The gaming web site led me to a blog where I found out about the book. I watched the book trailer, read the e-book on my iPhone, and shared a review on my GoodReads virtual book club. The book’s clues led me to a virtual world where I could develop my own character. I love to read.

Graphic novels are merging with digital storytelling and students are extending their reading experiences to gaming and virtual worlds. Innovative teacher-librarians are seeking ways to immerse young readers and writers in a transmedia world of information where divergent resources like web sites, books, audio, and video converge.

Emerging tools allow young people to easily access information in many forms. In part one of this series, we will explore these diverse resources and examine how combining old and new materials can create synergy in your school library.

**DIVERGENT CONVERGENCE**

As we enter a new decade, it is time to think beyond convention: to explore new possibilities, to consider innovative ways to synthesize ideas, to invent new ways to think about the teaching and learning process, and to design engaging opportunities for young people to learn and express their understandings.

As we consider the future of libraries and learning, we need both divergent and convergent thinking.
schooltube.com, and creates a presentation at Google Docs, docs.google.com.

Convergent thinking involves putting many different ideas together into a single solution that is effective, efficient, and appealing. The focus is on speed, logic, and application of information.

Through interlinking and connectivity of technologies, many ideas and approaches can more easily be shared and accessed making collaborating and using many tools at once more realistic. A student can easily read a book, watch a video, try a simulation, and discuss all at the same time through one or many devices.

For instance, the teacher-librarian uses tools such as VoiceThread, voicethread.com, to build a cohesive learning experience infusing text, images, video, and web site materials to motivate and engage. Students then interact and add their comments to the project. Teachers and students synthesize ideas, contribute to the crowd of online users, collaborate with the cloud of virtual resources, and create synergy through these experiences.

DIVERGENT RESOURCES: CROSS-GENRE, MULTI-PLATFORM, TRANSMEDIA WORLDS

No longer do people read in isolation. In Fluid Environments for Life-Long Learning: Cross-Genre, Multi-platform, Transmedia Worlds, Lamb (2010) states that today's students seamlessly flow from one form of communication to another. They may read a book, explore more about the topic online, and discuss their thoughts on a social network. The process may include e-book readers, mobile phones, computers, and gaming systems that are connected.

Cross-genre materials are a blending of themes from two or more genres such as romance and comedy becoming romance comedy. Increasingly these hybrids are becoming more complex such as "weird west" combining horror, science fiction, speculative fiction, and steampunk. Some authors are combining fiction with a news format for a fictional newspaper experience.

Multi-platform materials cross media types such as books, movies, music, and

WEB SITES

MICROBES

FOR EDUCATORS:

Intimate Strangers: Unseen Life on Earth. www.pbs.org/opb/intimatestrangers. This site provides an in-depth look at the critical role of microbes in sustaining life. Classroom resources include lesson plans for K-12, with a focus on secondary students.

Microbe world. www.microbeworld.org. Latest microbe news, pictures, and video, neatly organized and searchable. No teacher resources, but plenty of current news items and inspiration, including "virology art"—dollies based on the structure of various viruses, found under the images tab.

NCDaCS—Kid's World—Food Safety—Bad Bug Book. www.ncagr.gov/cyber/kidsworld/foodsafe/badbug/Badbug.htm. This condensed version of the FDA's Bad Bug Book gives a simplified overview of bacteria common in food, such as salmonella and E. coli. Each entry describes the illness and gives prevention tips.

The page is maintained by the North Carolina Department of Agriculture and Consumer Services.

Science NetLinks: Lesson Plan Index. www.sciencenetlinks.com/matrix.php. Links to a wealth of science lessons are available, including two on microbes for grades 6-8, and germs and antibiotics for younger grades. Each lesson includes e-sheets for students and occasionally online games.

WGBH American experience—Influenza 1918. www.pbs.org/wgbh/americanexperience/influenza. Online video includes extensive photographs and interviews with people who were children during the 1918 influenza epidemic. Web site includes transcript, story highlights, photo gallery with captions, and teacher's resources.
video games that share the same content but can be accessed on different devices or operating systems, while multimedia combines text, still images, animation, audio, and video. Hypermedia is non-linear access to these resources.

The book \\textit{Nabs} is a true story about a dog and a Marine in Iraq. The publisher web site, \texttt{hachettebookgroup.com/features/storyofnubs}, includes facts about the story, a book trailer, photo gallery, and a review of the locations in the story. Use this book to start an exploration of animal and journey stories. Think about ways you could create your own story with multi-platform, multimedia features.

