## **President's Message**

## Being the Best Teacher You Can Be in 2005

## Cathy L. Seeley



Each school year, we have two chances for renewal—the beginning of the school year and the beginning of the new calendar year. As you look ahead to 2005, how can you renew your efforts to be the best teacher you can be? I have three suggestions.

Knowing—Being the best math teacher you can be has to be grounded in knowing mathematics. Whether you are an elementary teacher, a middle school teacher, a high school teacher, or a university educator-or whether you play a supervisory or supporting role-committing to a deep and broad knowledge of mathematics should be a priority. Perhaps 2005 is the year for you to find a course that will expand your mathematical knowledge. The better you know mathematics, the better you can recognize where your students are headed when they explain their thinking. The better you know mathematics, the better you'll be at coming up with questions to push your students' thinking and deepen their understanding. And the better you know mathematics, the better you'll be at making sound professional decisions about programs and practices. But to be an effective teacher, knowledge of mathematics also has to be grounded in knowledge of how to teach mathematics—some call this mathematical pedagogy. Only when you know how mathematical ideas develop, how students acquire mathematical knowledge, and what elements of instruction help foster this knowledge will you be fully able to apply your mathematical knowledge to support student learning. For some teachers, even those with a mathematics degree, attaining this kind of pedagogical mathematics knowledge may call for new learning.

Acting—Make 2005 the year to do something with what you learn. Go one step beyond attending a workshop, taking a course, or acquiring knowledge through other means. Make your knowledge personal through real actions that will change and improve your teaching practice. It's only when we take a step—take a risk—and use what we've learned that our learning experience becomes relevant to our students. Think about making a shift in your classroom so that you ask deeper questions and expect students to do more of the talking. Think about teaching the next unit in your innovative mathematics program the way it was intended, not just going through the material, but putting into practice the principles of learning that underlie the materials. Acting on what you have learned can help you become the best teacher you can be in 2005.

**Caring**—Too often in these days of mandated standards and high-stakes testing it is easy to lose track of the human beings who are our students. Being the best teacher possible in 2005 means paying attention to each of your students, including the ones who are difficult, slow, troubled, absent, or seemingly invisible. It means paying attention to what they do and what they say when we ask them to explain their thinking. It means listening with our informed minds and also with our hearts so that we can recognize the seeds of

understanding in what they say. It means looking for the right question to ask to shift a potentially unproductive line of thinking toward something that will help students learn the meaning in what they are doing.

Becoming the best math teacher you can be in 2005 means that your students will develop mathematical knowledge that will allow them to build and extend what they know in years to come. An increasing number of studies show that the quality of teaching, especially the cumulative quality over a period of years, has a tremendous impact on what students learn.

## Being the Best Math Teacher Beyond 2005

Being the best mathematics teacher you can be won't end when this calendar year draws to a close. How can you be the best math teacher you can be for the years to come? Here are three more suggestions to consider for your future.

**Growing**—Commit to lifelong learning. Even if you have a mathematics degree, are a master teacher, or have advanced teaching credentials, your need for new learning will never end. Not only will there always be more to learn about the nature of mathematics and how to help students learn it, but modeling the attitude and practice of lifelong learning will set a powerful example for your students.

**Collaborating**—Working with colleagues not only allows us to help students build their learning from year to year but also gives us daily renewal. Working toward common goals in support of highquality mathematics for all students provides tremendous rewards and helps us withstand the challenges of teaching in today's world.

Actively advocating—Supporting policies and programs that will make it possible for all students to gain a high-quality mathematics education must take priority over discussions and disagreements about what direction to take. If we can go from merely saying "all students can learn" to believing what we are saying and acting on it, our direction will become clear.

Being the best math teacher you can be is really the only way to thrive in this profession. It not only keeps you on a constructive path as a professional but also allows all your students to benefit from your commitment.

What is the most valuable professional learning you have experienced? What challenges do you face in becoming the best math teacher you can be? Have you been part of a learning community whose members worked together to become the best math teachers they could be? Read the transcript from my January online chat at <u>www.nctm.org/news/chat.htm</u> to see how your colleagues answered these questions and for other suggestions for changing and improving teaching practices in 2005.  $\Omega$