

Technology Supported Literacy:

Students in an Inclusion Program E-mail, Blog, and Twitter

By Barbara Wollak

"Can I check my e-mail one more time, just in case my pen pal has written?" "Is it my turn to create a blog post?" These are examples of questions asked on a daily basis by students in the Inclusion Program at Highland Park Junior High, which is part of the Saint Paul (Minnesota) Public Schools. Students with the educational label of developmental cognitive disability, autism, other health impaired and/or physically impaired, all of whom are struggling readers and writers, are asking for opportunities to read and write using various technologies. Many of these students came to Highland with limited reading and writing skills.

Literacy can be defined simply as "reading and writing," the cognitive processes of comprehending and composing meaning in written text (Koppenhaver & Erickson, 2009). Not only do today's students need to learn to read and write with conventional texts and tools, they need skills to comprehend and compose on the World Wide Web. Due to technologies from social networking sites to blogs, the nature of literacy is changing. Borsheim, Mettitt, & Reed (2008) state, "Teachers who apply these technologies in their classrooms do more than motivate students with the latest cool tool; they prepare students with multiliteracies and for the realities of the technological world." Koppenhaver and Erickson (2007) stress the importance of motivation for struggling readers, as well as the importance of creating authentic purposes for reading and writing. Not only is the use of technology motivating and socially appropriate, it is giving Highland Park students real purposes for reading and writing and preparing these students for the 21st century.

For the past eight years, students in the Inclusion Program have been paired as e-mail pen pals with Dr. David Koppenhaver's undergraduate and graduate teacher education students at Appalachian State University (ASU) in North Carolina. Highland students use the free version of Gaggle e-mail (gaggle.net). Gaggle offers a free e-mail service for teachers that contains advertisement, as well as a subscription "ad free" service. Gaggle has built-in speech support for reading e-mails. Highland students attach Co:Writer

6 when they are composing e-mails to give them spelling and grammar support (www.donjohnston.com/products/cowriter/pricing_funding.html). Co:Writer 6 can be attached to anything on the computer that requires writing. Custom dictionaries are created that contain each e-pal's frequently

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used words as an additional support. An advantage of using this e-mail program is that the e-mail administrator can easily check and access all the students' e-mail, from one screen, to monitor frequency and content of the writing. Messages that contain question-

able words or content are blocked by Gaggle but can be unblocked by the administrator.

Highland students are taught that e-mail is like a conversation. Students learn to begin each e-mail with a greeting, answer their e-pal's questions, ask a new question, and end with a closing. All e-mails are printed out for repeated readings and are then sent home. Comments, such as "Do you want to hear what MY pen pal had to say?" are often heard. Parents often report that at home, the printed e-mail is the first thing out of the backpack.

University students learn first-hand about the life and abilities of teens with disabilities as they provide a real audience and good written language models for the Highland students. The pre-service teachers are told to get to know their e-pals as individuals first, and that they will learn about each e-pal's disability later in the semester. As the semester progresses, students exchange digital pictures and video e-mails (eyejott.com), as well as free online greeting cards to celebrate an e-pal's birthday or even Ground Hog's Day.

E-mail is a tool that "levels the playing field." The Highland students are struggling writers and it may take a student 30 minutes to compose a simple e-mail. Unlike conversations, when a communication partner may become frustrated when someone using an augmentative communicate device (AAC) takes a long time to compose a message,



E-pals exchange electronic greeting cards.



Virtual Authors, www.hpjh.blogspot.com.

time is not a factor when writing an e-mail. One college e-pal was surprised to learn through the video e-mail that her e-pal was deaf. Deafness had never been part of any of their e-mail exchanges, only conversations about family, friends and favorite activities. Another college e-pal learned that her pen pal was nonverbal and used an AAC device connected to the computer to write.

During literacy group, Highland students read books about North Carolina to give them background knowledge about where their e-pals live. The Highland e-pals, in fact, know more about North Carolina than any other state, other than Minnesota. ASU students learn about the Mall of America and that Minnesota does not have mountains! When the Highland students heard that a hurricane "hit" North Carolina, they immediately were concerned about their e-pals' safety.

At the end of the semester, Highland and ASU students create an online book for each other. Often, the text structure of a book is used as a model. *Courage* by Bernard Waber, which makes "Courage is..." statements, was used as the text structure for "A Pen Pal ..." (www.voicethread.com/#u7667.b92455.i470249). Students wrote text in PowerPoint and imported pictures of themselves and their e-pals to the PowerPoint presentation. The PowerPoint was uploaded into Voicethread and students read the text they had written through the video comment feature of Voicethread. Students asked to re-record their reading of the text multiple times. If these students had been asked by staff to re-read the text they had written, many would have protested, but because of the motivation to create a high quality book for their e-pal friends, the repeated readings were student directed. Repeated readings of

text is important for developing fluency and automatic word recognition (Koppenhaver & Erickson, 2007). Examples of what was written include "A pen pal is someone who is there for you even when you don't have anyone to talk to." and, "A pen pal is cool to have. A pen pal is someone you don't know at first but someone who becomes your friend." Beyond the opportunities for reading and writing, the social aspects of the friendships that have developed have been important to the Highland students. One Highland student asked, "Can I write to my pen pal? I'm having a bad day and I know my pen pal will listen." Students know that their e-pal relationship only lasts for a semester. As soon as a semester ends, students start asking, "How long will it be until I get a new pen pal?"

