Exploring Teachers' Thinking about Teaching and Learning

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ABSTRACT
Professional practice in general is to a large extent based on tacit knowledge (Schön 1983). For university teachers, tacit knowledge includes knowledge about what works – and what does not work – when teaching a specific group of students a specific subject matter in a specific context.

Making tacit knowledge explicit is important for at least two reasons: For the individual it may facilitate a more conscious linking of lose impressions and observations from own teaching practice to general principles of teaching and learning, thus enabling a more systematic interpretation and development of own teaching (Mcalpine and Weston 2002). It is also useful – if not necessary - for communication with others about teaching and learning, e.g. when peer coaching less experienced colleagues, or sharing experience and collaborating on teaching development with colleagues. Teaching Portfolios are a well-known means for the individual teacher to develop a reflective approach to own teaching practice and the underlying values and presumptions, including a process of making tacit knowledge explicit (Smith and Tillema 2006). However, we see a need for methods for sharing, discussing and developing teaching philosophies in a collective process. The perspectives of introducing such methods are to support a team-oriented approach to teaching and to strengthen communities of practice (Wenger 2008)/ communities of learning among teachers.

So how can we do this? The authors have conceived and designed a game to identify and clarify teachers' values, attitudes and preferences related to their teaching. The core element of the game is a deck of cards each with a statement about teaching and/or learning, e.g. "Students must learn to dare to fail and learn from their mistakes", "What I teach is what students learn", and "Blackboards are an overlooked method of teaching". While the statements do not give the "solution" to what good teaching practice is, their purpose is to start a personal reflection.

During the game, the players go through an individual reflection process leading to the selection of a number of cards with statements each player find relevant and important in relation to the question "What is good teaching?" These are then ranked and discussed in a group of players who are asked see if some consensus can be reached and explore if they can identify common approaches to teaching and learning. This consensus may different from the individual player's choices.

We have facilitated game sessions at several occasions, among others: at an international engineering education conference, at an annual education day at a university abroad, and at a meeting for study leaders of Bachelor of Engineering programmes. We have collected documentation of the selection and ranking of cards in these sessions, and analysed the data. These data represent the involved teachers' individual preferences, and consensus reached within groups of players - preferences which may influence their teaching practice, consciously or unconsciously.

The data analysis has raised questions like:

- What patterns can be identified based on the cards that were selected, and the cards that were not?
- What kinds of attitudes towards teaching and learning do the selected cards represent?
- Which selections reflect teaching practices that support active learning?
- What types of statements have participants filled in on blank cards?

The active poster will present data collected and conclusions of the analysis. This will supplement the workshop at the ETALEE 2017 conference (Jensen, Christiansen and Hansen 2017) – that gives conference participants a chance to get a first-hand experience with the game – with giving an opportunity to discuss the outcome of having played the game and help us with input to the further development.

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