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Feedback from external measurements of student achievement as a basis for developing English lessons

Objective and question. Feedback from external measurements of student achievements, such as comparative testing, provides teachers with information on the extent to which learners have reached the set learning goals and standards. Hence, external feedback may form a solid basis for the evidence-based development of teaching and learning processes. (cf. Standing Conference (KMK), 2006). This project explores how maximum benefits to improve the planning of learning processes can be leveraged from respective feedback.

Theoretical background. Developing the planning of teaching and learning processes on the basis of empirical evidence is a main component of the learning process of teachers and is therefore grounded in the reciprocal aspect of pedagogic interaction, as set out in the model proposed by Bronfenbrenner and Morris (2006). Furthermore, according to Helmke's model of utilizing learning opportunities (2012), the teacher sets the main conditions for pedagogic processes in the classroom by planning and respective implementation. The evidence-based development of lessons can be split into four phases. (1) First, the teacher searches for relevant evidence concerning the respective group of learners (e.g., his or her class). This evidence can, for example, be available in the form of external feedback. (2) Secondly, the teacher needs to comprehend this feedback and interpret the findings with regard to what he or she needs as essential information (cf. Hattie & Timperley, 2007). Most importantly, the teacher needs to consider the feedback as meaningful and relevant. For this purpose, the teacher requires competences in research methods (Shank & Brown, 2007) as well as knowledge about the curriculum. (3) Depending on the individual findings derived from the external feedback, the teacher starts planning lessons for his or her teaching. In this way, individual underlying assumptions concerning the learning processes of students and the impact of specific support measures can be captured indirectly. (4) Finally, the planned lesson is implemented and possible evidence on whether the goals have been reached can then provide a foundation for a similar additional cycle. For each phase, the necessary conditions as well as the professional teacher competences that result in a successful implementation can be described (Altrichter, 2010; Dederig, 2011) but up to date, there have been few empirical studies on the complex interplay.

Relevance. While different studies investigate how lesson planning affects learning achievement, this project explores the development of instruction specifically with regard to the adaptation of lesson plans to the level of student competence. Unlike in normal instruction, student achievement is measured externally here, providing external feedback (e.g., in the context of comparative testing in grade 8). External feedback of this kind has been increasing since the shift in empirical research and places new demands on teachers.

Methodological approach. The first three phases of evidence-based development of learning and teaching processes is explored. Teachers are provided with externally generated feedback based on an assessment of student achievement that is oriented towards the educational standards of English as a school subject. In a next step, they will be asked to draw conclusions, select teaching measures to improve achievement for subsequent lessons plans, and explain why they have selected these measures. In addition, different influencing factors, such as teachers' personality traits, their skill in dealing with empirical data, pedagogical content knowledge, and facets of professional competence. are collected. Finally, the relations between characteristics of feedback, the above-mentioned influencing factors, and the adequacy of the resulting lesson plans is examined.

Possible dissertation topics.

- The influences of capability-based teacher characteristics on the reception and use of external feedback from achievement measurements in the class context.

- The influences of personality traits of teachers on the reception and use of external feedback from achievement measurements in the class context.
- The influences of characteristics of external feedback from achievement measurements in the class context on reception and use.

Literature

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