The Journal of Research on Libraries and Young Adults The official research journal of the Young Adult Library Services Association

From Dickens to 9/11: Exploring Graphic Nonfiction to Support the Secondary-School Curriculum

Posted on May 5, 2014 by Anna Lam

😫 🖬 🕄 🔛 🔽 🖸 📷 🥲

By Barbara J. Guzzetti, Professor, Arizona State University and **Marcia A. Mardis,** Associate Professor, Florida State University

Tweet

Abstract

Graphic nonfiction has been under-researched for content-area instruction, yet these hybrid texts may motivate reluctant readers as they blend elements of art, journalism, and scholarship. This study aimed to determine the appeal and utility of graphic nonfiction for teaching content concepts. It was collaboratively conducted by a literacy researcher and a library and information science researcher. The multimedia perspective of the New Literacies Studies informed the work. Graphic nonfiction titles *Charles Dickens: Scenes from an Extraordinary Life* and *The 9/11 Report: A Graphic Adaptation* were compared to terms/concepts in a literature textbook, a nonfiction trade book, and *The 9/11 Report*. This study illustrates the utility of graphic nonfiction for teaching content concepts. Students can learn key concepts and be motivated by these alternative texts. This study also demonstrated the need to include original source documents, textbooks, and graphic nonfiction to provide varying presentations of and perspectives on content concepts.

Introduction

Recognizing the need to motivate adolescents, researchers have recommended using multiple texts for content instruction (Stahl and Shanahan 2004). Literacy researchers have suggested that alternative texts, such as trade books and original source documents, can be used to supplement textbooks to provide multiple perspectives (Stahl and Shanahan 2004), allow for constructions of knowledge through cross-text comparisons (Spoehr and Spoehr 1994), and foster deep understandings of content concepts (Spiro et al. 2004). Incorporating ordinary texts of everyday life can provide rich conceptual knowledge and engage students' curiosity (Walker, Bean, and Dillard 2010).

In considering multiple texts for content instruction, graphic nonfiction has been underused and underresearched (Lapp et al. 2012). Yet these hybrid texts may motivate reluctant adolescent readers as they blend elements of art, journalism, and scholarship (Butler 2011). Graphic nonfiction promotes multimodal learning and has been credited with increasing students' understanding by facilitating critical comparisons between words and images (Buckingham 2003). Graphic nonfiction has been found to be engaging for reluctant male readers (Griffith 2010), English Language Learners (Bridges 2009; Chun 2009), and readers with learning disabilities (Griffith 2010), but does not appear to have been systematically studied as a resource for at-risk secondary students in content learning. Yet graphic nonfiction may help to reach goals for learning in both language arts and social studies and may be the most appropriate resource for doing so. The National Council of Teachers of English (NCTE) and the International Reading Association (IRA) have documented the need for students to attain multimodal literacies to construct meaning and gain understanding from information presented in a variety of media formats (Rycik 2008). Graphic nonfiction may be a promising genre to engage adolescents toward these visions. The visual emphasis, accuracy, and engaging writing in graphic nonfiction make this type of expository text appealing and comprehensible (Gill 2009) and can ease students into interacting around complex or sensitive issues (Christenson 2006). Historical events or issues may contain experiences or actions that are too complex, too violent, or too tragic to explain in words. Visual elements and contemporary portrayals in graphic nonfiction allow readers to use both text and images to build understandings of difficult or distressing concepts (Bridges 2009; Frey and Fisher 2004)

<h1>Purpose</h1>

This study aimed to determine the appeal and utility of graphic nonfiction in relation to other types of nonfiction texts (i.e., textbooks, trade books, and original source documents). We were interested in determining the utility of graphic nonfiction for teaching content concepts and for motivating at-risk adolescents. Our study posed the following the questions: What concepts are presented in graphic nonfiction that would support the secondary-school curriculum for social studies and English/language arts? How do the range and frequency of concepts and the format features found in graphic nonfiction compare to the presentation of concepts in academic textbooks or trade books?

Theoretical Framework

The perspective of the New Literacies Studies (New London Group, Literacy Institute of Australia, and Culture 1995) that expands the definition of text to include visual images informed the study. These literacies include multiple forms of textual representations, including visual images—such as graphics, pictures, and diagrams—as well as auditory and spatial modalities (Cope, Kalantzis, and New London Group 2000). In this view, visual literacy is a core learning skill increasingly needed in the twenty-first century and is foundational to content areas (Mitchell 1994).

Literature Review

The National Council for the Social Studies (NCSS) proposed that "powerful social studies learning leads to a wellinformed and civic-minded citizenry that can sustain and build on democratic traditions" (National Council for the Social Studies 2008, para. 3) and called for educators to focus on making social studies, including history and civics, accessible to all learners through pedagogical strategies that actively engage learners. Understanding the world is paramount, and engagement through diverse texts can assure this knowledge.

Nonfiction is often heralded as a genre that gives children important ways to make sense of the world and techniques to contrast facts with their own experiences. Indeed, the Common Core State Standards Initiative (CCSS) has released K—12 curriculum standards that contain strong emphases on the use of nonfiction, particularly informational texts, in interdisciplinary learning; to date, these standards have been adopted in 45 states (National Governors' Association 2010). Effective use of nonfiction in the classroom is dependent upon the selection of works that will appeal to readers. Visual emphasis, accuracy, and engaging writing are cited as

particularly important aspects to consider in selecting nonfiction (Gill 2009). For these reasons, graphic novels and nonfiction are seen as particularly promising subgenres to engage students toward the visions that NCSS, NCTE, and IRA have articulated.

Graphic nonfiction promotes multimodal learning through the readers' need to negotiate between text and image. This negotiation is credited with increasing understanding and allowing for critical comparisons between word and image (Buckingham 2003; Griffith 2010) and semiotic awareness (Schwartz and Rubinstein-Ãvila 2006). Reading in this modality is especially in tune with adolescent brain development (Kress 2008). Images facilitate understanding of words, thus building vocabulary and reflection (Chun 2009; Griffith 2010).

