together and then we all learn a lot more than if we did it alone. I have experienced that this works for me. It feels good. I don't like that the teacher delivers the knowledge. (A 56-year-old male teacher, Faculty of Medicine.)

In the case of the content-focused approach to teaching, a more traditional teacher role was emphasised in the sense that a more distant and authoritative relationship with the students was considered more comfortable than an equal relationship. The students' active role in the learning process was not emphasised. In these descriptions the teachers' own expertise and their role as the source of information was emphasised:

I am also quite dominant, in the way that I think I always know things the best myself. I listen to students, of course, and I try to fight against this of course, but it is hard for an old teacher to learn new habits. (A 40-year-old female teacher, Faculty of Theology.)

### 3.2.2. *The students' role*

The students' role reflected in the learning-focused approach to teaching is one in which students are individuals and active participants with a capacity to find answers and to construct knowledge. Some descriptions showed that

teachers did not want to give students the right answers, but wanted the students to gain and process knowledge themselves. The students' responsibility for their own learning was emphasised:

In my own teaching I think that the learner is responsible for his/her own learning and is active, and that I don't process all the knowledge for the students.... That I don't give all possible options to students. (A female teacher, age not mentioned, Faculty of Social Sciences.)

Descriptions concerning the students' role in the content-focused approach to teaching suggest that students were seen as less active recipients and listeners. Some descriptions showed that students were viewed as a large crowd of people. In a few descriptions it was emphasised that teachers must be responsible for their students' learning because not too much can be expected from the students:

I feel very strongly that I have the responsibility that in front of me there is this big crowd, of which I don't know a lot and I cannot expect from them, especially in the beginning of the course, much of anything. (A 35-year-old male teacher, Faculty of Arts.)

### 3.2.3. *Interaction*

In many descriptions concerning interaction, which reflected the learning-focused approach to teaching, interaction between the teacher and the students and among students was considered as very important. In some descriptions it was emphasised that knowledge is constructed in interaction through discussions and activating teaching methods. In these descriptions the purpose of interaction was emphasised, which was to deepen the students' understanding:

I try to discuss as much as possible and I ask a lot of questions and hope that students keep asking me a lot of questions. I don't expect complete answers, but an open discussion.... There may not be absolute answers ... but instead ideas, which will be elaborated in peoples' own minds. (A 42-year-old male teacher, Faculty of Biosciences.)

Other descriptions concerning interaction reflected the content-focused approach to teaching. Some descriptions revealed that teachers did not know how to use interactive teaching methods. Furthermore, in some descriptions teachers expressed a fear of using interactive elements in their teaching. Activating students was considered impossible with large groups. Many descriptions revealed that interactive elements were widely used, but the impact of interaction on students' learning was not considered. In some descriptions it was emphasised that teachers tried to create some interaction or discussion, but the purpose of the interaction was not considered:

So far I have not used enough activating methods. But I always try to bring about some conversation. My teaching is quite teacher-focused. I have a lot of big groups. The bigger the group, the more difficult is this interactivity. (A 45-year-old female teacher, Faculty of Agriculture and Forestry.)

### 3.2.4. *Atmosphere*

The creation of a good atmosphere in the learning-focused approach to teaching was considered important for building a favourable environment together with the students and for creating an 'easy to ask' atmosphere. Many descriptions showed that a good atmosphere supports learning and encourages students to present their views and express differing and critical comments:

It's important to create the kind of atmosphere in which one can ask questions and give opinions, express differing and opposite views of a phenomenon, in order to create a sort of space. (A 56-year-old female teacher, Faculty of Pharmacy.)

Only a few descriptions concerning the atmosphere were present in the content-focused approach to teaching. In these descriptions there was an attempt for creating a good atmosphere through a good performance or by being humorous, but whether this supported students' learning or not was not considered. A teacher, when asked to describe himself as a teacher, reported:

I tell jokes and talk about nice things. (A 36-year-old male teacher, Faculty of Law.)

