eSCHOOL NEWS online™
Where K-12 Education and Technology Meet

http://www.eschoolnews.com

Parents, kids don't see need for math, science skills

Report reveals a disconnect between what policy makers believe is important for students--and what parents and kids think they need for themselves

By Meris Stansbury, Assistant Editor, eSchool News
September 21, 2007

With lawmakers and school leaders alike stressing the importance of math, science, and technology (MST) education in preparing students for 21st-century jobs and careers, one might assume that parents and students would agree these subjects are crucial to their future success. But a new report challenges this assumption.

According to the report, titled "Important, But Not for Me: Parents and Students in Kansas and Missouri Talk About Math, Science, and Technology Education," parents and students say they understand the importance of MST skills in general--but they don't see these as important for themselves.

The report is based on a survey of about 2,600 parents and students in grades six through twelve from Kansas and Missouri public schools. It comes from Public Agenda, a nonprofit organization that conducts nonpartisan public policy research. And though its data are taken from a relatively small geographical sample, its findings could have important implications for school leaders nationwide.

"The dilemma is really twofold," says Jean Johnson, executive vice president of Public Agenda. "One is that parents, students, and local communities may be complacent about or even resist efforts to strengthen math and science education. Right now, most just don't share leaders' sense of urgency. The second is that many young people and their families may not recognize the vast and interesting opportunities available to students with strong math and science backgrounds. They just may not have absorbed how much the economy and future jobs are changing."

The report was commissioned as part of a $25 million, 10-year initiative by the Ewing Marion Kauffman Foundation to improve MST education throughout the Kansas City area.

According to the report, both parents and students are satisfied with their school's curriculum, owing largely to the fact that parents say the courses are harder than when they were in school. Sixty-nine percent of parents say math courses are harder today, and 51 percent say science courses are harder. This, the report contends, has lead to complacency among parents and students.

Also, while parents and students believe that having basic math skills is "absolutely essential," many say understanding higher levels of math, such as calculus, is not essential. Ninety-two percent of parents and 83 percent of students value basic skills, while only 23 percent of parents and 26 percent of students value higher-level skills.

In fact, when asked whether all students should be expected to take advanced science classes such as physics and chemistry, 72 percent of students said "it

should be expected only of students who are interested."

According to one urban student interviewed by the survey, "You have to use basic math every day of your life. It's just good to know, but you don't need a whole bunch more than that. When are we ever going to use x plus y and all that?"

The study "underscores how difficult it is for states and local schools to set higher standards and increase rigor in the curriculum," said Stan Johnson, assistant commissioner of the Missouri Department of Elementary and Secondary Education.

"We are working with the Math, Engineering, Technology, and Science Alliance, created by Gov. Matt Blunt, corporate leaders, and higher-education officials, to focus public awareness on the importance of math and science competency," Johnson said. "We must have buy-in from students, parents, and teachers if we hope to make real progress."

And it's not just Kansas and Missouri that have an "urgency gap" between businesses seeking talented professionals and parents and students, Public Agenda's Jean Johnson said--it's a national concern.

"Essentially, what we saw in Kansas and Missouri was very consistent with what we have seen in national surveys and our other focus group work," she said. "In our national 'Reality Check' survey of parents last year, 64 percent said that math and science education in local schools was not a serious problem; 70 percent of parents of high school students said their own child's math and science coursework is fine as it is."

Public Agenda believes the core problem is that parents and students don't understand how much 21st-century learning factors into high-paying, productive jobs in today's economy.

However, while policy makers often warn about the detrimental effects that poor MST skills can have on regional and national competitiveness, research has found that parents and students are less moved by this argument than they are by the idea that a strong MST background might help with college applications.

For example, in the survey, parents and students both said they would be most motivated by arguments that relate to future opportunities for young people in higher education or in the job market. This suggests that families likely would put more emphasis on advanced MST education in high schools if universities and trade schools mandated MST prerequisites for a greater number of incoming students.

A key reason for parents' and students' complacency might be found in another recent report, this one from the Alliance for Excellent Education (AEE), which revealed that a fundamental disconnect exists between what high school students are taught and the knowledge that is needed to succeed in postsecondary education. (See "Report: Schools aren't preparing kids for college".)

As suggested by panelists at a recent AEE forum, perhaps open communication and collaboration between high schools and colleges will help, as well as a realignment of standards among high schools, colleges, and the workforce.

Links:

Public Agenda's report

Ewing Marion Kauffman Foundation

Missouri Department of Elementary and Secondary Education

Alliance for Excellent Education