ATTENDING TO RELEVANCE IN MATHEMATICS TEACHING

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The overarching goal of mathematics education is for students to develop mathematical competence necessary for everyday life, work, and to partake in a democratic society (Niss, 2007). However, previous research indicate that teachers seldom attended to the relevance of goals, except when referring to exams and tests (Selling et al., in review). Furthermore, research (e.g., Sealey & Noyes, 2010) indicates that mathematics education should be relevant and help students understand mathematics role in society, emphasizing that such aspects should be attended to during lessons. Thus, focusing on clarity and coherence, rather than relying upon students making inferences about the lesson goals and intra and extra-mathematical connections. The research question for the present study is as such: how does teachers in the Nordic countries attend to relevance in the classroom, in terms of learning goals and activities?

The study is part of a larger study, with data from the LISA Nordic study (Selling, et al., in review). The data comprises video recording from lower secondary mathematics classrooms in Finland, Norway, and Sweden. These countries are selected as overarching relevance goals can be found in their national curricula.

A two-camera setup is utilized, with audio collected simultaneously from the teacher and the classroom as a whole. Content analysis is applied to investigate teachers' goals and activities focusing on relevance. Analyses are conducted on a sentence-level, based on utterances, written communication if available, as well as classroom discussions. Preliminary results indicate that relevance is seldom attended to as an explicit goal, except when it is a result-oriented goal. While some lessons connect mathematical topics to everyday life, such as shopping or understanding economical aspects, there are few instances of lessons that target more overarching questions of society and democracy.

The poster will present an overview of teachers' goals centered on relevance and reallife connections in classroom samples from Finland, Norway, and Sweden.

References

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