### 3.3. *Conception of learning*

Many of the descriptions revealing a conception of learning in the learning-focused approach to teaching emphasised that learning is about insights and about the development of different and individual views of a phenomenon. Application of knowledge in varying contexts and critical thinking were considered important in gaining a deep understanding of phenomena. Some descriptions showed that learning was seen as a process in which students construct their own views of the phenomena:

The most important element in my teaching is the students' deep learning so that they don't memorise things and forget everything after the exam. By deep learning I mean that they can analyse these things by themselves and critically approach them. That the student can be critical... and express differing views analytically. (A 45-year-old male teacher, Faculty of Arts.)

Descriptions, on the other hand, in the content-focused approach to teaching suggested that right answers can be found simply through reading the course literature. It was emphasised that the students need to remember the course content and facts which are important from the point of view of the teacher:

I want students to learn and remember some basic facts which I consider as valuable.... Basic things which I consider as important, and I want the students to remember and learn them one way or another. (A 30-year-old female teacher, Faculty of Theology.)

### 3.4. *Pedagogical development*

#### 3.4.1. *The development of one's own teaching*

The development of the teachers' own teaching in the learning-focused approach to teaching revealed the centrality of developing one's own teaching. A number of teachers had participated in pedagogical training and the descriptions showed that some had made other kinds of efforts to improve their own teaching. The descriptions showed that they had acknowledged the elements in their teaching that should be developed and that they had a desire to become better teachers:

I should have more tools to make students work by themselves also when teaching large groups; I have not had that enough. I'm aware that discussions have been good, I don't underestimate them and I don't plan to omit them. I want to develop written assignments and peer discussions, or such kinds of things. (A female teacher, age not mentioned, Faculty of Social Sciences.)

Some descriptions concerning developmental aspects of teaching in the content-focused approach to teaching showed that some teachers did not know how to change their teaching practices and they had not made any effort to improve their teaching. In a few descriptions participation in pedagogical training in order to obtain a better position or a wage increase was mentioned:

Of course, teaching merits are emphasised more nowadays. This is one reason for participating in the course on university pedagogy. I can make use of this course when I apply for a job. (A 36-year-old female teacher, Faculty of Agriculture and Forestry.)

#### 3.4.2. *Pedagogical awareness*

Some descriptions revealed that some teachers were very aware of their pedagogical skills and they had elaborated their conceptions of teaching and learning over a long period. These descriptions reflected the learning-focused approach to teaching. The descriptions showed that some teachers talked about their teaching analytically and reflected on it rather deeply:

I try to be myself as much as possible and bring out my strengths. I'm quite open, extroverted, interested in people and in their opinions and thoughts. I try to motivate students, get them enthusiastic. I always try to discover ways to get students to process things by themselves, to realise things by themselves; that they would long for knowledge which you can experience when you are really interested in something; a kind of lust for

gaining knowledge. I like to bring up some questions and get students to discuss these, for example, in groups. I think knowledge is about finding diverse points of view. (A 41-year-old female teacher, Faculty of Veterinary Medicine.)

Some descriptions, on the other hand, indicated that teachers had not reflected on their own teaching that much. These descriptions reflected the content-focused approach to teaching, and in them the teachers' own expertise and teaching experience were emphasised. The following example shows how a teacher answered when asked what kind of a teacher she was:

Hmm, this is bad. What kind of a teacher am I, hmm. Well, I hope an expert at least. I know the things I teach or what I agree to teach. (A 44-year-old female teacher, Faculty of Pharmacy.)

### 3.5. Similarities and variation in approaches to teaching – the purpose of teaching

Although clear variation was found between and within each of the two approaches, some common elements to both learning- and content-focused approaches were also identified. Such similar characteristics included careful design of teaching, the need to make students familiar with the course content, the use of varying teaching methods, the aim of creating a good atmosphere, the use of interactive elements and some sort of development of one's own teaching. However, after deeper analysis it was noticed that the similarities mirrored mere action, but variation could be found when considering the *purpose* of teaching.

