What's H*APP*ening at UofA When It Comes to iPad *APPs*

L. Penny Rosenblum

Nineteen teachers attended a September 19 and 20 iPad workshop held at FBC. The workshop was part of the *AnimalWatch Vi Suite* project (www.awvis.org) which is a 3-year research grant awarded to Dr. Jane Erin and Dr. Carole Beal. Dr. L. Penny Rosenblum is the Project Director and organized the workshop that brought Diane Brauner and Ed Summers, both from North Carolina, to the Grand Canyon state for two days of hands-on training. After the workshop, Bonnie Steinberg at TVI for Scottsdale Unified, shared " It's no wonder I have been so ambivalent about the iPad.....in my ignorance it was like I was trying to bake a cake with only half the ingredients." Brauner and Summers demonstrated to all in attendance the power of the iPad for our students through their interactive, hands-on and patient presentation style.

Later this fall the 20 teachers, who are part of the project's feasibility study, will meet virtually with Brauner and Summers three times and then all will come back together in Phoenix on January 10 where the teachers will learn more advanced skills and receive the *AnimalWatch Vi Suite* app and booklets of accompanying graphics for their students to use.

The app, being developed at UofA, assists youth with visual impairments in grades 5-9 in building their math competence as they solve word problems about endangered species such as the black rhino, polar bear, and cheetah. The iPad has some phenomenal built-in accessibility features and the ability to pair with a Bluetooth QWERTY keyboard or braille display. In states such as North Carolina, many youth with visual impairment are using this technology in the general education classroom to fully access and participate in the curriculum. The UofA team wants to afford youth in Arizona with this same opportunity while at the same time evaluating the feasibility of our iPad app in helping youth be more successful in pre-algebra math skills and interpreting information presented in graphics.

Picture above: A combination approach when using the iPad is a good thing. Tapping on occasion on the screen coupled with the navigation the Bluetooth keyboard arrow keys affords makes for quick and easy access. (Elizabeth Guzman, Shelly Klennert, Bonnie Steinberg on edge of photo)

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Twenty teachers and more than 30 students have consented to be part of our feasibility study that will begin after the January 10 training. This fall the teachers from around the state will build their own iPad skills in tandem with their students. Brauner and Summers have done more than 20 iPad workshops around the country. The curriculum they have developed not only teaches the accessibility features of iOS devices including VoiceOver and Zoom, it also gives professionals the tools to infuse the iPad into the academic life of the student by enabling them to use apps such as Dropbox to access class assignments, complete them on the iPad and return them to the general education teacher for grading.

Another app, JoinMe, enables youth with low vision to view the teacher's computer or Smart Board presentation on their iPad where they can take screen shots and save for later review and annotation. The iPad's built-in camera can serve as both a near and distance magnification device.

Brauner noted that compared to the cost of JAWs and a laptop, the iPad with its built-in accessibility software is inexpensive. This coupled with the "cool factor" makes this tool a "want to use" for youth compared to some tools that make our youth "stand out" and therefore resistant to using them. Apps like Bookshare's Read2Go give youth access to literally thousands of titles that they can read in a variety of formats while simultaneously taking notes on the same device.
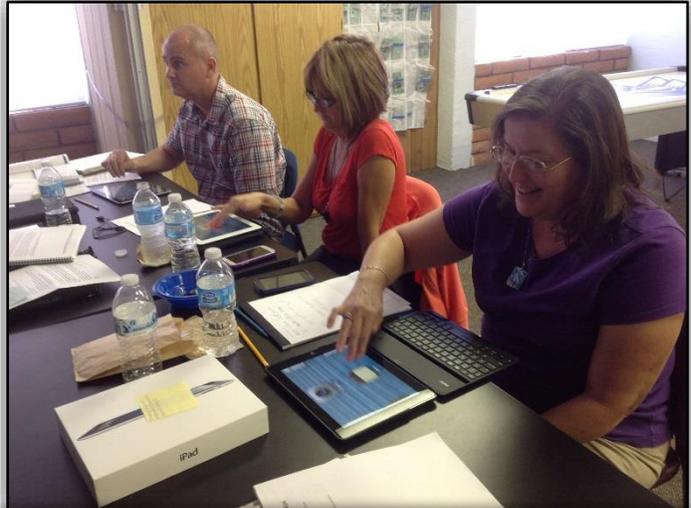
TVIs from Gilbert Public Schools find out that "bigger" isn't always efficient for those with low vision. Participants were asked to zoom their screen to the max and then use the on-line keyboard to write their name in Notes. This is not easy nor efficient! (Nancy Shepard, Cheryl Gorman and Steve Held)

Stephen Goudinoff from Tucson Unified School District was jazzed about the commands he learned for the Bluetooth keyboard when using VoiceOver. A blind user can have full navigation with this powerful combination.

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This project truly is a statewide collaborative effort. Not only have the teachers, students, their districts, and ASDB joined us, AZAER and Desert Low Vision have provided support. Dr. Jane Erin was awarded a mini-grant from AZAER that provided snacks and lunches on both days of the fall workshop. Several teachers also won iTunes cards courtesy of a donation from Desert Low Vision.

During this academic year the UofA is loaning iPads and Bluetooth keyboards to participating teachers. The changes Rosenblum, Beal, Brauner and Summers observed in the participating teachers in the two days of training were phenomenal. As Caroline Dingwell, a TVI from Paradise Valley (pictured right) said, "My mind is spinning on how I can infuse this knowledge into real life for my students."

To keep up with what the *AnimalWatch Vi Suite* project team is doing, come to our session at the November AZAER conference, visit our web site at www.awvis.org, and/or like us on Facebook.

Diane Brauner and Ed Summers the trainers for this workshop encouraged an environment where participants could problem solve and talk to their neighbor to share ideas. (Dana Powell & Caroline Dingwell)

UAbacus

Many of you have taken the UofA's Braille 2 course where one of many skills you learn is computation with a Cranmer abacus. In 2011 Penny Rosenblum went to UofA's Office of Instruction and Assessment with an idea to create an on-line abacus that would give students feedback as they practice their abacus computation. That idea morphed into an iPad app, UAbacus, now available for free download from the App Store. Not only does the app help those in university courses, it has applicability to general ed. teachers, paraprofessionals, and parents who are supporting children doing abacus computation as they can see the steps an abacus user needs to complete to compute a problem using the logic method. Download the app and give it a try! Feedback would be most appreciated so send it to rosenblu@u.arizona.edu and don't forget to rate the app and write a review in the App Store.