## Multimodal Stories: LIS Students Explore Reading, Literacy, and Library Service Through the Lens of "The 39 Clues"

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The article presents a conceptual framework for exploring multi-modal stories for children using the children's adventure series, *The 39 Clues*. The framework is accompanied by concrete examples of student learning experiences, in the form of student reflections on issues related to the convergence of media and the nature of reading and children's library service in the 21st century. The article begins with a look at the series, *The 39 Clues*, describing its history and its format. It then provides a framework for exploring some of the issues related to reading *The 39 Clues*, first by introducing concepts from the literature associated with reading in the digital world and then by outlining some practical concerns librarians might have in relation to *The 39 Clues*. The article then presents the reflections of five students—one MLIS student and four PhD students—who considered multi-modal stories in light of their future practice, research, and teaching in LIS. The article concludes by summarizing five over-arching themes that emerged from the students' explorations: reading as a two-track experience, questions about authorship, evaluation skills needed to review multimodal stories, opportunities for information literacy instruction, and access and equity issues.

**Keywords:** children's literature, digital texts, web-based games, cross-platform stories, multi-modal texts, reading

### Introduction

The 39 Clues is a mystery adventure series for children nine to twelve years old. Accompanied by a set of game cards and an extensive online game, the series demonstrates the convergence of media in the networked, digital world and is an excellent vehicle for exploring the nature of children's reading, children's stories, and

children's library service in the 21st century. The purpose of this article is to describe how *The 39 Clues* was used explore such issues with students in a graduatelevel LIS class.

For many children, reading is no longer an exclusively book-bound experience. Their reading traverses multiple platforms: books, games, computers, and increasingly, handheld mobile devices. Those of

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J. of Education for Library and Information Science, Vol. 53, No. 1—(Winter) January 2012 ISSN: 0748-5786 © 2012 Association for Library and Information Science Education us who work with children and children's literature need to think about children's reading experiences in these conditions. Is reading in the networked, digital world of the 21st century a substantively different experience from earlier, book-bound reading experiences? If so, how might this affect professional practice? Many in the LIS world are asking these questions, and students coming to the information professions, and those who may one day teach them, should be part of the conversation. A good starting point is for LIS students to look closely at new forms of texts for children-to read, listen, view, play, and reflect on their own experience interacting with the texts-and to ask: What did we learn about multi-modal reading and what might it mean for our future practice? One reading of one multi-modal text cannot represent the panorama of multimodal texts, nor does it mean that LIS students will be able to predict with accuracy the actual responses of children to multimodal texts. However, such an exercise in the context of an all-too-brief time in graduate library school, can help to raise student awareness of the changing landscape of children's literature.

This article describes a learning experience in the class Technology in the Lives of Children and Youth, a Master's-level course at the University of Pittsburgh's School of Information Sciences taught during the Winter 2009 term. The course was designed to explore emerging issues related to children, youth, and new media. Of the 14 students in the class, four were doctoral students and nine were working toward their MLIS degree. The doctoral students took this course to fulfill the 36 credit requirement for course work in the PhD program at the School of Information Sciences. Where courses on topics relevant to doctoral students are not available at the PhD level, doctoral students are permitted to take a Master's level course with the expectation that doctoral level work will be conducted. In the case of this course, while all students reflected on issues related to children, reading in the 21st century and library practice, the doctoral students were expected to consider (and write about) these topics in light of their own research interests and future teaching.

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Throughout the term, students were asked to keep a journal of reflections on various topics explored in the class. Class discussion accompanied each week's reflection. As part of the unit on reading, students were asked to read *The Maze of Bones* (Riordan, 2008), the first book in *The 39 Clues* series, and play the webbased game, reflect on their personal experiences, and finally, consider their experience in light of their research interests and/ or future professional practice.

The selection of one book in the *The* 39 Clues series was prompted by the format of the book and associated webbased game, as well as consideration of the kind of learning experiences that the series would afford a class in a program training future information professionals. While the larger purpose of the exercise was to consider a multimodal story, some students did evaluate the book on its own terms. The fact that some students drew a line between the book and the game is interesting and prompts further questions about how cross-platform stories are meant to work.

The remainder of this article begins with a look at the series The 39 Clues, describing its history and its format. It then provides a conceptual framework for exploring some of the issues related to reading The 39 Clues by introducing concepts from the literature associated with reading in the digital world. The article presents the reflections of five students---one MLIS student and four PhD studentswho considered cross-platform reading in light of their future practice, research, and teaching in LIS. The article concludes by summarizing five over-arching themes that emerged from the students' explorations-reading as a two-track experience, questions about authorship, evaluation skills needed to review multimodal stories,

opportunities for information literacy instruction, and access and equity issues.

### The 39 Clues

The 39 Clues is a mystery adventure series for children nine to twelve years old. The children who read books in the series will experience a synergy of book reading, online gaming, and card collecting. Combined, these three elements create a multimodal approach to bringing story to children, prompting the New York Times Book Review to call the series a "multimedia extravaganza" (Grossman, 2008, p. 32). The Maze of Bones is the first title in the 10-book series. Each book in the series comes with a selection of game cards that help the reader solve a clue. The balance of the clues can be found by solving puzzles that are only available online.

