Your School Librarian: A Powerful Technology Partner

SUMMARY

With knowledge of integrating technology into the curriculum, school librarians are a valuable resource for all classroom teachers. Collaborating with them can pay off in higher student achievement in a variety of subjects, as teachers in this school district will attest.

Toss away the image of the librarian of old and investigate today's school librarian as a dynamic, collaborative teaching partner! Explore the possibilities of curriculum that is planned in partnership between the school librarian and classroom teacher. Today's librarians are experts in integrating appropriate technology across all curriculum areas to teach students the skills they need to succeed in the 21st century.

Collaboration among faculty members is the cornerstone of effective school programs — and key to the development of 21st-century skills of our students. Yet developing collaborative partnerships can be challenging. In this era of high-stakes testing, teachers often perceive time in the school library as an "add-on," rather than a core component of an instructional program. In this article, our successes with collaboration will be shared, as well as the frameworks and research that inform our mutual understanding of which skills matter and how to approach instruction.

What Informs our Work

The development of 21st-century skills is guided by standards from the International Society for Technology in Education's *National Educational Technology Standards for Students (ISTE, 2007), The New York State Crosswalk* ("An ISTE Crosswalk," 2008), and the American Association of School Librarians (AASL) *Standards for the 21st Century Learner* (2007). Whether students meet these standards is influenced by the quality of our collaboration as well as the theories of learning that are embraced by team members in our schools. Our work is greatly influenced by constructivist learning theory, which is grounded in the premise that learners create their own knowledge by building upon prior knowledge. Dewey (1910-91) perceived learning

Donna G. Baratta is a library media specialist at Mildred E. Strang Middle School in Yorktown Heights, Westchester County.

Donna G. Baratta, Yorktown Congress of Teachers

to be an active process in which knowledge is created by the learner through authentic activity in a meaningful context. Vygotsky (1978) built upon the social aspect of the theory, believing that learners gain knowledge through cultural experiences and interaction with more capable others such as teachers and peers. These theories provide the perfect foundation for designing activities that are student-focused, draw on higher order thinking skills, and involve collaborative learning.

Moving from Theory to Instructional Design — as Partners

We know that students benefit from school libraries and librarians. Todd, Kuhlthau, and the Ohio Educational Library Media Association (2004) conducted the *Student Learning through Ohio School Libraries: The Ohio Research Study* which examined how students benefit, and sought to calculate the school library's relationship to student learning. Data were gathered from 13,000 students, nearly all of whom indicated that the school library, its services and school librarians helped them with their learning.

Classroom teachers also benefit from this partnership since technology integration is a significant aspect of a school librarian's professional preparation. Librarians can work with classroom teachers who are just beginning to use new technologies — as well as those with advanced skills. LaBanca (2009) developed a schema that enables educators to identify three levels of technology integration. The first level, **retrofitting**, is when the teacher presents information in the same way, whether using traditional tools such as a chalkboard or overhead, or technology such as a computer. The second level, **retooling**, is when the teacher provides options with access to new items, like adding hyperlinks to a presentation that enable students to participate in a virtual tour of a museum. The third level, **reconfiguring**, changes the role of students from consumers of information to producers of information. This level typically involves Web 2.0 for a bidirectional flow of information and feedback between students and local or global communities. Librarians and teachers — as teammates — can navigate through these phases of integration. This navigation

> Classroom teachers also benefit from this partnership since technology integration is a significant aspect of a school librarian's professional preparation.

Your School Librarian: A Powerful Technology Partner

Librarians can work with classroom teachers who are just beginning to use new technologies — as well as those with advanced skills.

can result in challenging inquiry- and project-based activities that immerse students in curriculum topics. Projects embed 21st-century skills in context, rather than teaching them in isolation. Students learn to take charge of their own learning as they develop essential questions, evaluate and use information, create knowledge, and communicate results. They are prepared not only for the test; they also learn skills they can apply for life.

What follows are just a few of the ways our collaboration in building 21st-century skills has been successful.

