Kansas Library Association College and University Libraries Section Proceedings

2013

Comic Book Guy in the Classroom: The Educational Power and Potential of Graphic Storytelling in Library Instruction

Matt Upson
Emporia State University

C. Michael Hall

Recommended Citation

Comic Book Guy in the Classroom: The Educational Power and Potential of Graphic Storytelling in Library Instruction

Abstract

Whereas comics and graphic novels were once derided as "debased" texts unworthy of consideration in the academic classroom, they have recently gained more acceptance as valid educational resources. In fact, graphic narratives have a long history of success in terms of instruction and engagement, stretching back millennia. Comics can be very effective in academic settings, especially in library instruction, due to their engaging and participatory nature, as well as their ability to model behaviors and imbed lessons within a greater narrative. Many college and university instructors already utilize comics in their classrooms in a variety of manners, from examining existing comics as historical artifacts to intentionally creating comics for instructional purposes and even allowing students to produce their own comics.

Volume 3, 2013

Driving Towards New Frontiers

Comic Book Guy in the Classroom:
The Educational Power and Potential of Graphic Storytelling in Library Instruction

Matt Upson
Emporia State University
Emporia, Kansas

C. Michael Hall
Professional Writer, Cartoonist, and Educator

Abstract

Whereas comics and graphic novels were once derided as "debased" texts unworthy of consideration in the academic classroom, they have recently gained more acceptance as valid educational resources. In fact, graphic narratives have a long history of success in terms of instruction and engagement, stretching back millennia. Comics can be very effective in academic settings, especially in library instruction, due to their engaging and participatory nature, as well as their ability to model behaviors and imbed lessons within a greater narrative. Many college and university instructors already utilize comics in their classrooms in a variety of manners, from examining existing comics as historical artifacts to intentionally creating comics for instructional purposes and even allowing students to produce their own comics.

Introduction

Marshall McLuhan once wrote, "It's misleading to suppose there's any basic difference between education and entertainment. This distinction merely relieves people of the responsibility of looking into the matter" (1960, p. 3). McLuhan was not writing about comics in this instance, though he later wrote a great deal about comics (1964). However, the statement is especially resonant when considering the question of whether or not comics have a role to play in information literacy instruction. Comics are a familiar and recognized entertainment medium, but their capacity to educate even as they entertain is, in academic circles, not yet universally understood.

The authors of this article—comics aficionados and co-creators of educational information literacy comics—assert that comics have tremendous educational power and potential which academics and educators have only begun to grasp. It is our intention to address the criticisms of comics which have caused academia to overlook comics for so long, discuss the properties of comics which make them well-suited for use in the educational and instructional settings, and to explore examples of comics' use in the classroom to achieve various learning goals.

A Misunderstood Medium

Most people would not dismiss a communicative medium simply because it has not always been used to its fullest potential. Though millions of pages have been "wasted" on pulp fiction, formulaic romance novels, and self-published memoirs of questionable quality and veracity, no credible analyst would dismiss the entire medium of prose as being undeserving of study. Similarly, while most films are popcorn fare, created by committee with the goal of raking in vast ticket revenues rather than the goal of crafting high art, it never occurs to the informed person to define the entire cinematic medium by its low points rather than by the classics of the form. And yet, this is precisely the kind of dismissal which comics have endured in the United States: condemned as a "popular" entertainment form—the most damning label academia has in its arsenal—for much of their history, comics have gone largely underappreciated in America. Despite being a constant presence in American pop culture since the advent of lithography (and the resultant explosion of American political cartooning) in the 1820s, comics have long been deemed a lower art-form undeserving of scholarly attention. Only since the 1980s and the rise of the graphic novel—an artifact itself no different from the traditional comic book except in its length and binding—have comics in America finally begun to attract positive attention in academic circles.

