The 21st Century WORKFORCE: Skills Gap & The STEM DILEMMA

The gap between the skills available in the current workforce and those needed for many 21st century jobs creates a serious challenge.

12 MILLION
Americans are unemployed, yet 3.6 MILLION job openings remain unfilled.

A workforce prepared to tackle science, technology, engineering and math (STEM) is critical to driving future growth and innovation.

67% of employers believe there’s a shortage of qualified workers for their jobs.

50% of the country’s 17 year olds are not qualified to work in a 21st century society.

more than 1/2 of employers believe their schools are not preparing enough students for the workplace.

WHILE ONLY 40%

OF THE NATION’S WORKFORCE IS COMPRISED OF COMPUTERS, MATH, ENGINEERING, AND PHYSICAL SCIENCE MAJORS, 66% OF GRADUATES PREFER MASTERS OR DOCTORATES.

STANDARD工具

The U.S. suffers a $78,000 annual productivity loss per 1,000 workers.

In the U.S., the average professional degree earns a STEM degree nearly 100,000 more annually.

STEM SKILLS ARE REQUIRED FOR WORK ACROSS MANY DIFFERENT INDUSTRIES.

U.S. STEM jobs

60% of fourth-graders and 65% of eighth-graders do not perform at math proficiency.

18% of fourth-graders and 26% of eighth-graders do not perform at reading proficiency.

Educators, parents, communities, policymakers and businesses must all work collaboratively to inspire the next generation of innovators – and must do more to increase the momentum and turn the tide.

Numbers indicate an increase in corporate support for STEM initiatives.

Corporate support for STEM increased by 27%.

Organization names as large as U.S News & World Report are encouraging private companies to support STEM education through events such as the STEM Solutions National Conference.

Programs like Engineering is Elementary – which he has reached 44,400+ teachers and 3.9 million students with corporate, public, and private funding – help all students, but especially girls, students who are underrepresented groups, recognize their ability to engineer.

A 2012 New York Times survey found that more than 60% of respondents believed that math would be critical to the future success of their children.