That students want to read and how they read are important, but so is *what* they read. Graphic nonfiction that is focused on aspects of social studies such as current events, history, and biography has been shown to have a particular effect on student interest and learning. Exposure and gained facility with "reading" images build visual literacies that aid students' abilities to make sense of concepts presented and link them with prior knowledge and experience; media present current social issues and history in visually rich formats for which these skills are especially important (Schwarz 2007; Smetana et al. 2009). Whether the topic is World War II, conflict in the Middle East, or the biography of a significant politician, social issues and history can include concepts that are unfamiliar to youths, and graphic novels and nonfiction ease learners into interacting around these complex issues (Christenson 2006). Often historical events may contain experiences or actions that are too complex, and crises may contain occurrences that are too violent or tragic to express in words; the visual elements and contemporary portrayal of graphic nonfiction allow readers to disjunctively work between text and images to build understanding (Bridges 2009; Frey and Fisher 2004).

In an article that integrated prior research on graphic novels with a fresh analysis of the graphic nonfiction memoir of a racially charged childhood recounted in "Hurdles" by Derek Kirk Kim, Schwarz notes:

A number of graphic novels, directly or indirectly, address questions citizens need to be asking and researching . . . issues of war, injustice, terrorism, poverty, and alienation, the whole range of social issues in the United States. . . . Graphic novels may promote discussion in more lively and immediate ways than most textbooks, and they offer points of view often unexpressed in the usual curriculum resources. . . . The graphic novel can sometimes communicate the human reality better than academic text or strategy report (Schwarz 2007, 2, 8, 9)

Researchers, professional organizations, and curriculum policy makers point to nonfiction in a graphic format as a valuable way for learners to develop content knowledge and multiple literacies. This combination of accessible entrée to challenging topics and development of skills that hone learners' abilities to grasp issues and concepts makes graphic novels and nonfiction a compelling context for the research presented in this paper.

Methods

Data Collection

We analyzed alternative and academic texts that potentially could support two topics typically found in the secondary-school curriculum. For English/language arts, we selected Charles Dickens's life and works as a topic of author study. For social studies, we focused on the 9/11 terrorist attack, a common focus in the American history

curriculum. We chose these two topics for their historic relevance, because they are topics addressed in secondary schools, and because they present disturbing social and political conditions that graphic nonfiction might more appropriately address.

We selected multiple types of texts, including two graphic nonfiction titles, two textbooks, an original source document, and a trade book, analyzing each for their concepts and features for a total of six texts or three texts per content area. The texts were chosen for their age appropriateness; availability to the target audience through their classrooms and school and public libraries; and, for the graphic and trade texts, positive published book reviews located through Follett's TitleWave database (http://www.titlewave.com), which is used by many teachers and librarians to guide collection development.

Although our primary focus was on graphic nonfiction, we followed other researchers' recommendations to explore the potential of multiple texts for learning (Stahl and Shanahan 2004) and to investigate graphic texts in comparison to academic and other alternative texts. The graphic nonfiction for English/language arts was *Charles Dickens: Scenes from an Extraordinary Life* (Manning and Granstrom 2011), and for social studies, *The 9/11 Report: A Graphic Adaptation* (Jacobson and ColÃ³n 2006)–both selected for their availability and relevance. Academic texts included a textbook for American history, *The Americans* (Danzer et al. 2010), a textbook commonly used in secondary schools for social studies, and a textbook currently used for author studies of Charles Dickens, *McDougal Littell Literature: British Literature* (Allen et al. 2008). We also examined a current trade book's treatment of Dickens, *The Best of Times: The Story of Charles Dickens* (Caravantes 2005), and an original source document, *The 9/11 Report* (National Commission on Terrorist Attacks upon the United States, Kean, and Hamilton 2004).

We identified and analyzed content terms in these texts because vocabulary represents concepts (Alvermann, Gillis, and Phelps 2010). Features and terms/concepts in the graphic nonfiction of Dickens's life in the Victorian age and his stories were compared to the popular textbook's (Allen et al. 2008) treatment of Dickens and to the trade book's (Caravantes 2005) coverage of Dickens. Terms and features in the graphic adaptation of the 9/11 report were compared to terms/concepts and features in the original document, *The 9/11 Report* (National Commission on Terrorist Attacks upon the United States, Kean, and Hamilton 2004), and to the social studies textbook's treatment of the events of 9/11.

Data Analysis

We analyzed the vocabulary in these texts through matrix analysis (Miles and Huberman 1994). We first read each text and then reread each chapter to identify and list the content terms. We examined these terms to form categories that indicated larger units of meaning. Finally, we tallied the terms within each category and calculated the frequency percentage that each category represented. This content analysis enabled us to obtain an overview of the conceptual load and distribution in each text and make comparisons across textual forms.

Due to the length of the original 9/11 Report and the numerous terms used in this original source document and in the graphic nonfiction report of 9/11, we present four tables of terms and their categories for these texts and for only the two most relevant chapters in them. We examined chapters 1 and 9 for both the original 9/11 Report and the graphic adaptation by creating tables listing the terms/concepts included in each category of analysis. These chapters were selected because each of these chapters in both of these texts discussed the core events of 9/11 and most closely paralleled the textbook treatment of 9/11. The chapters' titles were the same and the content was

similar across these two alternative texts. In addition, we examined each text's format features. We identified, listed, and tallied the supplemental elements of each text. We then compared these features across textual forms.

Findings

In this section, we present the results on the analyses of texts for English/language arts on Charles Dickens.

Results of Analyses of Texts for Charles Dickens and Student Surveys

The Textbook's Treatment of Dickens. The textbook *McDougal Littell Literature*: *British Literature* (Allen et al. 2008) devotes only two pages to Charles Dickens's life and novels. This textbook briefly summarizes six of his stories and includes a 47-line excerpt from his thirteenth novel, *Great Expectations* (Dickens 1861). The textbook also includes a 12-page introductory essay on the Victorian period mentioning Dickens. In an "About the Author" section, five sentences describe Dickens's family's debt, his education, and his success as a writer, including the dire social conditions and mores in the Victorian period and how they inspired his writing. In an "About the Novels" section, the authors describe Dickens's writing style and provide information about his works, including a photograph of Dickens, a drawing of an English town, and the cover of one of the editions of his novel *Great Expectations*. The textbook does not include a glossary, and none of the relevant terms are defined in context.

There are only nine content terms in the textbook, each of which fall into four categories: social conditions, political conditions/structure, literary devices, and literary genres. About one-half (55%) of these terms relate to literary devices and genres, while the remainder relate to the political and social conditions influencing Dickens's writings. This balance between concepts related to social studies and literature makes the textbook useful for cross-disciplinary instruction if supplemented by other texts.

