

Professional Development *for* and *through* Performance Assessment

Summary

Professional development is at the heart of systemic reform in mathematics. This particular strategy takes assessment as the point of departure for professional development. There is growing evidence that assessment can be a site for teacher learning – about mathematics, about learning, about students' understanding, about best practices that combine assessment with instruction so that one serves the other and both contribute to student learning.

This strategy has several key features.

- Uses professional development centered on high-quality assessment tasks to raise issues of the critical role balanced assessment plays in supporting enhanced teaching and improved student learning.
- Gives teachers experience in the workshop sessions with the activities and discussions they will facilitate in their classrooms
- Provides opportunities to reflect on and discuss their work on tasks in the workshops and their students' work back in their own classrooms.

Challenges addressed

Teachers are reluctant to use performance assessments

Key features

Professional development *for* assessment involves helping teachers prepare their students for performance assessment tasks and assess the quality of student work. Professional development *for* assessment focuses on the much wider range of types of tasks, and thus of mathematical performance, that the new standards require and the new assessments embody.

Professional development *through* assessment involves using assessment as a powerful stimulus for broader development of capacity to carry out reform – using high-quality tasks to extend teachers' knowledge; linking assessment with curriculum, teaching and learning; and developing materials to build capacity of leadership teams to support work in the local setting.

Implementing the strategy

This strategy requires planning for a series of workshops with time between each session to allow teachers to use assessment tasks with their own students and bring samples of students' written work to subsequent workshops. The optimal time between sessions is 2-6 weeks – enough to give teachers flexibility in using the tasks in their own classrooms but not too much time so that continuity is compromised. The choice of tasks should be conditioned by local circumstances (e.g., grade level of teacher participants; content that students tend to be weak in on state and district tests; areas where teachers' own mathematical knowledge needs to be strengthened). A period of at least 3 hours should be allotted for each session. It is advisable in advance to align workshop tasks with local and state standards and benchmarks. Since the new tasks cover a broad range of content and process, any task is likely to target more than one benchmark.

Strengths

Professional development that targets assessment

- brings teachers together to work collectively on problems of practice that cut across grades and classrooms.
- directly connects the workshop activities with instruction and assessment back in the classrooms and follow-up reflection on classroom use.
- can help teachers come to see that richer tasks typically involve more than one district benchmark in content and in process, so that time spent on a single problem is time well-spent.
- can help teachers to see that assessment and instruction can take place simultaneously so that the time is well-spent.

Likely challenges

- For the professional development to be effective, teachers must try performance assessments in their classrooms, which will disrupt their normal routines.
- The work with assessment tasks raises issues of curriculum and teaching. The professional development facilitator needs to be able to respond to local issues that are likely to arise (e.g., the inadequacy of the curriculum-in-use to help students learn the content and processes that could help them successfully engage these new task-types).

Tool: Balanced Assessment in Mathematics Workshop Series

The *Balanced Assessment in Mathematics Professional Development Series* is comprised of a collection of Leader Notes that support 8 or more 3-hour workshop sessions. Developed by the Mathematics Assessment Resource Service (MARS), the design grows out of professional development experiences with a variety of district, state, and project clients. The workshop series has been used successfully with groups that ranged in size from 15 to more than 50 participants, and grade levels 2-5, 3-8, 6-8, and 3-10. The collection of Leader Notes makes it possible to customize the series to accommodate this diversity and contains all the materials needed to facilitate a session, including masters of all handouts and transparencies.

All sessions have a high-quality performance assessment task from the BA-MARS collection as a central component. Some of the tasks appear in the *Balanced Assessment Classroom Packages* published by Pearson Learning. Others are previously unpublished tasks. These tasks:

- provide an occasion for professional discussions about what makes a good assessment task, what a particular task has the potential to reveal about multiple aspects of students' mathematical understanding, what kinds of learning opportunities students would need if they were to productively engage with the task;
- provide the opportunity to push at the boundaries of teachers' mathematical knowledge so that they can build their own mathematical power;
- can be used by teachers for classroom-based assessments to monitor student progress toward learning goals as expressed in their state and district standards.

Assessment-led improvement: The MAC model

MAC, the Silicon Valley Mathematics Assessment Collaborative, grew out of the California Math Renaissance, which focused on reform through good curriculum. There the:

- workshops went well but there was not much sign of change in classrooms;
- curriculum replacement units were each too big a bite for teachers to swallow;
- coaching was so expensive.

In 1996 formative classroom assessments with Balanced Assessment and New Standards tasks became a focus of professional development, working with various districts in Silicon Valley. Each task provides a common experience for teachers to work and discuss, and a common universe of discourse for examining student work from their own and other classrooms.