MassMATCH Quarterly News: Fall 2014

Tweet

In This Edition:

Technology and Student Success!

Maureen Knowlton, M.Ed., shares a remarkable journey with assistive technology and one student with grit

We met four years ago, during the summer before he entered fifth grade. Mackay was nine years old and letters and numbers had very little meaning for him. Despite significant difficulties, characteristic of a student with specific learning disabilities in reading, writing, and math, Mackay had grit; he would work with me for several hours a day, multiple times a week without complaint, and he wanted to succeed. This engaging young student eagerly told stories about his interests and life experiences. His oral language strength became quickly apparent, and the key to his learning was capitalizing on that strength. The monumental advances in technology over the last four years helped Mackay be included in the classroom, helped to maximize his access to grade level curriculum, and contributed to his independence and success in school.

Tools for Reading

When he entered middle school, Mackay could not read or write. He could, however, understand more sophisticated text if it was read aloud to him, and he participated enthusiastically in class discussions. Paper and pencil and the written word were enormous barriers to his learning, therefore it was important to find ways to eliminate those barriers. That is precisely where technology came in! At the same time that he was receiving direct instruction in learning how to read, technology was helping Mackay read to learn. Initially, he listened to recorded books on tape, and when an audio version of a book was not available, we created one for him. Soon, thanks to local grant funding, we were able to download audiobooks onto an iPod, which was much cooler to use in the classroom than an old-fashioned tape recorder.

During this time, Mackay's teachers also began to explore using the idea of Universal Design for Learning (http://www.cast.org/udl/) to create powerful lessons. They increasingly used technology to present information, to engage students, and to offer choices for demonstrating knowledge and understanding. Students had access to computers in the classroom, and for academic reading Mackay initially used the Kurzweil (http://www.kurzweiledu.com/default.html) text-to-speech application. Textbooks, worksheets, tests, and quizzes were scanned and then read aloud to him by a desktop or laptop computer. Given his print disability, Mackay was an eligible member of Bookshare.org (http://bookshare.org) , and this membership also gave him access to their enormous online library of digital text to use with Kurzweil. One of his first great milestones was using Kurzweil to independently access the Massachusetts MCAS assessments to show his proficiency.

Mackay's readiness for greater independence in grade seven coincided with our school's purchase of iPads for students. His IEP team determined that an iPad was a necessary assistive technology accommodation to help him continue to make progress. Armed with an iPad and the Read2Go App (http://read2go.org/) , he easily accessed books he needed from Bookshare for his classes and he began to read more. As he tells it, "I got that feeling that everyone always talked about being hooked on a book. It was awesome." He also used the built-in accessibility features on the iPad to help him more efficiently complete assignments and keep pace with his peers. In grade eight, all students participated in our 1:1 iPad Program, and so he was not the only one reaping the benefits of technology in the classroom. As time went on, Mackay primarily used

Read2Go and text-to-speech to help him meet deadlines for longer reading assignments. He also used the Subtext App (http://www.subtext.com) for some reading in English class. The built-in text-to-speech, vocabulary support, and on screen annotation features of Subtext helped Mackay more successfully meet the objectives of the assignments.

Tools for Writing

Evolving technology helped minimize the impact of Mackay's weaknesses over time in writing, as well as in reading. Various tools helped him make progress and write more independently because they allowed him to use his spoken language strength. At first, Mackay dictated his written work to a teacher, who typed for him. The capability of Macintosh computers to speak selected text was especially useful because he could easily listen to his own words to edit for clarity. As his keyboarding skill improved, Mackay typed his own work using accessibility features, such as changing the font type and size, line spacing, and color of text. Since he could not recognize correctly spelled words, WordQ (http://www.goqsoftware.com/) word prediction software and its "speak" capability reduced the frustration of using traditional spellcheck. Imagine his satisfaction when he could read his own writing! Once he had access to an iPad, he used apps, such as Popplet (http://popplet.com/) and Keynote (https://www.apple.com/mac/keynote/), to help with organizing his ideas and for creating written presentations. Mackay also used Dragon Dictate (http://www.nuance.com/for-individuals/mobile-applications/dragon-dictation/index.htm) on his iPad for completing short writing assignments, and he eventually advanced to using MacSpeak on a laptop to write multi-paragraph essays, like his own success story. He says, "Using Dragon made it easier because I could speak what was on my mind without writing it down, and I no longer needed a person to write for me. I could just write myself." When given an assignment, Mackay learned to select from a variety of tools to help him get the job done.