The reluctance to give even political cartoons their academic due may be the result of intellectual snobbery. Cartoons—a term referring alternately to the individual pieces of comics and also to the medium of comics as a whole—"are often dismissed on the grounds of…absurdity and ideological insignificance" (Abraham, 2009, p. 120). Abraham posits that cartoons are "seen as offering just 'passing chuckles' rather than any 'deep reflection' on social issues," a phenomenon he says "may be related to the cartoon's discursive spatial limitation and its very nature…Visual modes of communication are deemed deficient in performing analytical communication" (p. 118). This bias is evident in statements such as those made by Michael J. Lewis, chairman of the art department at Williams College, who in 2003 wrote, "Ephemeral by nature, often slapdash in execution, the cartoon is incapable of complex argument or fine distinction" (p. 67).

The dismissal of comics as entertainment fit only for children, adolescents, and the illiterate is, globally speaking, rather unusual. In France and Belgium, the comic strip (*bandé dessinée*, or "drawn strip") is considered to be of importance equal to architecture, music, painting, sculpture, poetry, dance, film, and television, hence its nickname "the Ninth Art" (Pilcher & Brooks, 2005). Japan's multi-billion dollar *manga* industry produces more comics than any other nation; roughly 40% of Japanese publications are comics, catering to all ages and social groups, including children, teens, young adults, housewives, and middle-aged professional men (Pilcher & Brooks, 2005). In Italy, the conception of comics as strictly children's fare died off in the 1960s, with the rise of darkly-themed graphic novels created especially for adults (*fumetti neri*, or "black comics") and the debut of the prestigious magazine *Linus*, which, in addition to featuring translations of classic American comics and showcasing the work of Italy's best cartoonists, featured scholarly articles on the subjects of comics and media (Pilcher & Brooks, 2005); in fact,

European comics were, by the 1970s, incredibly diverse in content, style, and audience (Horn, 1999). While America is not the only nation to have dismissed comics as mere children's entertainment (Germany, and to a lesser extent, Great Britain have until recently had similarly low opinions of comics), the American academic's disdain for comics is nonetheless pronounced and noteworthy.

Of course, mainstream American comics have been dominated by superhero titles since the 1960s, and such titles are not generally deserving of serious academic attention (two notable exceptions being Alan Moore and Dave Gibbons' *Watchmen* and Frank Miller's *The Dark Knight Returns*). As such, it took a dramatic shift in the American comics landscape to attract said notice. As European and Asian influences pushed independent American creators to forge a new brand of literary, high-minded comic book/graphic novel (ala Art Spiegelman's Pulitzer Prize-winning *Maus*, or Charles Burns' *Black Hole*), the perceived potential of the medium became much broader in scope. While superheroes still dominate the American market in terms of dollar share and merchandising revenues, there are comics published in a myriad of genres, for a multitude of audiences, and on a seemingly infinite variety of subjects. As a result, the shortsightedness Abraham describes and which Lewis epitomizes appears to be bound for the scrapheap of academic obsolescence. Comics and cartooning have attracted serious scholarly evaluation in recent years, not just from those interested in the medium's artistic and literary merits, but by historians, psychologists, sociologists, and educators interested in its power to communicate complex ideas across extraordinarily broad population samples sometimes difficult to reach through more formalized communicative avenues.

How Comics Work

Comics are a complex interactive medium. The reading experience—because it involves the interplay of text and images, requiring the reader to draw complex connections to absorb meaning—is both engrossing and participatory (McLuhan, 1964; McCloud, 1994; Gillenwater, 2009; Smith, 2007). The skills underlying the creation of comics are varied and not easily mastered (one of the authors of this paper teaches an introductory course on comics creation, and institutions such as the Joe Kubert School, the Center for Cartoon Studies, and the Savannah College of Art and Design offer courses of study focused on the field of comics). That said, the human mind seems to demonstrate a hunger for visual narrative, an almost intuitive desire to explore the form, and this propensity is key to understanding the potential for success of comics, cartoons, and graphic novels in the classroom.

The human brain's responsiveness to visual communication—and the kind of graphic narrative unique to comics—is observable across thousands of years of history. From the cave paintings of Lascaux, France (circa 17,000 BCE) to the tomb of Menna in ancient Egypt (circa 1200 BCE), to more modern examples such as the Bayeux Tapestry (11th Century CE) and the pre-Columbian Codex Zouche-Nuttall (14th or 15th Century CE), there are innumerable examples of visual narrative in the historical record. It is, of course, debatable as to whether or not these historical examples of pictorial narrative are truly examples of comics. The definition of comics is rather fluid, after all. Since Colton Waugh's landmark 1947 work *The Comics* (the first comprehensive survey of the comics medium), there have been attempts to define the term, none of which has been universally accepted by experts in the field.