The Trade Book's Treatment of Dickens. The 160-page trade book on Charles Dickens, *Best of Times: The Story of Charles Dickens* (Caravantes 2005), describes in seven chapters Dickens's life from his childhood to his death and the events that influenced his writings. This text presents terms of the Victorian period and provides excerpts or references to 28 of Dickens's stories. There are 64 color photographs or illustrations, including photos of Dickens, his family, and his shorthand notes. Additional features include a timeline of Dickens's life events from 1812 to 1866. This text also has a bibliography of 24 works on Dickens, a source list for each chapter, an index, and three websites, including the Dickens Project (http://dickens.ucsc.edu), the Charles Dickens Museum in London (www.dickensmuseum.com), and an overview of Dickens's life (www.victorianweb.org/authors //dickens/index.html).

Our analysis of this trade book revealed its utility for interdisciplinary learning in social studies and English/language arts. There were 66 content terms in seven categories: social conditions, political conditions/structures, laws, settings/contexts, literary elements, literary devices, and literature genres. The largest category of terms (33%) relate to the social conditions of the times, including debtors' prison, the Industrial Revolution, ragged schools, and Sunday schools. Terms related to political conditions compose another 20%, including the French Revolution, the Gordon Riots of 1780, and Parliament. Hence, about one-half (53%) of these concepts are relevant to social studies. Terms related to literary elements, devices, and genres make up almost all (43%) of the remaining concepts, including terms like plot, protagonist, first-person narrative, parody, satire, farce, and, in the last category, melodrama, operetta, and memoir. Like the textbook, the conceptual load in this trade book is about evenly divided between concepts relevant to social studies and terms related to English/language arts, but does not include a glossary or define any terms in context.

The Graphic Nonfiction's Treatment of Dickens. The 47-page Dickens's graphic text, *Charles Dickens: Scenes from an Extraordinary Life* (Manning and Granstrom 2011), describes Dickens's life in comic-book style in chronological order, including events that influenced his writings. The text defines terms from the Victorian period, and it provides excerpts and graphic synopses of 17 of Dickens's stories including information about the events or conditions that inspired each piece. Ten of these stories are given in a graphic form, including a one- or two-sentence summary; main scenes from these stories are presented as drawings and dialogue. The graphic text describes 22 events from Dickens's life, including moments from his childhood, his family's move to London, his responsibilities to financially assist his family, events of his adult life, visiting America with his wife, and a description of his final days. Each event includes a first-person account from Dickens's point of view; a scene/drawing, including characters and dialogue depicting the theme of the event; and two or three smaller drawings illustrating Dickens, important members of his life, or a related historical event, each with a caption. Events described relate to Dickens's development as a writer, his early start as a journalist, his pen name "Boz," and his strategies to make characters come to life.

The graphic nonfiction presents information with cartoon-like drawings that reinforce accounts of historical events from Dickens's life, including illustrations depicting the Victorian age, the war against France, the changes that Britain experienced at the time, Dickens's visit to his father in debtors' prison, and children's dire working conditions during the Industrial Revolution. This text also includes a map of London, pointing out the locations where events occurred in Dickens's life. Other supplements include a bibliography of referenced works, referrals to other texts by and about Dickens, and a glossary of 15 of the terms used in this graphic text.

There are 37 terms in this graphic nonfiction representing six categories, including a category not found in the other comparison texts, adaptations of Dickens's works. About one-half (51%) of these terms relate to the social and political conditions that influenced Dickens's writings, such as the Industrial Revolution, Yorkshire schools, and hard labor, and include terms that had not been used in the other two texts, such as prison hulks, Rat's Castle, pay clerk, and Fagin's gang. Of these terms, 11% relate to Dickens's experiences with buildings in London that he incorporated into his stories, including Buckingham Palace, Westminster Abbey, and Guildhall. For example, readers learn how as a child Dickens got lost in London and fell asleep in the Guildhall under the statues of giants. About one-third (38%) of the terms relate to literary devices (pen name and episode), literary genres (short story, comic songs, and fairy tale), genres that Dickens was interested in prior to becoming a writer and those in which he participated as he developed his craft. The final category, adaptations of Dickens's work, account for 16% of these terms. Readers learn that Dickens's masterpieces have been adapted into costume dramas, films, television series, animations, plays, and musicals, terms that relate to contemporary popular culture.

Cross-Text Analysis. All three texts are useful as resources for author study. Each one provides information about Dickens's life and the Victorian age that influenced the themes and content of his writing. Due to its brevity, however, the textbook's treatment of Dickens would need to be supplemented by other texts. Although the graphic nonfiction does not provide as many concepts as the trade book, the graphic text provides sufficient background for students to understand Dickens's life, the historical time period in which he lived that influenced his writings, and the style and type of works he produced–concepts not well developed in the textbook. In addition, the graphic nonfiction was more motivating for students than reading the textbook. The trade book offers readers the same information provided by the graphic nonfiction but delivers it in a more detailed account. Readers could learn

much about Dickens's life, the period, and his writings simply by viewing the illustrations and reading the captions in the trade book or by viewing the hand-drawn illustrations in the graphic nonfiction, a common strength of the two alternative texts.

In addition to their individual strengths and weaknesses, all three of these texts had one common limitation and one common contribution to supporting the secondary English/language arts curriculum. None of these texts offer much information on Dickens's writing styles that would be required for a literary analysis. The two alternative texts present students with more detail regarding Dickens's life and times compared to the textbook, however. Knowing the social context that influenced a work is integral to understanding literature. Together, these three texts promoted understanding of the economic and political influences on the author necessary for author study.

Texts for Social Studies on 9/11

The Secondary School Textbook's Treatment of 9/11. The Americans (Danzer et al. 2010) embeds the discussion of 9/11 in a six-page section on terrorism. This textbook describes the decline of national and local crime with new fears of international terrorism, new foreign policy challenges, the war on terrorism, the impact of 9/11, and aviation security. This textbook also discusses the Patriot Act of 2001 and the Transportation Security Act that made airport security the responsibility of the federal government.

