

## **Peer-review based assessment of teaching – a conceptual discussion**

**Thomas Olsson<sup>1</sup>**

Senior lecturer/Academic developer  
Lund University, Faculty of Engineering  
Lund, Sweden

E-mail: [thomas.olsson@genombrottet.lth.se](mailto:thomas.olsson@genombrottet.lth.se)

**Torgny Roxå**

Lecturer/Academic developer  
Lund University, Faculty of Engineering  
Lund, Sweden

E-mail: [torgny.roxa@genombrottet.lth.se](mailto:torgny.roxa@genombrottet.lth.se)

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### **INTRODUCTION**

We would like to raise the important question of assessment of teaching. At this point we do this as a conceptual discussion – and not as a full research project – and our discussions and arguments build on the literature and an extended experience of assessment of applications for senior lecturer or professor, promotion, and scholarly rewards for excellent teaching [1].

Assessment of the quality of research is based on collegial peer-review systems that are strongly embedded in academic traditions, and the confidence in the judgments is usually high. Assessment of teaching has traditionally not been close to the rigour of peer-review of research, and this is the challenge of the conceptual debate we want to raise. Important initiatives to improve the quality of academic teaching during the last decades have been the Scholarship of Teaching and Learning movement, and the Teaching Quality movement. A key issue in both is the importance of a scholarly approach to teaching and learning. In this conceptual discussion, we analyse and argue for a scholarly peer-review based assessment of teaching [2], closely related to the structure of peer-review of academic research.

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<sup>1</sup> Corresponding Author  
T Olsson  
[thomas.olsson@genombrottet.lth.se](mailto:thomas.olsson@genombrottet.lth.se)

## 1 ASSESSMENT OF TEACHING

### 1.1 Judging university teaching

Keith Trigwell [3] discussed the judging of university teaching and presented a model illustrating aspects of the teaching and learning situation. His paper builds on the ideas that good teaching should support high quality student learning and that good teaching should be scholarly. The *student* is at the centre of the model, which consists of concentric spheres. The sphere closest to the student, thus being most influential with respect to the student, is *teachers' strategies*. The following spheres represent *teachers' planning*, *teachers' thinking*, and finally the *teaching and learning context*.

### 1.2 A model

We build on the work of Trigwell [3] in our discussion of peer-review of teaching and propose a model with the *teacher* at the centre. Then spheres follow representing teachers' *conceptual understanding* of teaching and learning and how this relates to the teaching practice with focus on *students*, *colleagues*, and *organizational levels*. Another dimension with relevance to this model stems from Ashwin and Trigwell [4]. They introduced the concepts of personal, local, and public knowledge. This means that, in relation to our model, a teaching practice without sharing of information with others represents personal knowledge. Such a practice would focus on students and possibly very few colleagues. Teachers opening up their pedagogical practice for others to scrutinize, focusing on students, colleagues or organisational levels, could also contribute to local or public knowledge.

## 2 RESEARCH AND TEACHING

### 2.1 The research and teaching processes

Wilhelm von Humboldt, 200 years ago, had a vision that the commitment of a university should include and unify teaching and research. His ideas were, at the time, quite radical and they were manifested in the foundation in 1810 of what today is Humboldt-Universität zu Berlin. Before that, universities were mainly educational institutions and, as we all know, Humboldt's ideas are now the main stream of universities throughout the world.

Bowden and Marton [5] introduced the concept of learning as a common denominator of teaching and research. They regard teaching as an activity supporting learning that is new to the individual learner, and research as an activity producing learning that is new to the society. This opens up for ideas of assessment of teaching and research based on shared intellectual principles, with focus on the learning process, and therefore comparable, and similar methods could be used for assessing teaching as well as research.

The importance of the discipline should also be underlined. Ramsden [6] emphasizes the subject and also teaching that supports the learning process – what should be learned and how should it be learned. The generally close relationship between teaching and research in a specific subject, the research process and the knowledge formation, influences how assessment is performed. Varying processes, complexity and discipline dependence, for both teaching and research, are crucial.

