



March 22, 2009

## N.J. math proposals look like Indiana's

Chester mother among critics of state efforts to revise K-12 standards

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daily record*

A war of words has developed over the state Department of Education's efforts to revise K-12 math standards, the backbone for state tests and local school districts' curricula.

The debate centers on whether the state should use revised math standards developed by a team of three educators who were paid by the state and worked on the project for nearly a year.

State officials scrapped the team's work, and instead released a draft document in February that in many parts is a word-for-word copy of Indiana's math standards.

State Education Commissioner Lucille Davy acknowledged consulting Indiana's standards, but said the draft is not simply a cut-and-paste of the other state's work. New Jersey's draft standards looked at best practices in five states, and changes are based on two major national math reports, issued in 2006 and 2008, Davy said.

Two interest groups have drawn battle lines around Davy's decision to recast the standards. The New Jersey Coalition for World Class Math, a parents group, supports Davy's move to ditch the commissioned work. On the other side is the Concerned Mathematics Educators of New Jersey, which got more than 200 public school math teachers, administrators and college professors -- including a dozen from Morris County -- to petition for a return to it.

In the middle is a Chester mother, a coalition member, who believes neither the commissioned work nor the state's draft reflect the latest thinking on math standards and said the state is bungling the issue and leaving school districts in limbo.

### 'Hand-me downs'

"To me, this is an insult," said Anne Clark, who spent hours studying the new draft to see how it measured up to the national reports the state said it referenced. Clark discovered that New Jersey's proposed standards were largely Indiana's old standards, written years before the national reports existed. The draft copies more than 200 of Indiana's K-12 standards, lifting entire sections on geometry, measurement, numerical operations and algebra functions. It also copies the entire problem-solving standards from Washington state.

Meanwhile, Indiana is set to unveil a major revision to its standards this spring.

"As a taxpayer, a citizen and a parent, I am appalled," said Clark, who testified at a state hearing on the draft standards last month.

Clark, who has a master's degree in chemical engineering, said New Jersey, which has the second highest per-pupil spending in the country, deserves better than Indiana's "hand-me-downs."

Davy said it's not unusual for states to share standards and for the math ones to look similar across states. In math, there should be national standards, she said, because unlike other subjects, the content is the same regardless of locale. Davy said the new draft is not perfect, but it is a better starting point than the document received from the commissioned team. The three writers are each being paid \$2,500 for their work, which includes more than just the standards, Davy said.

"It is important to get this right," Davy said. "To change in mid-stream is a small price to pay."

The Education Department now has convened a taskforce of 20 people, with Coalition and Concerned Educators members represented, which will meet over three days to review both documents and consider public input.

"I'm not trying to take sides in the math wars," Davy said. "We need to get to middle ground."

The working draft will change, Davy said, so local school districts were told not to update their math curriculum in the meantime.

The work done by the state's outside team did not adequately address recommendations for math standards released last year by the National Math Advisory Panel, a group convened by the U.S. Department of Education, Davy said. The commissioned draft was a revision of the state's existing standards, which rely too much on "conceptual" understanding of math, she said. The standards need more emphasis on learning basic math facts, she said.

"Kids with a weak foundation will never be able to do the math the 21st century will demand of them," Davy said.

## Weak standards?

The state's existing standards have received mixed reviews. One review by Achieve Inc., a bipartisan reform group, said New Jersey's math standards are "as challenging as the best domestic and international standards." The Thomas B. Fordham Foundation, a conservative think tank, gave them a "D." Indiana's standards got an "A" from the Fordham Foundation, and several other states have drafted them for their own, including Florida.

Leaders of the coalition, who say they have the support of 60 members statewide, applauded Davy for breaking away from the state's existing standards, despite also seeing problems with the draft. They say the state's standards have failed to prepare students for math. They cite statistics that 40 percent of students take remedial courses in their first year at the state's public universities and 80 percent do so at the state's community colleges.

"We think this is a step in the right direction," said Jill Gladstone of Bridgewater, co-founder of the coalition. "We understand it's a work in progress."

Gladstone, a member of the Bridgewater-Raritan Regional School Board, said she hears many parents complain that their children need math tutors because they are not learning basic skills.

Gladstone and coalition co-founder Amy Flax, a teacher who lives in Westfield, are especially happy with the Education Department's statement on the use of calculators, a major flashpoint in the debate. The draft calls for elementary school students to do basic arithmetic without the use of a calculator.

Janet Caldwell, a math professor at Rowan University and one of the original writers the state commissioned, said the state's stance on calculators is unrealistic in today's world.

"Technology is here. Adults use calculators," Caldwell said. "There is nothing more exciting than seeing third-graders solving real-world problems with calculators."

Caldwell said all students need to know how to do simple arithmetic and how to add, subtract, multiply and divide fractions by hand, but students also need to know how to use calculators appropriately.

Another point of contention is that the state's draft calls for some 200 changes to what students are expected to learn at various grade levels. For example, the state's current standards call for multiplying and dividing fractions in the sixth grade. The draft now applies this standard for fifth-graders.

The Concerned Educators said this would require local school districts to overhaul math curriculum, at significant cost to re-writing lessons and training teachers.

"They're trying to change direction at this point without any empirical evidence that it will improve achievement," Caldwell said. "That doesn't seem rational to me."

Caldwell and her backers point to New Jersey fourth- and eighth-grade students performing better in math than Indiana's on the so-called nation's report card, the National Assessment of Educational Progress. New Jersey's fourth-graders have the second highest scores, and eighth-graders the sixth highest. Indiana places sixth and 18th, respectively.

"Why are we copying someone who is doing worse than us?" said Eric Milou, math professor at Rowan University and a leader of the Concerned Educators group.

Milou said the state rejected the team's work, commented on by teachers and educators around the state, and instead created a document with no outside input.

"All they did was copy and paste another state with no rationale for why it is better," Milou said.

Davy said her detractors are using "fear tactics" by warning districts that it will cost them if the state changes the standards. And while New Jersey students do fare better than Indiana on the Nation's Report Card, nearly 50 percent are considered failing in the fourth grade and 60 percent in the eighth.

Imagine those future costs, Davy said.

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