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Function, form and focus: the role of tasks in elementary mathematics teacher education.

Clarke, Barbara (ed.) et al., Tasks in primary mathematics teacher education. Purpose, use and exemplars. New York, NY: Springer (ISBN 978-0-387-09668-1/hbk; 978-0-387-09669-8/ebook). Mathematics Teacher Education 4, 1-5 (2009).

Summary: The choice of tasks and the associated pedagogies is a key aspect of teaching and learning mathematics. We argue that what students learn is largely defined by the tasks they are given. For example, we assume that tasks designed to prompt higher order thinking are more likely to produce such thinking than tasks designed to offer skills practice. We agree with *C. Ames* [“Classrooms: goals, structures and student motivation”, J. Educ. Psychol. 84, No. 3, 261–271 (1992)] that tasks are more likely to be effective when students have meaningful reasons for engaging in the activity, when there is enough but not too much challenge, and that variety is important. This is equally true when the teachers are the learners of mathematics. Tasks have function, form and focus. They have an aim in relation to the learning expected from student teachers, they are given a form to inspire, challenge and motivate students, and they have specific foci chosen by the constructors of the task.

Classification: D59 B50

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