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A virtual mathematics laboratory in support of educating educators in inquiry-based style.

Maaß, Katja (ed.) et al., Educating the educators: international approaches to scaling-up professional development in mathematics and science education. Proceedings of the conference hosted jointly by project mascil (mathematics and science for life) and the German Centre for Mathematics Education (DZLM), Essen, Germany, December 15–16, 2014. Münster: WTM-Verlag (ISBN 978-3-942197-77-9/pbk; 978-3-942197-85-4/ebook). Conference Proceedings in Mathematics Education 2, 167-176 (2015).

Summary: The paper deals with a Virtual School Mathematics Laboratory (VirMathLab) being developed at the Institute of Mathematics and Informatics at the Bulgarian Academy of Sciences (IMI-BAS). Various ways of using it in mathematics education are presented, with emphasis on the implementation of the Inquiry Based Learning (IBL) by means of dynamic geometry software. Strategies for integrating it with the education of educators in mathematics and information technologies are discussed. The paper deals with the specifics of seminars for teachers organized in the frames of recent European projects (InnoMathEd, Fibonacci, DynaMat, Mascil, Scientix2, KeyCoMath) the authors have been involved in for implementing the IBL in mathematics education.

Classification: U59 U79 D49 B50

Keywords: teacher education; professional development; inquiry-based learning; dynamic geometry software