

Funding math and science teacher recruitment and training programs at the earliest education levels is imperative for keeping America competitive, the Maryland state superintendent of schools told House lawmakers Thursday.

Nancy Grasmick presented recommendations to a subcommittee of the House Appropriations Committee as part of a panel on better preparing students for the highly technical and scientific workplace of the future.

"In the Information Age, they are going to need a stronger foundation in math and science," said Tom Luce, fellow panel member and assistant secretary of the U.S. Department of Education. "This is about every child needing a foundation in math and science."

Grasmick's proposals came from a National Academies report on math and science education in the United States. The report caught the attention of the Department of Education, because "the Academy said unanimously that the K-12 pipeline was the No. 1 priority of their report."

Luce said that this was unusual as the National Academies typically focus on higher education objectives, like college courses and doctoral programs.

But Grasmick said training has to start early for students to be competitive internationally.

Grasmick used Maryland statistics to illustrate the challenges that face many states when it comes to math and science education.

For example, she said the state lost 523 math teachers last year, but could only find 91 qualified replacements. A gap between qualified teachers lost and qualified teachers gained occurred in sciences like physics and chemistry.

To fill the vacancies, she had to cast a wider net and hire teachers who were not trained in the subject area.

The diminished teacher force does not prepare students adequately for rigorous math and science concepts, Grasmick said.

"You cannot teach what you do not know," she said.

Among the plans that would help strengthen the pool of math and science teachers, Grasmick stressed a proposal that would recruit 10,000 students annually through scholarships to teach K-12 math and science.

Those teachers would then have to commit to teaching for five years and would be awarded a bonus for working in rural and inner city areas.

Although Rep. Steny Hoyer, D-Md., supported the competitiveness initiatives, he was concerned that the president has not adequately funded the program.

"When you say that we need to invest in our future by getting 10,000 new teachers to teach 10 million new math and science students, it costs money to get there," said Hoyer.

According to Grasmick's report, it will cost about an estimated \$110 million to get there.

Tom Luce, the assistant secretary for the U.S. Department of Education, noted that those new funds have been included in the president's budget for 2007.

In addition to the \$110 million committed to teacher education, the president has put about \$270 million toward the American Competitiveness Initiative in the budget, according to Luce's report.

In his State of the Union address last month, President George Bush said that American competitiveness would be a major priority for this year.