Tools for Executive Functioning

Schoolwork presented Mackay with other challenges requiring executive functioning skills including organizing, prioritizing, and remembering. He described it by saying, "Sometimes I just have to dump everything in my brain on the table, sort it all
out, and then put it back in where it belongs." The iPad and our use of a blended learning approach to teaching in grade eight, helped with Mackay with this. His teachers posted daily lessons and assignments on their itsLearning (http://www.itslearning.com/welcome.aspx) online classroom sites. He could check the calendar for homework and due dates, and often he could complete work directly through itsLearning on his iPad and email it to the teacher. He learned to use reminder apps and speech-to-text on his phone to leave himself messages. This reduced the number of lost assignments and made the job of school a little less overwhelming.

The right tools can help students learn. During the past four years in middle school, Mackay used a variety of high and low-tech tools, specific to his individual needs, to help minimize his disabilities and help him perform to the best of his ability. In his own words, "Without the iPad who knows where I'd be." These tools helped set him up for greater independence as he enters high school. When coupled with best practices for teaching, technology assists students with varied learning needs by
providing personalized options and supports and it helps them write their own success stories!

Maureen Knowlton has taught special education at Millis Middle School for twelve years. She was a 2013 Teacher of the Year Finalist. Knowlton blogs at TeachingEmpoweredLearners.com.

PARCC Accessibility Resources (and Twitter Event October 23rd!)

PARCC Partnership for Assessment of Readiness for College and Careers

This year some Massachusetts school districts will transition from MCAS to the new computer-based PARCC assessment. PARCC stands for "Partnership for Assessment of Readiness for Colleges and Careers" and is one of two federally-funded state consortia creating general assessments aligned to the new Common Core State Standards (http://www.corestandards.org/) (CCSS). The CCSS are a national set of learning objectives in mathematics and English language arts (ELA) created to better prepare all US students for college and careers. Massachusetts has adopted the Common Core State Standards to replace its state-level standards.

What makes the PARCC assessment different?

In general, the consortium's assessments are referred to as a "new generation" because: 1) they reflect education reform inherent to the CCSS initiative, 2) they are the first summative assessments that are digital and accessed on the Internet, and 3) they build in various "UDL" digital tools and accommodations for users to select or administrators to turn on (such as text magnification and spell check).

PARCC hosts Twitter office hours October 23rd

PARCC's approach to accessibility is complicated and all IEP and Section 504 Teams will need to get to know the PARCC guidelines. To answer questions about accessibility and accommodations for the new assessments, PARCC is holding Twitter "office hours" on October 23rd from 5 to 6 p.m. ET. The topic is "Access for All" and participants can Tweet using #askPARCC.

First get to know PARCC's approach to accessibility through the following essential links:

PARCC Accessibility Features and Accommodations Manual
(http://parcconline.org/sites/parcc/files/PARCCAccessibilityFeaturesandAccommodationsManualNovember2013.pdf)
(PDF)
PARCC Accessibility Features and Accommodations Documentation Form
(http://www.parcconline.org/sites/parcc/files/PARCC%20Field%20Test%20Accessibility%20Features%20and%20Accommodation%20Documentation%20
(PDF from the field tests)
PARCC Training Module on the Accessibility System
(http://www.parcconline.org/sites/parcc/files/pdmodules/module5/index.htm?Attempts=3&W1=1366&H1=643&W2=1366&H2=643&W3=1366&H3=643)
PARCC Assessments Technology Guidelines: Version 4.2
(http://parcconline.org/sites/parcc/files/Technology%20Guidelines%20for%20PARCC%20Assessments%20v%204_2%20May%202014.pdf)
(PDF May 2014)
PARCC Practice Tests (http://practice.parcc.testnav.com/)

Also read "The PARCC Assessment and Assistive Technology: What Do IEP Teams Need to Know (2014_Spring.php#PARCC)" in the spring edition of this newsletter.

