



CONNECTOR

ANYA EVMENOVA, EDITOR AUGUST 2014

President's Message


Margaret Bausch, Ed.D., President TAM



Last week, while teaching summer school, two of my undergraduate students walked into class with a workbook from the hall-way surplus table. They asked

me why the pages were purple and why the reverse image on the backside of the page was darker than that on the front side. Recognizing the duplicating masters, I replied that the pages were designed to be copied on a ditto machine or spirit duplicator, although, we often incorrectly called it a mimeograph machine. As evidenced by the blank stares, both students remained clueless about the purpose of the purple pages. I suggested that the students search the web for information and a video.

Within seconds, they found a video and sat mesmerized as they watched the machine's drum spin and the copies fall into a neat pile in the tray. Besides being a wonderful teachable moment (since the day before we had discussed the impact of background knowledge on comprehension), I reflected on how I had relied on that old technology in my early days of teaching and how technology innovation has changed my life and my teaching over the years. With resources literally at my fingertips, I can locate information within minutes rather than hours or days. The problem now becomes one of sorting through all of the available information. With so many resources, how do we know what is valuable and what is not. Immediately,

I thought of TAM and the amazing work the members have contributed to assist teachers at all levels learn about useful strategies, devices, software, and so much more. We have an incredible membership that has been willing to share ideas as the technology has changed from ditto machines to the electronic world. I am proud to be part of such an organization, and I hope you have taken advantage of all it has to offer. By the way, if you have never seen a ditto machine in action – search the web! 

Note: Special thanks to my curious and inspirational summer school students, Amber Barbour and Katelyn Tallarico.

Creating Technology Labs for Children with Autism Spectrum Disorders (ASD)

Demetria Ennis-Cole, Ph.D., Associate Professor, University of North Texas

The University of North Texas operates a Technology Laboratory for Children with Autism Spectrum Disorders (TARA) with the direction and support of faculty members from the College of Information. TARA is a small, comfortable space for children with ASD and their parents. Children in the lab use different technology tools (computer-assisted instruction, apps on the iPad, Reading Pens, Radius System, online Internet Games, and others) and experiment with different instructional

tools and strategies. In addition, parents share their insight; discuss their child's social and educational problems; connect with other parents; observe; and discuss their child's progress, educational goals, and technology use.

Technology labs designed to meet the needs of children with ASD may be a good way to conduct research on different forms of technology and their impact on children diagnosed with ASD. Children with ASD are individual

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Interview with the Dr. Kyle Higgins and Dr. Randall Boone

The Software Checklist

Anya Evmenova

Dr. Kyle Higgins is a professor in special education in the Department of Educational & Clinical Studies at the University of Nevada of Las Vegas. She is a renowned expert in the area of technology for students with various abilities and needs. Her current projects focus on training teachers to work with students with autism and intellectual disabilities as well as to implement common core standards. Dr. Randall Boone is a professor in educational computing and technology and the associate dean for research and graduate studies in the Department of Teaching and Learning at the University of Nevada of Las Vegas. Dr. Boone is a renowned expert in the area of computer-mediated teaching and learning for persons with disabilities. He was a member of the initial committee that developed the National Instructional Materials Accessibility Standard. He has led numerous federally and state funded projects focused on assistive technology. Dr. Higgins and Dr. Boone are past co-editors of the *Journal of Special Education Technology* and current co-editors of the *Intervention in School and Clinic* journal. In 2007, they developed and co-authored the *Software Checklist: Evaluating Educational Software for Use by Students with Disabilities* paper published in the *Journal of Special Education Technology*. Long-time supporters of TAM, Dr. Higgins and Dr. Boone have graciously given permission to use the Software Checklist within the TAM eBook (http://www.exinn.net/ebook_The_Software_Checklist.html).

Software Checklist is a validated instrument that can be used by teachers and parents to evaluate educational software in terms of its usability and accessibility for students with disabilities. The checklist includes six forms: (a) general form for all students with disabilities; (b) form for students with learning disabilities; (c) form for students with intellectual disabilities; (d) form for students with physical disabilities; (e) form for students with emotional disabilities;

and (f) form for early childhood. The checklist targets such attributes of educational software as instruction, directions and documentation, feedback and evaluation, content, individualization options, interface and screen design, and accessibility.

Tell us about the purpose of Software Checklist.