Launched in 2008 by Scholastic, the series is notable for its link to an elaborate web-based game, a scavenger hunt for clues that will solve the mystery driving the series: Who are the Cahill family and what is their role in history? Text on the front cover of the book prompts readers to "Read the books. Play the game. Win the prizes" (Riordan 2008). Instructions inside the book tell readers, "there are over \$100,000 in prizes up for grabs, so start your Clue hunt now." To do so one must go to the web site, create an account, choose a username and password, and solve puzzles to gain clues. Reading is required to solve many of the puzzles.

The series has proved to be enormously popular amongst young readers, with all 10 titles in the *The 39 Clues* series listed in Amazon's "bestsellers in children's mystery and detective, and spy" list. Part two of *The 39 Clues* series, "Cahills vs. Vespers", was launched on April 5, 2011, with the newest title *Vespers Rising*.

In many ways, the series is a replay of many familiar forms of children's entertainment. The mystery adventure is a timehonored favorite in children's literature, attested to by the long-running interest in The Hardy Boys and Nancy Drew series. Scavenger hunts, games based on books, and books that look like games are wellknown in the children's library world, often presenting themselves in the form of a library treasure hunt, a web-quest or, as in the case of the 1980's series Choose Your Own Adventures, an open-ended story in the shape of a printed book.

Multiple formats of children's stories are not a new phenomenon to libraries either. Many children's books are available in both print and audio formats and popular book series today are often accompanied by an array of web content. Witness, for example, the web content associated with J.K. Rowling's Harry Potter series: websites launched by the author, publishers, movie studios and young readers; chat rooms; fan fiction; blogs; and Facebook profiles. But this content is "satellite text" (Mackey, 2001, p. 167), text that is a spinoff from the book. It is complementary to the book. Harry Potter existed before the web content and the story as it appears in book format is complete. The narrative in The 39 Clues series, on the other hand, continues across platforms. While the books can be read alone, to do so is to miss some of the story.

The 39 Clues is not the first time that the triumvirate of book, game, and web site has been associated with a popular book series. Frank Beddor's series, The Looking Glass Wars, also includes game cards and an interactive website. What is new with The 39 Clues is the large size of the website and the tight relationship between the website, game, and books. Although the books in the series can be read alone, readers must read the books and visit the website to understand all the elements of the story (and compete in the game). A back-and-forth relationship between the books and the web-based game is implied, suggesting that young readers who follow the story across platforms will encounter a mix of reading experiences, each one shaped by the media used to deliver the text.

This new take on children's literature is explained well by David Levithan, executive editorial director at Scholastic and part of the team developing crossmedia projects. "We wanted to look at how publishing is going to shift as technology changes. . . . It's so exciting from an editorial and storytelling viewpoint to explore all the ways a story can be told." (Maughan, 2008, p. 19). Levithan goes on to say that Scholastic doesn't "think of *The 39 Clues* in terms of anything else we've done" (Maughan, 2008, p. 19).

## Reading in a Digital World

Predicting that the borders between old media and new would merge as the "apparatus of technology shrinks," Mackey (2002) envisioned a new literacy ecology of the 21st century (p. 192). Dresang (1999) has written about the "radical change" occurring in handheld books for children due to the influence of the digital world. Dresang argued that contemporary children's books are different because of children's experiences with hypertextual, networked, digital texts. Even before The 39 Clues emerged, child readers were already experiencing "rhizomorphic" reading, an aesthetic that mirrors the connected, interactive, and accessible nature of the digital environment (Burnett & Dresang, 1999, p. 421). To construct a meaningful experience, readers of rhizome books must learn how to peel away the layers of story, make connections within and beyond the story, and approach the story with a stance that is open to multiple points of view (Burnett & Dresang, 1999). The concept of rhizomorphic reading, new in 1999, preceded the digital world of today and spoke about reading within a book. The multidimensional platform of The 39 Clues seems to be another sort of animal all together, more of a quilt, with intertextual threads connecting the pieces, rather than an onion.

Intertextuality is the shaping of one text's meanings by another text. An inves-

tigation of reading via a multidimensional platform such as The 39 Clues reveals that intertextuality is virtually unavoidable when one story is subdivided into two or more texts and those texts are re-distributed over several distinct forms of media. In the case of The 39 Clues, the books and the web site each provide story and back story. Children may very well be reading two related but parallel texts, one in the book and the other online in the form of a game, each one shaping the reading experience of the other in a distinct way. The book is a linear narrative that requires sustained attention to follow the narrative. while the web site is a hyper-linked collection of puzzles, informational text, biographies and short stories. A third leg of the story emerges through the game cards. Combined, all three components fill in the blanks and shape a complete story world.

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Arguably, a story that is spread across platforms might provide a richer story experience than one that lives only in a book. Ouite simply, there is more space to tell the story so there is more story to experience. But can there be such a thing as "too much story"? Should some details be left to the imagination? In the days when children did not have easy access to print resources and the web, they had to fill in the blanks themselves, doing what Mackey (1999) has called "reading in the phase space." The phase space is where the fictional "add-ons" to a story live: the back story, the extra details. Teachers, especially at the elementary level, often ask children to play in the phase space by writing book reports, creating dramatic work based on a book, drawing images for a book, writing from the perspective of other characters, or creating parodies of the original work. The phase space is not so much a void as it is a play space for readers, left by the author. In the 21st century we see the phase space filled in by adults, with movies, movie trailers, computer games based on books, web-based games and puzzles built around a single book. A question those of us who are concerned about children, reading, and story should ask is: What effect will the convergence of media have on the phase space?