Abilities Expo Highlights!

Abilities EXPO | The event for people with disabilities

Last month the Abilities Expo returned to Boston for a second year and MassMATCH was again a sponsor. Hundreds came to the Boston Convention and Exhibition Center to learn about a range of assistive technology including cutting-edge mobility equipment, adaptive vehicles, robotic arms and suits, innovative furniture, and recreation equipment. Workshops and demonstrations were geared toward individuals and families and ranged from "Tips for Traveling with a Disability" to "Wheelchair Hip Hop" with Push Girls star Auti Angel.

A face-painted visitor!

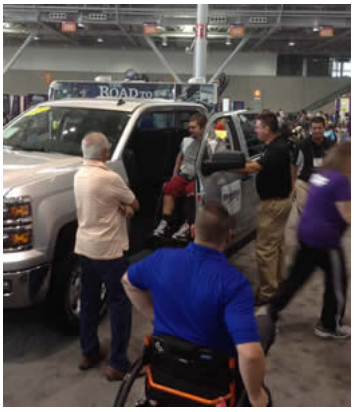
Touring the exposition with a bicycle built for ... a pediatric wheelchair!

Demonstrating the grip of the Jaco robotic arm (http://kinovarobotics.com)

Eileen McNamara attended from Quincy, Massachusetts. "There is quite a drool factor at Abilities," she remarked, noting how expensive cutting-edge equipment often is. "It's the one place, however, where there's competition for adaptive van sales. Vendors are trying to cut deals with me, competing against each other!"

Kendra and David Cucovatz also gave the expo high ratings, especially for accessibility. "It's been great to see everything. And it's been so easy to get in and around." They took advantage of the the valet parking, and their daughter, Adleigh, loved the Upsee (below).

Adleigh enjoying the Upsee (http://www.fireflyfriends.com/upsee) mobility device with her dad



Unique adaptive truck

Learning to maneuver with Empower Spinal Cord Injury (http://www.empowersci.org/)

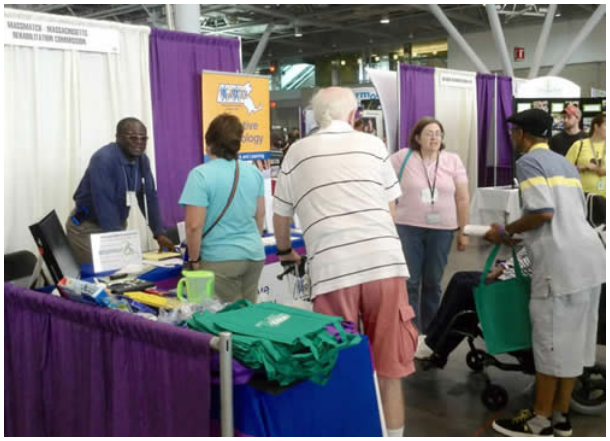
Elizabeth Tilton drove from Maine with her husband and her not yet three-year-old son, Kellan. Kellan stole the show... specifically the wheelchair hip hop workshop. One dance observer, who uses a power chair herself, enjoyed Kellan's spontaneous moves: "It's terrific they bring him here! He'll always know he's not the only one."

Kellan's chair seemed an extension of his person, spinning with self-expression and... mischief! "He's been using a chair since he was 18 months old," his mom explained, laughing.

Dance instructor Auti Angel enjoying Kellan Tilton's spunk!

Others, with less experience, also joined the fun. A middle schooler from Vermont was invited by the Empower Spinal Cord Injury exhibitors to see how challenging maneuvering a wheelchair can be (above).

MassMATCH Program Coordinator Kobena Bonney reported his booth had many visitors and that he enjoyed chatting with people from all over New England. "It was good to be able to share our programs with so many interested attendees. Hopefully this is now an annual event for Boston and the whole region."



