

## ACROSS THE NATION

# Experts Say Young Children Need More Math

BY LINDA JACOBSON

Some educators are worried that early-childhood education's heavy emphasis on encouraging children's literacy skills could be overshadowing the development of skills in another important area: mathematics.

In response to those concerns, the National Association for the Education of Young Children is working with the National Council of Teachers of Mathematics to draft a joint position statement about appropriate math instruction for 3- to 6-year-olds.

"This originated from concerns that we needed to send a message to the field about the importance of high-quality mathematical experiences," said Marilou Hyson, the associate executive director for professional development at the Washington-based NAEYC, a 100,000-member professional organization.

The position statement is the latest in a series of activities over the past few years that has brought early-childhood educators and experts in math education together.

In 1998, the American Association for the Advancement of Science held a conference for early-childhood educators and researchers to talk about math and science for preschoolers. Shortly after, the National Science Foundation asked for grant proposals from individuals or organizations working with young children in those subjects.

One of the projects to receive funding from the NSF and the ExxonMobil Foundation was a 2000 invitational conference or-

ganized by Douglas H. Clements, an education professor at the State University of New York at Buffalo.

At the conference, 110 people—including representatives from more than 40 state education departments—gathered to discuss mathematics standards



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Associate Executive Director for Professional Development  
National Association for the Education of Young Children

for preschool and kindergarten. Mr. Clements is compiling the discussions and recommendations from that conference into a report titled "Engaging Young Children in Mathematics," which is expected to be released next year.

### Math Lessons

Authors of the new document are planning to organize it into two sets of recommendations.

The first part will offer descriptions of high-quality mathematical experiences for young children and the types of materials and activities that teachers can use to develop children's awareness of such concepts as numbers and geometric shapes.

In the other section of recommendations, the authors will explain what it takes to equip early-childhood teachers

with the knowledge and skills to strengthen their teaching of math. Simply taking more mathematics courses in college is not the answer, Ms. Hyson said.

The position statement—especially those areas focusing on teachers' professional development—is being influenced by

group, the NAEYC is continuing its practice of forming partnerships with subject-oriented professional associations to bring knowledge to early-childhood educators that they might not be exposed to otherwise.

For example, Ms. Hyson said, college-level instructors who spend time training child-care providers and directors might never have heard of the Third International Mathematics and Science Study, an exam that was first administered to 38 countries in 1995 and again in 1999. TIMSS served as a rallying cry for improving math and science education in this country because U.S. students' performance compared with their international peers' disappointed many educators and policymakers.

Three years ago, the NAEYC worked with the International Reading Association to produce "Learning to Read and Write: Developmentally Appropriate Practices for Young Children." The document, which is still cited by literacy experts, was meant to communicate young children's need for early reading experiences to the child-care providers and others who care for them.

While the new joint statement is not intended to counteract the strong emphasis on early literacy development—a top education priority for President Bush—Ms. Hyson said that an "exclusive focus on literacy" can inadvertently send the message that mathematics is not important.

"Our members have called for a similar kind of attention to other areas," she said.

a National Research Council document released early this year. (See *Education Week*, Jan. 31, 2001.)

That 444-page report, "Adding It Up: Helping Children Learn Mathematics," recommended an overhaul of elementary and middle school mathematics and stressed that children need to acquire skills as well as a deeper understanding of mathematical concepts. It also emphasized that such learning should begin before children enter formal schooling. And so, beginning with prekindergarten, teachers should allot as much as an hour a day for math activities, the report recommended.

### 'Exclusive' Focus Changes

With this current project undertaken with the math educators'

# Teachers Criticized for Striking During National Crisis

BY JULIE BLAIR

They say they were exercising their democratic rights in the American tradition by walking off the job the week after terrorists attacked the United States. Yet teachers in Granite City, Ill., are being criticized by some community members for striking during a national emergency.

