



DEN 16. NORDISKE LÆRERUDDANNELSESKONFERENCE

INNOVATION I UNDERVISNING OG LÆRING

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Titel på Præsentationen	Proof-related competences in new Norwegian mathematics curriculum for grades 1-10
Type af præsentation:	Mundtlig præsentation
Sprog:	Engelsk
Tema:	1. Uddannelse, evaluering og feedback
Abstrakt:	<p>Researchers in mathematics education have long stated that a greater emphasis on proof in primary school supports students meaning making in mathematics and create foundations for deep understanding of concepts and connections. We take proof in primary school to mean mathematical valid argumentation using forms of expressions that are appropriate and known to a given group of students. The new 2 curriculum standard for primary mathematics includes proof as a part of one of its core elements and in this study, we explore how competencies connected to work with proof are spelled out for grades 1-10. We have analyzed the curriculum standard using a framework which conceptualize proof-related-competence into six categories. In order to uncover relationships between the categories we see proof as a part of mathematical reasoning. Our analysis shows that the standard addresses several of the proof-related categories – students shall work with investigations, representations, relationships and argumentation. However, the notion of proof is not mentioned as a part of the goals for each grade and there is very little focus on development of logical thinking and work with definitions. This can hinder the development of students' competence with proof and proof related work in primary school.</p>