ASU students also comment on Virtual Authors (hpjh.blogspot.com) created with blogger.com. This is a blog with the purpose of providing additional opportunities for students to read, write, and communicate. Many Highland e-pals come to 7th grade with difficulty answering question that include "why." Examples of blog questions include "What is your favorite winter activity? Why?" Blog questions also reinforce skills necessary for reading comprehension, such as making predictions and compare/contrast (e.g., Make a prediction. When we will get our first four inches of snow?" and "How are you and your e-pal the same? How are you different?") Questions generally are related to a current event, a topic about which the students have been reading, or a question of interest to a student or students. Students take turns helping to create the blog posts. Students create slideshows using free technologies that are embedded into the blog and that can be used to "activate background knowledge" for

the week's question. All of the technologies that are used are free and ones that can be embedded into Virtual Authors. Parents are all informed about the project and give permission to have their son's or daughter's picture posted on the blog. Only first names are used. ASU students, Highland teachers, and parents are encouraged to make comments on each blog post, providing Highland students with good language models.

In order to prevent issues with copyright, pictures for the below mentioned sites are all taken from flickr.com/creative commons www.flickr.com/creativecommons

SITES THAT ARE USED TO CREATE SLIDESHOWS AND EMBEDDED INTO VIRTUAL AUTHORS

Animoto (www.animoto.com) – This site allows the user to create 30-second video slideshows consisting of text and pictures. The user can upload a music file or use Animoto's free music. The site then uses a computer to synchronize the pictures and text with the music.

Photshow (www.photoshow.com/home/start) – This site allows the user to create a multimedia slideshow. Upload pictures and choose a theme. Music, captions and speech bubbles can be added. The free version is only "active" for 30 days.

Slide (www.slide.com) – This site allows the user to create a multimedia slideshow. The user selects a design and adds photos. Music, captions and special effects can also be added.

Smilebox (www.smilebox.com) – This site is sponsored by Hallmark. Add photos, videos, music and text to create an electronic greeting card slideshow.

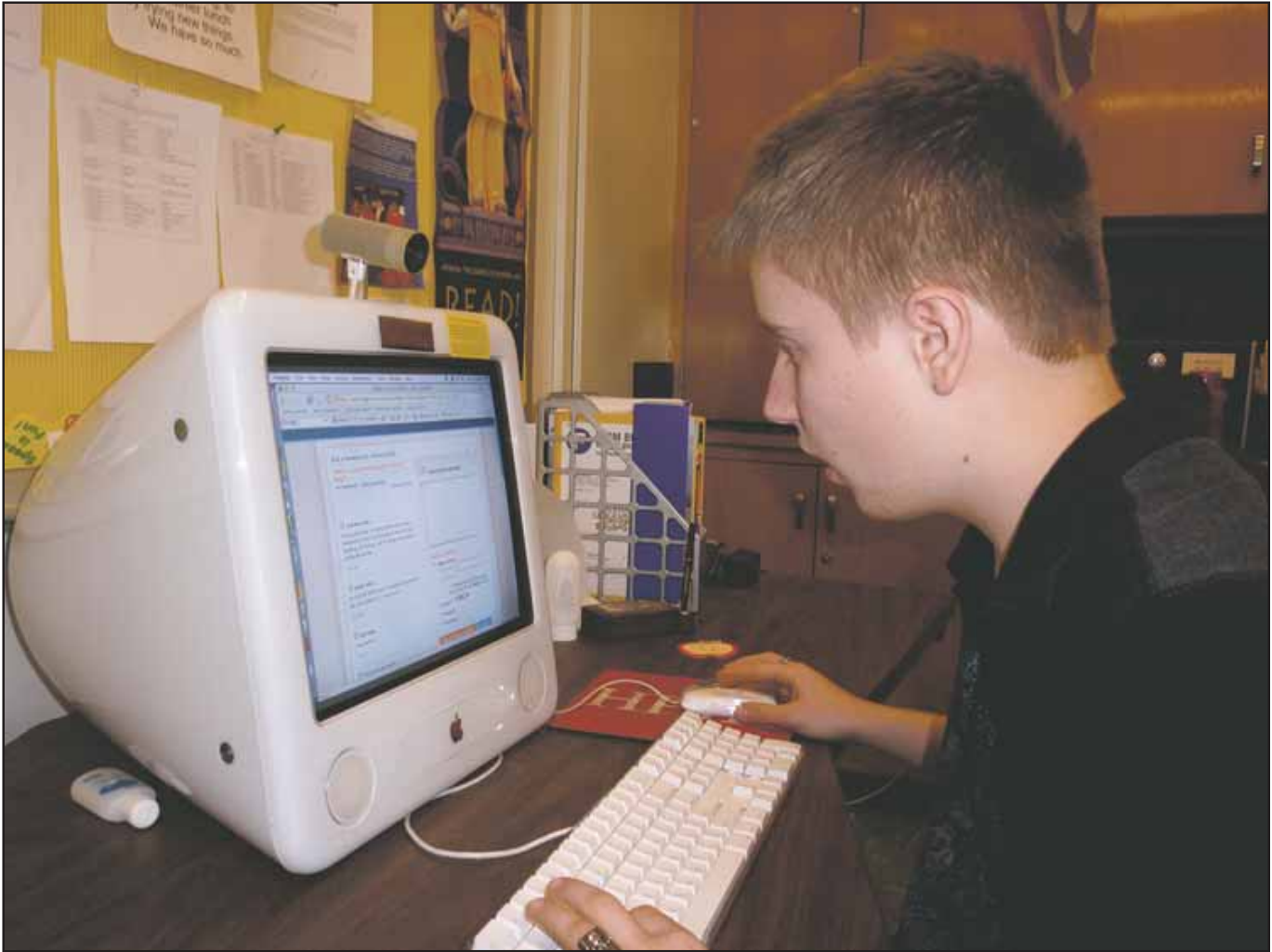
Voicethread (www.voicethread.com/pricing/k12) – Voicethread is an award-winning site for digital storytelling. It allows the user to create a multimedia slide show that contains images, documents and videos and allows people to navigate pages and leave comments by using voice (with a microphone or telephone), text or video (via a webcam).