The textbook's account of 9/11 also includes several supplementary features. These consist of six photographs or illustrations with captions, including the famous photograph of firefighters and rescue workers flying the United States flag while sorting through the rubble of the World Trade Center and a photograph of the impact of the two jets used by terrorists as missiles to destroy the World Trade Center. The textbook also has a timeline of the history of terrorist attacks against the United States from 1978 to 2001. One question to readers requires summarizing the information, and another question prompts critical thinking, asking readers their evaluation of the efficacy of the Bush administration's measures in preventing future terrorist attacks. There is also a link to a website (http://classzone.com), directing students to read an epilogue on the war on terrorism.

There are 57 content terms in this textbook's treatment of 9/11 that represent both past and current relevant concepts. These terms represent 10 categories, including the military (20%), personnel (16%), defense responses and strategies (11%), aviation (11%), weapons (9%), law (9%), agencies (7%), religion (7%), civilian structures (7%), and government (3%). In addition to these common categories related to historical events, the textbook is unique in addressing concepts related to the present day. For example, the textbook is the only text we examined that uses the term "ground zero."

However, the textbook is also the only one of the three texts we examined on 9/11 that includes less relevant information. For example, the textbook is the only text that mentions that the New York City Fire Department chaplain, Mychal Judge, was killed by falling debris after giving the last rites of the Catholic Church to a firefighter on the scene. The textbook also is the only text that describes how the destroyed Twin Towers accounted for an estimated 2 billion pounds of rubble. These are the kinds of "seductive details" in textbooks that students often focus on instead of main ideas (Wade, Schraw, and Buxton 1993).

The Original Source Document's Treatment of 9/11. The 9/11 Report authored by the chair and vice chair of the 10-member 9/11 Commission (National Commission on Terrorist Attacks upon the United States, Kean,

and Hamilton 2004) is 592 pages with 14 illustrations and tables. This report includes front material, a "List of Illustrations and Tables," the "9/11 Commission Member List," the "9/11 Staff List," "Appendix A: Common Abbreviations," "Appendix B: Table of Names," and "Appendix C: Commission Hearings and Notes." A large section (129 pages) explains how the bipartisan 9/11 Commission composed of five Republicans and five Democrats was formed; presents the New York Times' coverage of the 9/11 Commission's progress and findings; and includes a preface, an "Executive Summary," and an afterword. The 28-page "Background" describes how the impetus for the 9/11 Commission came from intense pressure by the families of the 9/11 victims for an investigation and calls for a sweeping overhaul of the security system at the time of the attacks. The 45-page description of the New York Times' coverage includes newspaper articles describing how the 9/11 Commission identified nine operational failures that allowed the attacks to occur, four of which involved the FBI either not receiving or acting on intelligence information. This section also includes a timeline of terrorists' plots from 1996 to 2001. A nine-page afterword projects why this report will remain relevant for decades. Eight pages consist of lists of staff and commission members, signatures of the commission members, and a "List of Tables and Illustrations." These lists precede the 34-page "Executive Summary," including recommendations for reorganizing intelligence, and a flow chart of the commission's recommended restructure for promoting unity in sharing information. The preface is a five-page reflection on the commission's mandate, their process, and acknowledgments.

This section with its five subsections includes 248 terms that represent concepts in 10 categories: the military, government, politics, defense responses and strategies, aviation, agencies, law, civilian structures, personnel, and the media. Most of the terms relate either to aviation (29%), politics (22%), the government (20%), or the military (17%). This section includes a unique category, the media, that discusses the news media's coverage of the 9/11 Commission, the commission's charge, and their progress, including critiques of the partisan nature of the running commentaries by individual members of the commission to the media while the investigation was in progress.

Chapter 1. Chapter 1, "We Have Some Planes," in the commission's report of 9/11 discusses the events of that day in 68 pages. This chapter chronicles the sequence of events that occurred on the four doomed flights that terrorists hijacked during the morning of September 11, 2001, and the government's notification of and military response to those events through the Northeast Air Defense Sector (NEADS). The chapter describes the mission, structure, and working relationship of the two agencies responsible for the defense of U.S. airspace: the Federal Aviation Agency (FAA) and the North American Aerospace Defense Command (NORAD). Three supplements include maps showing the locations of FAA control centers; the reporting structure for the Northeast Air Defense Sector; and the flight paths and timeline of events on the four doomed flights. Table 1 shows the 125 terms in the first chapter.

Table 1

 Category
 Term or Concept

 Agencies
 Boston Central New England Region; FAA; National Transportation Safety Board (NTSB) (3)

Chapter 1 Vocabulary: The 9/11 Report

Aviation	Airline Dispatcher; Airliner; Airspace; Air Traffic Control Center; Air Traffic Control Channel; Air Traffic Control Specialist; Air Traffic Control System; Air Traffic Control Transmissions; Air Traffic Controller; Autopilot; Beacon Code; Cabin Public Address Channel; Captain; Cellular Airphones; Checkpoint; Closed Circuit TV; Coach; Cockpit Voice Recorder; Command Center; Commercial Airliner; Computer Assisted Passenger Prescreening System (CAPPS); Contemporaneous Logs; Control Tower; Emergency Frequency; Explosive Trace Detector; FAA Rules; First Class; Flight Attendants; Flight Crew; Flight Data Recorder; Ground Stop; GTE Airphones; Hijacker; Infrared Satellite Data; Jump Seat; Mayday; Medevac Helicopter; Northeast Air Defense Sector (NEADS); Passengers; Pilot; Primary Radar Returns; Radar; Radar Scopes; Screening; Security Checkpoints; Terminal Control Facility; Throttles; Transcontinental Flight; Visual Flight Rules; "Weapons Free" Flying (50)
Civilian Structures	North Tower; South Tower; Twin Towers; World Trade Center (4)
Defense Responses and Strategies	Air Defenders; Alert; ATC Zero; Attack; Bunker; Chain of Command; CNN; Code; Command Center Teleconference; Counterattack; Counterterrorism; Hotline; Interceptors; Protocols; Scrambling; Signal; Squawking; Transponder; Radar Data; Radar Reconstruction; Universal Code 7500; Vectored (22)
Government	Capitol; Department of Justice; Department of State; Joint Chiefs of Staff; Motorcade; Secretary of Defense; Secret Service; Situation Room; Solicitor General; Vice President; White House; World Trade Center (12)
Military	Air Defenders; Air National Guard; Cargo Plane; Combat Air Patrol; Continental Region Headquarters; Department of Defense; Deputy National Security Advisor; Fighter Escort; Hostile Aircraft; Interceptor Pilot; Military Aide; National Command Authority; National Guard Base; National Military Command Center (NMCC) Fighters; NORAD Instant Message System; North American Aerospace Defense Command (NORAD); Otis Fighter Jets; Pentagon; Rules of Engagement; Terrorist (20)
Personnel	Acting Deputy Administrator; Command Center Facility Manager; Command Center National Operations Manager; First Officer; Immigration Inspector; Press; Quality Assurance Specialist; Strategy Hijack Coordinator (8)
Weapons	Bomb; Firearm; Box Cutters; Guided Missiles; Mace; Pepper Spray (6)

