

Posted By Laura Devaney On October 2, 2015

Twenty-year benchmark survey reveals critical need to improve U.S. science Education. Eighty-five percent of teachers in a recent survey said they would devote more instructional time to hands-on science-based learning if they had the chance. Eighty percent of those respondents said they lack time due to other educational priorities, and 49 percent said they lack funding to do so.

These responses are part of the Bayer Facts of Science Education Surveys, polled a variety of audiences to gauge the state of science education in the United States. It was conducted as part of a 20 year benchmark survey; a similar survey was conducted in 1995.

The 2015 survey included many benchmark questions from the 1995 survey to assess how the state of science education has evolved.

Schools today need to place more emphasis on science education.

- Three-fifths (61 percent) of surveyed teachers believe schools should place more emphasis on science education.
- Two-fifths (40 percent) of surveyed parents do not feel there is a greater emphasis on getting a good science education today, compared to when they were young. In fact, 17 percent feel there is less emphasis today. It's essential to shift how science education is taught, and surveyed teachers appear to believe that hands-on science learning is, by far, the best way for children to learn.
- Nearly all participating teachers (95 percent) believe hands-on activities are the most effective way for students to learn science, and 79 percent of parents say the same.
- Nearly all surveyed teachers (94 percent) agree hands-on learning in general is a valuable strategy for improving standardized test scores and overall performance.

Although parents want to be involved in hands-on science learning with their children, they need access to more resources and support.

- Eighty-five percent of surveyed parents enjoy having to help their children with hands-on science-based activities; yet, nearly 31 percent of those surveyed said they don't feel confident enough in their scientific knowledge to help their children engage in hands-on science activities.
- Two-fifths (41 percent) of surveyed parents don't believe their child has an inspiring science role model. Parents, teachers and the STEM community need to work together to encourage girls' and minorities' interest in science.
- Eighty-five percent of surveyed teachers say female students are just as interested in science education as their male counterparts.
- Ninety-one percent of surveyed parents and 95 percent of surveyed teachers agree the science and engineering community, including companies that employ science and engineering workers, should develop programs that attract, encourage and retain girls'

and minority students' interest in science and math in school.

Along with the survey, Bayer is announcing a five-year commitment to provide 1 million hands-on learning experiences for children by 2020, timed to the 20th anniversary of the Making Science Make Sense program, Bayer's company-wide initiative that advances science literacy across the United States.

"The Bayer survey found that parents want more hands-on homework for their kids and are willing to help them with it," said Dr. Mae C. Jemison, chief ambassador for Bayer's Making Science Make Sense initiative since 1995 and the world's first African-American female astronaut. "And both teachers and parents say more students view science favorably than any other subject. This is great, because here are very important anchor points from which to build science literacy by nurturing the enthusiasm for science children are born with."

The 2015 Bayer Facts of Science Education Survey presents the findings of a national telephone survey conducted May 11 to June 11, 2015 by SSRS among a representative sample of 1,009 adults with children in grades K-5 and a representative sample of 1,002 of adult teachers who teach in grades K-5. The margin of error associated with samples of this size is  $\pm 3.1\%$  at a 95 percent level of confidence.

Making Science Make Sense® (MSMS) is Bayer's company-wide initiative that advances science literacy through hands-on, inquiry-based science education, employee volunteerism and public education. For more information, go to [www.MakingScienceMakeSense.com](http://www.MakingScienceMakeSense.com).

#