The Challenge of Defining Comics

Nevertheless, as scholars have begun studying comics and cartoons in earnest, a desire to define the subject matter in concrete terms has persisted. Complicating this endeavor is the fact that many writings about the structure and communicative power of cartoons and comics are contradictory in nature. Scott McCloud's book *Understanding Comics: The Invisible Art* is widely hailed as the premiere dissection of comics and how they function as an artistic and communicative medium, but even McCloud's core definition of the subject is problematically exclusive: McCloud defines comics as "juxtaposed pictorial and other images in deliberate sequence, intended to convey information and/or to produce an aesthetic response in the viewer" (1994, p. 9).

McCloud's definition builds on an earlier term—"sequential art"—first coined by veteran cartoonist Will Eisner while Eisner was teaching a course on comics at New York's School of Visual Arts (1985, p. 5). Both definitions suggest that the term "comics" applies only to those works combining multiple images (typically referred to as "panels" within the cartooning industry). Some newspaper cartoons do this; many do not. Therefore, while a comic strip such as Gary Trudeau's *Doonesbury* stands as a political cartoon which might also be considered comics, one-panel gag cartoons such as Gary Larson's *The Far Side* are not. McCloud refers to the comic strip in general as an "object," focusing on its form over its content (1994, p. 4). Of the one-panel strip, McCloud writes, "Such single panels might be classified as 'comic art' in the sense that they derive part of their visual vocabulary from comics," but he prefers to refer to such images as "cartoons" rather than "comics" (1994, pp. 20-21). Therefore, as we can see, while Eisner and McCloud offer wonderful explorations of the language and symbols used in the creation and consumption of comics and cartoons, they focus more on the art of storytelling through multi-panel comics.

Means and Methods

Ultimately, though, splitting hairs over the definition of comics rather misses the point: whether the cave paintings of Lascaux and the Codex Zouche-Nuttall (let alone *Doonesbury* and *The Far Side*) are technically comics is irrelevant in the face of the greater realization, being simply that humans have conveyed narrative via visual means for tens of thousands of years, which establishes visual narrative's viability as a communicative medium in the most authoritative manner: through its continued use down the millennia.

Cartoons resonate with readers through the principle of abstraction. The cartoon image—the abstraction of reality which fills the two-dimensional page—is a symbolic representation of an idea. While comics and cartoons vary in the level of artistic realism employed by the artist, most favor a form of simplification and exaggeration that "by stripping down an image to its essential 'meaning'…can amplify that meaning in a way that realistic art can't" (McCloud, 1994, p. 30); the simplification of imagery enables a process of identification in which the reader is allowed to see (or project) him- or herself into the comic (p. 31), creating a reading experience which is both immediate and intensely personal (p. 42).

This principle is especially useful in the creation of instructional comics. While an instructional video might lead the viewer to compare themselves to the actors onscreen (or the quality of their performance) and thus distance them from the message—the medium actually inhibits the viewer's ability to connect with the material—the capacity of cartoons for ready identification and self-projection greatly reduces this tendency. The implications are staggering. Combining this principle with solid instructive methodology creates an educational tool with an incredible potential to connect with audiences.

Instructional models/methods for comics have already been tested and proven for some time. Will Eisner—who, in addition to pioneering the American graphic novel, produced instructional comics for the US Army and for schools from the 1950s to the 1970s—divides instructional comics into two categories: "technical instructional comics" and "attitudinal instructional comics." Eisner's two categories, respectively, represent those comics which give "instruction in procedures, process, and task performance…[S]uch tasks are, in themselves, sequential in nature," and those comics which are useful for "conditioning an attitude toward a task" (Eisner, 1985, pp. 143-44). By combining the universality of cartoon abstraction with Eisner's instructional models, educators can create comics which speak to a broad audience and instruct on multiple levels; this, in fact, is precisely what we have done in *Library of the Living Dead* and the instructional comics we have created since (Hall & Upson, 2011 & 2012; Upson & Hall, 2012a & 2012b).

