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Sosnovsky, Sergey; Dietrich, Michael; Andrès, Eric; Gogvadze, George; Winterstein, Stefan
Math-Bridge: adaptive platform for multilingual mathematics courses.

Ravenscroft, Andrew (ed.) et al., 21st century learning for 21st century skills. 7th European conference of technology enhanced learning, EC-TEL 2012, Saarbrücken, Germany, September 18–21, 2012. Proceedings. Berlin: Springer (ISBN 978-3-642-33262-3/pbk). Lecture Notes in Computer Science 7563, 495-500 (2012).

Summary: Math-Bridge is an e-learning platform for online courses in mathematics. It has a number of unique features: it provides access to the largest in the World collection of multilingual, semantically annotated mathematical learning objects; it models students' knowledge and applies several adaptation techniques to support more effective learning, including personalized course generation, intelligent problem solving support and adaptive link annotation; it facilities a direct access to learning objects by means of semantic and multilingual search. All this student interface functionality is complemented by the teacher interface that allows managing students, groups and courses, as well as tracing students' progress with the reporting tool. Overall, Math-Bridge offers a complete solution for organizing technology-enhanced learning of mathematics on individual-, course- and/or university level.

Classification: U50 U70

Keywords: e-learning; mathematics education; adaptation; course generation; adaptive navigation support; e-learning platform; multilingual and multicultural aspects

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