Interviewing Students: An Assessment and Learning Opportunity in Mathematics

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The Beyond Crossroads document (AMATYC 2006) contains the Standard for Assessment of Student Learning. Its implementation standard requires that faculty use results from assessment to improve instruction. In doing this, each faculty is expected to employ multiple assessment techniques.

Interviewing students enables us to gain insight into students' conceptual knowledge and reasoning as they engage in mathematical problem solving. Paper-and-pencil tests have the potential to mask students' misunderstandings and misconceptions. Writing down the correct answer to a problem does not necessarily imply that students possess the correct reasoning. Advantages of using interviews include the opportunity to understand students' level of understanding, identify misconceptions, and assess their ability to communicate mathematical knowledge. The most obvious disadvantage of the interview strategy is time. This barrier can be removed through careful planning, organization, and practice. Students' responses on the beneficial and less than beneficial aspects of the interview assessment technique will be shared later.