### The Perspectives of LIS Students

What kinds of questions do multimodal stories like The 39 Clues prompt in people whose future teaching, research and professional practice will be influenced by issues related to children and reading in a digital world? In this section, five students at the University of Pittsburgh present their perspectives on reading the Maze of Bones, the first book in The 39 Clues series. They discuss how the multimodal platform of The 39 Clues influenced their understanding of the story, what this might mean in terms of children's reading, gaming, and story experiences, and how these issues might shape their own research, teaching, and practice.

Rebecca, PhD Student [at the time of the analysis]. Rebecca is a former middle school librarian and first grade teacher. Her research and teaching is in the area of school libraries, children's and young adult resources, children's use of technology, video gaming, information and storytelling.

## The Reading "Hats" of a Former School Librarian and Classroom Teacher

When I read *The 39 Clues: The Maze* of Bones in the context of the Technology in the Lives of Children course, less than a year had gone by since I left my job as a middle school librarian. Despite my status as a full-time doctoral student, I couldn't help but resurrect my middle school librarian's hat, a perspective which forces certain contexts and readers to my mind as reference points. When reading any title for children or young adults, my expectations for the story tend to be shaped by my education and experience teaching emerging readers in the first grade classroom. Among the factors cemented into my schema are strong characters, a clear beginning, middle, and end, and similarly traditional conventions of story. In the context of those disclosures of my reading history, I will share my perspectives on the significance of the merging of print and online reading that *The 39 Clues* encourages, or perhaps requires, its readers to try.

Are these books, with covers bearing the words, "Read the book. Play the game. Win the prizes," a gimmick, or an attempt to rein in and take advantage of readers' evolving tendencies toward multitasking, interruption-laden reading? This jumpy, stop-and-start, hyperlink, snippet-reading behavior, described vividly in Motoko Rich's (2008) "Literacy Debate: Online R U Really Reading?" may be the largest distinction between 21st century readers and those who grew up "analog," so perhaps *The 39 Clues* is meeting readers where they are: all over the place.

Where do those scattered pieces of story leave the book? When we say, "the book," can that mean the stand-alone, bound paper document I hold in my hand, or does "the book" encompass the characters and events represented online? To what extent is participation in The 39 Clues online experience requisite to understanding the story? If the reading experience is only complete with the online components, and if that fulfillment results from a high level of comfort, success, and enjoyment in the game, then I'm in trouble as a reader. I was genuinely curious about the online part initially (adults can play for fun but not prizes)-and perhaps overconfident, as it turns out, since I was a little baffled by the sequence of activities and the enormous amount of content on the site. I grew terribly frustrated with some of the scrolling and keyboard manipulating required to obtain the codes I needed to earn my first clue. The true target audience may be more skilled and thus more capable of mastering the games, though perhaps their DS/Wii/PSP backgrounds have shaped

more sophisticated game playing palates than *The 39 Clues* can offer.

Questions about the elegance of the online game aside, The 39 Clues exemplifies a merging of new and traditional media, quite possibly resulting in a new genre of story. The idea that we might have to read and play in order to capture the full story elicits some novel concerns for readers and librarians. I worry that even though I read the first book with minimal participation online, more attentive involvement may be needed not only to win the prize (which does not concern me), but to follow the story through the planned ten books, which I would like to be able to do. From a school or public librarian's perspective, the cards and online component introduce logistical questions of circulation policies, and issues of equity and access, in terms of granting readers the opportunity to experience the transmedia story in its entirety. Perhaps one solution is to offer discussion groups and gaming clubs, as librarians have done in Connecticut and Pennsylvania (Barack, 2009). In addition to engaging kids in reading and getting them into the library, having students follow the story and solve the mystery in a collaborative, semi-structured setting allows librarians to support students' mastery of the Skills for the 21st Century Learner (American Association of School Librarians, 2007). It is not too much of a stretch to consider solving the mystery an exercise in such skills as organizing knowledge, finding and evaluating information, reading and viewing in multiple formats and gathering meaning, forming conclusions and testing against evidence, and using social networks to gather and share information (AASL, 2007).

It is relevant to note that the books are not all written by the same author. As the books proceed, I wonder if the change in authorship and maybe voice will be tempered by the consistency of the game online, or if the potentially divergent paths of the online experience are too numerous to forge a stable referent.

That question of consistency among readers formed one branch of our graduate class discussions on this novel. A valid concern in a new reading experience like this one is how the different gaming and card collecting experiences might shape readers' literary palimpsests, a concept employed by researchers such as Mackey (1996). Ancient palimpsests were basically primitive Etch-a-Sketches: scrolls that could be written on, scraped off, and written on again overtop the remnants of past writings (NOVA, 2003). In the literary application of the term, different readers approach a book with varied, layered experiences: schema which support understanding and interpretation of what we read. Hutcheon (2008) notes that when reading adaptations of children's literature, such as fractured fairy tales, our comprehension and appreciation of the tale are richer when we have the palimpsest; that is, knowing the "original" version affords readers a valuable reference as they read the new work. As readers, our palimpsests have the potential to produce differing outcomes and understandings of what we read, because our personal life and literature experiences shape how we process a story.