The “purpose” of teaching is the end or aim that steers teachers' actions. It differs from *intention* (Trigwell & Prosser, 1996b) in the sense that intention is about what teachers think and feel about teaching – see Approaches to Teaching Inventory (Prosser & Trigwell, 1999). Purpose of teaching is understood as a broader concept including teachers' intentions. Presumably, teachers' underlying *conceptions* of teaching define teachers' purposes of teaching. Thus, when a description referred to planning of teaching it was categorised as reflecting the learning-focused approach to teaching if the purpose was to take students' previous knowledge and skills plus their points of view into account. On the contrary, when a similar description was categorised as reflecting the content-focused approach to teaching, the purpose behind it was to get through the course by making an exact plan.

Also, almost all the teachers mentioned that they wanted to make students *familiar with the course content*. When a description was categorised as reflecting the learning-focused approach to teaching, the importance of students reflecting on the knowledge and gaining a deep understanding of the phenomena was the purpose behind it. On the other hand, if a description of familiarization reflected the content-focused approach, the focus was on the teachers' own constructions of the phenomena.

The use of *varying teaching methods* did not define whether a description was categorised as reflecting either the learning- or content-focused approach. When a description was categorised as reflecting the learning-focused approach, the use of varying teaching methods was selected to support students' deep approach to learning and to activate them in constructing their knowledge. Conversely, when a description was categorised as reflecting the content-focused approach to teaching, the methods were selected without consideration of what enhances student learning. In many cases these descriptions revealed that the purpose guiding the selection of the teaching method was what was most comfortable for the teacher.

Similarly, the desire to create a *good atmosphere* during the course was indicative of the learning-focused approach if an equal relationship with the students was emphasised in order to create an atmosphere that supports deep learning. If the aim was to create a good atmosphere by being humorous, but not enhancing students' deep learning, the purpose was to serve a content-focused approach to teaching.

The same regards the descriptions referring to interaction. The critical difference was whether *interaction* was aimed at deepening the students' learning or not. When interaction was used without any consideration of whether it enhanced students' learning or not, the description was considered to reflect a purpose indicative of a content-focused approach to teaching.

Finally, descriptions concerning *development of one's own teaching* reflected the learning-focused approach if the purpose was to become a better teacher and through this improve students' learning outcomes. The description was categorised as reflecting the content-focused approach if the purpose of developing one's own teaching was to obtain better positions or a wage increase, not to become a better teacher and thus improve students' learning outcomes.

#### 4. Discussion

When examining teaching in higher education qualitatively with the use of a large and multidisciplinary sample, it was assumed that the variation in descriptions of teaching could be captured in more detail and more broadly than in previous studies. Hence, it was hypothesised that more than the two broad approaches, the student- and the teacher-centred, identified in previous research (e.g., Kember & Kwan, 2000; Trigwell et al., 1994) could be identified. In line with previous research this study identified two approaches to teaching as well: the learning- and the content-focused approaches to teaching. The results of the study, however, broadened our understanding of the approaches to teaching since an important finding of the study was that the variation in descriptions of teaching could be identified in detail only after considering the purpose of teaching practices. Furthermore, the study identified 10 aspects of teaching within both of the two approaches, which were further grouped into four broader ones.

Specifically, first, there was variation in how teachers described the *teaching process*, including planning of teaching, teaching practices, and assessment practices. Second, variation could be found in how teachers described the *learning environment*, including the teacher's role, students' role, interaction, and learning atmosphere. Third, there was variation in the ways teachers described their *conceptions of learning*. Fourth, variation could be identified in the ways teachers described their own *pedagogical development* including the development of their own teaching and pedagogical awareness. The large and multidisciplinary sample of the study, as we had hypothesised, made it possible to identify such detailed aspects of teaching.

