



# The Role of the School Administrator

Support from administrators is a key element in the success of MiC implementations. The following suggestions are some information that MiC developers have learned from teachers and districts who have implemented MiC successfully in the past.

## Schedule a Parent's Night

MiC represents a significant change for most parents. They will need an opportunity to learn about MiC and what they can expect their child to experience in a MiC classroom. An evening parent's meeting devoted to MiC is a good way to accomplish this.

- Be positive about the new curriculum. Encourage teachers to also be positive.
- Involve the teachers in activities for parents.
- Engage the parents in doing some math so that they can see how MiC is engaging for students. Choose an activity or lesson that insures parental success.
- Invite someone from outside your district who is knowledgeable about MiC to respond to questions the parents might have.
- Have copies of research on student learning using MiC. (Summary Report of Student Achievement in MiC)

## Schedule Planning Time

Teachers new to MiC will need time to meet with other teachers to discuss new units, to plan lessons, and to work out solutions to difficulties that arise. This ongoing communication is facilitated by scheduling common planning periods or monthly meetings devoted to MiC. Whenever possible, administrators should attend these meetings. It is important that administrators keep informed on progress and teacher concerns.

## Protect Teachers

Implementing a new curriculum like *Mathematics in Context* places demands on teachers. They often need to learn new mathematics, new instructional strategies, and new methods of assessment.

Administrators who recognize these demands will work to protect their teachers from additional demands from outside pressures, such as concerned parents and school board members. The key is to make sure teachers do not need to justify their instructional model or the curriculum that they are using.

Alfie Kohn put it best when he wrote about the pressures resulting from external tests. His words could also apply to curriculum implementation:

“Finally, whatever your position on the food chain of American education, one of your primary obligations is to be a buffer—to absorb as much pressure as possible from those above you without passing it on to those below. If you are a **superintendent** and must face school board members who want to see higher test scores, the most constructive thing you can do is to protect principals from these ill-conceived demands—to the best of your ability and without losing your job in the process. If you are a **building administrator**, on the receiving end of test-related missives from the central office, your challenge is to shield teachers from this pressure—and, indeed, to help them pursue meaningful learning in their classrooms. If you are a **teacher** unlucky enough to work for an administrator who hasn't read this paragraph, your job is to minimize the impact on students. Try to educate those above you whenever it seems possible to do so, but cushion those below you every day. Otherwise you become a part of the problem.”

(Kohn, A. January, 2001, “Fighting the Tests,” *Phi Delta Kappan*, p. 351)

## Field Parent Concerns

Not all parent concerns will be addressed by a Parent's Night; some of them will only surface as the year progresses. It is important to monitor these concerns in order to provide the appropriate response. Some administrators find it helpful to keep a log of calls received from concerned parents.

Typically concerns can be classified in the following five levels of increasing seriousness:

- 1. Concerns of parents who support the program.** A parent wanting to know how they can help their child with homework is an example of this level of concern. A failure to respond to these concerns can lead to the loss of these parents' support.
- 2. Concerns resulting from misinformation or no information.** A parent who is worried about the lack of drill and practice in MiC might not understand the spiraling of the curriculum and the embedding of computation within problem solving situations.
- 3. Concerns about program implementation.** It takes time for teachers to adjust to the new pedagogy of MiC. They will make mistakes in the first year of implementation. Continued attention on professional development will address these concerns.
- 4. Concerns based on lack of trust.** Some parents are uncomfortable with any change, and they lack trust in both MiC and the teachers' ability to use it effectively to educate their child. Administrators can address these concerns with evidence of the district commitment to the implementation.
- 5. Concerns based on traditional beliefs about schooling.** Some parents' beliefs about schooling and mathematics will be in conflict with the goals and approach of MiC. Concerns at this level are the hardest to address, because nothing will change their minds. The best response is to seek a compromise for their child.

## Support Implementation

Since MiC expects changes in both the mathematics content that is taught and in the way that content is taught, one can expect considerable variation in how the materials are implemented in classrooms by teachers. Fidelity to the content and pedagogy of MiC is a serious issue.

- 1.** To implement MiC well, teachers need training and support. The training needs to be both prior to and during implementation. The support needs to include both administrative assistance and the opportunity for teachers to meet and share on a regular basis (see above on Scheduling Planning Time). Lack of adequate support and in particular isolation of teachers as they teach MiC, lead to poor implementation.
- 2.** The mathematical background and content knowledge of teachers vary. Provide activities and professional development workshops that focus on content for the teacher.
- 3.** Recognize the differences in classroom techniques. MiC focuses on teaching for understanding. This often involves posing contextual problems and having students investigate ways of representing and solving the problems. Do not expect teachers to adhere to a model of teaching that does not support the instructional goals of MiC.
- 4.** Assessments must inform instruction. MiC expects teachers to judge the strategies and quality of answers students provide to complex tasks. Require teachers to use assessments provided with the curriculum. Provide scoring workshops and have teachers share their strategies for evaluating student learning.
- 5.** Understand that talking is a part of the curriculum; interaction between students is to be expected. Straight rows and quiet classes may not indicate success!



## Expectations about Student Performance

Student performance as a consequence of implementing MiC depends on answers to three questions.

1. Have the students had an opportunity to learn the content and processes emphasized in MiC?
2. Were the students adequately prepared to study the content of MiC?
3. Is the district's method of assessing student performance aligned with the new curriculum?

Student learning is the central guiding principle for the design of the MiC curriculum. Students master concepts over time; research shows that student scores on assessments will also rise over time. Administrators who recognize these issues will not look for instant results and will instead reserve judgment until the end of the second or third year of implementation.

## The MiC Classroom

Building administrators are often responsible for doing periodic observations of teachers' lessons during the school year. What should an administrator look for in a *Mathematics in Context* classroom?

### Use of MiC materials:

- The teacher is using MiC units.
- The teacher monitors groups and uses informal assessments.
- There is evidence that the teacher has worked through the problems and understands the mathematical tasks.

### Student engagement and communication:

- Students are engaged in complex, higher level problem solving.
- Students collaborate on strategies and solutions.
- Students listen to other students' strategies.
- Students constantly assess their own and others' strategies.
- Students write and explain orally their solutions.

### Teacher as facilitator:

- The presentation of the lesson emphasizes conceptual understanding.
- The teacher encourages multiple paths to a solution.
- Discourse between students and teacher includes connections and generalizations (when appropriate).
- The teacher encourages active participation of all students.
- The teacher provides ongoing, purposeful feedback to students to help them make sense of the mathematics and the solutions.
- The teacher asks questions on articulation of thinking, understanding mathematics, or the reasonableness of solutions.
- Mathematical talk time is shared by students and the teacher.
- The teacher exhibits high expectations for all students.
- Students work independently and without constant input from the teacher.