4

Figure 1. Combining aspects of Eisner's technical and attitudinal definition of instructional comics allows for both straightforward explanation and the attempted modeling of a desired behavior. Illustration from *Library of the Living Dead* by C. M. Hall and M. S. Upson, 2011. Copyright 2011 by C. Michael Hall and Matt Upson.

A separate but connected matter, using comics not designed specifically for instruction in the educational environment, has been a topic of considerable interest in certain academic circles of late. In 2006, O'English, Matthews, and Lindsay wrote an excellent summation of the many reasons academic libraries should stock graphic novels, though the only real instructional content in their work lay in using graphic novels as a tool for promoting literacy (p. 179). This is a common theme in the perception of comics and graphic novels as instructional tools: rather than the comics themselves being educational in nature, they are used as alternative means by which to coax students into exploring characters and themes which might be otherwise obfuscated by the density of traditional prose (from 2006 to 2009, Gretchen Schwarz wrote several articles on various iterations of this theme).

In "The Graphic Novel: A 'Cool' Format for Communicating to Generation Y," Short and Reeves (2009) take a different tack. They analyze various examples of comics which deliver content via comic book storytelling, akin to Eisner's attitudinal instruction model. Though the article is brief and short on examples, it raises an intriguing idea, and cursory research unearths numerous examples. One such work is the *Cartoon History of the Universe* series by Larry Gonick, a massive project which combines solid historical scholarship with effectively humorous cartooning, creating a highly accessible survey of world history (1990; 1994; 2002). Another, very different example is *The Adventures of Johnny Bunko*, by Daniel H. Pink and Rob Ten Pas (2008), which touts itself as "The Last Career Guide You'll Ever Need" and uses the manga format to teach six essential lessons about succeeding in the workplace. McCloud's (1994; 2006) books on the form and function of comics are themselves long-form educational comics, and there have been any number of historical and biographical graphic novels published in recent years.

Utility

Comics offer an array of practical benefits conducive to library instruction. We should note that comics used in instruction can be any of the following: Existing works whose content is simply utilized as an example or is adapted for instruction, works created explicitly for the purpose of instruction (such as our series of library comics), or even student-created comics. The potential utility offered by any of these approaches is worth exploring in detail, but for the purposes of this article, will only be touched on in general as a way of examining the breadth of options available to educators and students who use comics as instructional resources.

Engaging Non-majors and Weaker Students

Although it is not our intention to state that comics are exclusively beneficial to low-performing students (see Jacobs, 2007), comics do have the potential to engage learners who may not excel or exhibit interest in library instruction or information literacy. Hosler and Boomer (2011) utilized a graphic novel, created by Hosler as an instructional text, in a series of undergraduate biology courses. They found that the attitudes of non-science majors and weaker students toward biology improved significantly after reading this graphic novel. While their findings do not address actual learning, it is safe to say that many students in one-shot sessions or for-credit library courses are not particularly interested in the material that librarians have to offer because the course is a general education requirement or they may not view the information as immediately relevant to their academic success.

We can apply Hosler and Boomer's findings to library instruction and assume that *all* of our students are *essentially non-majors* who have less of a vested interest in succeeding in a library class versus a course of more immediate concern to their major. This speaks to a greater need for librarians to become engaged with their students and with other faculty members in order to shift attitudes about the library from indifference to active interest. One way to attempt this shift is to utilize comics as a means to engage learners and appeal to their preferences. Research has shown that students tend to prefer a comic to a PowerPoint presentation as comics are "easier to use, more attractive, more useful, and more useable than a PowerPoint presenting the same information" (Webb, Balasubramanian, Ò Broin, & Webb, 2012, p. 114). The authors of this paper were prompted to create their own comic guides to libraries after seeing how often students would disregard bland handouts and tedious lectures. The act of creating a comic guide to library skills was fundamentally an act designed to engage students in a new way.