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In the case of The 39 Clues, readers may arrive at the story not only with diverse experiences with life and story, but with literally different experiences within the realm of the book, such as different cards or different encounters with the online game, which could create a range of understandings of the characters' motivations, backgrounds, and progress in the hunt for the clues. Numerous questions arise from this potential change in reading structure and format, and the answers are still being formulated as the series and game progress. I am curious to learn whether students respond favorably to what seems to be a publisher's strategy to meet their perceived reading needs and tendencies, or if a synthesized reading and gaming experience is too cumbersome, a merger perhaps better left to games that re-

late to book characters, such as *Harry Potter and the Half-Blood Prince: The Video Game* (EA), but that exist separately from the book. I would not be surprised if kids shift among their "hats" like I do, which would have "readers" turning to books that offer entire, rich experiences within printed pages, and "gamers" showing preference for a more sophisticated gaming experience than the39clues.com.

I-Ling, PhD Student: I-Lings's research is in the area of Information Architecture Design, Information Visualization System, Usability, Digital Libraries, and Web Analytics. Before her doctoral studies, I-Ling worked as an Online Instructional and Human Interface Designer.

## *"The 39 Clues"* as a Learning Environment: Thoughts from an Instructional Designer

My professional and academic background is in learning technologies and information science. Here I consider how the first book in *The 39 Clues* series (*The Maze of Bones*), and the online game that accompanies it, influenced my personal reading experience and what lessons I can draw from it with respect to my professional experience as an instructional designer and my future teaching and research.

My impressions as a reader: I found it interesting that The 39 Clues provides a way to read a printed children's book and play an online game at the same time. The book starts with the death of Grace Cahill, Amy and Dan's grandmother. We are introduced to the key characters in the story during the reading of Grace Cahill's will. Her family is offered two choices: accept one million dollars or participate in a worldwide scavenger hunt with a chance to win an unimaginable amount of wealth and power. Thus begins the global scavenger hunt. To solve clues, the characters are encouraged to do research in libraries, specifically in books. The author asks

readers, "what do you normally do when you need answers?" The logical answer: go to the library! I liked this message. It instills in children the idea that they should read books and use the library to find information and knowledge. It also inspires the reader to learn about culture and history. As the story unfolds, the characters are offered clues that incidentally teach readers about history. For example, the clue "Follow Franklin" introduces readers to the biography of Benjamin Franklin. As an international student from Taiwan, I think The 39 Clues is a fun way to teach students who come from non-Western countries a little bit about western history. (As an aside, The 39 Clues reminds me of a popular Chinese historical video game in Taiwan called The Records of Three Kingdoms. Like The 39 Clues, it uses role playing to teach the history of the Three Kingdoms from 189 to 280.) After reading this book, I wanted to learn more about Benjamin Franklin's importance to science, American social history, and the catacombs in Paris. I believe the main purpose of the The 39 Clues series is to inspire young people to read and I felt the books succeeded in this.

My impressions as an instructional designer and human interface designer: Since the books in The 39 Clues come bundled with an online game, librarians who select the books must consider the quality of the gaming experience for their young readers/players. With this in mind, I looked closely at the web-based game. The 39 Clues online game provides an elaborate multimedia design. Embedded in the online game are interactive puzzles, historical information, and interesting facts about the series' characters-all of which should support the experience of reading the book. But as a professional instructional designer, I did not find this to be the case. Why? First, the role playing in the online game limits the readers/players by telling them what branch of the Cahill family they belong to. Self-expression is important for an online environment and

my experience indicates that most people prefer to be main characters in the story. Others might like to choose their own branch of the family by following famous historic characters linked to that branch. For example, famous members of the Ekaterina branch of the Cahill family (according to The 39 Clues) include Abraham Lincoln, Marie Curie, Albert Einstein, and Alexander Graham Bell. The readers/players of The 39 Clues are "Digital Natives," the generation that willingly plays in the online environment in large part because of the possibilities for self-expression (Palfrey & Gasser, 2008). From that perspective. I would prefer more possibilities and options available to the readers/players.

Second, I considered the game interface. The interface is what the user sees, hears and touches while interacting with computer systems (Shaw, 1991). If the interface is user-friendly, then it will attract more users (Chu, 2005). With this in mind, I found the online interface design used for The 39 Clues too complex for children aged 9 to 12 to follow. For example, there are too many navigation options to play this game. Even I got lost when I chose one of the games in "Arena 39"! The instructions for navigating the online game are either too little or too much. For instance, even though the "My Clues" function has a cool multimedia film, there is no explanation to lead you to the next step of the game. I had no idea what I should do after watching it. In other cases, too much information was included, information which may not be useful for the scavenger hunt. What needed to be considered more carefully for The 39 Clues were ways to encourage readers/ players to revisit the website and play the game more frequently.

Impact on future teaching and research: My future teaching will focus on human computer interaction (HCI) design, information visualization, and architecture design in digital environments. The 39 Clues is one example of how children in the 21st century will experience multimodal storytelling and I see several ways I could use cross-platform stories such as this in my future teaching. I hope to provide students with opportunities to think about how to provide online content that supports book-based stories and transnavigational literacy. Game designers also need to think about content. What should readers/players learn about in terms of history, culture, and language and how can this content be built into the story in ways that are interesting? In my teaching, I also hope to build students' visual and interface creativity by having them practice, build, and critique cross platform stories and games. For example, instead of designing puzzles for an online game that goes with a book, students may like to create more interactive and educational content such as a map of the world that calculates the distance between America and other countries mentioned in the series, or an interactive tool that tells readers/players what mode of transportation and route to take to get to each location. One part of The Maze of Bones (first book in the series) is set in Paris. A nice, interactive approach would be to create game content that demonstrates how to pronounce French vocabulary related to events in the book.

