NEW YORK – Americans are convinced that math and science skills are crucial for the future, with strong majorities who say there will be more jobs and college opportunities for students with those skills, according to a new Public Agenda survey. But while there's broad support from parents and the general public for K-12 national standards, more than half of parents (52%) say the math and science their child is getting in school is "fine as it is."

These are just some of many surprising realities facing science, technology, engineering and math (STEM) education in public schools, according to “Are We Beginning to See the Light?” a new Public Agenda survey exploring the views of more than 1,400 individuals nationwide, including 646 parents of children grades K-12. The national survey was underwritten by the GE Foundation.

While only 3 in 10 Americans see a demand for science and math-focused jobs in the current economy, 84% agree that there will be a lot more jobs in the future that require math and science skills. And 9 in 10 Americans say studying advanced math and science is useful even for students who don’t pursue a STEM career. Additionally, 88% of the public agrees that students with advanced math and science skills will have an advantage when it comes to college opportunities.

Overall, the general public favors a “national curriculum” as one way of improving STEM education: 8 in 10 Americans say establishing a national curriculum in math would improve STEM education; with more than half (53%) saying it would improve it “a lot.” And 78% say the same about a national curriculum in science, with 48% saying it would improve it “a lot.”

"Giving today's students a world class science and math education is the key to maintaining our country's economic prowess,” said Alan Leshner, Chief Executive Officer of The American Association for the Advancement of Science (AAAS). “Parents are beginning to envision the opportunities for their children in the STEM fields, and I am especially heartened by their receptivity to having high national standards in these critical subjects.”
At the same time, parents agree with the general public on the value of STEM education. Most parents surveyed want their own children to take advanced math and science courses in high school (60% and 54% respectively). Parents would also like to see their local schools spend more money on up-to-date and well-equipped science labs (70%), more equipment for hands-on learning (69%) and more equipment to help students learn computer and technology skills (68%). A plurality of parents with children in grades 6-12 say they want to see more emphasis in their child’s school on STEM topics such as computer programming (65%), basic engineering principles (52%), and statistics and probability (49%).

“The public is open to many different strategies for improving STEM education, and they’re enthusiastic about the overall goal, but much more has to be done to help them understand what’s needed for kids in their local schools to have a world-class science and math education,” said Jean Johnson, director of Education Insights at Public Agenda. “The problem is particularly acute in science. Many parents don’t realize the importance of starting children in science early on. Many think it can easily wait until high school.”

There is a growing body of research suggesting Americans are falling behind in math and science education. U.S. students rank 25th in math and 21st in science skills internationally, according to a recent OECD report, and the 2007 ACT College Readiness Report points out that only 43% of graduating seniors are ready for college math and 27% are ready for college science.

Last November, President Obama launched an “Educate to Innovate” campaign to improve the participation and performance of America’s students in STEM fields. “Are We Beginning to See the Light?” provides insight into how Americans perceive the problem and how they identify solutions that could help solve the nation’s STEM education problem.

For example, 71% of those surveyed believe in having local businesses provide internships and other business partnership programs, so high school students can gain practical job skills.

While parents and the public understand the value of STEM skills, there’s still a gap between the way the leaders and public see the problem. Few Americans think it is absolutely essential for students to understand advanced sciences like physics (28%) and advanced math like calculus (26%). When it comes to their own child, few parents want more emphasis on advanced math and science like physics (42%) and calculus (42%). Additionally, nearly 7 in 10 Americans say science can wait until middle and high school.

About the survey:
“Are We Beginning to See the Light?” is based on a survey of a nationally-representative sample of more than 1,400 individuals, including 646 parents of children grades K-12. Telephone interviews were conducted from December 1 – 15, 2009, and respondents had the choice of completing the interview in English or Spanish. The margin of error for the report is plus or minus 2.8 percentage points.

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