Comics as Outsiders

Duffy (2010) notes that since comics are "seen as outside of the imposed discourses of educational institutions, students feel a greater ownership of comics texts, and thus a greater investment in reading them" (p. 204). Comics, by their very nature, long criticized for their debased content and focus on images, are seen by students as having value because of their typical exclusion from academic study. This attitude is changing amongst academics, but the outsider stigma is still strong enough to potentially encourage students to view comics as a little dangerous and even questionable in a way that a textbook might not be.

While teaching a recent session on evaluating resources to undergraduates, one of the authors presented a copy of *Atlas Black: The Complete Adventure* (Short, Bauer, Ketchen, & Simon, 2011) to the students for examination. This work is a 300 page graphic novel textbook for management students written and designed by management professors. When given the text for evaluation, the students immediately questioned it because the item is clearly a graphic novel and not a traditional textbook. It took them some time to evaluate the resource and they still were not entirely sure they were correct in their decision to accept it as a legitimate resource for academic purposes, but they did so by asking the traditional questions about authority, purpose, and audience. This example serves to validate Duffy's comments regarding the outsider nature of comics in the academic world, while also recognizing that students can come to question and accept comics as valid and legitimate academic texts.

Participatory

Contrary to popular opinion, the act of reading comics can be a demanding combination of processes that require both print and visual literacy skills to navigate successfully. Gillenwater (2009) notes that due to the multimodal nature of graphic novels, "there is no either/or dichotomy because words can take on properties of images and vice versa. It is the reader, however, who must synthesize these elements to make meaning" (p. 35). The dynamic nature of graphic novels and comics "force[s] readers to get information from the art within a panel, from the progression of images from panel to panel, from the printed text of speech balloons and captions, and often from the in-art 'audio' text of sound effects – all at the same time." (Diamond Bookshelf 2008, paragraph 4). Smith (2007) argues that comics force readers

to address what is left unsaid, fill the gaps between the panels, and come to terms with their own visual illiteracy and actively "extract information rather than absorbing it" (p. 47-48).

Narrative

The ability to tell a story with comics allows for some added-value in terms of instruction. Using the example of our own library comics, a student might examine the behavior of the librarian and student characters in the story and model their own use of library resources on that behavior. *Narrative provides the opportunity to model ideal behaviors.*

A narrative also allows us to exaggerate reality. This narrative feature can help us with library education in a few ways. First, we can *dispel stereotypes* about the library and librarians. Again, returning to our own efforts, the librarians featured in our comics are not dismissive "shushers" residing in a dusty and unfriendly library. Our librarians are heroic and funny, helpful and encouraging. The libraries themselves are exciting venues where adventure happens alongside learning. Next, by providing fantastic events as the impetus for our library adventures, we have provided a *context* within which if become very easy to present library skills as especially vital. Somehow, library instruction becomes more interesting if a posse of ghost cowboys is chasing you through the stacks. This sense of excitement and involvement in the story can provide *motivation* for reluctant library students and engage their *imagination*, as well as increase their retention and recall skills (Negrete & Lartigue, 2004).

Figure 2. Instructional comics can present information within the greater context of a narrative. In this series of panels, the mundane task of scanning call numbers and understanding interlibrary loan is given immediacy by a supernatural scare. Illustration from *Sundown at the Library* by M. Upson and C. M. Hall, 2012. Copyright 2012 by Coffeyville Community College.

Negrete and Lartigue (2004) also note that "it is the spirit of fictional narratives to allow freedom of interpretation, as it is the very absence of explicit spelling-out that allows the reader to enter into and engage with the story" (p. 121). This is what we have sought in the creation of our comic guides. We do not intend to spell out everything for the students. By providing an exciting narrative, we hope to engage the students enough to open their minds just a bit and let them build their own understanding of the library through the story and then pursue their questions.

Use of Comics in the College Classroom

Outside of the work we and others have done with library comics (Upson & Hall, 2011; 2012a; 2012b; Hall & Upson, 2011; 2012; Charland, Blackburn, & Wise, 2012), there are many examples of how comics are being utilized successfully in the college classroom, across a wide range of disciplines. The examples that follow are not intended to be exhaustive list, but merely a superficial glance at the variety of ways that comics have been implemented as instructional tools in the classroom.