When genre hybrids are merged with the varied media types, transmedia worlds begin to emerge. Transmedia storytelling immerses participants in an experience with many entry points that cross media types. Users may even become part of the narrative. The technologies are woven together to create synergy and new ways of thinking about storytelling, information exploration, and virtual worlds.

\textbf{Skeleton Creek}, \texttt{scholastic.com/skeletoncreek}, by Patrick Carman is a great example of a transmedia storytelling experience. Designed for preteens, the story is written in journal form by a boy recovering from an accident. While writing in his journal, Ryan receives email communications from his friend Sarah who posts video clips at her web site. The video clips, \texttt{http://www.sarahfincher.com}, are woven throughout the reading experience and are accessed by entering the passwords found throughout the book. The web site also contains hidden content that can be accessed by clicking on different areas of an image.

\section*{BEYOND THE BOOK WITH TRANMEDIA STORYTELLING}

New technologies and emerging approaches will expand our thinking about the reading experience. For instance, \textit{The 39 Clues}, the39clues.com, is a popular series of books by Scholastic. The adventure books contain fictional characters, but connect to famous people from history. Cards that accompany the books are used to gain access to online content. The web site materials include missions, activities, and fictional materials. Participants play online games and collect clues to solve a mystery as they read the books. Social technology also plays a role as young people discuss the books, games, and strategies.

A broad spectrum of technologies is woven into this new world of publishing including iPods, iPhones, Playaways, and e-readers such as the iPad, Nook, and Kindle.

\textbf{Multi-format Options}. At the most basic level, works are adapted for different formats. Ray Bradbury’s \textit{Fahrenheit 451, us.macmillan.com/raybradburysfaren-
Fahrenheit 451 is available as a graphic novel that can also be downloaded to an iPhone. Get students involved in writing for multiple formats. For instance, ask students to write a 140-character short story to be posted on Twitter or create a cell phone video.

Document-Book Connections. An increasing number of books are being bundled with supplemental materials. David McCullough's 1776, The Illustrated Edition provides 130 illustrations with an abridged version of the text. In addition, 37 facsimile documents are scattered throughout the book in pouches.

Written for a young adult audience, Cathy's Book: If Found Call 650-266-8233 (2006), cathysbook.com, Cathy's Key: If Found Call 650-266-8233 (2008), cathyskey.com, and Cathy's Ring: If Found Call 650-266-8233, cathysring.com, by Sean Stewart and Jordan Weisman include an evidence packet along with a web site for each book. A web resource called DoubleTalkWireless, doubletalkwireless.com, is also available for fans that wish to discuss the book. The fictional character Cathy has Facebook, Flickr, and YouTube accounts you can visit. There's even an iPhone App. Although the books can stand alone, readers can also immerse themselves in the world of a fictional character through social technologies.

written for the mature teen and adult audience, Personal Effect: Dark Art (2009), jhutchins.net/site/personal-effects, by J.C. Hutchins and Jordan Weisman introduces an interesting multi-format approach to mystery reading. In addition to the text, the book provides a packet of materials along with supplemental web site materials. These elements bring an additional dimension to the story and characters. Readers can explore the Brinkvale Psychiatric Hospital, brinkvalepsychiatric.com, to learn more about the staff of the fictional hospital and see samples of the fictional patient artwork. The main character, Zach Taylor, has a Myspace page, myspace.com/arttotherescue. Participants can also check out the work of Zach's girlfriend, www.pixelvixen707.com. Readers can even explore news clips from a fictional newspaper, The New York Journal Ledger, newyorkjournalledger.com. Finally, readers who wish to become even more engaged can "get committed", jhutchins.net/site/the-brink, by participating in specific online activities.

Illustration-Book Connections. From graphic novels to illustrated novels, books are increasingly incorporating visual elements into the text experience. Told through the eyes of a twelve-year-old boy, The Selected Works of T.S. Spivet by Reif Larson (2010), is a wonderful example of imaginative writing combined with an innovative presentation style. While not designed specifically for young people, the book would be of interest to high ability middle school and high school readers. What makes the novel unique is the author's use of illustrations and side notes in the margins as well as a web site, tsispivet.com, to extend the reading experience.

Audio-Book Connections. Books and music are often connected. The John Denver series of books based on songs is one example. Recently, Peter Yarrow has begun to visualize his songs such as Puff the Magic Dragon.
Kaleb Nation created music to go with his Brian Hambrick series. Listen to the music that goes with the book at his web site, branhambrick.com. Think about ways that young people could use tools such as Apple’s GarageBand to create music for their own creative writing.