Cross-platform stories like *The 39 Clues* can provide young readers with a both a traditional reading experience *and* a technological, online learning experience. My suggestion for developers of cross-platform stories is to find a balance between education and playing so that the reader/player can make discoveries both in the book and online as he/she is experiencing the story.

Reham, PhD Student: Prior to her doctoral studies, Reham was a reference and instruction librarian at the American University of Kuwait, where she taught information literacy skills to undergraduate students. Her research is in the area of information literacy, library instruction, and digital libraries. Here she discusses cross-platform games like The 39 Clues in terms of their

ability to appeal to today's multitasking youth, as well as their potential contribution to media and information literacy.

## Information Literacy Through Cross-Platform Storytelling

When I was younger I enjoyed mysteries and adventure books such as the Famous Five and Nancy Drew series but at that time the online, interactive component was missing. I approached this new series wondering if the added layers would make a difference. My conclusion is that the mix of book, playing cards, and online game will most likely help to lure young readers to the book and keep them interested in the story. I enjoyed the book-the plot was engaging and the characters appealing-but most of all, I liked the way historical information was incorporated into the story. The reader has a good story experience while also learning about history and culture. (For example, in The Maze of Bones, part of the story happens in Paris and readers learn about the catacombs.)

I was surprised when I visited the site; I was not aware how much effort had been put into creating this virtual fantasy escape for the young reader. Despite the fact that the site was visually captivating for the young reader, in terms of navigability, it was rather clumsy. At times I got frustrated when I could not find a clue (I really could not tell if this was intentional on the part of the designers, or if it was just me not being able to decipher the clues?). Additionally, I felt that there was a disconnect between the book and the online game. There were times when I felt like the online game and the book were incompatible. The game, however, did provide a great supporting narrative to go along with the book. It provided a means of breaking the monotony of the traditional reading experience. To a certain degree the book left me interested in the back story provided by the game. It kept me wondering, wanting to find out more about the game and the clues.

Playing the online game in conjunction

with the book may help to enhance information and media literacy, a set of skills which seem to become more complex with each advance in technology. What linkages can be made between the AASL Standards for the 21st Century Learner and the activities young people experience through The 39 Clues? AASL's Standards proclaim that young people should be able to make inferences and gather meaning by reading, viewing, and listening for information presented in any format (e.g., textual, visual media, digital) (AASL, 2007). The 39 Clues provides such an opportunity by engaging the reader and helping him or her create meaning through reading the text in the book, then interacting online via the digital medium by playing the online game. The reader creates meaning and gains knowledge by using the combination of the traditional medium (the book) and the digital medium (the online game). The AASL (2007) Standards state that young people should be able to use "technology and other information tools to analyze and organize information." Multimodal texts like The 39 Clues foster the ability to draw conclusions and the ability to draw knowledge from the text. Exposure to the Declaration of Independence, the U.S. Constitution, and Benjamin Franklin in the story helps to build a body of knowledge in the area of American history. The book also takes the characters on an adventure through Paris, presenting the reader with historical and geographical information. Here the reader organizes the information and makes sense of it using the combination of reading and gaming. The ability to "seek information for personal learning in a variety of formats and genres" (AASL, 2007) is another important skill that the reader can practice in the context of answering questions related not only to the game, but also to personal interest.

"By the time students reach age 13 to 17, they are spending more time with digital media (computer, Internet, games) than they are television," (Oblinger, 2004). They have grown up with technology and are programmed to perform numerous tasks at a given time. They do their homework, listen to music on their iPods, and text their friends, all at the same time. The combination of book, game cards, and online game matches this multitasking behavior perfectly. Whether this is good or bad, we do not know, and it is something that librarians need to consider: Do we promote this behavior or try to move young people away from it?

Brian, Master's student. Brian was a Master's-level student in the class. He is currently working as a librarian in a public library. His future plans include pursing a PhD in Library and Information Science and conducting research in the area of youth and new media.

## The 39 Clues: Considerations for Libraries

The act of reading materials online, or in digital form, is increasingly common. With this in mind, it is important to consider several major questions about the benefits and ramifications of reading in a digital environment. As a librarian, my concern would be whether digital and online content is equally accessible for all readers. I would also wonder whether readers have an enriched experience when they interact with online content that is paired with print material. Examining the *The 39 Clues* series presents a way to begin addressing these questions.

The books in *The 39 Clues* series are great for kids: the stories are fast paced, the main characters are relatable, and they contain many puzzles and twists to engage readers. *The 39 Clues* series would likely be popular even if it was not linked to an online game offering the potential to win prizes.

