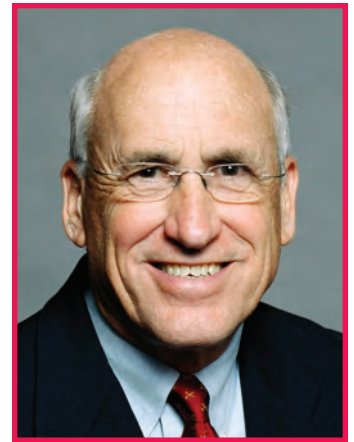


# President's Message

## Can You Hear Me Now?

Francis (Skip) Fennell



This is the final President's Message of the school year. As you read this, many of you are making summer plans for graduate school, vacation, time with family, and other activities that will recharge your batteries for the coming school year. Others will use the break for uninterrupted professional development, which may include district-level, school-based, or regional opportunities to communicate with teachers about the mathematics you teach. For this President's Message, I'd like to focus on articulation—communication about the mathematics that teachers teach and students learn within a school system.

The summer provides golden opportunities for educators to share information about the mathematics to be taught in the coming school year. For some time now I have referred to the articulation across school divisions as “bridging.” Bridging occurs when elementary school mathematics teachers communicating with middle school mathematics teachers and middle school mathematics teachers communicate with high school mathematics teachers. This is a simplified view of articulation, but you can imagine how this level of communicate can help stop the “blame game” that ensues when a teacher at one level blames previous teachers or the previous level for the lack of prerequisite knowledge and perceived (or real) “difficulties” that students may be encountering. It is not uncommon to hear teachers say things like, “Why is it that they didn't learn this in middle school?” Or, “Don't they teach multiplication in elementary school?” And on and on....

For several summers, I taught groups of teachers and focused particularly on articulation across grade and instructional levels. One group included elementary school mathematics teachers, the middle school mathematics teachers who received the students from those elementary school teachers, and the high school teachers who received the middle school teachers' students. English Language Learner (ELL) and special education teachers were also represented in the mix.

Articulation initiatives across instructional levels should enable teachers to develop an understanding of the mathematical expectations that have been identified for their school system and then to determine what mathematics students should learn before entering middle school and high school mathematics classes. In addition, bridging activities should provide teachers with a glimpse of the instructional challenges faced at each of the other instructional levels. ELL and special education teachers must be included in such bridging opportunities to illuminate the needs of their students.

The articulation efforts in which I have been involved used questions such the following to begin the process:

- What is the important mathematics that all elementary school students should know deeply and well before they leave elementary school?
- What is the important mathematics that all middle school students should know deeply and well before they leave middle school?
- What is the important mathematics that high school students should learn? How does this knowledge transfer to college-level mathematics or mathematics in the world of work?
- What are the major issues that you face instructionally?
- What do you wish that students would know before they come to you? How can we ensure that this mathematics is learned?
- What are the major challenges that you face as an elementary school, middle school, or high school teacher of mathematics?
- What can we learn from one another?

“Can you hear me now?”—that's a well-known phrase from a commercial about cell phone service and the clarity of signals received. It is appropriate here because teachers at every level must have access to clear lines of communication with one another. They ultimately share responsibility for teaching the same students and must discuss the challenges and needs that students will face as they progress from elementary school to middle school and on to high school.

Articulation efforts take time and should extend beyond a summer experience. The process should begin at the building level with teachers establishing an understanding of their building-based responsibilities. As articulation efforts expand across instructional levels, middle school and high school teachers should have opportunities to review assessments of their students as they consider these and other formative assessments of their students' progress for annual scheduling. This will create opportunities for them to develop a common understanding of the expectations for classes that precede high school mathematics.

Participants in the course I discussed earlier decided to spend time in classrooms at the different instructional levels as part of their articulation effort. Their collaboration began with brief visits to each school facility and then expanded into full-day observations of students at each instructional level. Discussions following the observation days were among the most important elements of their articulation efforts.

As we consider ways of ending the “blame game” and finding opportunities for articulation, we should focus on mathematics instruction and our students' learning—how they begin and extend across levels. In addition, we should use professional development, perhaps including case studies and lesson study to investigate the *what* and *how* of local mathematics teaching and learning. These articulation efforts will help teachers understand how important their slice of mathematics instruction is to their colleagues and students. Can you hear me now? I hope so!  $\Omega$