J.C. Hutchins, jchutchins.net, is known for his podcast thriller 7th Son (2009). This book jumpstarted a group called the Ministry of Online Propaganda.

Rather than a traditional book review project, consider podcasts related to a book award project. Focus on a particular genre of book or type of character. Check out the podcasts focusing on characters and freedom from Mrs. Newton, web.me.com/cnewton54/Site/Podcasts/Podcasts.html.

Video-Book Connections. YouTube has become a place where books and video converge. Explore Great Depression Cooking with Clara, youtube.com/user/DepressionCooking. Also check the blog, depressioncooking.blogspot.com, book, and other related resources. Create your own alternative to traditional oral history projects. Provide an effective foundation before jumping into the project through nonfiction reading opportunities. For instance, the Greatest Achievements, greatachievements.org, web site provides an overview, timeline, and an essay on twenty topics related to the 20th century. Then, focus on how a particular invention impacted the lives of local people.

AUTHOR AND PUBLISHER WEB SITES

One of the easiest ways to integrate new technologies into the reading experience is through the use of author and publisher web sites.

Author Web sites No longer do author web sites simply provide biographical information. Patrick Carman, patrickcarman.com, has been at the forefront of extending reader’s experiences through online resources including card collecting, clues, and online gaming.

In the Atherton series, patrickcarman.com/books/atherton, young people can play online games associated with the book, see artwork and the lost archives. By collecting clues, participants can “Unlock Dr. Harding’s Brain.” In The Lands of Eylon series, scholastic.com/elyon, participants explore the world, trace a journey, and play games. For younger readers, the Elliot’s Park series, scholastic.com/elliotspark, encourages children to play games, explore characters, explore a park, and create their own.

James Patterson, max-dan-wiz.com, is another author that provides resources to accompany his books. For instance, he provides social networking type profiles for his Witch & Wizard book. Use the ReadWriteThink’s Profile Publisher, readwritethink.org/classroom-resources/student-interactives/profile-publisher-30067.html, to help young people learn more about social networking profiles.

The World of Brian P. Cleary, brianpcleary.com, provides online and printed activities to accompany math and science books. These materials could be integrated into a library or classroom learning station.

Book Web Sites In many cases, web sites are developed for individual books such as The Unusual Mind of Vincent Shadow, hachettebookgroup.com/features/vincentshadow, by Tim Keho. Use these web sites as a kickoff for student activities. For instance, the book web site provides a history of toys timeline. Use timeline software such as Timelinr or online tools such as Dipity, dipity.com, Timeglister, timeglister.com, or TimeToast, timetoast.com, to make your own toy timeline.

The Scholastic web site houses many book resources such as A Dog’s Life, scholastic.com/dogslife> by Ann M. Martin that contains background information, activities, and tools for building your own dog story.

Series Web Sites Because of the interest in series, web sites often provide a jumping off spot for information about the world or setting of a series such as Septimus Heap, septimusheap.com, or the Mysterious Benedict Society, hachettebookgroup.com/
Character Web Sites. Web sites often focus on a particular character featured in a series. The Mallory, mallorymcdonald.com, web site contains information about each character. Use this web site to talk about character development. Then, ask students what's missing from the character descriptions. The Horrid Henry, horrid-henry.co.uk, web site provides a roll-over visual showing characters. Ask students to create their own roll-over in PowerPoint. Or, listen to a story, then record your own. Other character web sites include Junie B., randomhouse.com/kids/junieb, and MacKenzie Blue, mackenzieblue.com.

Social Web sites. Some authors are focusing on a club-like atmosphere. The Fairy Godmother Academy, fairygodmotheracademy.com, by Jan Bozarth combines cards, clues, and online activities. Online participants can play games, view galleries, and explore an encyclopedia of Aventurine. The online presence also includes a music element and the option to design and organize costumes for avatars.

Social Technology Tools. Polls, blogs, contests, and social elements are increasingly built into author, book, and character web sites. Allie Finkle's Rules for Girls, alliefinkle.scholastic.com, by Meg Cabot has social technology features for younger learners including polls and rating systems.

Book Clubs and Reading Groups. Web sites such as LibraryThing, librarything.com, and GoodReads, goodreads.com, are book-specific places where readers gather. Facebook, facebook.com, is an example of a more general social network used to promote books.

