An ecological turn in mathematics education

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Abstract

In this plenary talk, I make the case for the need for an "ecological turn" in mathematics education. The Covid pandemic has exposed the fragility of the world economy and its systems, in the face of global events. I argue that there are more concerning global challenges, such as climate change and totalitarianism, and that mathematics education can no longer assume a neutral position. Mathematics itself is mobilized in the formulation and communication of challenges, such as the global pandemic. Having set out some theoretical considerations, I then describe a research project I co-lead, taking place in Mexico, where the aim is to bring the concerns of a disadvantaged community into dialogue with the school mathematics curriculum. I conclude with some thoughts on possible futures for mathematics education, in school and higher education.