Boys & Girls Clubs of America (BGCA)’s Great Think series convenes key influencers and stakeholders to examine critical issues affecting America’s youth, especially those who need Clubs most. In May 2014, thought leaders representing higher education, government, corporations and nonprofit organizations participated in the STEM Great Think, the first national thought leadership forum to combine innovation and creativity with science, technology, engineering and math (STEM) programming in the out-of-school time (OST) environment.

The purpose of the STEM Great Think was to develop a plan for establishing strategic partnerships that will advance STEM education in the OST space, which will engage more underrepresented youth in these disciplines and set them on the path to successful careers. Currently, there is a shortage of both interested and adequately prepared K-12 students in STEM subjects, especially among minority youth and young women. Yet, STEM jobs in the United States are expected to grow nearly twice as fast as other fields by 2018.

Research has shown that the OST environment—after school and summer—advances STEM knowledge and increases interest in STEM-related careers. Therefore, OST providers have an opportunity to help close the opportunity gap that prevents underrepresented youth from reaching their potential in fast-growing STEM fields.
Hosted by Oracle Chairman Jeffrey O. Henley and moderated by Retired President of Microsoft’s Entertainment & Devices Division Robert J. Bach, the STEM Great Think featured a panel discussion and roundtable session in which participants offered guidance for OST providers to inspire more underrepresented youth in becoming the innovators and problem-solvers of tomorrow. Topics discussed included:

- **Develop Strategic Partnerships Across the Youth Development Ecosystem**

  A collective impact strategy on STEM will only be as successful as the OST providers behind it. OST providers must step into their role as conveners—forming critical public-private partnerships. BGCA envisions a model, with youth at the center, in which OST providers form collaborations with schools and educational institutions, corporations and government to identify gaps in service to underrepresented youth and develop high-quality STEM programs to address them.

- **Embrace the Identities of Digital Natives and Expand Access to Cutting-Edge Technology and Resources**

  Today’s young people are **digital natives**, born into a world where technology is ubiquitous and their lives are defined by their interactions with computers, handheld devices, social media and video games. OST providers must embrace the reality of digital natives and curate the best available technologies that can be incorporated into programming and scaled to youth across the country, whether online videos, mobile applications, games, social media channels or 3-D printers. This is the essential shift that OST providers need to facilitate in youth to lessen the skills divide and help kids consider applications to real-world challenges.

- **Invite High-Skill STEM Volunteers and Experts to Become Part of the OST Community**

  STEM Great Think participants advised on the importance of creating a high-skill volunteer model that would bring stronger STEM/technical/quantitative abilities to OST environments. These volunteers could offer trainings to OST staff and serve as excellent youth mentors, showing them pathways to success.
Additionally, in response to the key insights from the STEM Great Think participants, BGCA outlined our position on advancing STEM education in Boys & Girls Clubs nationwide:

- **Introduce iSTEM**
  At BGCA, innovation and creativity form the connective tissue between the science, technology, engineering and math fields, not bound by discipline, or a specific way of thinking and learning. Called “iSTEM,” our cross-disciplinary approach channels young people’s natural curiosity into the design process inherent in the arts, empowering them to create new solutions to real-world challenges.

- **Leverage STEM-Related Content Providers**
  Key to our “iSTEM” strategy is the ability to connect Clubs with STEM-related content providers, such as Khan Academy, U.S. Navy, NASA, Connecticut Science Center and Smithsonian Institution. The content provided by partners must emphasize computational mastery since math is critical to success in STEM.

- **Change Young People’s Relationship with Technology**
  In addition to putting cutting-edge technology into the hands of our youth, we want to encourage young people to analyze the challenges in their communities and create their own technologies and innovations to address them—becoming the makers and drivers of technology.

- **Develop an OST STEM Learning Framework**
  First, we must create a STEM youth development approach that puts Club members on a continuous developmental journey from childhood to high school graduation. Second, we must foster 21st century skills development through project-based learning.

- **Reimagine Club Spaces as “Centers of Innovation”**
  With support from partners, we are reimagining Club spaces as “Centers of Innovation” to reflect our emphasis on innovation and creativity. Today’s Clubs should infuse modern technology into every learning space—from classrooms stocked with e-books to laboratories designed to spur creative thinking.

- **Expand STEM Learning Over the Summer**
  We see a monumental opportunity to expand STEM learning over the summer. Our Summer Brain Gain program is one example of how we are working to help close the opportunity gap in STEM among underrepresented youth.

As a result of the STEM Great Think, BGCA will meet with our STEM Advisory Council to develop an outcome-driven plan for securing strategic partnerships that advance “iSTEM” education in the OST space, which will engage more underrepresented youth in these disciplines and set them on the path to successful careers. As we begin our work with the STEM Advisory Council, feedback from participants and all interested parties is encouraged. You can reach us at greatthink@bgca.org.