



President's Message


Joel Mittler, Ed.D.

Just the other day, I was wondering about what was happening in our field so I did what anyone with an Internet connection would do, I Googled (that is a real word, isn't it?) the term "assistive technology". Well, it told me that there were about 10,300,000 results. (Don't you wonder why it could not have told me exactly how many?) I went over to Bing and found that they only show 10,100,000 results, obviously missing "about" 200,000. Aside from suggesting that Google was more comprehensive than Bing, I was struck by the extent of the use of the term. A little playing at a site called Google Trends surprisingly tells me that the term assistive technology is searched about twice as often as the term instructional technology.

What am I to make of all this??... Over 10 million Google results, more popular than instructional technology?? I somehow think we have made it... Our little field that some of us have watched develop over the past thirty or so years has grown and grown. Surely, some of the interest is in the rehabilitation community where assistive technology is a critical component. And other interest is in the geriatric community, where assistive technology compensates for the loss of physical, cognitive, and sensory functioning. And we know that some of the attention is in the higher education community, where many of the children we worked with in preschool through secondary schools are now able to succeed. But it seems to me that assistive technology in the lives of children with exceptionalities represents perhaps the largest and most varied application. Over the past thirty years, we have established ourselves as an important

component in the lives of millions of children, not just being "considered" (as IDEA requires) but required to help them achieve their goals.

And we, in TAM, have tried to be a part of that growth. Calling upon some of the most knowledgeable folks in the country, we try to keep you up-to-date on this still developing field. Our journal, the *Journal of Special Education Technology*, continues to lead the field as a source of the scholarship that any respectable area of study requires. Our newsletter, the *TAM Connector*, brings you the news about the organization. Through our technology fans (including a new one on Web 2.0 tools), our series on practical ideas, or through our new publications such as *Integrating Technology Tools into Instruction: What's Working in Inclusive Classrooms* and *Apps for All Students: A Teacher's Desktop Guide*, TAM works hard to stay in the forefront of the field and share that information with you.

As President, I have the pleasure to work with an energetic board of volunteers, all focused on serving the field. It takes enormous chunks of their time but as the professionals they are, they freely give. And as our members, we thank you for your continued support. Even as overall CEC membership has slipped over the past few years, our membership in TAM has held steady or even increased. So I thank you for your time, your commitment, your support of TAM and for the good things you do for children with exceptionalities. As assistive technology has grown, consider yourself a part of that success. 

What's Inside...

President's Message	1
Interview with Jim Gardner...	2
CAN Report	3
Federal Funding Awards	4
CEC 2013 Convention	4

Interview with the JSET Topical Issue Editor: Jim Gardner

STEM Education

Anya Evmenova

James Emmett “Jim” Gardner, Ph.D. is a professor at the University Oklahoma in the Jeannine Rainbolt College of Education. For more than 5 years, he served as editor of the *Journal of Special Education Technology* (JSET). In 2010, JSET published a topical issue titled *Shaping STEM Education for All Students*, which is now available as an eBook from the TAM store (http://www.exinn.net/tam_e-books.html).

Tell us about the new TAM eBook on Science Technology Engineering and Mathematics (STEM) education for students with various abilities and needs?

This special issue of *JSET* was the first time that research and implementation issues related to STEM education and special education technology were published. It brought together a diverse group of educators who were at the forefront of research, practice, and policy issues in STEM education. The special issue thus compiles and summarizes recent thinking on STEM.

How do you envision TAM members using this publication?

Anyone interested in STEM education should consider this a seminal publication on STEM and special education technology. It’s clearly the starting place if you are conducting a review of research. It’s also an excellent resource highlighting the National Science Foundation’s funded initiatives on STEM and research in disabilities education.

Do you have any advice for TAM members who want to use this product for professional development activities?

Consider this eBook from a variety of perspectives. There is a set of articles that describes implementation issues and promising practices in STEM. There

is information that helps readers gain a sense of the type of outcomes that can serve as measures of the effectiveness of STEM education for persons with disabilities. There is an ecological model of STEM education that helps practitioners and researchers conceptualize the critical elements and variables that comprise a successful STEM education program.

Based on your professional expertise, what is the future of STEM education for students with various abilities and needs?