Comics have been created within teacher education classrooms in an attempt to "provide a symbol system for representations that are amenable to an active, hands-on study of practice" (Herbst, Chazan, Chen, Chieu, & Weiss, 2011, p. 101). In other words, comics are being used to immerse future teachers in complex hypothetical scenarios and sequences prior to actual physical classroom experience. History professors have utilized comics of the past as historical documents that can shed light on issues and concerns particular to an era. For example, Aiken (2010) uses issue #1 of *Captain America* to look at opposition to and support for U.S. entry into World War II – the comic featured Captain America punching Adolf Hitler in the face and was published nine months before the Japanese attack on Pearl Harbor. History classes have also examined fictional series, such as *Unknown Soldier* (set in war-torn Uganda) as a starting point for the examination of real-world events (Decker & Castro, 2012). Sociology courses have looked at superhero comics and how gender, race, violence, and other values are represented in popular culture (Hall & Lucal, 1999). The X-Men have been used to teach business ethics, leadership, diversity, teamwork, marketing and other business related skills (Gerde & Foster, 2008), while an entire graphic novel textbook has been created to address management (Short et al., 2011). Surprisingly, science courses frequently utilize comics in many ways. We have already discussed Hosler's (2011) findings that comics can improve the attitudes of non-majors toward biology. Roesky and Kennepohl (2008) discuss how the "single panel gag cartoon is an excellent vehicle to communicate ideas and connect with students using humor" (p. 1359) as a way to improve retention. Di Raddo (2006) has used exaggerated and ridiculously inaccurate comics scenes to illustrate lab safety techniques. Cheesman (2006) uses comics as "attention getters" and starting points for instruction. Comics have also been successfully used as a means for public science education (Tatalovic, 2009; Silver, Archer, Hobbs, Eckert, Conner, & CDC, 2011; Wadey, Deese, & Endy, 2009).

Next Steps

Recent library literature has focused on the utility of student narratives in examining the research process and information literacy skills. Detmering and Johnson (2012) note that creating narratives gives "students the power to reflect on and learn from their experiences, as well as develop a more intricate understanding of academic research in both conceptual and contextual terms" (p. 20). Providing students with the opportunity to create their own library narratives as comics (whether through illustration or photos) seems to be a logical option that would allow the combined utility of the narrative with those of a comic. The authors hope to continue investigating the effectiveness of instructional comics in the library setting and will begin to examine the potential for student-created comics as a means to assess library skills and multi-modal literacy.

References

Abraham, L. (2009). Effectiveness of cartoons as a uniquely visual medium for orienting social issues. *Journalism & Communication Monographs*, *11*(2), 117–165. doi: 10.1177/152263790901100202

Aiken, K. G. (2010). Superhero history: Using comic books to teach U.S. history. *OAH Magazine of History*, *24*(2), 41–47. Retrieved from http://www.lrhsd.org/cms/lib05/NJ01000316/Centricity/Domain/155/superhero-study-of-history.pdf

Charland, G., Blackburn, H., & Wise, K. (2012). Legends of the library ninjas: A quest for knowledge. Retrieved from http://issuu.com/libraryninja/docs/legendsofthelibraryninjasthequestforknowledge

Cheesman, K. (2006). Using comics in the science classroom. *Journal of College Science Teaching*, *35*(4), 48–51.

Decker, A. C., & Castro, M. (2012). Teaching history with comic books: A case study of violence, war, and the graphic novel. *History Teacher*, *45*(2), 169–188. Retrieved from http://www.societyforhistoryeducation.org/pdfs/Decker_and_Castro.pdf

Detmering R., & Johnson A.M. (2012). "Research papers have always seemed very daunting": Information literacy narratives and the student research experience. *Portal Portal*, *12*(1), 5–22. doi:10.1353/pla.2012.0004

Di Raddo, P. (2006). Teaching chemistry lab safety through comics. *Journal of Chemical Education*, *83*(4), 571–573. doi:10.1021/ed083p571