As table 1 indicates, about one-third of these terms (50 terms, or 40%), the largest number of terms in one category, are technical vocabulary related to aviation as the chapter describes the re-created events on the four doomed flights controlled by terrorists. The second largest numbers of terms (22, or 18%) represents the defense responses and strategies, followed in frequency by 21(17%)' terms relating to relevant government, military, and aviation agencies that regulated responses to the events of 9/11. The remaining terms in this chapter are categorized (in order of frequency) military, government, personnel, weapons, and civilian structures (e.g., the World Trade Center, and the North and South Towers).

Chapter 9. Chapter 9, "Heroism and Horror," in the original 9/11 Report discusses the World Trade Center's

preparedness, the 1993 terrorist bombing at the site, the events of 9/11 in the two towers, and the Port Authority's responses to the attacks by the New York City Police and Fire Departments. This chapter spans 64 pages and chronicles the impact of the collapse of the North and South Towers, and includes a diagram of the World Trade Center complex, a graphic of the complex's radio repeater system, and a diagram of the North Tower stairwell. Table 2 lists the terms and concepts included in the chapter.

Table 2

Chapter 9 Vocabulary: The 9/11 Report

Category	Term or Concept
Agencies	Bureau of Alcohol, Tobacco, and Firearms; FAA; Federal Emergency Management Agency (FEMA); Greater Hospital Association; International Monetary Fund; National Institute of Standards and Technology (NIST); PAPD; Police Academy; Precincts; World Bank (10)
Aviation	Helipad; Mayday (2)
Civilian Structures	Boroughs Concourse; Mezzanine; North Tower; Sky Lobby; South Tower; Twin Towers; Underground Mall; World Financial Center; World Trade Center (9)
Defense Responses and Strategies	Chain of Command; Citywide Channel 1; Emergency Operations Center; Mobilization; Nonambulatory Civilian; Protocols; Repeater Channel; Tactical Channel; Tactical 1; Triage; Transmission (11)
Government	FBI; Jurisdiction; National Capital Region; 911; Port Authority (5)
Military	Arlington County After Action Report; Field Intelligence Unit; Impact Zone; Incident Command System; Military District of Washington; National Guard Base; Operation Omega; Pentagon; Protection of Sensitive Locations; Search and Rescue (10)
Personnel	Battalion Chief; Chief of Department; Commissioner; Dispatcher; Emergency Services Unit; Field Commander; Field Responder; Fire Commissioner; Fire Safety Director; Fire Warden; First Responders; Incident Commander; Ladder Company; Mayor; Medic; National Medical Response Team; New York Police Department; Police Commissioner; Specialized Operations Commander; Special Operations Division; Terrorists (21)

As table 2 shows, there were 68 terms in this chapter in seven categories of agencies, aviation, civilian structures, defense responses and strategies, government, military, and personnel. About one-half of the concepts in this chapter related either to personnel (31%) or defense responses and strategies (16%). The next largest categories of terms were military (15%) and agencies (15%).

Chapters 2—8, 10—13. These 11 chapters contain the remainder of the 1,162 terms used in the text, or 681 terms for an average of 62 terms per chapter. These terms are representative of 11 categories, most of which represented the government (223) or the military (236). These chapters discuss the foundation of the new

terrorism, how counterterrorism evolved, and responses to al Qaeda's assaults. The chapters depict the individuals and the mechanisms supporting terrorism and discuss the government's immediate and long-term responses to the 9/11 attacks, foresight and hindsight regarding the attacks, a global strategy for countering terrorism, recommendations for reorganizing the government's intelligence at the time (2004), and concluding with 13 recommendations to improve homeland defense.

The Graphic Nonfiction Version of the 9/11 Report. The 9/11 Report: A Graphic Adaptation (Jacobson and ColÃ³n 2006) is 144 pages, illustrated in comic-book style. The purpose of the graphic adaptation was—in the words of the chair and vice chair of the 9/11 Commission, Thomas H. Kean and Lee H. Hamilton—"to bring the work of the 9/11 Commission to the attention of a new set of readers . . . of all ages . . . [and] encourage them to learn more about the events of 9/11, to study, reflect—and act" (Jacobson and ColÃ³n 2006, ix—x). The authors also stress in the foreword that the graphic adaptation displays a "close adherence to the findings, recommendations, spirit, and tone of the original Commission report" and "conveys much of the information contained in the original report" (ix).

Chapter 1. As with the full 9/11 Report (National Commission on Terrorist Attacks upon the United States, Kean, and Hamilton 2004), chapter 1 of *The* 9/11 Report: A Graphic Adaptation (Jacobson and ColÃ³n 2006) describes the events unfolding aboard the aircrafts presented in comic-book style. The first subsection of this first chapter, "Inside the Four Flights," presents four concurrent timelines for each doomed flight. The first panel of each timeline has illustrations of each of the hijackers. Each event is presented and described with a time stamp so the reader can gauge the simultaneity of the events on each of the four flights, concluding with the plane crashes and national crisis management. Table 3 illustrates these concepts.