Over the past many years of investigating technology solutions for students with disabilities, we have become intensely attuned to the design of not only instructional materials, but also of the everyday things that students and teachers interact with at school, at home, and in the community that are part of the educational environment. However, the world is a pretty big place, so we limited this project to computer-based educational materials and learning tools that might be used by students with a wide range of disabilities. It was clear from a series of previous studies that commercial developers of educational software and related products were not adequately engaged in a process of formative and summative evaluation of their own products. So it seemed reasonable that someone in the education community should take on the task of developing an evaluation tool for teachers and parents.

How do you envision TAM members using your Software Checklist?

The checklist is pretty straightforward. It lists positive attributes that should be found in digital tools, educational software, and [now] tablet and smartphone apps that are being considered for use by students with disabilities. There are separate checklists for different disabilities and this is an important feature of the checklist and an important aspect of evaluating materials for different students. The one thing we know for sure about learning is that we all do it differently. A feature that is helpful

for a student with a learning disability might be detrimental to a student who has autism. So, we urge users to carefully consider for whom the materials will be used, and have that as a point of departure in making a final evaluation and consideration of having the student use the materials or not.

Do you have any advice for TAM members who want to use the checklist for professional development?

Certainly use it yourself several times so that you are very familiar with it before attempting to use it in a training situation. There are some seeming contradictions to be found. For example, content that is fast-paced might be a positive attribute in the checklist for a student with a behavioral disability, but would not be a positive attribute for a student with a learning disability or intellectual disability.

What should be changed in the Software Checklist in light of new technologies?

Clearly the term software is fading from everyday use. With the large number of mobile and tablet devices being used for educational purposes today, applications (apps) that rely heavily on touchscreen for access need to be a big part of the accessibility section.

What is the future of AT?

Assistive technologies are becoming a part of the everyday lives of everyone, not just those who have a documented disability. Voice command such as Siri® on the iPhone® and auto-correct as we type our text messages are both instances of technologies that benefit persons with disabilities significantly, but that are being developed to their full potential because they make wonderfully convenient tools for everyone. Also, the convenience and low cost of mobile devices will undoubtedly move AT even further in this direction. 🌟

Creating Technology Labs for Children with ASD (continued from Page 1)

and unique, and a technology laboratory that can capture their behaviors and interactions may provide researchers with additional insight on the children's needs, level of engagement with technology, motivation, abilities, and interests. Additionally, the lab may be used to facilitate small group interaction for social skill development, discussion, software evaluation, and exposure to a variety of instructional tools and strategies. Some of the services provided by TARA are described here.

Exploration and Software Trials. The TARA Lab (<http://www.tara.unt.edu>) was designed to be an exploratory opportunity for children with ASD. The lab environment allows children to experience customized curriculum material along with technology tools to support their learning. Progression through exercises and scores on activities, time using tools, students' perceptions of their experience, observations of student engagement and interest, and other data are collected to evaluate students' experiences and plan additional learning opportunities. The lab functions as an educational exchange between the lab director, parents, and children. The lab director learns more about the family's experiences and challenges, and the parents gain additional information and ideas for supporting their child. The child gains the opportunity to practice skills individually, with a partner, or with a small group. This triad of learning allows all participants to benefit from the lab experience.

The TARA Lab also was designed to be a repository for technology tools that can be evaluated and explored on site. Because individuals with ASD have special interests and preferences, their level of engagement with different computerized tools varies. An interesting program to one child may not be interesting to another child with the same diagnosis and ability level. The lab allows parents to try different programs and apps before purchasing

them. Several parents have purchased computer-assisted instruction and software apps their child enjoyed in the lab. This helps parents narrow the field and make purchases that are more appealing and more cost-effective.

Data Collection. Through the TARA Lab, data have been collected on a variety of research questions that focused on school involvement, challenges facing families of children with ASD, perspectives of mothers of children with ASD, technologies and therapies most frequently used by families, and other areas. Data collected have been analyzed and shared through presentations and journal articles in an effort to bring additional attention to the needs of families of children with ASD. The dissemination of findings informs research and practice and creates a vehicle for dialogue across different disciplines. Researchers involved in different disciplines can bring differing points-of-view and a diverse skill set to the discussion. This collaborative exchange may provide a broader platform for addressing the needs expressed by families. In response to those needs, additional services can be facilitated through a technology lab including focus group sessions, special events, show-and-tell technology presentations for families, and ideas for technology integration and data collection within the child's school or home setting. All of these activities help provide evidence for the effectiveness of technology and describe ways to use various tools to improve outcomes for children with ASD and their families.