We separate the research process as well as the teaching process in three parts:

*Research* starts with practical research work, including collection of (quantitative or qualitative) data and different analyses of the data. Secondly, a research paper is written and finally it is this paper that is assessed in the peer-review process.

*Teaching* starts with the actual teaching practice, including teaching materials, planning of teaching and the teaching practice. Secondly, in an assessment process, a teaching portfolio is written, including a self-reflection and integrated practical examples [7]. Finally, it is the teaching portfolio that is assessed in a peer-review process.

## **2.2 Peer-review of research and teaching**

Peer-review of teaching has traditionally meant listening to a teacher lecturing. This captures only a small fragment of the complexity of the teaching process and today peer-review of teaching is often based on a teaching portfolio and done with the same rigour as peer-review of research [8]. It is important to take account of multiple types of evidence in this process and, since we expect teaching to be scholarly, it is equally important that the assessment process is scholarly [8].

The main difference between peer-review of teaching and research concerns the importance of interpersonal skills. Traditionally this aspect, together with quantitative teaching records, has been the principal concern of the assessment. We argue that interventions in the practical teaching process are disturbing and a single teaching performance does not give much relevant information. Teaching practice involves numerous interactions that are not able to detect unless the practice is followed over a longer time. Furthermore, assessment of teaching as well as assessment of research involves data not immediately accessible using peer-review. The ability to interact is evident, but also practical research skills are hidden in the methods section of a paper and not directly assessed.

## **3 ASSESSING THE REFLECTIVE PRACTITIONER**

### **3.1 The reflective practitioner**

We argue for an assessment of teaching focusing on the reflective practitioner [9], comparable to academic peer-review of research. A reflective practitioner is engaged in a professional learning process by continuously examining, reflecting on, and improving the professional practice. Teachers that examine and scrutinize the effects of teaching activities building on knowledge about teaching and student learning in higher education can be considered to be reflective teaching practitioners. It is the reflected teaching practice that we want to assess.

### **3.2 Different kinds of reflection**

The ability to teach is sometimes described as a gift that a person possesses or not. Schön [9] discusses tacit knowledge and knowing-in-action and he describes these related concepts as knowledge that we have inside ourselves, something we do without thinking about why we act as we do. However, Schön [9] develops his intellectual discussions to include *reflection-in-action*. By this he means the ability to evaluate and make improvements during an action. Furthermore, Schön [9] also argues for *reflection-on-action*, which is reflection after the action has taken place. This reflection includes analyses and evaluations of the action that are important to improve the practice in the future. We argue that good teaching, a teaching that is continuously evolving over time, is strongly supported by the ability to reflect in and on action.

We also build on Argyris and Schön [10, 11] and their principles of single- and double-loop learning. In a process characterized by single-loop learning only actions are changed. However, if governing variables as well as actions are questioned and changed, a process called double-loop learning is at hand. Double-loop learning is characterized by the ability to draw conclusions from data, and to scrutinize and test

hypotheses and viewpoints. Teachers that think and act outside their own teaching practice, observing teaching and student learning, and reflecting with the use of pedagogical knowledge, are likely to learn through double-loop learning.

Reflection-on-action, essential in the teaching portfolio, facilitates an assessment of the teaching practice that includes a variety of aspects not possible to detect by just listening in on the teaching in the classroom. A teacher's ability to make professional judgments based on observations in the classroom and a teacher's ability to use theoretical knowledge of teaching and student learning in the continuous development of the teaching practice are just two important examples.

#### 4 SUMMARY

We argue that assessment of teaching and research should be performed with the same rigour and scholarly approach. It is the reflected teaching practice and how evidence based actions and methods support and improve students' learning that is at the focal point in assessment of teaching.

The participants of this session are invited to contrast their views with our arguments that peer-review of teaching should be a multifaceted and rigorous assessment closely related to peer-review of research.

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