OTHER EMBEDDED SITES

Funface (www.funfacecam.com/fun) – Funface is an online photo booth that allows the user to capture funny portraits in "virtual costumes." The Highland e-pals used this application to create a post about Halloween.

Gabcast (www.gabcast.com/index.php) – Gabcast is a site that allows the user to create a podcast using a telephone.

Jibjab (www.sendables.jibjab.com) – Jibjab offers some free templates that allow students to upload their own photos into scenes like a snowball fight or an elf dance.



Dustin is reading what's on the blog before making his own comment.

AIM widgit (www.wimzi.aim.com) – AIM provides the ability to chat with anyone who is on the blog via instant messaging. It's not necessary to be an AIM user to use this feature.

Yackpack (www.yackpack.com/walkie-talkie) – Yackpack provides online chatting, like a walkie-talkie, between people who are online on the blog at the same time.

Statcounter (www.statcounter.com) – Statcounter is a free application that has been added to Virtual Authors. It allows teachers to connect the blog to math and geography. Students can study various graphs about number of visitors to the blog and even see a map of where each visitor lives.

vozMe (www.vozme.com/index.php?lang=en) – VozMe is a widget that will read any text and can convert that text to an mp3 file.

Highland students also have Twitter accounts, due to a suggestion by Dr. Koppenhaver. The Highland students and teachers in

the Inclusion Program all “follow” each other’s tweets. Students’ tweets are protected so that any potential follower needs to gain permission before following a student. Because tweets are a maximum of 240 characters, the writing task is not overwhelming for students who find writing difficult. Co:Writer is also attached when a student writes a tweet. Many students also choose to follow groups like the Minnesota Wild or the Minnesota Vikings. These students are very motivated to make meaning out of the text from these tweets they receive.

The Internet is ever changing. New sites appear on a daily basis. It can be overwhelming for teachers to keep up with all the new sites and technologies. The benefits, however, are huge. Technologies that are motivating and socially appropriate can be used to help improve students’ reading, writing and communication skills, as well as teaching them to be active participants in today’s technology driven world.

REFERENCES

Borsheim, C., Merritt, K, & Reed, D. (2008). Beyond Technology for Technology’s Sake: Advancing Multiliteracies in the Twenty-First Century. *The Clearing House*, 88-90.

Koppenhaver, D. & Erickson, K (2007). Literacy Camp at Camp Courage. Maple Lake, Minnesota.

Koppenhaver, D. & Erickson, K. (2009). Literacy in Individuals with ASDs Who Use AAC. In D. Beukelman & J. Reichle (Series Eds.) & P. Mirinda & T. Iacono (Vol. Eds.), *Autism Spectrum Disorders and AAC* (pp.385-412). Baltimore: PaulH. Brookes Publishing Co.

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