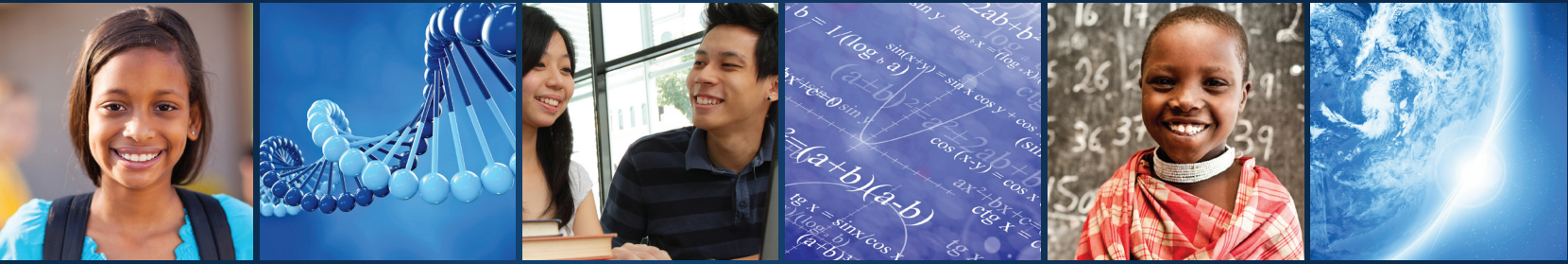# Announcing The Global STEM Alliance:
Engaging Young Minds Through Novel STEM Interaction

STEM Illiteracy: A Global Crisis Is Unfolding

Urbanization. Hypergrowth in emerging markets. Climate change. These are just a few massive shifts changing our world. The challenges they pose threaten our economies and our quality of living. According to a recent study by the World Bank, information and communication technologies (ICTs) can reduce poverty, create jobs, and contribute to overall economic growth,[1] an example of the increasing importance of knowledge-based economies. And yet, around the world, students are opting out of science, technology, engineering, and math (STEM) subjects at alarming rates—at the exact time that the world needs to be cultivating the next generation of science and technology leaders.

Did you know...?

There is an unmet demand for high-skill workers. In the U.S. alone, it is estimated that by 2018, more than 75% of occupations will be middle- or high-skill, with the majority of these jobs requiring an education in STEM subjects.[2]

Coming Together to Solve Challenges: The Global STEM Alliance

To meet this critical need, reverse the well-documented STEM education crisis, and develop the high-skill workforce of tomorrow, the New York Academy of Sciences and Cisco created The Global STEM Alliance. This initiative recognizes the importance of working together, in both physical and virtual communities, to bring Internet of Things (IoT)- based curriculum resources, local and remote mentorship, and access to universities to the next generation of entrepreneurs, scientists, and innovators around the world.

CISCO

The New York
Academy of Sciences

New York

Qatar

Barcelona

South Africa

Malaysia

Australia

Where Is It?

Envisioning full global reach, the Alliance is already targeting students in New York and across the U.S.; throughout Malaysia; in Barcelona, Spain; and is currently developing programs in regions as diverse as Australia, Qatar, and South Africa.

Cisco® technologies like TelePresence® HD video conferencing facilitate a truly global academic environment, linking the New York Academy of Sciences' local programs to locations around the world through in-person and online platforms. This partnership encourages the sharing of knowledge resources—humanizing science, through the use of technology, by connecting students and STEM professionals across geographic boundaries.

By engaging learners in STEM subjects and nurturing their journey through all stages of the STEM pipeline, the Alliance will help equip the next generation with the specialized skills required to address economic, social, and environmental concerns.

How Does It Work?

Designed to inspire engagement, passion, and aptitude in STEM subjects, the Alliance provides programming for a range of ages, from primary school students to work-ready professionals. The Alliance works closely with individual communities to customize offerings, so that they best serve local needs. Examples include:

· Transformational mentoring between young scientists and school-age children
· Activities for targeting the gifted and talented, including workshops, online classes, and research experiences
· Support for female graduate and post-graduate students such as networking events and partnership opportunities
· Cisco Network Academy IoT courses and certifications that map to growing IT careers

Join the Movement

Interested in helping us build the STEM workforce of tomorrow? Contact:

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1. "ICT For Greater Development Impact," World Bank (June 2012); European Commission Global Economic Outlook. http://www.worldbank.org
2. "The Future of the U.S. Workforce," Achieve, Inc. (September 2012). http://www.achieve.org/files/MiddleSkillsJobs.pdf