

ZMATH 2016c.01000

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The use of handwriting recognition technology in mathematics education: a pedagogical perspective.

Amado, Nélia (ed.) et al., Proceedings of the 12th international conference on technology in mathematics teaching, ICTMT 12. Faro: University of Algarve (ISBN 978-989-8472-68-7). 131-139 (2015).

Summary: In mathematics education, the lack of an intuitive means to enter mathematics expressions online has been a major barrier to effective communication, causing mathematics to be lagging behind in the development of online collaborative learning environments. This study evaluates the use of handwriting recognition technology as a potential solution from a pedagogical standpoint. With pedagogical needs in mind, a new handwriting recognition user-interface (MathPen) was developed as a research tool to investigate the teaching and learning perspectives through a) an expert review with practising teachers, and b) a usability study with undergraduate students.

Classification: U50 R40

Keywords: handwriting recognition user-interface design; instrumental genesis; technology-induced distractions