The Approaches to Teaching Inventory (Prosser & Trigwell, 1999; Trigwell & Prosser, 2004) includes partly similar items as the ones identified in the present study. Specifically, items concerning teachers' *teaching processes*, including planning of teaching, teaching practices, and assessment practices. It also includes items concerning the *learning environment*, such as the teacher's role, students' role and interaction. The inventory presents these items in terms of either teaching strategy or intention. The inventory does not, however, investigate teachers' *pedagogical development* or their *conceptions of learning*.

The *pedagogical awareness* aspect is worth deeper consideration. It differs from the other aspects in terms of its very nature. It is not directly associated with the purpose of teaching as the other aspects do. When analysing the transcripts, it was observed that some teachers were very aware of their approach to teaching and had reflected on their teaching quite deeply. Other teachers, on the contrary, were not aware of what kind of teachers they were and had not elaborated on their teaching practices. Thus, pedagogical awareness seemed to 'cut' through all the aspects of teaching and not just pedagogical development. This phenomenon needs further investigation in order to reveal how pedagogical awareness is related to the two approaches.

Another finding worth discussing regards the role of *interaction* in teaching. In previous research (Kember, 1997) student-teacher interaction had been placed between the student- and teacher-centred orientations providing a link between these two orientations. However, in other studies evidence of this bridging 'student-teacher interaction' conception was not found (Kember & Kwan, 2000); instead it was argued that the nature of the interaction differentiates the orientations, not interaction 'per se' (Samuelowicz & Bain, 2001). The latter view is in line with the results of the present study; it was found that interaction could be categorised into either the learning- or content-focused category after considering the purpose of interaction.

One of the aims of the study was to explore the relationship between the two approaches to teaching. Previous research had suggested that the learning- and content-focused approaches are separate categories (Trigwell & Prosser, 2004) and have their own special characteristics. Other researchers however, argued that the two approaches are poles of a continuum (Meyer & Eley, 2003). This view defines the content-focused approach to teaching as 'not a learning-focused approach'. The results of the present study imply that the relationship between the two approaches is a combination of the two opposite views presented above: there were characteristics typical only of either learning- or content-focused approaches, but on the other hand, the results revealed that the content-focused approach lacked some elements that were typical of the learning-focused approach. Thus, the learning-focused approach is, as Prosser and Trigwell (1999) have described, a more complete approach to teaching when compared to the content-focused approach. In a sense, the learning-focused approach goes beyond the content-focused approach. Previous research has described the learning-focused approach to be more *desirable* (McKenzie, 1996) or more *sophisticated* (Entwistle & Walker, 2000) than the content-focused approach, which is described as more *limited* (McKenzie, 1996) than the learning-focused approach.

The results of the present study imply that the theory of approaches to teaching should go beyond the student/teacher-centred dichotomy. The two approaches share similar elements, but variation can be captured in detail when focusing on the purpose of teaching. In developing the quality of teaching in higher education, the complex relationship between the two approaches should be considered. A strong opposite ‘either/or’ positioning of the approaches (see also Åkerlind, 2003) does not do justice to the nature of the phenomenon. Instead, the content-focused approach should be considered as a less complete approach to teaching which can be developed to be more complete and learning-focused, for example, through pedagogical training (see, e.g., Gibbs & Coffey, 2004; Postareff et al., in press). The focus should be especially on affecting teachers’ conceptions of teaching, which presumably affect the purpose of teaching.

A limitation of the present study was that the majority of the participants had participated in voluntary pedagogical training organised for university teachers. In addition, all of them voluntarily participated in the interviews. Hence, the sample was somewhat biased since the participants were interested in developing their own teaching. More descriptions of content-focused teaching would have probably emerged from the data if the sample had been more representative of the university teachers. Future research should focus on the representativeness of the two approaches to teaching in higher education.

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