

WYTIWYG —
What You Test Is What You Get:
The Role of Assessment in
Mathematics Teaching



Dr. Rick Billstein, University of Montana

The goal of the presentation was to educate teachers on the role of assessment in the learning of mathematics. In particular, I intended to show them how multi-dimensional, generalized scoring rubrics could be used for assessment and learning. I also wanted to introduce much of the important vocabulary in assessment work so that teachers could understand what they are seeing and hearing about assessment. Hopefully, teachers will have success in the classroom by better understanding the role of assessment.

In the past assessment was primarily used to evaluate the effects of instruction. More recently assessment has been used to actually enhance student learning instead of just measuring it. This talk focused on assessment *for* learning and not just assessment *of* learning. Assessment is the gathering of information about students' learning. The tasks used for assessment in mathematics must be appropriate and should align with the mathematics that is expected to be learned. Tasks should be genuine and allow students to solve problems and to communicate about their solutions and the mathematics they are using. Two rubrics (from *MATHThematics*) for use with mathematics tasks were presented and described: one for use by students in assessing their own work, and one for teachers. The rubrics assess problem solving, use of mathematical language, use of mathematical representations, connections to other mathematics, and presentation, each on a scale of one to five. Under each category are descriptions to help with the assessment. For example, under the scale for representation, the descriptions include not using any representations such as equations, diagrams, graphs, or tables (scored as one), using an appropriate representation that is not complete or not correct, and using appropriate representations that are correct (five).