Table 3

Category	Term or Concept
Agencies	FAA (1)
Aviation	 AA Headquarters; Airborne; Aircraft; Airline Officials; Air Route Traffic Control; Airspace; Autopilot; Boston Center; Civil Aviation; Cleveland Air Route Traffic Control; Cockpit; Cockpit Intrusion; Cockpit Voice Recorder; Cockpit Warning; Cruising Altitude; Descent; Disengage; Dulles Tower; FAA Traffic Control Centers; First Class; Flying Time; Ground Stop; Message Unintelligible; New York Center; Passed Without Incident; Passengers; Radar Contact; Radio Transmission; Resolved Security Warning; Routine Communication; Suspicious Transmission; Takeoff; Takeover; Transcontinental; Transponder; Twin-Engine Plane; UA Headquarters (37)
Civilian Structures	Boston Logan Airport; North Tower; Ronald Reagan National Airport; South Tower; Trade Center; Twin Towers; World Trade Center (7)
Defense Responses and Strategies	All Points Bulletin; Chain of Command; Command Center Teleconference; CNN; Conference; Declaration; Exile; Interceptors (8)

Chapter 1 Vocabulary: The 9/11 Report: A Graphic Adaptation (Jacobson & Colón, 2006)

Government	Attorney General; Capitol; Chief of Staff; Defense Department; Defense Secretary; JCS Vice Chairman; Motorcade; Multiagency; 9/11 Commission; Parallel Decision Making Processes; President; Secret Service; Security Adviser; Senior Adviser; Senior Decision Makers; Solicitor General; Vice President; White House (18)
Military	Binational Command; Command Center; Continental Aerospace Command Region; Defense Command; Herndon Command Center; National Military Command Center (NMCC); NORAD; Northeast Air Defense Reporting Structure (NEADS); Otis Fighter Jets; Pentagon; Soviet Bombers (11)
Personnel	Air Traffic Controller; Civilian; Dispatcher; FAA Controller; First Responders; Flight Attendant; Hijackers; Immigration Official; Pilot (9)
Weapons	Bomb; Knives; Mace (3)

As table 3 depicts, the conceptual terms in chapter 1 are classified in eight categories for a total of 94 terms. In descending order, they are aviation (37 terms), government (18), military (11), personnel (9), defense responses and strategies (8), civilian structures (7), weapons (3), and agencies (1). Aviation is the most frequently represented category with 39% of the terms, with government and military comprising 31% of the remaining terms and the other five categories accounting for the rest.

<h4>Chapter 9.</h4> Chapter 9, "Heroism and Horror," provides an overview of the World Trade Center complex and its readiness for crisis. This chapter traces the World Trade Center's experience with a prior bomb attack that exposed its vulnerabilities in response management and linked these vulnerabilities to ones that remained on September 11, 2001, and exacerbated the difficulties that emergency crews faced in reaching workers in the buildings. The chapter depicts the actions of firefighters and police officers in trying to rescue people trapped in the towers and briefly recounts the events surrounding the fourth plane's crash into the Pentagon and the ensuing emergency response. This chapter concludes with an analysis of the emergency responses at the World Trade Center and Pentagon, comparing the strengths and weaknesses of each strategy, as shown in table 4.

Table 4

Chapter 9 Vocabulary: The 9/11 Report: A Graphic Adaptation (Jacobson & ColÃ³n, 2006)

Category	Term or Concept
Agencies	FDNY; Local, State, and Federal Agencies; NYPD; Office of Emergency Management;
	PAPD; Port Authority Police Department (6)
Aviation	Helicopter Landings; Jet Fuel; Self-Dispatching (3)
Civilian	Brooklyn-Battery Tunnel; Marriott; North Tower; South Tower; Twin Towers; West
Structures	Street Lobby; World Trade Center; WTC (8)
Defense	Civilians; Communications Channels; Control and Command; Emergency
Responses	Preparedness; Emergency Response Plan; General Evacuation; Integrated
and	Communication; 911 Emergency Call System; PA System; Radio Zones; Rescue
Strategies	Operation; Second-Level 4 Mobilization; Unified Command; Unified Incident

	Management System (14)
Government	Border and Port Security; Port Authority (2)
Military	Impact Zone; Pentagon (2)
Personnel	Building Personnel; Chief; Commission; Elite Rescue Teams; Emergency Personnel; Emergency Service Team; Engine Companies; Engineer Fire Chief; FDNY Dispatch; Fire Company; Firefighters; First Responders; Hazmat Team; Ladder Companies; Lieutenants; Local Policymakers; Local Public Servants; Mayor; NYPD Aviation; NYPD Chief of Department; NYPD Lead Team; NYPD 911 Operators; Officers; Operators; Police; Rescue Workers; Responders; Sergeants; Transit Police; WTC Personnel (30)
Weapons	Bomb (1)

In retelling these events, the chapter contains 66 terms in eight categories as table 4 shows. The majority (30, or 45%) relate to personnel, and an additional 21% (14) are defense responses and strategies, with another 21% related to civilian structures (8) and agencies (6). Aviation accounts for three terms, and government and military each have two terms. Weapons only includes one term.

Chapters 2—8, 10—13. The remaining 11 chapters contain 1,692 terms within the same eight categories for an average of 130 terms per chapter, most of which represent the government (602) or the military (410). These chapters trace Osama bin Laden's rise to influence between 1978 and 1998, including regional channeling of arms and finances to al Qaeda and bin Laden, concluding with a characterization of al Qaeda's membership and operations as of the late 1990s. These chapters describe events at the World Trade Center in the early 1990s alerting the U.S. government to increasing terrorist activities, the need for counterterrorist strategies, the lack of interagency collaboration causing intelligence failures, the assault on the USS *Cole* battleship, and the transition from Clinton's administration to Bush's leadership with unclear federal response to terrorist activity; and they offer recommendations for counterterrorism.

Additional Features of The 9/11 Report: A Graphic Adaptation. The 9/11 Report: A Graphic Adaptation includes several features that enhance or limit the reader's experience. Sophisticated vocabulary is used in descriptions, explanations, and dialogue. Some terms like "attrit" (p. 61) and "presage" (p. 79) are defined in context. Numerous undefined terms, however, also characterize the graphic adaptation of *The 9/11 Report*, and no glossary is included, presuming prior knowledge of terms/concepts and individuals' roles. The graphic nonfiction also has numerous references to countries and regions in Eastern Europe, the Middle East, Africa, and Asia, with explanations about important events in these regions that influenced the 9/11 attacks. These references are often accompanied by illustrations, such as the map of the Gulf States, maps depicting the NORAD and FAA centers and the hijackers' home cities in Saudi Arabia, and flags of terrorists' nations.