■ **Drawing on Students' Interest in Comics and Other Graphics** —In my role as school librarian, I teamed with eighth-grade English teachers to develop a book review comic project as an option to the traditional five-paragraph essay. This project is designed to use a comic to represent, interpret, and evaluate a work of literature. *Comic Life* (Plasq, 2010), an inexpensive software application, was used. Free comic applications such as *MakeBeliefsComix.com* (Guarionex Press Ltd., 2010), and *Myths and Legends* (E2BN, 2006) are also available online. We collaboratively prepared students for the book review comics. We reviewed essential project components, editing checklists, and project rubrics.

In addition, I provided instruction on software usage, image resources, and ethical use. Students chose essential elements for their book review comics based on either a timeline for non-fiction books or a plot diagram for fiction books.

Students were immediately engaged in the project. It was fascinating to watch them select graphics to represent key elements and concepts of the books they had read. Graphics were effectively used to convey ideas with carefully written, succinct explanations and, in some cases, dialogue between characters. Overall, students successfully used higher order thinking skills to synthesize information and apply it appropriately in a graphic representation.

Classroom teachers commented on the comic format as having encouraged students who do not typically participate in class to find their voice through the comic format. Upon reflection, eighth-grade English teacher Ginger McElduff wrote: "Initially, the idea of using a comic to represent, interpret, or evaluate a work of literature seemed to be a fun and simple exercise. However, representing the literature through graphics and limited text was in reality demanding, but quite rewarding." We

were pleasantly surprised with the students' enthusiastic responses to this project. The quality of the work overall was extremely thoughtful and impressive. Theresa Carey, eighth-grade English teacher, said: "This project was a great success. The students' interest in reading and technology grew, and they developed a new love of creativity in the classroom that continued through the school year and will take with them into their future education endeavors." Digital storytelling through comics brought fresh perspective to social studies students. Seventh-grade students reported news from the Revolutionary War. Their teacher, Sean Carney, notes: "By creating comics, students got an inside view of what was happening at places like Valley Forge, Lexington and Concord, Bunker Hill, and more. They loved the different outlet of writing as it allowed them to think outside the box and create something different from anything they had done in the past."

Eighth-grade students synthesized and presented the key elements of significant events of World War II. Their social studies teacher, David Marr, believes the project "increased the students' motivation to describe, illustrate, and provide commentary on historical events.

This added motivation was the catalyst to a very successful week of research, analysis, and creativity."

Using a free online site, *MyAvatarEditor.com* (2010), students with learning challenges enjoyed collaborating on an original superhero comic strip in which they created individual characters graphically represented by avatars resembling those found in popular video games. Students transformed their comics into enhanced podcasts, which included comic graphics and images to illustrate their audio superhero stories. This type of multimodal digital storytelling enabled students to create, collaborate, and communicate their work. Special Education teacher Mario D'Auria, already thinking about his next project, stated: "Comics and podcasting do indeed have a learning curve initially, but once students and teachers embrace the technology, it becomes an integral part of the learning process."

■ **Podcasting** — Podcasts are files that can be released by the author, downloaded by others and stored on a computer or other device such as an MP3 player. An enhanced podcast is a file that contains audio and can also display images, video and hyperlinks. Enhanced podcasts

continued on following page

> Students learn to take charge of their own learning as they develop essential questions, evaluate and use information, create knowledge, and communicate results. They are prepared not only for the test, they also learn skills they can apply for life.

Your School Librarian: A Powerful Technology Partner

Research studies in more than 16 states have demonstrated that school library programs, when staffed by qualified school librarians, have a positive impact on student academic achievement.

have been developed by students in grades 6-8 across curriculum areas. Classic book podcasts make literature come alive as reporters enrolled in reading, speech, and language classes selected events, wrote scripts, chose graphics and audio, and verbally communicated their favorite scenes to the local and global audience. Laurie Kalinoski, speech/language pathologist, explained, "Working alongside our school's library media specialist has proven to be an invaluable experience for my students as well as myself. She has taken me from being technologically challenged to technologically capable! I am excited to share my new knowledge in the classroom with my special education students, who in turn have learned to incorporate this new multisensory resource into their academic lives."

