

**„The Influence of a Practical Phase on Student Teachers’ Beliefs about Intelligence, Talent and Learning“** by Andrea Mühlig

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According to multidimensional competence models, knowledge, motivational orientations, self-regulation skills and professional beliefs of (student) teachers are considered to be a part of teachers’ professional competence. Recent studies show the importance of teachers’ beliefs by referencing their role as filters for professional development, frameworks for decision making, and guides for action during teacher practice (Fives & Buehl, 2012). Thus, teachers’ beliefs about the variability of their students’ personal characteristics such as intelligence, talent and the ability to learn can have a moderating influence on students’ achievement, motivation and learning outcomes. For example, research indicates that teachers who believe that these personal characteristics are changeable are more likely to have high expectations of student performance and create a more supportive learning environment (Dweck, 2000).

Which teachers’ beliefs are activated, reflected or changed may depend on context demands. Therefore, the practical phases in teacher education programs could provide meaningful learning opportunities for the reflection of beliefs. Only very few studies have used a longitudinal design to investigate such possible developmental shifts of teachers’ beliefs. The aim of the present study is (1) to examine the beliefs of student teachers about intelligence, talent and learning and (2) to explore the effects of the experiences in the practical phase of teacher education on these beliefs.

A sequential mixed method study was conducted. At first step 390 student teachers of all disciplines in the fourth semester of the University of Oldenburg, who participated in a six weeks practical phase during the summer semester 2014, completed a questionnaire before and after the practical phase. This questionnaire included an adapted and extended version of the „Theory of Intelligence Scale“ (Dweck, 2000), Big Five personality scales, self-efficacy beliefs, beliefs about learning ability, scales to assess the learning guidance and the subjective significance of the practical phase. Subsequently, episodic interviews were conducted with 46 students, which captured both the conceptual understanding about the concepts intelligence, talent and learning and relevant experiences with narrative prompts. The data will be analysed using both correlations, analysis of variance with repeated measurement and qualitative content analysis, according to Mayring (2010).

First results of the repeated measures ANOVA revealed a statistically significant effect in terms of time on the beliefs about learning ability ( $F(1,226) = 185, p < .001, \eta^2 = .46$ ). Student teachers believe less in the ability to learn after the practical phase experience than before. Beliefs about intelligence ( $F(1,226) = 3.34, p = .07$ ) and talent ( $F(1,226) = 0.16, p = .69$ ) seem to remain stable over time. Preliminary results from the interview study show that the examined beliefs of the student teachers are mostly based on their own experiences as pre-university students. In addition, the results support the findings of other studies in the field that the teachers’ shared beliefs seem to have the most impact on the reflection of beliefs during the practical phase.

A detailed framework about the content of the examined student teachers’ beliefs still has to be worked out. Further possibilities of integrated mixed methods analysis will be discussed at the workshop.

## References

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