

# COLUMBIA MISSOURIAN

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## Math professors hear response from the state on education standards

By ELISE CATCHINGS

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COLUMBIA — The state has broadened its invitation to mathematicians to review a draft of updated K-12 math curriculum standards. The move is in response to a letter sent in May by more than 50 math professors from MU, Washington University and Missouri University of Science and Technology.

An alliance of state business, education and community leaders created the document “Missouri K-12 Mathematics: Core Concepts, Learning Goals and Performance Indicators” as a new framework for guiding K-12 mathematics instruction in the public schools. The alliance, known as METS — mathematics, engineering, technology and science, was appointed by Gov. Matt Blunt to improve achievement in those fields. The document, which is in the draft stage, can be found at [dese.mo.gov](http://dese.mo.gov).

“It’s going to be a living document, and every year we’ll update it,” said Victoria May, a representative of METS.

In their letter, the professors faulted the draft standards in part because they lack, in their view, sufficient input by mathematicians (versus mathematics educators). May said that before the letter was received, mathematicians were asked to review the proposed standards. In light of the letter, the group that wrote the standards wants to open up the process for as much feedback as possible.

“There are no research mathematicians on the writing group (for the standards),” said Barbara Reys, co-chairwoman of the writing group for the K-12 mathematics standards and a professor of mathematics education at MU. “In hindsight, the organizers probably should have invited their participation. We are continuing to seek feedback from all interested parties, including mathematicians from Missouri and elsewhere.”

In the response to the professors, the state also emphasized that “minimum competencies” in math — that is, what high school students should know at base level when they enter college — are not intended to be goals.

“If you are a student interested in math, interested in engineering ... you should not gear yourself to minimum,” said Robert Stein, Missouri higher education commissioner. “You should be working with your advisors to gear yourself to master more than the minimum.”

Stein said “optimal competencies” for students interested in careers in engineering and information technology have been developed and will be posted on the Web site for the Missouri Department of Higher Education, [dhe.mo.gov](http://dhe.mo.gov), by June 23. Public comment on those competencies is welcome, in particular through mid-July, he said. Groups working on math curriculum at the state level will look at these to see how they might be used

for math-minded, college-bound students.

The professors' letter said the proposed standards don't sufficiently take into account the final report of the National Mathematics Advisory Panel. Rather, it said, the draft too closely follows the standards of the National Council of Teachers of Mathematics, which the professors believe are not future-focused.

"While we did pay attention to NCTM standards, it was not the primary driving force of this document," Reys said. "There were several national resources and national standards that we paid attention to including recommendations of the National Mathematics Advisory Panel."

The writing group for the math curriculum draft is made up of 26 K-12 teachers, school administrators and higher education faculty from mathematics departments and colleges of education.

Feedback on this first incarnation of the standards would be most timely between now and August, May said.

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