BHEF BUSINESS-HIGHER EDUCATION FORUM®

Creating Solutions. Inspiring Action.®

SECURING AMERICA'S LEADERHIP IN SCIENCE, TECHNOLOGY, ENGINEERING, AND MATHEMATICS (STEM)

STEM Initiative Sponsor: The Business-Higher Education Forum (BHEF) is a non-profit organization of Fortune 500 CEOs, prominent college and university presidents, and foundation leaders working to advance innovative solutions to our nation's education challenges in order to enhance U.S. competitiveness.

STEM Initiative Goals: BHEF's STEM initiative seeks to double the number of college graduates in STEM disciplines by 2015. The Initiative includes research, programmatic, and advocacy efforts designed to:

- Increase student awareness, interest, and achievement in science, technology, engineering, and mathematics.
- Attract and graduate more students in the STEM disciplines, particularly women and under-represented minorities.
- Advance P-20 systemic reforms that facilitate greater student achievement in STEM.
- Strengthen the P-12 mathematics and science teaching workforce.
- Advance policy and programs that enable U.S. higher education, private industry, and government agencies to attract and retain top STEM talent.
- Stimulate national dialogue and local, grass-roots initiatives through alliance building and collaboration among business, education, and government.

BHEF carries out its work through collaboration with stakeholders including educators, business, government, and society-at-large.

STEM Report: BHEF's 2007 publication, *An American Imperative: Transforming the Recruitment, Retention & Renewal of Our Nation's Mathematics and Science Teaching Workforce*, proposes a comprehensive action plan for overcoming a projected shortfall of more than 280,000 math and science teachers by 2015. The report addresses three factors that contribute to a thriving mathematics and science teacher workforce: recruitment, retention, and renewal.

STEM Education Modeling Project: BHEF STEM Initiative co-chair and Raytheon Company CEO Bill Swanson tasked Raytheon systems engineers to create a tool to help policymakers, educators, and researchers better understand the complex nature of the U.S. education system and identify potential solutions that could help the nation strengthen its leadership in STEM. With the assistance of BHEF and other experts, Raytheon developed a simulation model that tracks students as they flow through the educational system and into either a STEM-related career in teaching or industry or a non-STEM career. The U.S. STEM Education Model, which was gifted to BHEF in July 2009, allows users to examine the impact of proposed interventions on the number of STEM-capable and interested students, and thus the number of STEM college graduates.

STEM Research and Modeling Network (SRMN): Together with partners Raytheon and The Ohio State University, BHEF created the STEM Research and Modeling Network to foster an open-source research community devoted to increasing STEM student outcomes, augmenting the STEM education model, and advancing predictive modeling tools in education. Visit its Web site at www.STEMnetwork.org.

To learn more about the STEM Initiative, please visit www.bhef.com.