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Developing explanatory competencies in teacher education.

Paditz, Ludwig (ed.) et al., Proceedings of the 10th international conference “Models in Developing Mathematics Education”, Dresden, Saxony, Germany, September 11–17, 2009. Dresden: Hochschule für Technik und Wirtschaft (ISBN 83-919465-9-2). 570-574 (2009).

Summary: When interviewing school students for what constitutes a good mathematics teacher the first characteristic usually listed is the ability to explain well. Besides well-founded content knowledge most important for classroom episodes of teacher explanations is knowledge about how to present mathematical concepts in a comprehensible way to students. This encompasses competencies in the area of verbal communication as well as the conscious use of means for illustrating and visualising mathematical ideas. We report about an analysis of explanatory processes in math lessons and about an analysis of prospective teachers' explanatory competencies. As a result we identify improvements in teacher education at university.

Classification: B50

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