

Abstracts:



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Titel: Designing instructional sequences for ethical and critical mathematics education.

Abstract: Designers of critical mathematics instruction have documented difficulties in simultaneously fostering the development of critical consciousness while supporting students in developing understandings of *new* mathematics. Confining justice-oriented tasks to applications of *previously learned* mathematics limits the degree to which these tasks will be taken up by teachers. I describe an attempt to employ heuristics from the instructional design theory of realistic mathematics education [RME] to create an instructional sequence aimed at developing students' critical and ethical reasoning while also developing new mathematical understandings of ratio, proportion and percents.



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Titel: What I learned from designing a mathematical mystery for lower secondary level.

Abstract: Speaking from the notion of "creative pragmatics" (Svabo & Shanks, proceeding), I present an autoethnographic exploration of the second order learning gained from designing learning materials for lower secondary education, namely a booklet called "The Gate Key". This booklet is an urban escape-room-like mathematical mystery tour. While reminiscing about the design process, I also share the insights I gained into game design, mediation, and mathematics.



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Titel: Active mathematical engagement in Danish Kindergarten

Abstract: In my ph.d. -project I am using ethnographic methods exploring how bodily engagement with the material environment in Danish daycare can be related to children's mathematical experience. I will give a few examples on some of my first findings from my fieldwork.



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Titel: STEM Assessment Methods and Student Well-being

Abstract: Research suggests that young Danes are experiencing distress, partly due to our school assessment methods. I aim to explore how adopting a STEM approach in examinations can shift the focus from outcomes to the process, all while prioritizing students' emotions and well-being.