

**PROMOTING THE PLANNING AND COACHING COMPETENCE OF STUDENT  
TEACHERS AND MENTORS IN VOCATIONAL TRAINING  
DEVELOPMENT AND EVALUATION OF AN INNOVATIVE TRAINING SETTING  
(PROFALE)**

Anja Christina Augsdörfer, Anja.Augsdoerfer@uni-hamburg.de

University of Hamburg, Faculty of Education; Institute of Vocational and Business Education

**Introduction**

*The state funded project 'Professional teacher actions to promote subject-related learning under changing social conditions' (ProfaLe) aims at improving teacher education at the University of Hamburg at various levels. One goal, amongst others, is to intensify the cooperation between University lecturers and mentors within school practical activities during teacher education. Both teachers and students shall develop their professional competence based on common reflections.*

**MAIN SECTION**

Teacher training runs the risk of producing "inert knowledge" (Renkl, 1996). Furthermore, current research approaches based on a complex concept of competence focus on the problem of transforming competence into performance. Teachers state that in practice they rarely orient themselves to theories they had developed during their studies (Blömeke, Gustafsson and Shavelson, 2015).

Facing the uncertain transition from knowledge to action, the training of teachers in many European countries is subject to criticism, although so far its effects haven't been empirically investigated on a larger scale (Townsend & Bates, 2007). Thus, the question which content knowledge (CK), pedagogical content knowledge (PCK) and general pedagogical knowledge (GPK) should be acquired by teachers and how it can be linked up for teaching practice has just recently been regarded as an important research subject (Larcher & Oelkers, 2004, Kunter & Baumert, 2006; Blömeke, Kaiser & Lehmann, 2010).

Thereby the common core of most recent studies is the reference to Shulman's description of PCK (1987) as a "special amalgam of content and pedagogy that is uniquely the province of teachers, their own special form of professional understanding". However, there is no common consensus on the facets of this construct (Depaepe, Verschaffel, Kelchtermans, 2013). Current approaches distinguish between a cognitive and a situated paradigm regarding the conceptualization of PCK: "whether (...) knowledge in teaching is located 'in the head' of the individual teacher or is somehow a social asset, meaningful only in the context of its applications." (Rowland & Ruthven, 2011).

Based on the concept of noticing, current studies distinguish three facets of the teacher's perception: **p**erceiving particular events in an instructional setting, **i**nterpreting the perceived activities in the classroom and making **d**ecisions related to teaching situations (PID) (Carter et al., 1988; Van Es & Sherin, 2002; Sherin, Jacobs & Philipp 2011; Erickson, 2011; Neuweg, 2011). The availability of these behavioural representations, which are close to the situation, essentially determines whether the transformation of competence into performance is successful. Therefore, the promotion of PID-related competencies is a key development goal to reduce the already described discrepancy between university-

acquired professorial knowledge and the knowledge that is relevant in school practice. In this regard, recent findings show clear differences between experienced (experts) and less experienced teachers (novices) whereby experts have a richer repertoire of teaching-learning strategies and show broader skills to anticipate teaching situations (Berliner, 2001, Chi, 2011).

Based on the outlined theoretical framework this study attempts to answer and confirm the following research question and assumptions:

*How can the planning and coaching competence of student teachers and mentors be supported within joint training settings?*

A1: Lesson planning based on approaches of the content-focused coaching supports the planning and coaching competence of student teachers and mentors simultaneously.

A2: Working with annotated video portfolios promotes the planning competence (PID) of student teachers.

A3: By working on a research question focusing on a specific facet of lesson planning, the planning and coaching competence of student teachers and mentors can be promoted simultaneously.

## **Methods**

### **Treatment**

The innovative seminar concept was developed to accompany the one-year school internship, which is obligatory for all student teachers at the University of Hamburg. To limit the discrepancies between theory and practice as well as to promote the planning and coaching competence, 14 master students and their 7 mentors, took part in the pilot study. Thereby the mentors attended 4 out of 8 joint training sessions. According to the previously stated assumptions, the treatment incorporated theoretical approaches to content-focused coaching (Kreis, Staub, 2009), an individual research question regarding a concrete facet of lesson planning, the implementation of planned teaching units and annotated video portfolios (Cho, Huang, 2014). Thereby the focus was on working out breakages or successes in planning and formulate alternatives for future lesson planning. All research questions and video portfolios were presented in the last course session for further discussion with all participants.

### **Instruments**

The evaluation concept is based on a complex and complementary mix of quantitative as well as qualitative instruments:

- a specially developed video-based test with an open-qualitative answer format consisting of 9 sequences concerning different phases and quality aspects of the lesson planning process.  
→pre-post; students (n=14); mentors (n=7); control group (n=13)

- questionnaire on personal data and items regarding: reflection and discourse ability, relation of knowledge and skills as well as learning opportunities based on a 4-dimension-likert scale →pre-post; students (n=14); control group (n= 120)
- qualitative evaluation of annotated video portfolios (n=7)
- recorded and transcribed lesson planning sessions (n=7) and final course session
- general feedback on the course setting

### Data Analysis

To determine changes in the planning and coaching competence of students and mentors, it was necessary to develop a set of comparative criteria. Therefore approaches to qualitative content analysis and the evaluation of complex teaching and learning arrangements were adopted to analyze the data generated by the video-based test (Kuckartz, Siemon, 2003).

As a next step the identified effects, determined by changes of the defined criteria, need to be traced back to the different elements of the treatment. For this purpose, the developed criteria catalogue is currently used and extended (based on an explorative approach) whilst analysing the transcribed planning sessions, the final course discussion and the annotated video portfolios. In addition, eventual correlations will be triangulated with the generated quantitative data.

### Conclusions/ results

First analysis of the generated data shows:

- a greater number of perceived critical incidents shown in the video-based test
- a positive change regarding criteria such as: broader scope of answers, greater usage of keywords, more frequent recourse to didactic theories in interpretations, a greater number of formulated action alternatives (with regard to own experience from lesson planning and implementation)

General feedback showed:

- a very high interest of students and mentors to focus more on lesson planning in terms of content-focused coaching, to work on a common research question concentrated on concrete aspects of lesson planning and to analyse own video material
- a positive rating on the exchange among university lecturer, students and mentors

Currently, these first results concerning the changes in the planning and coaching competence of student teachers and mentors are more specifically analysed. As a next step, the possible effects of the different

treatment elements are about to be implemented into new course material for all seminars that accompany the school internship.

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