Kobena Bonney greets visitors to the MassMATCH-Massachusetts Rehabilitation Commission booth at Abilities Expo in September.

Learn more about Abilities Expo (http://abilitiesexpo.com)

Need a Back-up Wheelchair? Check Out REquipment!

REquipment (http://dmerequipment.org/) is a great way to obtain free, gently-used, durable medical equipment (DME) for use by individuals and families in Greater Boston. Refurbished items currently available include rollators, walkers, bath seats/benches and manual wheelchairs. New refurbished items (including scooters, power wheelchairs and sling lifts) are posted weekly at www.dmerequipment.org. REquipment will also refurbish pediatric adapted strollers and standers.

In a recent Facebook post, REquipment Program Manager Randi Sargent highlighted several manual wheelchairs in the REquipment inventory. She writes: "We have a huge selection of available manual wheelchairs, from travelers to very supportive types...for all ages! Why not have a back-up wheelchair or one you can keep in the car 'just in case?' Also, with fall and winter holidays coming up, don't forget to have that basic manual wheelchair so that your visiting relatives in need will be able to get around your home and on outings!"

"Like" the REquipment Facebook page (https://www.facebook.com/dmerequipment) to see announcements! REquipment will pick up donations and deliver items in eastern MA (a delivery fee may apply).

Contact:

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New Product Spotlight: TabAccess

Wireless Switch Interface for iOS and Android Tablet Computers

Zyrobotics is an assistive technology startup company that was founded through VentureLab (http://venturelab.gatech.edu/) , the Georgia Institute of Technology's business incubator. Zyrobotics is dedicated to accessible play and gaming, but is receiving considerable attention for its new Bluetooth switch interface--TabAccess.

TabAccess enables "out of the box" wireless switch access to IOS and Android tablets. The interface makes using tablets--whose touch screens rely on fine motor dexterity--accessible with sip/puff devices, joysticks, buttons and other switch hardware.

The interface is sleek, easily mounted on wheelchairs and boasts full compatibility with switch-accessible apps.

The Zyrobotics website (http://zyrobotics.com/wpcproduct/tabaccess/) offers TabAccess for $129 (as an introductory price).

Zyrobotics will soon also be offering a plush toy as a switch for use with tablets. Zumo is a turtle whose spots work as buttons, allowing children without fine motor skills to play games.

Learn more at Zyrobotics.com (http://zyrobotics.com)

GetATStuff Highlights

The Assistive Technology Exchange in New England is now the Assistive Technology Exchange in New England AND New York! GetATStuff has welcomed New York as a new state partner which means access to more equipment from and for more people! GetATStuff is the "Craig's List" for AT. Currently there are hundreds of items posted as for sale or free.

As of this writing, GetATStuff highlights include:

- 8 Vision-related items, including a Perkins Brailler for $200 in Portland, ME.
- 2 Hearing-related items, including a RF Stereo TV Listening System for Free in Salem, NH.
- 3 Speech Communication-related items, including Dynavox V - AAC Device for Free in Bristol CT.
- 4 Learning, Cognitive, Development related items, including protective helmets for Free in Winooski, VT.
- 92 Mobility, Seating, and Positioning related items, including an Invacare Jazzy for Free in Amherst, MA.
- 102 Daily Living related items, including a twin-size semi-electric bed and Get-U-Up lift for $1,000 OBO in Granby, MA.
- 33 Environmental Adaptation related items, including an Acorn stair lift for Best Offer in Sudbury, MA.
- 7 Transportation and Vehicle Modification related items, including a 2003 GMC Savana 15-passenger van with Rifton lift for $10,000 OBO in Williamstown, MA.
- 3 Computer-related items, including a Footime foot mouse with programmable peddle for $99 OBO in Rochester, NH.

Go to GetATStuff (http://www.getatstuff.com) to search items by category or geography or to list what you need. Looking for a wheelchair? Scooter? Rollator? Or other gently-used durable medical equipment? Be sure to check out REquipment (http://www.dmerequipment.org/) !

Learn about additional AT reuse sites (../../find_at/at_swap_shop.php) .

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