Diamond Bookshelf. (2008). Graphic storytelling and the new literacies: An interview with NCTE educator Peter Gutiérrez. Retrieved from http://www.diamondbookshelf.com/Home/1/1/20/182?articleID=74165

Downey, E. M. (2009). Graphic novels in curriculum and instruction collections. *Reference & User Services Quarterly*, *49*(2), 181–188. Retrieved from http://racomics.pbworks.com/f/GN%27s+for+Instruction.pdf

Duffy, D. (2010). Out of the margins ... into the panels: Toward a theory of comics as a medium of critical pedagogy in library instruction. In M. T. Accardi, E. Drabinski, & A. Kumbier (Eds.), *Critical library instruction: Theories and methods* (pp. 199–219). Duluth, MN: Library Juice Press.

Eisner, W. (1985). *Comics & sequential art*. Tamarac, Fla.; Guerneville, Calif.: Poorhouse Press ; Distributed by Eclipse Books.

Gerde, V. W., & Foster, R. S. (2008). X-Men ethics: Using comic books to teach business ethics. *Journal of Business Ethics*, *77*(3), 245–258. doi:10.1007/s10551-006-9347-3

Gillenwater, C. (2009). Lost literacy: How graphic novels can recover visual literacy in the literacy classroom. *Afterimage*, *37*(2), 33–36.

Gonick, L. (1990). *The cartoon history of the universe: Volumes 1-7, from the Big Bang to Alexander the Great*. New York: Doubleday.

Gonick, L. (1994). *The cartoon history of the universe II: Volumes 8-13*, *from the springtime of China to the fall of Rome.* New York: Doubleday.

Gonick, L. (2002). *The cartoon history of the universe III: From the rise of Arabia to the Renaissance*. New York: W.W. Norton & Co.

Hall, C. M., & Upson, M. (2011). *Library of the living dead: Your guide to Miller Library at McPherson College*. McPherson, KS: Atomic Raygun Comics. Retrieved from http://blogs.mcpherson.edu/library/wp-content/uploads/2011/03/Library-of-the-Living-Dead-Online-Edition.pdf

Hall, C. M., & Upson, M. (2012). *Monster clash: Using the Wilton Library...ferociously!* Wilton, CT: Atomic Raygun Comics. Retrieved from http://www.wiltonlibrary.org/monster-clash/

Hall, K. J., & Lucal, B. (1999). Tapping into parallel universes: Using superhero comic books in sociology courses. *Teaching Sociology*, *27*(1), 60–66. Retrieved from http://www.jstor.org/stable/1319247

Herbst, P., Chazan, D., Chen, C.-L., Chieu, V.-M., & Weiss, M. (2010). Using comics-based representations of teaching, and technology, to bring practice to teacher education courses. *ZDM*, *43*(1), 91–103. doi: 10.1007/s11858-010-0290-5

Horn, M. (1999). *The world encyclopedia of comics* (Vols. 1-7). Philadelphia: Chelsea House.

Hosler, J., & Boomer, K. B. (2011). Are comic books an effective way to engage nonmajors in learning and appreciating science? *CBE Life Sciences Education*, *10*(3), 309–317. doi:10.1187/cbe.10-07-0090

Jacobs, D. (2007). More than words: Comics as a means of teaching multiple literacies. *The English Journal, 96*(3), 19–25. Retrieved from http://www.jstor.org/stable/10.2307/30047289

Kennepohl, D., & Roesky, H. W. (2008). Drawing attention with chemistry cartoons. *Journal of Chemical Education, 85*(10), 1355–1360. doi:10.1021/ed085p1355

Lewis, M. J. (2003). Cartooning, left and right. *Commentary, 116*(3), 67–72.

McCloud, S. (1994). *Understanding comics : The invisible art*. New York: HarperPerennial.

McCloud, S. (2006). *Making comics : Storytelling secrets of comics, manga and graphic novels*. New York: Harper.

McLuhan, M. (1960). Classroom without walls. In E. Carpenter & M. McLuhan (Eds.), *Explorations in communication: An anthology*. Boston: Beacon Press.

