Aligning Assessments to Problem-based Mathematics Classrooms: Three Examples of Assessment Tools.

Students benefit from opportunities to experience mathematical inquiry and problem solving which support deep understanding of central mathematical concepts. So, professors have lots to do: develop a careful progression of problems, questions, and experiences to engage students’ inquiry; think of ways to support students’ perseverance through challenging problems; and provide opportunities for students to communicate their thinking verbally and in writing. In my courses, much of this happens in small groups and involves collaboration and communication between students. Here is the challenge: for all classroom experiences, there must be a valid assessment which aligns not only with WHAT was learned but also HOW it was learned. In this session, I will share three assessment items that I use in my courses for future elementary teachers: Classroom Synthesis and Analysis (CSA); group exams; and peer participation evaluation. I will provide attendees with helpful resources for easy adoption in their classrooms. (Received September 15, 2013)