While there is no shortage of praise for the books, there are some aspects of *The 39 Clues* online game that merit consideration from librarians. The first point to evaluate is whether the online component of The 39 Clues enriches the experience of reading the books. After exploring the game, I did not feel that the books were an integral a part of the online experience. The books introduce readers to characters, who are also present in the game, and there are some clues hidden within their pages; but readers do not have to retain much information from reading the books in order to advance in the game. This is not to say that the game has no educational value, just that it acts more as an expansion to the books than an accompaniment. As a standalone entity, the game provides an opportunity for children to learn problem-solving skills and to work collaboratively in a safe, fun environment. But it does not represent a great leap forward in terms of an integrated multimedia and reading experience.

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A second point for librarians to evaluate is the way players advance through the game. One way is by completing missions. Missions are online tasks on The 39 Clues website that combine reading, problem solving and game play in a fun, educational setting. Another way is by procuring trading cards. These cards come with the books or they can be purchased independently in packs costing several dollars. The 39 Clues trading cards include access codes which unlock valuable online content for readers. The access codes on these cards are unique, and can only be entered into the site by one reader. This limits the ability of public libraries to buy books and cards that will offer the same online gaming advantages to all children. Scholastic, the books' publisher, offers "Library Editions" of their 39 Clues titles that do not come with playing cards. Presumably, Scholastic provides this option so libraries do not have to deal with the difficulty of circulating cards that children could easily lose or damage. But in removing cards from the Library Edition books, Scholastic is sending the message, intentional or otherwise, that libraries can offer the books, but should not be concerned with the online game.

The outcome of these decisions is a

system where individuals or families with the economic means may have greater access to all functions of the online game. As a corrective, Scholastic offers readers the opportunity to request card codes, free of charge, by writing to them via postal mail. Readers can find the information for contacting Scholastic in the official contest rules, which are printed on the backs of books and on The 39 Clues website. Though this information is publically available, I question the ability of children-who comprise the book's target audience-to find and understand it without the aid of parents, teachers, librarians or other adults. In contrast, the availability of card packs for purchase is well advertised.

Overall, *The 39 Clues* offers a promising, if imperfect step, toward creating a meaningful link between reading and interacting in an online environment. The online component of the series offers an experience that can add to a reader's enjoyment of the books and provides additional incentive to read for those who may not do so otherwise. However, Scholastic, and other publishers pursuing similar ventures in the future, should consider making substantial changes to *The 39 Clues* model to ensure equitable public access to online content for all readers.

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## Get a Clue! Opening Up New Possibilities for Multi-Media Storytelling with *The 39 Clues*

I am not a librarian. I work in a world that is probably as different from a li-

brary as can be. My world is ephemeral, rooted in the body, and often loud. I am a theatre artist. Specifically, I am a designer focused on theatre for young audi-. ences, which is how I came to find myself sitting in a classroom surrounded by librarians. I enrolled in the Children and Technology Class in an effort to join an important conversation that is not yet happening in my field: how is technology affecting children and what are the implications for the future. In my research, I am exploring the impact of "screen time" on young people's visual perception, drawing on current brain-based research that suggests young people's brains are organically changing in response to the type of images that are displayed when viewed on screens. I am interested in looking at how design in theatre for youth could provide a different form of visual stimuli that may help to strengthen neural pathways that are not stimulated by screen filtered images. So my reading of The 39 Clues: The Maze of Bones comes from an entirely different perspective, but one that I think is relevant to the conversation.

From a learning standpoint, creating a book that communicates through multiple means, such as text, pictures, and experiences, speaks to all learning styles and potentially offers an equal opportunity for any child to engage with the story. As children get older, their interest in reading often declines. I would like to suggest that perhaps this is partially due to the fact that in general, books written for older children rely solely on text to tell the story. Creating a multi-media book that breaks with this practice might engage those children who are visual learners, who more readily "read" pictures than words. Images that flowed between screen and book would provide an opportunity for visual learners to perform their best, and would create a clear connection between the formats. For the kinesthetic learner, a multi-media book offers the unique opportunity to engage physically with the book. When children are learning to read, writers provide

them with this type of hands-on interaction through "touch" books and pop-up books, but, again, as children age, this type of non-verbal communication is discontinued, in favor of text-driven books. The online game experience would reinsert that physical component to the reading experience, both in the real world, as children interact with the keyboard and mouse, and in the virtual world, as characters on the screen interact with their digital world. In this way, the multi-media book offers an opportunity to speak to children on a variety of levels and in a way that has significant, individual meaning for them. It also offers an opportunity to have different forms of media speak to each other in a new and exciting way.

One of my biggest disappointments with The 39 Clues was that the two experiences were not truly in dialogue with each other. The narrative of the story seemed to be limited to the text, rather than continuing to develop in the online game, but the game did offer excitement and fun, and the opportunity to add a personal component to the story. The two experiences needed to share more direct connections, rather than a parallel experience. Perhaps clues imbedded in the book offer the only way to open certain parts of the game, or visuals in the game provide insight into the characters that is not revealed in the text, or foreshadow developments in the next book. This would put the two forms of media into a clearer dialogue with each other, creating a conversation that was wholly unique, and expanding the idea of what it means to tell a story.

Whether in print, onstage, or on a screen, stories are a powerful force in our society; they inform, inspire, and incite. As a theatre artist, I am always looking for ways to connect the stories I create on stage to the real world experiences of the young people in the audience, so their interactions with the theatre will resonate in their daily lives. So too should a "multimedia" book provide an opportunity to forge new connections between seemingly disparate forms of media, while simultaneously opening new pathways of communications between itself and the young people who are consuming it.