McLuhan, M. (1964). *Understanding media: The extensions of man*. New York: McGraw-Hill.

Negrete, A., & Lartigue, C. (2004). Learning from education to communicate science as a good story. *Endeavour, 28*(3), 120–124. doi:10.1016/j.endeavour.2004.07.003

O'English, L., Matthews, J. G., & Lindsay, E. B. (2006). Graphic novels in academic libraries: From Maus to manga and beyond. *The Journal of Academic Librarianship, 32*(2), 173–182. doi:10.1016/j.acalib.2005.12.002

Pilcher, T., & Brooks, B. (2005). *The essential guide to world comics*. London: Collins & Brown.

Pink, D. H. & Ten Pas, R. (2008). *The Adventures of Johnny Bunko: The Last Career Guide You'll Ever Need*. Riverhead Trade.

Schwarz, G. (2006). Expanding literacies through graphic novels. *The English Journal, 95*(6), 58–64. Retrieved from http://www1.ncte.org/Library/files/Free/recruitment/EJ0956Expanding.pdf

Schwarz, G. (2007). Media literacy, graphic novels and social issues. *Simile, 7*(4), 1–11. Retrieved from http://utpjournals.metapress.com/content/x1611725454724x3/fulltext.pdf

Schwarz, G. (2010). Graphic novels. *Curriculum & Teaching Dialogue, 12*(1/2), 43–65.

Short, J., Bauer, T., Ketchen, D. J., & Simon, L. (2011). *Atlas Black : The complete adventure*. Irvington, NY: Flat World Knowledge, Inc.

Short, J. C., & Reeves, T. C. (2009). The graphic novel: A "cool" format for communicating to Generation Y. *Business Communication Quarterly, 72*(4), 414–430. doi:10.1177/1080569909336464

Silver, M., Archer, J., Hobbs, B., Eckert, A., Conner, M., & Centers for Disease Control and Prevention (U.S.). (2011). Preparedness 101: Zombie pandemic. Retrieved from http://purl.fdlp.gov/GPO/gpo22985

Smith, S. W. (2007). Academaesthetics: How the essay and comic can save each other. *Text, 11*(2), 1–55. Retrieved from http://www.textjournal.com.au/oct07/smith.htm

Tatalovic, M. (2009). Science comics as tools for science education and communication: A brief, exploratory study. *SISSA, 8*(4), 1–17. Retrieved from http://jcom.sissa.it/archive/08/04/Jcom0804%282009%29A02/Jcom0804%282009%29A02.pdf

Upson, M. (2012). Library Comics! *Matt Upson - Librarian*. Retrieved from http://upsonlibrarian.weebly.com/library-comics.html

Upson, M., & Hall, C. M. (2011). Zombie attacks: How they can contribute to the success of your library. *College & Research Libraries News, 72*(7), 390–393. Retrieved from http://crln.acrl.org/content/72/7/390.full

Upson, M., & Hall, C. M. (2012a). *Sundown at the library: How to use your Coffeyville Community College library*. Coffeyville, KS: Atomic Raygun Comics. Retrieved from http://www.coffeyville.edu/library/Guide-to-the-Graham-Library.cfm

Upson, M., & Hall, C. M. (2012b). *Supreme librarians in metaspace*. Emporia, KS: Atomic Raygun Comics. Retrieved from http://slim.emporia.edu/index.php/new-slim-comic-takes-librarians-into-metaspace/

Wadey, C., Deese, I., & Endy, D. (2009). Adventures in Synthetic Biology. *Nature.* Retrieved from
http://www.nature.com/nature/comics/syntheticbiologycomic/index.html

Webb, E. N., Balasubramanian, G., ÒBroin, U., & Webb, J. M. (2012). Wham! Pow! Comics as user
assistance. *Journal of Usability Studies, 7*(3), 105–117. Retrieved from
http://www.upassoc.org/upa_publications/jus/2012may/JUS_Noll-Webb_May_2012.pdf

Matt Upson is a Reference/Instruction Librarian at Emporia State University, Emporia, Kansas.

C. Michael Hall is a professional writer, cartoonist, and educator.