OLD MEETS NEW IN SCHOOL LIBRARIES

Today's school libraries are learning laboratories where old and new resources intersect. Young people read books while taking notes on a laptop. They consult an online database while holding a small group discussion.

In Convergence Culture: Where Old and New Media Collide (2006) by Henry Jenkins discusses the relationship among three ideas: media convergence, participatory culture, and collective intelligence.

Media convergence involves the flow of content across multiple media platforms. Young people seamlessly move from reading print materials to viewing online video to creating their own animations. Your mobile phone can upload a videocast directly to iTunes that can be downloaded by millions of subscribers.

Participatory culture entails the use of social technologies to make connections and interact with others. Teens might check the school library's Facebook, facebook.com, page for information about an upcoming poetry slam event, upload photos to Flickr, flickr.com, from the last event, watch a book trailer at YouTube, youtube.com, and contribute to a school book club discussion at GoodReads, goodreads.com.

Collective intelligence is what happens when many minds work together to solve a problem or take action. The most famous example is the collaborative encyclopedia, Wikipedia, wikipedia.org. With the cooperation of thousands of contributors, the web site Encyclopedia of Life, eol.org, is collecting information about every organism in the world. These ideas are being extended to reading experiences where participants are asked to add characters to a book, suggest an alternative ending, or contribute artwork based on a book theme.

In the past, new technology displaced old media. Today the media are combining to create something new and more complex systems of information access and interaction. For instance, Google Earth, earth.google.com, began as a collection of satellite images, but now it is a system that includes images, audio, video, web site links, and more. It is changing both the way media is consumed and created. Young people are at the core of this change and they need to understand how to evaluate and use this information effectively. While the U.S. Geological Survey, usgs.gov, and NASA, nasa.gov, provide authoritative information, anyone can contribute images to Panoramio, panoramio.com, or YouTube and make a link to Google Earth.

Teacher-librarians will play an important role in bringing these new materials to teachers and students.

REFERENCES


Adapted from Divergent Convergence: Learning in a Transmedia, Multiplatform World. Available at http://www.eduscape.com/sessions/multiplatform/

Figure 9. Allie Finkle's Rule for Girls
Rachelle Lasky Bilz: Author of Life Is Tough: Guys, Growing Up, and Young Adult Literature; freelance writer; retired high school librarian. bilzrm@gmail.com

Reid Goldsborough: Author of Straight Talk About the Information Superhighway. reidgold@netaxs.com, http://members.home.net/reidgold.

Suzanne Myers Harold: School Corps Librarian, Multnomah County Library, Portland, OR. suzharold@gmail.com.

Sara Catherine Howard: Adjunct instructor, Department of Library Science, Sam Houston State University, Huntsville, TX. lis_sch@shsu.edu.

Larry Johnson: Professor, School of Library and Information Science, Indiana University–Perdue University, Indianapolis, IN. ljohnson@mail.escapes.com.

Erlene Bishop Killeen: District Media Coordinator and Elementary Library Media Specialist for the Stoughton Area School District; adjunct instructor at the University of Wisconsin, Oshkosh. erlene.killeen@stoughton.k12.wi.us.

Annette Lamb: Professor, School of Library and Information Science, Indiana University–Perdue University, Indianapolis, IN. alamb@eduscapes.com.

David Loertscher: Coeditor of Teacher Librarian; professor, School of Library and Information Science, San Jose State University, San Jose, CA; president of Hi Willow Research and Publishing; and past president of the American Association of School Librarians. dloertscher@teacherlibrarian.com.

Elizabeth "Betty" Marcoux: Coeditor of Teacher Librarian; assistant professor, Information School, University of Washington. b.marcoux@verizon.net.


Joe Sutliff Sanders: Assistant professor of children's and young adult literature, California State University. joess@csusb.edu.


Betty Winslow: Media center director, Bowling Green Christian Academy, Bowling Green, OH. freelancer@wcnct.org.

Tell Us What You Would Like to Read!

E-mail editor@teacherlibrarian.com and tell us what topics you would like to read about, and we will seek to publish articles on those topics. Other comments and suggestions are welcomed, too.

Advertiser Index

Please let our advertisers know you saw their ad in Teacher Librarian

69 Chicago Review Press
www.chicagoreviewpress.com

92 Omnigraphics
www.omnigraphics.com

53 Resource Links
www.resourcelinksmagazine.ca

51 Rowman & Littlefield Education
www.rowmaneducation.com

71 Teacher Librarian
www.voya.com

91 Tor
www.tor-forge.com

55 VOYA
www.voya.com

www.teacherlibrarian.com

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.