More than 400 members of the Granite City Federation of Teachers voted to strike Sept. 12 and joined the picket lines Sept. 17 after negotiations between union representatives and school administrators broke down, according to Dave Comerford, a spokesman for the Illinois Federation of Teachers, the union's state counterpart.

The parties could not agree on a health-care policy, salary increases, or the length of the new contract, he said. The previous, three-year agreement expired Sept. 12.

"I told the local press that for the first time in my nine years as superintendent, I was ashamed of a group of teachers," Steven M. Bayen, the Granite City schools chief, said last week. "What difference does it make if you strike now or in two weeks? Nobody was not getting paid."

But the teachers contend they took action

at the right time, for the right reasons.

"This is not a decision we made lightly," Mr. Comerford said, adding that war veterans are among the ranks. "There isn't a teacher here that doesn't feel for the families of the victims in this terrible tragedy. But there comes a point when we say, 'This is a democracy; we have a right to demonstrate in the workplace.'"

Regardless of the teachers' actions, administrators had threatened to shut down all 11 schools in the 7,200-student district on Sept. 17 and 18 to give the school board time to contemplate any offers made in a weekend bargaining session, Mr. Comerford said. School administrators were forcing a strike, he contended.

### Community Split

The Granite City school board has put forth a plan that would require teachers to pay for a portion of the health insurance provided to employees' dependents, a benefit that is currently free, Superintendent Bayen said.

Teachers want to keep the current system intact, and have taken pay cuts over the years to ensure that the perquisite re-

mains as is, said Mr. Comerford of the IFT, an affiliate of the American Federation of Teachers.

The two sides are also wrangling over salaries.

Administrators have offered a yearlong contract and a 3 percent raise. The teachers have suggested a two-year contract with a 4 percent raise the first year and a 3.5 percent raise the second.

A federal mediator has stepped into the negotiations, but no further talks had been scheduled as of press time last week, the superintendent said. The last strike occurring in Granite City lasted 11 days in 1987.

Meanwhile, the superintendent continues to field telephone calls from union supporters and detractors. Of the nearly 90 or so conversations he has had with constituents, about half approve of the decision to strike during the current national situation, Mr. Bayen said.

Local residents seem to be split on the issue, agreed Michelle Daily, the president of the Worthen Elementary School PTA.

"The terrorists want us to stop living," Ms. Daily said. "My feeling is that we need to move on."

## Take Note

### Their Own Crystal Ball

The Ames, Iowa, school district is taking responsibility for its own weather forecasting.

The 4,700-student district has bought a \$900 annual subscription from DTN Kavouras Weather Service of Minneapolis and purchased a weather satellite dish and monitor that allow continuous access to local forecasts online. The private service has more than 160,000 subscribers in the United States and Canada.

"We want to make appropriate decisions on school closings, and relying on broad services just wasn't getting it done," explained William Schoemenberger, the district's technology director.

Inaccurate weather reports can mean extended school days, angry parents, and frustrated transportation employees, he pointed out. "These decisions often have to be made at 4 or 5 in the morning, so that you don't have kids standing outside waiting for a bus when the wind chill makes it feel like it's 30 below zero," he said.

"TV stations aren't providing forecast information at those hours."

The Ames district is not alone. Scott Dahlin, the transportation supervisor for the 10,500-student St. Cloud, Minn., district, says his schools rely on local information supplied by St. Cloud University's earth sciences department.

Paul Speranza, who owns Speranza's Weather Service in Hendersonville, N.C., has been forecasting for the 23 schools in Hendersonville County for several years.

"They had a terrible time predicting with the National Weather Service," he said. "Here in North Carolina, elevation is the big story and determines how much snow you get in any given area."

School districts that seek out private forecasting companies can buy equipment for \$600 to \$1,000 and see fairly accurate results, Mr. Speranza said.

"Not to mention, it's a great learning tool for the students," he said. "They can learn to predict their own local weather and watch it come to pass."

—MARIANNE HURST