# Advocacy

## Partner With STEM to Enhance Opportunities for Gifted Children

Dr. Julia Link Roberts and Tracy Ford Inman

"What can Brown do for you?" is a slogan that UPS has made familiar. As an advocate, you need to hear that on two levels: One as a catchy advertisement, and, more importantly, as a great idea. Ask yourself: What can blank do for you and your advocacy organization to advocate for gifted education making it both relevant and important in your region or state? For example, "What can interest in science, technology, engineering, and mathematics (STEM) do for you?" Rewording UPS's slogan can refocus advocacy for gifted children at the local, state, and national level.

If you haven't heard of STEM, just Google science, technology, engineering, and mathematics, and more than 54 million hits can be found! These hits include STEM scholarships from the National Science Foundation to the STEM Education Coalition made up of advocates from more than 100 educational and professional groups. The nation's attention is focused on these four education and career areas. The STEM Caucus explains that STEM education is responsible for providing our country with three kinds of intellectual capital:

- scientists and engineers who will continue the research and development that is central to the economic growth of our country;
- technologically proficient workers who are capable of dealing with the demands of a science-based, high-technology workforce; and
- scientifically literate voters and citizens who make intelligent decisions about public policy and who understand the world around them.

For more information, go to http://www.stemedcaucus.org.

You may ask "Why STEM?" and "Why STEM right now?" Those questions can be answered by acknowledging that developing STEM talent is critical at this time if the United States is to remain globally competitive. Nations that are globally competitive are focusing on the preparation of scientists, engineers, and mathematicians who can match or outperform similar professionals in other countries. So, even if the word *gifted* is not stated in the discussion of the STEM areas, interest in STEM creates an interest in gifted young people as they are disproportionately represented in fields that are needed to stimulate the economy plus they take leadership roles in science, technology, engineering, and mathematics.

Momentum comes and goes. Right now momentum for STEM is high, and you don't want to miss opportunities to boost interest in young people who are gifted in mathematics and science while leaders in your state are speaking out about ways to nurture talents and develop capacity. Various groups within the United States and your state are speaking out about the need to teach high-level math and science in elementary, middle, and high schools. Identifying those groups in your state is a great way to find others who share your interest in developing the talents of gifted children. It is the ideal time to identify old friends who are concerned about the economic future of your state and to make new ones among individuals and groups who are very concerned about the daunting possibility that the United States may not remain in a leadership role in STEM areas.

The first question to ask is who else in your state is vitally interested in developing talent in STEM disciplines? Which groups are placing a priority on STEM areas and for what reasons? The governor's office; your legislators; a state task force focusing on STEM; professional organizations of engineers, mathematicians, and scientists; institutions of higher education—these are all possible networks. Are there schools in your state with a focus on mathematics and science, or even a statewide residential school? Knowing who else is interested in developing talent in your state is incredibly important. All states have STEM initiatives, and you can learn more about these initiatives by visiting the National Governors Association at http://www.nga.org/Files/pdf/0702INNOVATIONSTEMRFP.PDF.

### Has your organization developed a white paper on STEM and/or gifted education?

Perhaps this would be the time to issue a white paper on gifted education and tie it to the critical role of gifted young people in the economic future of your state. See Colorado's (http://74.54.42.226/~cagtkids/documents/WhitePaperFinal.pdf) or Kentucky's (http://www.wku.edu/kage/whitepaper.html) white papers for ideas. The Colorado Association has "the promise" posted on the front page of its Web site:

> The promise is that gifted education will continue to enrich our world and nation with intellectual manpower as we face a changing future. The promise is that all children, including those that are identified as gifted,

will achieve to their fullest potential. Gifted individuals account for the broad majority of new inventions, patents, research and development breakthroughs, and advances in technology.

For more information, go to http://www.coloradogifted.org.

Tapping America's Potential, made up of leading American businesses and technology associations, includes a Business Roundtable section on its Web site (http://www.tap2015.org), emphasizing the critical role that scientists and engineers play:

> Scientists and engineers drive innovation and technological change. They create the knowledge and develop the technologies that define modern life. A degree in science or engineering opens the door to many career paths. The jobs of the future will require creativity and technical understanding. Science and engineering deliver both.

Concern about the potential of losing the U.S.'s competitive edge is being voiced nationally as well as at the state level. Tapping America's Potential calls on the country "to double the number of science, technology, engineering and mathematics graduates with bachelor's degrees by 2015." During a time when an economic downturn is the topic of frequent discussion, the importance of STEM fields takes on new significance. "Past economic studies have estimated as much as 85% of measured growth in U.S. income per capita is due to technological change." The tie between innovation and economic prosperity is both obvious and important.

## What can you and your organization do to take advantage of the current interest in STEM?

1. Identify the STEM initiatives in your state.
2. Become familiar with the national and state reports that call for STEM initiatives and that focus on innovation and creative ideas.
3. Contact individuals and organizations that are working to increase public interest in STEM and begin to dialogue with them.
4. Include a strand on science, technology, engineering, and mathematics in your conferences, and disseminate that information to organizations that share your interests.
5. Build and maintain partnerships with individuals and organizations working to enhance capacity in STEM fields.

So, what can STEM do for you as you advocate for children who are gifted and talented? STEM can provide opportunities to elevate the development of top talent and abilities to a level of primary importance. Emphasis on STEM does not mean that you are not interested in developing talents and abilities in the arts, history, language arts, etc. What it means is that you are taking advantage of the current momentum in the STEM disciplines. Numbers count in advocacy, and voices that join together are most likely to be heard. Partnering with groups that share your organization's goal to develop intellectual capital compounds your potential to advocate. Don't miss opportunities to develop new partnerships that can be long lasting!

## Resources

Broad, W. (2004, May 3). U.S. is losing its dominance in the sciences. *New York Times*. Retrieved February 20, 2008, from http://www.nytimes.com/2004/05/03/science/03RESE.html?ex=1398916800&e=f37a1c973069

*Business Roundtable highlights scientists and engineers who make a difference to U.S. innovation leadership*. (n.d.). Retrieved February 20, 2008, from http://www.tap2015.org/resource/profiles/scientists_engineers/berners_lee.html

Business Roundtable. (2005). *Tapping America's potential: The education for innovation initiative*. Washington, DC: Author.

Committee on Prospering in the Global Economy of the 21st Century. (2007). *Rising above the gathering storm: Energizing and employing America for a brighter economic future*. Washington, DC: The National Academies Press.

## Authors' Note

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Tracy Ford Inman, M.A., serves as Associate Director of The Center for Gifted Studies at Western Kentucky University. She has presented on the state, national, and international levels, trained hundreds of teachers in differentiation, published multiple articles, and served as writer/editor for the award-winning newsmagazine for *The Center, The Challenge*. She also serves as chair of the *PHP* Advisory Board.