I think we are in the middle of a paradigm shift. In my opinion, previous anecdotal evidence indicated that students with average or above average intelligence, but possessing certain disabilities (e.g., learning, sensory, or physical disabilities), were being redirected away from careers in STEM. To a degree, this was probably based on misperceptions that they were not capable of performing some of the mental or physical activities associated with STEM careers. However, new knowledge in the areas of STEM, Universal Design for Learning (UDL), and innovations in the area of assistive technologies (both physical and cognitive) are helping teachers and educational practitioners realize that (a) persons with disabilities ARE entirely competent to pursue STEM careers and (b) there are elements of STEM education/curricula and special education technology (e.g., UDL) that also can help educators frame STEM-related content for students with intellectual or behavioral disabilities, using instruction that is innovative and engaging.

The new eBook on STEM education for all students is available from the TAM store (http://www.exinn.net/tam_e-books.html). It features the following articles:

- *Introduction to the Topical Issue: Shaping STEM Education for All Students* by James Basham and Matthew Marino
- *Technology to Advance High School and Undergraduate Students with Disabilities in Science, Technology, Engineering, and Mathematics* by Mark Leddy
- *An Ecological Model of STEM Education: Operationalizing STEM for All* by James Basham, Maya Israel, and Kathie Maynard
- *Using Technology to Support STEM Reading* by Matthew Schneps, Jamie O’Keeffe, Amanda Heffner-Wong, and Gerhard Sonner
- *Analysis of Factors that Affect Struggling Readers’ Achievement During a Technology-Enhanced STEM Astronomy Curriculum* by Matthew Marino, Anne Black, Michael Hayes, and Constance Beecher
- *Applying Technology to Enhance STEM Achievement for Students with Disabilities: The Blending Assessment with Instruction Program* by Edward Meyen and Diana Greer
- *Technology and Communications Coursework: Facilitating the Progression of Students with Learning Disabilities Through High School Science and Math Coursework* by Data Shifrer and Rebecca Callahan



Federal Funding Awards to the Assistive Technology Field: Examples

The U.S. Department of Education awarded \$9 million for 38 grants to institutions of higher education to train educators to improve the services and results for children with disabilities. One of the projects funded at the University of Kentucky will support Master's students and Alternative Certification students in low-incidence disabilities. The Master's students will mentor the Alternative Certification students using remote observation technologies located in both of their classrooms. Students also will have a choice of receiving a Graduate Certificate in Autism Spectrum Disorders or Assistive Technology. Read more: <http://www.ed.gov/news/press-releases/9-million-grants-awarded-institutions-21-states-and-dc-special-education-personnel>

The U.S. Department of Education awarded more than \$1.1 million in grants to three projects (Pacer Center, Inc.; FHI Development 360, LLC; and University of Delaware) that will support early intervention and preschool programs in the effective use of assistive technology with young children with disabilities. These projects will assist early intervention and preschool programs in using and evaluating promising practices for the use of assistive technology by infants, toddlers and preschool children with disabilities in an effort to improve their functional outcomes. Read more: <http://www.ed.gov/news/press-releases/more-1-million-grants-awarded-promote-young-childrens-use-assistive-technology>

The U.S. Department of Education announced today that the National Institute on Disability and Rehabilitation Research (NIDRR) has awarded 16 grants of \$75,000 each to 11 small businesses to conduct research and develop technology that makes life and

learning easier for individuals with disabilities. For instance, one grantee will develop a low-cost computer graphics screen reader for persons with visual impairments, another will develop and evaluate an accident prevention system for manual wheelchairs, and another will design and develop a foot-operated mouse for computers. Read more: <http://www.ed.gov/news/press-releases/department-awards-12-million-11-small-businesses-develop-technology-people-disabilities>

The Office of Disability Employment (ODEP) within the U.S. Labor Department has been awarded a \$950,000 grant to establish an accessible technology center. The recipient is the Rehabilitation Engineering and Assistive Technology Society of North America (RESNA), located in Arlington, VA, a COAT member organization. With the funds, RESNA will set up a National Accessible Technology Action Center to facilitate and promote the

use of accessible technology in the hiring, employment, retention, and career advancement of people with disabilities. Read more: http://www.coataccess.org/node/10115?goback=%2Egde_3080152_member_171066503

The U.S. Department of Education's National Institute on Disability and Rehabilitation Research (NIDRR) provided \$647,844 to the Global Public Inclusive Infrastructure (GPII) team for "Profile Creation Support for Cloud-based Accessibility". The team will develop methods to enable people with disabilities, and others facing barriers to access, to discover and request user interface and digital content configurations that work best for them while accessing online services over the Internet. The contracting entity for this grant is the Institute for the Study of Knowledge Management in Education (ISKME) in California. Read more: <http://gpil.net>

Save the Date! CEC 2013 Convention, April 3–6, 2013

Join the Council for Exceptional Children in San Antonio for the CEC 2013 Convention & Expo – the largest professional development event dedicated to special and gifted education. Educators from around the world will discuss the most pressing issues in special and gifted education and share information in areas such as common core state standards, administration and supervision, autism spectrum disorders, emotional and behavior disorders and supports, policy, technology, and response to intervention.

