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Digital technologies in mathematics education: reflecting on a personal experience

In the last twenty years, I have been involved in research on the design and use of digital technologies in mathematics education, at different levels of schooling from middle school to university. My research has considered different technologies from dynamic geometry software, computer algebra systems and spreadsheets to on-line resources and diagnostic tools. In this lecture, I propose to use this personal experience as a clue for reflecting on the evolution of didactic research in that area, for showing the potential and limits of what has been achieved, and analysing up to what point the knowledge that has been accumulated makes us better able to put technological advances at the service of the improvement of mathematics education.