Sixth-graders in Deborah Potter's social studies class reported news from Ancient Egypt featuring topics related to daily life; Michelle Manicchio's English class students drew illustrations for original works of poetry and shared them with the global community using enhanced podcasts posted on the district website.

■ **Wikis, Whiteboards and Tablets**
Wikis (websites containing the collective work of many authors),

interactive whiteboards (connected to an LCD projector and allowing touch control of computer applications) and *wireless slates* (interact with the whiteboard by touching electronic pen to screen from any location in the library) allow students to collaborate on topics relating to school, career, and future planning. These topics are based on the Career Development and Occupational Studies (CDOS) learning standards. The Life Explorers program, developed in collaboration with guidance counselor Paula Ward, provided enrichment during lunch periods. Students explored goals and dreams using Wordle word clouds (Feinberg, 2009), examined character strengths in the creation of digital person-of-the-year posters, and developed solutions to communication problems through comics.

Our Experience Confirms What Research Tells Us

Research studies in more than 16 states have demonstrated that school library programs, when staffed by qualified school librarians, have a positive impact on student academic achievement (Scholastic Library Publishing, 2008). One of the most significant studies is *How School Libraries Help Kids Achieve Standards: The Second Colorado Study* by Lance, Rodney, and

Hamilton-Pennell (2000). The study examined the Colorado Student Assessment Program reading scores and revealed increased reading scores correlated to increases in library program development, information technology, teacher/library media specialist collaboration and individual visits to the library media center. A central finding of the study was the importance of collaboration in teaching information literacy skills and the related increase in test scores. Increases in student achievement were also realized when the librarian trained teachers, keeping them abreast of new information resources (Scholastic Library Publishing, 2008).

The 21st century brings rapid change and opportunities never before seen in education. Working together as collaborative partners, we can be the transformational agents of change who provide opportunities for the development of skills and meaningful learning that will positively impact our students now and in the years to come.

REFERENCES

American Association of School Librarians. (2007). *Standards for the 21st-century learner* [Pamphlet]. Chicago: American Library Association.

An ISTE crosswalk by six major categories. (2008, March). Retrieved August 26, 2010, from http://www.emsc.nysed.gov/technology/initiatives/Crosswalk_of_ISTE_NYS.doc

Dewey, J. (1991). *How we think.* NY: Prometheus. (Original work published 1910)

E2BN. (2006). *Myths and legends* [Online application]. Retrieved from http://myths.e2bn.org/index.php

Feinberg, J. (2009). Wordle [Online application]. Retrieved from http://www.wordle.net/

Guarionex Press Ltd. (2010). MakeBeliefsComix [Online application]. Retrieved from http://www.makebeliefscomix.com/Comix/

International Society for Technology in Education. (2007). *National education technology standards for students 2007.* Retrieved August 26, 2010, from http://www.iste.org/Content/NavigationMenu/NETS/ForStudents/2007Standards/NETS_for_Students_2007.htm

LaBanca, F. (2009, August 26). *In search of scientific creativity.* [Web log post]. Retrieved from http://problemfinding.labanca.net/?p=148

Lance, K. C., Rodney, M. J., & Hamilton-Pennell, C. (2000). *How school librarians help kids achieve standards: The second Colorado study.* Retrieved August 26, 2010, from High Willow Research and Publishing Website: http://www.lrs.org/documents/lmcstudies/CO/CO2brochure.pdf

MyAvatarEditor (2010). [Online application]. Retrieved from http://www.myavatareditor.com/

Scholastic Library Publishing. (2008). *School libraries work!* Retrieved August 26, 2010, from Scholastic Library Publishing Website: http://www2.scholastic.com/content/collateral_resources/pdf/s/slw3_2008.pdf

Todd, R. J., Kuhlthau, C. C., & OELMA. (2004). *Student learning through Ohio school libraries: The Ohio research study.* Retrieved August 26, 2010, from Ohio Educational Library Media Association Web site: http://www.oelma.org/StudentLearning/documents/OELMAResearchStudy8page.pdf

Plasq. (2010). Comic Life (Version 1.3) [Computer software]. Retrieved from http://plasq.com/comiclife-win

Vygotsky, L. S. (1978). *Mind in society.* Cambridge, MA: Harvard University.