Cross-Text Analysis. There are unique features or content in each of the three types of texts on 9/11 that we examined. The original *9/11 Report* contains information that the other two texts do not provide, including a link to footnotes providing background information, signatures of the 9/11 Commission members, and a list of the 9/11 Commission staff (http://www.9-11commission.gov). Boxed texts provide additional information or vignettes describing possible terrorist actions and feasible responses. However, only the graphic nonfiction includes the "Report Card" issued by the 9/11 Commission in 2005 as their final act. Their "Report Card" ranks the president's and Congress's responses to the commission's findings in homeland security and emergency response, intelligence

and congressional reform, and foreign policy and nonproliferation—awarding mostly Ds (29%) or Cs (24%) in 42 areas. The graphic nonfiction is also the only one of the three texts to include both sketches and names of the 19 terrorists responsible for the demise of the four flights. This text also provides a graphic of *The 9/11 Report* overviewing the commission's findings, including the narrow range of response options provided to Presidents Bush and Clinton, and the incapability of the FBI to link collective knowledge. Conversely, the textbook is the only text to include the famous photograph of the U.S. flag flying over the rubble of the World Trade Center while firefighters and rescue workers searched for survivors. The textbook is also the only text with information on the recently established color-coded threat advisory system.

Of these three texts, the original source document was the most difficult to read. The quantity of concepts in the original *9/11 Report* made it a burdensome text to read. It was not uncommon for a single page to include eight or more terms, making it cumbersome to decipher, not only for the length of each chapter and the total report, but also for its density. Numerous unfamiliar terms are not defined in the original report, and there is no glossary. In addition, the report's appended list of abbreviations for agencies and organizations and identification of their names was often needed while reading. Hence, this text would be most suitable for enrichment or extensive research on the topic.

Discussion

Our findings suggest answers to our two research questions. For the first research question—How do the range and frequency of concepts and the format features found in graphic nonfiction compare to the presentation of concepts in academic textbooks or trade books?—we performed comparative matrix analyses of the vocabulary and concept terms relating to the life of Charles Dickens found in a textbook, trade book, and graphic nonfiction text. Previous research on the content of graphic nonfiction (e.g., Buckingham 2003; Christenson 2006) has suggested that these alternative formats provide much the same breadth of content as traditional types of texts, but present the content with the aid of visual representations that can aid understanding. Despite Dickens's central role in the literary canon in secondary education, the textbook provides the briefest description of his life. Both the trade book and the graphic text include more in-depth explorations of the topic, with similar numbers of topics addressed in each work. However, at only 47 pages, the graphic text provides a denser exploration of Dickens's life and work while also providing timelines and illustrations.

Examinations of a textbook entry, primary source document, and a graphic nonfiction version of *The 9/11 Report* reflect somewhat different findings. While the textbook treatment of the 9/11 attack has the least amount of conceptual depth and supplemental supports, the graphic nonfiction and primary source versions of *The 9/11 Report* provide much of the same content. The original *9/11 Report* has an extremely detailed account of the prelude, occurrence, and aftermath that requires close reading due to its many undefined terms, but it does include footnotes and other visual features that could enhance understanding. The graphic nonfiction version is in an accessible style that has similar language supplemented with glossary, charts, graphs, timelines, and other visual supplements that aid concept identification. Each version has unique features, but the many supports included in the graphic nonfiction version better supported the needs of at-risk learners.

Conclusion

This study demonstrates the need to include not only multiple texts, but a variety of genres of multiple texts, particularly graphic nonfiction, to provide varying presentations of and perspectives on content concepts.

Findings from this investigation illustrate the appeal and utility of graphic nonfiction for teaching content concepts. The graphic nonfiction texts provided more breadth and depth of conceptual content than did the textbooks we examined for social studies and English/language arts and had sufficient information to support the curriculum. The graphic texts also had a balance between too brief a treatment of a topic in a textbook and too lengthy or dense a treatment of a topic in an original source document or a trade book.

Like Chun (2009), we found that the images in graphic nonfiction facilitated students' understanding, assisted with vocabulary acquisition, motivated individuals, and prompted reflection. At-risk adolescents found the illustrations in the graphic texts to be a compensatory strategy for acquiring new conceptual knowledge that made learning entertaining and engaging. In addition, the cartoon-like visuals in these texts assisted in conveying disturbing subject matter in a more audience-appropriate way than could words or photographs.

Our experiences in comparing graphic nonfiction to a trade book, an original source document, and a textbook's treatment of a topic have led us to recommend that when possible, students read a graphic nonfiction account of a topic prior to reading other forms of text to build their interest and conceptual knowledge. Like other researchers (e.g., Vacca 2005), we found the textbooks' treatment of a topic to be inadequate for developing students' understandings or motivating individuals to read more about a subject. The textbooks we examined also contained seductive details that could distract readers. Like our colleagues (Alvermann, Gillis, and Phelps 2010), we found that a textbook does not always provide a comprehensive or coherent discussion of a topic. These issues can be addressed by incorporating alternative texts like graphic nonfiction into content instruction. We call for future research in additional content areas to further explore the educational potential of this genre of expository text and its role in a multiple-text approach to content teaching and learning.

' References

Allen, Janet, Arthur N. Applebee, Jim Burke, Douglas Carnine, Yvette Jackson, Robert T. Jiménez, Judith A. Langer, Robert J. Marzano, Donna M. Ogle, Carol Booth Olson, Carol Ann Tomlinson, Mary Lou McCloskey, and Lydia Allen Stack. 2008. *McDougal Littell Literature: British Literature*. Evanston, IL: McDougal Littell.

Alvermann, Donna E., Victoria R. Gillis, and Stephen F. Phelps. 2010. *Content Area Reading and Literacy: Succeeding in Today's Diverse Classrooms*, 6th ed. Boston: Allyn & Bacon.

Bridges, Elizabeth. 2009. "Bridging the Gap: A Literacy-Oriented Approach to Teaching the Graphic Novel 'Der erste Frühling." *Die Unterrichtspraxis / Teaching German* 42 (2): 152–61. doi:10.1111/j.1756-1221.2009.00049.x.

Buckingham, David. 2003. *Media Education: Literacy, Learning, and Contemporary Culture*. Malden, MA: Polity Press.

Butler, Kristin. 2011. "Comic Books as Journalism: 10 Masterpieces of Graphic Nonfiction." *Atlantic Monthly* (August 10). http://www.theatlantic.com/entertainment/archive/2011/08/comic-books-as-journalism-10-masterpieces-of-graphic-nonfiction/243351/.

Caravantes, Peggy. 2005. Best of Times: The Story of Charles Dickens. Greensborough, NC: Morgan Reynolds.