Those of us who work with "old media" do not need to fear new media, but we need to demand it bring something more to the table than media hype and marketing gimmicks. It should expand our ideas of how stories can function in our world and how we can interact with them. It should inspire us to create our own stories, even if sometimes those stories take us back to the beginning. It should connect us to others in new and unexpected ways, like bringing a theatre designer into a library.

## Discussion

From concerns about library service to critiques of game design, the responses of these five LIS students reveal a rich and varied range of approaches and attitudes. While the initial purpose of the exercise was to consider reading, the experience brought to the fore an array of concerns related to broader questions about LIS. Several themes emerged through this exercise in reading a multimodal story for children: reading as a two-track experience, questions about authorship, evaluation skills needed to review multimodal stories, opportunities for information literacy instruction, and access and equity issues.

## The nature of the reading experience in a multimodal story: A division of labor

The most prominent message delivered by all five students was that reading the book and playing the online game were two separate events that engaged two very different forms of reading. Earlier in this article we referenced Mackey's (1999) concept of the "phase space"—the space where the back story and fictional add-ins live—wondering what the effect of combining a book, game, and website into one unit would be. Would it fill in so many blank spaces that little would be left to the

imagination? Perhaps the use of imagination is not the single goal of The 39 Clues. Perhaps there are dual reading purposes at play here. Consider that the books deliver a lot of historical information and the game is structured like a scavenger hunt. Readers/players must gather information, solve problems, and collate data from the web site, book, and game cards to gain clues to win the game. The website presents children with a substantial body of informational text, much like an informational book or educational game would, and one positive outcome of the reading/ playing the game is that young readers/ players might learn about history. But extracting information from text and getting lost in an imaginary story are two very different reading experiences. Reading theorist Louise Rosenblatt considered reading to fall along a continuum, with aesthetic reading (reading for a lived experience) at one end and efferent reading (reading to extract information) at the other (Rosenblatt, 1994). Aesthetic reading immerses us in imaginary worlds and asks us to fill in the gaps, while efferent reading provides us with background and teaches us facts. Neither is a necessarily better way to read. The 39 Clues, through its use of the book and game, story and information, seems to straddle both types of reading. Rather than see the multimedia "add-ons" as destructive of imagination, we might think of the series as an opportunity for children to read at two ends of the reading continuum. It may be that multimodal texts provide both an aesthetic and efferent reading experience. Children who read The 39 Clues might be constructing imaginary worlds, and in effect, playing in the phase space, even as they extract information from the web site to solve clues in the game.

Reading, as Rosenblatt (1994) assures us, is not a flat, uni-purpose experience. Neither is it a simple case of decoding letters or understanding vocabulary and there are a broader range of skills that are associated with comprehension and sense-making. What do these skills look like in the

complicated world of cross-media stories? The 39 Clues presents transmedia stories. that is, stories that are told across multiple media, and such stories require the ability to "think across media" (Jenkins et al., pp. 47–48). To enjoy a cross-platform story, children must be able to pull together disparate sources of story, using different ways of reading to construct a meaningful whole from the parts. Today's children are primed for transmedia storytelling, familiar as they are with the "branding" of their favorite cartoon characters on their books. movies, toys, and clothes, but they still may need help navigating modes of representation that are at odds with each other. Finding ways to help children traverse this uncertain terrain is an important consideration for those who work with children, stories, and literature.

## What does it mean to tell a story in the multimodal environment?

Story, not reading, was the axis upon which Lisa's analysis hinged. As a student of theatre, Lisa's primary concern was not necessarily the platform nor even reading, but rather, the ability to connect a story to the real world experiences of youth. This is not unlike the traditional concern of children's librarians. Children's libraries have a century of storytelling behind them, using the power of stories to enrich children's lives, open a window on the world, make connections between cultures, and most critically, draw them to books and a lifelong love of reading. Children's librarians understand the power of story and continue to look for good stories in many different places. Perhaps the critical question here is not "what is the reading experience", but rather, "what is the story experience"? As Rebecca so neatly points out with her "reading hats" analogy, in the fractured environment of the multimodal story, readers can approach a story from many angles. One reader might be devoted to the traditional meditative and linear approach to reading; another might be a dedicated gamer who enjoys action and

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an explosion of sensory experiences. They arrive at the story in different ways, an important lesson for librarians beginning their practice in the complex reading environment of the twenty-first century.

### Authorship in the twenty-first century: Who "wrote" this?

Librarians by tradition love to identify authors. In the old word of the card catalog, authors were the "main entry." In reader's advisory work, many connections to literature are made through the work of a favorite writer or by discovering writers who are "like" that favorite writer. The very meaning of "authorship," however, may need redefining in the context of multimodal stories. What exactly does "authorship" mean in terms of the entire production? Is it perhaps more proper to think of the story as scripted or remixed? In the case of The 39 Clues, each book in the series has a different author and each author is identified, but we do not know who wrote the text for the website, which is (supposedly) the linchpin that holds the series together.

Connecting multiple storytellers to a broader narrative might be problematic when, as Rebecca highlighted in her response, they operate over multiple modalities of expression. While multiple authors within a book series is not a new phenomenon in the world of children's literature-few readers of the Nancy Drew mysteries complained that the books were ghost written by several authors under the pseudonym Carolyn Keene-the question of authorship takes a different turn when reading in a multimodal environment, a deliberately fractured milieu for presenting a story. It suggests that formulaic approaches, much like the ones used in series like Nancy Drew, will bind the multimodal story together.