The CEC Convention & Expo offers hundreds of educational sessions conducted by leading experts and endless opportunities to network with others working with children and youth with exceptionalities and their families. Attendees will also have the opportunity to learn about new and pending legislation and explore cutting edge products and services in the exhibit hall.

CEC's Convention & Expo is the heart and soul of the special education community and your premier professional development event. Registration opens October 17 so visit www.cec.sped.org convention for updates.

CAN Report

Highly Qualified Designation Part of Budget Bill

Joel Mittler, Ed.D., TAM CAN Coordinator

As this column is being written well before the 2012 elections, I can only assume that by the time you read this, we will all know who will be living in the White House and who will be in control of each house of Congress. Thus, you, the reader, know far more than I do as to what we might expect over the next few months.

That said, based on events in the weeks leading up to the election, there are a few things that we do know. For one, we do have a budget for fiscal year 2013, which began October 1, 2012. Well, we sort of have a budget as the Congress recently passed a six month continuing resolution (CR) which will fund the federal government through March 30, 2013 at a total annual level of \$1.047 trillion: the amount Congress agreed to last summer in the Budget Control Act of 2011. The bill maintains spending at fiscal year 2012 levels, plus a small 0.612 percent increase across the board. This will bring total spending for Department of Education discretionary programs to about \$68.5 billion.

Of particular note to readers is that the budget bill included a policy rider addressing whether teachers who are enrolled in, but have not yet graduated from, alternative route to certification programs may be deemed "highly qualified." CEC joined with 90 other disability, civil rights, and education groups in the Coalition for Teaching Quality, and fought the extension of this provision. CEC believes Congress needs to address the issue as part of ESEA reauthorization and give it the full and fair debate it deserves. CEC is pleased, however, that Congress only extended this provision for one year, instead of two, and required the U.S. Department


of Education to provide for more transparency of the data. Specifically, the Secretary of Education must report to Congress by December 31, 2013, and identify the teachers who meet the NCLB's highly qualified requirements, where they are teaching, and the subject areas in which they are teaching. Having access to this information is important to understand the needs of the profession and our nation's children and youth.

The ongoing problem that must be addressed after the election, however, is Sequestration—the 8.2% automatic, across-the-board-cut to most federally funded programs that was mandated by Congress last summer in the Budget Control Act. On August 2, 2011, President Obama signed into law the Budget Control Act of 2011 (BCA), increasing our nation's debt limit and imposing a series of measures to limit spending and decrease the nation's debt.

The BCA calls for \$900 million in cuts to discretionary programs, including education, over the next decade. It also created a Joint Select Committee (referred to as the "Supercommittee") made up of both Democratic and Republican members from the House and Senate, charged with finding \$1.2 trillion more in cuts over the next decade. If the Supercommittee failed to identify these savings, or Congress failed to approve the Supercommittee's recommendation, automatic cuts would impact every federal program not specifically excluded on January 1, 2013. Well, the Supercommittee failed, and now sequestration will begin, unless Congress and the Administration change the law. The White House budget office released a report detailing

the impact sequestration would have on federal programs. Specifically, \$4.1 billion would be cut from education programs. Estimates have stated that nearly \$1 billion would be cut from special education programs for infants, toddlers, preschoolers, and school aged students; in addition to special education research and IDEA's support programs (i.e., technology and media, parent training and information centers, grants to support personnel preparation and professional development). These deep cuts of sequestration will take place on January 1, 2013 if Congress doesn't act.

As you know, we still await action on a reauthorization of ESEA (NCLB) and eventually IDEA. But all of that will surely wait until the new Congress, the 113th, begins on January 2, 2013. Don't hold your breath, however. Such action is unlikely to be on the top of their agenda. Also work continues on the implementation of the common core and the new assessments that will, hopefully, be more responsive to the needs of children with exceptionalities. It should be an exciting 2013!!

If you have any questions or comments or want to receive a weekly update on public policy from CEC email me at jmittler@liu.edu. 

TAM CONNECTOR

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