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CED Releases Plan for Reviving Math and Science Excellence
Business Group Says Decline in Basic Math and Science Skills
In U.S. Students Imperils Future Economic Growth

WASHINGTON, D.C., May 7, 2003 - "A skilled workforce is crucial to a growing economy," argues the Committee for Economic Development in its' newest report, *Learning for the Future: Changing the Culture of Math and Science Education to Ensure a Competitive Workforce*. The report proposes a strategic plan for improving math and science education in U.S. schools with the goal of creating a larger American workforce of creative scientists and engineers. *Learning for the Future* summarizes statistics showing the steady decline in proficiency in math and science skills the longer that students stay in U.S. schools. One result of this decline is the fact that less than 1% of all bachelor's degrees from American colleges in 2000 were in mathematics.

"The pool of United States-educated scientists and engineers continues to shrink," said Christopher D. Earl, Ph.D., Managing Director, Perseus Capital, LLC, CED Trustee and project co-chair. "Today industry cannot fill key technical positions. If we don't take dramatic steps to improve our math and science education, we could see the day when America is no longer the world center for innovation in a wide range of industrial sectors. Currently business is relying on immigration to fill slots in many technical fields, but that cannot serve as a long-term solution."

Dr. Shirley Ann Jackson, President of Rensselaer Polytechnic Institute and CED Trustee, also served as co-chair of the CED Subcommittee on the Supply of Scientists and Engineers.

"The business leaders at CED understand first hand how deteriorating math and science education and steep decreases in qualified science and math professionals can not only hurt business; it can undermine our nation's long-term economic performance, security, and global position," said Rep. Rush Holt, keynote speaker at CED's release luncheon for *Learning for the Future*. "I applaud CED for its sensible and timely report."

"CED is an organization that takes the long view of economic problems facing our nation," said Charles E.M. Kolb, President of CED. "If we don't increase the pool of U.S. educated scientists and technical workers by improving our math and science education, we run the risk of crippling our economy in the very near future. The need to reinvigorate technical education has never been more pressing. CED's proposals are inclusive and, I believe, are a solid plan that will improve math and science education across all grade levels, economic, racial, and ethnic groups."

The *Learning for the Future* report notes, “The issue is not solely one of producing the next generation of Nobel Prize winners. The increasing complexity of civil discourse in the 21st century – issues from cloning to homeland security – requires that all citizens attain scientific proficiency.” The report specifically urges action in three areas that will increase student “demand” for and achievement in mathematics and science:

Increasing student interest in math and science to sustain the pipeline focuses on ways to change the way students view math and science disciplines. CED calls on the business community to collaborate with school districts to develop enhancements to the district-adopted math and science curricula that integrate the state-of-the-art applications of mathematical and scientific principles into the classroom setting and provide an insight into the work scientists and engineers perform every day. Business should also provide financial and logistical support to extracurricular math and science activities, as well as the time and talents of their employees, to enrich the learning experiences of students.

Demonstrating the wonder of discovery while helping students to master rigorous content offers programs to help teachers reinforce student interest and success in math and science. CED calls for reform in teacher preparation, opportunities for teachers to work with those in the technical work force, and significant improvements in the quality of professional development. Businesses should partner with local school districts to provide scientists and engineers as resources for schools. Businesses, colleges and universities, and school districts should jointly develop effective programs to provide valuable summer experiences for teachers.

Acknowledging the professionalism of teachers considers the “supply side” problems facing the teacher labor market. CED recommends that teacher salary scales be viewed as a capital investment similar to other capital improvements. The report also urges reforms in teacher certification, licensing, and pension incentives.

CED has been working with other public and private groups to develop new ways of restoring vitality to math and science education.

“The culture surrounding math and science education in this country will not be changed overnight,” said Linda P. Rosen, CED education policy advisor. “Yet, the urgency of the problem demands innovative short- and long-term strategies to ensure excellence in technical, engineering, and mathematics education for this country. The business community has a real stake in this goal and are willing partners in bringing it to fruition.”

Learning for the Future: Changing the Culture of Math and Science Education to Ensure a Competitive Workforce is available from the Committee for Economic Development, 2000 L Street NW, Suite 700, Washington, DC 20036, telephone - (202) 296-5860. The full text of the report will be available on our website, www.ced.org, after the release.

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CED is a non-profit, non-partisan organization of more than 200 business leaders and university presidents. Since 1942, its research and policy programs have addressed many of the nations most pressing economic and social issues, including education reform, workforce competitiveness, campaign finance, health care, and global trade and finance. CED promotes policies to produce increased productivity and living standards, greater and more equal opportunity for every citizen, and an improved quality of life for all.