# Twenty-first century evaluation skills for librarians

How exactly do librarians provide quality control with regard to the online game? Are we selecting the game when we select the book? How do we know it is a good game, other than by playing it? The book was reviewed, meaning that the book was read end-to-end by someone who has expertise in children's literature, but was the game reviewed by someone with expertise in gaming and interaction design? I-Ling and Reham both commented on the need to assess the interface design. Brian and I-Ling also wrote of the need to understand game design and how different genres of games afford different experiences and outcomes. All this implies an understanding of concepts related to usability, interaction design, and gaming. As we see more multimodal stories for children and youth emerge, librarians must be prepared to devote to such materials the same effort and care that they give when evaluating the traditional book.

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### Opportunities for information literacy instruction

Can The 39 Clues be a learning environment? If so, what skills will young readers/players learn? Reham and Rebecca wrote about the connections between the multimodal environment of The 39 Clues and the types of information literacy lessons that the story might afford. As they point out, AASL Skills for the 21st Century Learner provides a valuable framework for teaching a wide variety of new media skills in the context of The 39 Clues. What such lessons might look like and how effective they will be is a problem that needs to be addressed. This is an area in need of examination in the school media and public library environments. Many libraries have already begun to use The 39 Clues series as a platform for a library program, for example as an after school club. Building 21st century learning outcomes into such library programming might be a useful way to teach new media skills in a way that is meaningful to young people.

## Access and equity issues

For all the thoughts about reading,

story, authorship, information literacy, interaction and game design, The 39 Clues also served to raise some very practical concerns about the daily practice of librarianship. Brian and Rebecca, both of whom have experience as practitioners, expressed some unease about how to bring multimodal stories into the library collection and how such texts might affect library service, specifically questioning the equity issues related to the game cards that come with the books and which provide needed clues to solve the online guizzes. Should libraries circulate the book with or without the clue cards? Kirkus Reviews urges libraries to "purchase card-free library editions to avoid circulation headaches" (2008, p. 956). If the cards are removed, some children will not have access to extra clues in the game. But how does a library manage this extra text that lives outside of the book? If the library chooses to circulate the book with the game cards, what happens if the cards are lost? Should libraries make photocopies of the cards before lending the book and

## cards out to children? The more questions we ask, the more problematic the book becomes. Other questions to consider with regard to access and equity of library service:

- In the library world, access issues translate into practice and policy. For example, if the web site is essential to the experience of reading books in *The 39 Clues* series, are children's libraries then not bound to provide children access to computers in order to complete the experience?
- Some clues require the use of a printer. Should the library then make a printer available too?
- What happens if the clues are solved by a group of children in an after-school program in a library? Who wins the prize? How do we make sure the prize money is divided up fairly, given that children come and go in most library programs?

#### Conclusion

This article demonstrated how the use of children's literature in an LIS class, specifically the first book in the cross-platform adventure series The 39 Clues, afforded the opportunity for five students to consider issues important to LIS education: children's reading and access to stories in the 21st century, the relationship between books, gaming, and Web-based resources, and issues related to library practice, such as information literacy instruction, selection and collection development, and equity of access. On a broader level, the responses of these five students reflect the multidisciplinary nature of LIS and even its connection to a seemingly non-related discipline such as theatre arts. In this respect, the experience of reading, playing, and viewing The 39 Clues acted as a prism for viewing LIS itself.

Children today have access to multimodal stories that present a reading experience that is potentially quite different from reading a story encapsulated in one book. To think critically about children's reading experiences in the 21st century, to understand what it is like to navigate a story across platforms, to consider whether multimodal stories are a new form of reading or really just old wine in new bottles, and finally, to anticipate the practical concerns such stories have for libraries, a good starting point is to experience multimodal stories oneself. Only then can future practitioners, teachers, and researchers in LIS begin to ask serious questions about children's reading experiences in a digital world and what their impact on library services might be.

## Appendix: More Multi-modal Stories for Children and Young Adults

Carman, Patrick. *Skeleton Creek*. Scholastic, Inc., 2008–2009. YA mystery series told through print-text and web-based video clips, also known as a digi-novel

- *ttfn; ttyl; l8r, g8r; bff.* YA books written in instant messenger format, with a fill-in-the-blanks companion volume; by Lauren Myracle, published by Henry N. Abrams, Inc., 2005-2009
- serafina 67 \*urgently requires life\*. YA book written as a blog; by Susie Day, published by Scholastic, 2008
- The Amanda Project (website) and Invisible I(book), Website and book series in which students participate online in writing the story and crafting details of Amanda's disappearance. Website maintained by The Amanda Project, LLC; book one by Mellissa Kantor, published by Harper Collins, 2009
- *Heart On My Sleeve.* Book incorporating Instant Messenger, email, postcards, letters and a playlist of songs; by Ellen Wittlinger, published by Simon and Schuster, 2004.
- Fan Fiction. Fans write and share variations, sequels and further chapters in the lives of favorite book characters. Popular sites include Teen Ink Fan Fiction (http://www.teenink.com/fiction/fan\_ fiction/), Twilighted Teens (http://www.twilightedteens.com/) and Fan Fiction.net (www.fanfiction.net).

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