Considerations and Issues for Parents and Children. Child safety, ethical issues, equipment obsolescence, and payment are some of the issues that must be resolved in order for a technology lab to be successful. It is essential that children attending the lab feel comfortable. They must be physically safe in the environment. The lab should be uncluttered, easy to navigate, and any

wires for laptop or desktop computers should be hidden from view. Work surfaces and equipment should be cleaned regularly, and children should be free to explore, make requests, and use software for which they have a preference. Security cameras should be installed to record behavior and interactions, and provide additional protection. Also, parents should be allowed to enter the lab, see what is occurring, and have their comments and concerns addressed.

Labs should operate under ethical guidelines established to protect the rights of human subjects. There should be protocols and procedures for data storage, collection, and archival, along with safeguards to protect patrons from psychological and emotional harm. Procedures should be created to handle obsolete equipment and replace tools that are faulty. A donation and inventory system can be implemented to track equipment that is functioning, under repair, or on loan. Another consideration is cost. It may be necessary for patrons to pay a small fee for the use of equipment and software. The fee can be reinvested in the lab to pay for newer software and hardware. Other issues include developing procedures for loaning equipment and recording data on its use; selecting curriculum materials and software; and evaluating the impact of technology use on behavior, academic achievement, motivation, and functional, communicative, and social skills.

The use of technology for persons with ASD is growing rapidly, and more research is needed to explore the technology integration, needs, and interests of learners with ASD in both home and school settings. Labs equipped with a variety of software and hardware that target the core deficits in ASD (behavior, social interaction, and communication) and supply academic support, provide additional opportunities to examine the effectiveness of technology with learners on the spectrum. ●

CAN Report

Just a Glimmer of Optimism in DC

Joel Mittler, Ed.D., TAM CAN Coordinator

I have recently returned from the CEC National Legislative Conference, held at CEC Headquarters in Arlington, VA. Along with the other Children and Youth Action Network (CAN) Coordinators and interested CEC members, we spent several days hearing about the issues and contributing our best ideas. Amid the dismal performance by Congress on the Elementary and Secondary Education Act (ESEA), the Individuals with Disabilities Education Improvement Act (IDEA), and most other education bills, there were some positive events to report.

As always, the CEC Public Policy staff continues to work diligently to advance the field and the interests of children with exceptionalities. We spent a few days listening to their explanation of the current issues. Planning ahead to a time when IDEA will be reauthorized (it is already well overdo), we generated areas where we thought IDEA could be improved. CEC will consider these ideas as it creates its recommendations to send to Congress and the Department of Education.

We heard from Office of Special Education and Rehabilitative Services (OSERS) officials about the pending shift to Results Driven Accountability, which was formally announced shortly after our visit. We also learned of the

impact of ESEA waivers on students with disabilities as well as initiatives from the Department of Education on early learning. We had a presentation on the recently released data that show that students with disabilities, particularly those of color, are suspended, expelled, and referred to law enforcement at far greater rates than their non-disabled peers.

A fascinating presentation by Congressional staffers from both the House and Senate representing both parties, reported on the pending approval of the Workforce Innovation and Opportunity Act by Congress. (This act includes several provisions advocated by CEC that will benefit workers with disabilities.) As of press time, the Act had passed the Senate 95-3, a remarkable vote considering how few education bills (as well as other bills) have been approved recently. Passage by the House also is expected this summer. When asked why this bill was able to be passed in a bipartisan fashion (a pattern that is expected to be repeated in the House), the staffers simply replied that their bosses (the Committee Chairs) told them to work it out. Regrettably that cooperation has not happened very often during the past few years.

However, the highlight for me was the last morning of our meeting when we

went “up on the hill” to meet with our members of Congress. CEC began the day with a breakfast to honor nine members of Congress, representing both parties, for their support of an IDEA full-funding bill, as well as other legislation that helps children with exceptionalities. In thanking CEC, about a half a dozen members of Congress spoke eloquently, recounting their personal experiences and their commitment to children with exceptionalities. Though it is doubtful the full-funding bill will be approved, it was good to hear the support that exists in both parties. Maybe the future is not as bleak as it appears!

For more information about items in the CAN report, questions about CAN, or to receive a weekly public policy update from CEC, email me at jmittle@liu.edu.

TAM CONNECTOR

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