Christenson, Lila L. 2006. "Graphic Global Conflict: Graphic Novels in the High School Social Studies Classroom."

Social Studies 97 (6): 227-30. doi:10.3200/TSSS.97.6.227-230.

Chun, Christian W. 2009. "Critical Literacies and Graphic Novels for English Language Learners: Teaching *Maus.*" *Journal of Adolescent & Adult Literacy* 53 (2): 144–53. doi:10.1598/JAAL.53.2.5.

Cope, Bill, Mary Kalantzis, and New London Group. 2000. *Multiliteracies: Literacy Learning and the Design of Social Futures*. London: Routledge.

Danzer, Gerald A., J. Jorge Klor de Alva, Larry S. Krieger, L. E. Wilson, and N. Woloch. 2010. *The Americans*. New York: McDougal Littell.

Dickens, Charles. 1861. Great Expectations. Reprint, London: Penguin, 2002.

Frey, Nancy, and Douglas Fisher. 2004. "Using Graphic Novels, Anime, and the Internet in an Urban High School." *English Journal* 93 (3): 19–25. doi:10.2307/4128804.

Gill, Sharon Ruth. 2009. "What Teachers Need to Know about the 'New' Nonfiction." *Reading Teacher* 63 (4): 260–67. doi:10.1598/RT.63.4.1.

Griffith, Paula E. 2010. "Graphic Novels in the Secondary Classroom and School Libraries." *Journal of Adolescent* & *Adult Literacy* 54 (3): 181–89.

Jacobson, Sid, and Ernie ColÃ³n. 2006. *The 9/11 Report: A Graphic Adaptation*. New York: Farrar, Straus & Giroux.

Kress, Gunther. 2008. "'Literacy' in a multimodal environment of communication." In *Handbook of research on teaching literacy through the communicative and visual arts*, edited by James Flood, Shirley Brice' Heath and Diane' Lapp, 91-100. New York, NY: Erlbaum.

Lapp, Diane, Thomas Devere Wolsey, Douglas Fisher, and Nancy Frey. 2012. "Graphic Novels: What Elementary Teachers Think about Their Instructional Value." *Journal of Education* 192 (1): 23–35.

Manning, Mick, and Brita Granstrom. 2011. *Charles Dickens: Scenes from an Extraordinary Life*. London: Francis Lincoln Ltd.

Miles, Matthew B., and A. Michael Huberman. 1994. *Qualitative Data Analysis: An Expanded Sourcebook*. Thousand Oaks, CA: Sage.

Mitchell, W. J. T. 1994. *Picture Theory: Essays on Verbal and Visual Representation*. Chicago: University of Chicago Press.

National Commission on Terrorist Attacks upon the United States, Thomas H. Kean, and Lee H. Hamilton. 2004. *The 9/11 Report*. New York: St. Martin's Press.

National Council for the Social Studies. (2008). A vision of powerful teaching and learning in the social studies: Building social understanding and civic efficacy.' Retrieved February 25, 2014, from http://www.socialstudies.org/positions/powerful National Governors' Association [NGA], & Council of Chief State School Officers [CCSSO]. (2010, June 2). Common core state standards for English language arts & literacy in history/social studies, science, and technical subjects.' Retrieved February 25, 2014, from <u>http://www.corestandards.org/assets</u> /CCSSI_ELA%20Standards.pdf

New London Group, National Languages, Centre for Workplace Communication Literacy Institute of Australia, and Culture. 1995. *A Pedagogy of Multiliteracies: Designing Social Futures*. Haymarket, NSW: NLLIA Centre for Workplace Communication and Culture.

Rycik, James A. 2008. "A Decade of Adolescent Literacy." American Secondary Education 37 (1): 62-64.

Schwartz, Adam, and Eliane Rubinstein-Ãvila. 2006. "Understanding the manga hype: Uncovering the multimodality of comic-book literacies." *Journal of Adolescent & Adult Literacy* no. 50 (1):40-49. doi: 10.1598/JAAL.50.1.5.

Schwarz, Gretchen. 2007. "Media Literary, Graphic Novels and Social Issues." *Studies in Media & Information Literacy Education* 7, no. 4 (November): 1–11.

Smetana, Linda, Darah Odelson, Heidi Burns, and Dana L. Grisham. 2009. "Using graphic novels in the high school classroom: Engaging deaf students with a new genre." *Journal of Adolescent & Adult Literacy* no. 53 (3):228-240. doi: 10.1598/JAAL.53.3.4

Spiro, Rand, Richard L. Coulson, Paul J. Feltovitch, and D. K. Anderson. 2004. "Cognitive Flexibility Theory: Advanced Knowledge in Ill-Structured Domains." In *Theoretical Models and Processes of Reading*. 5th ed. Edited by Robert B. Ruddell and Norman Unrau, 602—16. Newark, DE: International Reading Association.

Spoehr, Kathryn T., and Luther W. Spoehr. 1994. "Learning to Think Historically." *Educational Psychologist* 29 (2): 71.

Stahl, Steven A., and Cynthia Shanahan. 2004. "Learning to Think Like a Historian: Disciplinary Knowledge through Critical Analysis of Multiple Documents." In *Adolescent Literacy Research and Practice*. Edited by Tamara L. Jetton and Janice A. Dole, 94–113. New York: Guilford Press.

U.S. Department of Commerce. *America's Children at Risk*. September 1997. Available from http://www.census.gov/prod/3/97pubs/cb-9702.pdf.

Vacca, Richard T. 2005. Content Area Reading: Literacy and Learning across the Curriculum. Boston: Pearson.

Wade, Suzanne E., Gregory Schraw, and William M. Buxton. 1993. "Seduction of the Strategic Reader: Effects of Interest on Strategies and Recall." *Reading Research Quarterly* 28: 93–114. doi:10.2307/747885.

Walker, Nancy T., Thomas W. Bean, and Benita R. Dillard. 2010. *When Textbooks Fall Short: New Ways, New Texts, New Sources of Information in the Content Areas.* Portsmouth, NH: Heineman.

This entry was posted in Volume 4: May 2014. Bookmark the permalink.

About Anna Lam

The Journal of Research am Libraries and Maing Spelts list for the Young Adult Library Services Association (YALSA). Proudly powered by WordPress. posts by Anna Lam \rightarrow

roucast powered by pour ress vo.0.10.17