

ZMATH 2016e.01016

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Blended learning, e-learning and mobile learning in mathematics education.

ZDM, Math. Educ. 48, No. 5, 589-610 (2016).

Summary: In this literature survey we focus on identifying recent advances in research on digital technology in the field of mathematics education. To conduct the survey we have used internet search engines with keywords related to mathematics education and digital technology and have reviewed some of the main international journals, including the ones in Portuguese and Spanish. We identify five sub-areas of research, important trends of development, and illustrate them using case studies: mobile technologies, massive open online courses (MOOCs), digital libraries and designing learning objects, collaborative learning using digital technology, and teacher training using blended learning. These examples of case studies may help the reader to understand how recent developments in this area of research have evolved in the last few years. We conclude the report discussing some of the implications that these digital technologies may have for mathematics education research and practice as well as making some recommendations for future research in this area.

Classification: U50

Keywords: internet; mobile learning; MOOC; blended learning; digital libraries; learning objects; collaborative learning

doi:10.1007/s11858-016-0798-4