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Investigating the voice of two Swedish mathematics teacher guides

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This poster presents a study on the voice of two Swedish mathematics teacher guides. We have made a content analysis of teacher guides to the two most commonly used mathematics textbooks in Swedish lower secondary school Grades 7 to 9. Our theoretical stance is that curriculum resources can support teachers pedagogical design capacity. Our analysis shows that the voice of both guides speaks through the teacher with narratives and scripted instructions, instead of making visible the strengths and weaknesses with different teaching design considerations. The results could be used to further elaborate on how the teacher guides can be designed to support the pedagogical design capacity for a range of different teachers.

Keywords: Sweden, teacher guides, voice.

RESEARCH TOPIC

Mathematics curriculum resources are teachers' most important tools in mathematics education all over the world (Fan, Zhu, & Miao, 2013). Emerging research shows potential in curriculum resources to support teachers' pedagogical design capacity (PDC), i.e., support teachers to find productive ways to adapt curriculum resources to reach instructional goals (cf. Brown, 2009; Davis & Krajcik, 2005). This poster presents one piece of a larger study where the support for the teachers in their teacher guides' is investigated. Our research question is: *What characterizes the voice of two dominating Swedish mathematics teacher guides?*

THEORETICAL FRAMEWORK AND METHOD

Davis and Krajcik draw on the work of Ball and Cohen and present five high-level guidelines for how to design educative curriculum materials, i.e., with the intention to promote teacher as well as student learning.

We used these guidelines to develop an analytical tool to analyze the content of mathematics teacher guides (Hemmi, Koljonen, Hoelgaard, Ahl, & Ryve 2013). In this poster, we focus on one of five categories in that framework, namely to make the developers pedagogical judgments visible to the reader. This category is manifested by the *Voice* of the teacher guide; how the authors communicate with the teacher. They can speak either *through* the teacher or *to* the teacher. The difference in addressing the teacher by through or to is nicely explained by Remillard (2012) in the following quote:

Despite the invisibility of the authors, curriculum resources have a voice that is manifested through the way they communicate with the teacher. Most curriculum resources place primary emphasis on what the teacher should do. I think of this as talking *through* teachers. That is, the authors communicate their intent through the actions they suggest the teacher takes. Few resources speak *to* the teacher by communicating with teachers about the central ideas in the curriculum. (p. 112)

RESEARCH RESULTS AND IMPLICATIONS

Our analysis shows that the voice of the investigated guides mostly *speaks through* the teacher as narratives and scripted instructions, and only occasionally *to the teacher* about the strengths and weaknesses with different teaching designs that could facilitate teachers to make choices and to keep their autonomy. The results could be used to further elaborate on how the teacher guides can be designed to support the PDC for a range of different teachers.

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