

Abstract

Taking its departure point in critical mathematics education, mathematical competencies, and the use of digital technologies in mathematics teaching and learning, the paper sets out to discuss and describe a technocritical mathematics education. Not least this is due to the increase of hidden mathematics in technology of society today, both inside and outside the classroom. It is argued that a technocritical mathematics education must enable students to exercise the processes of "packing" and "unpacking" (hidden) mathematics as part of becoming citizens in a modern society. The paper raises the questions of what mathematical cases might enable students to develop competence with regard to these processes, and what might characterise such mathematical cases. Part of the answer to this point is a so-called embedded "matryoshka doll" feature of such mathematical cases. Two examples of mathematics-based technologies – public-key cryptography and blockchains for cryptocurrency – on which our modern-day society are deeply dependant are displayed and discussed in the light of a technocritical mathematics education.

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