Teaching with Comics for the First Time: Traditional Literacy and Non-Traditional Texts in Content Area Classrooms

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This research project examines the literacy practices that developed and were implemented around the comics medium when two secondary teachers (one AP Science and one AP English) used graphic novels for the first time in their classroom instruction. Drawing from the view of literacy as a social practice, the researchers used ethnographic methods to examine the two case study classrooms. Using constant comparative analysis and interpretive analysis, the researchers identified six literacy practices the teachers used to teach with and about the graphic novels including Q&A, lecture, answering multiple choice questions, reading out loud, writing about comics, and drawing comics.

Comics have a long and contentious relationship with education. Since the 1930s, the use of comics in classrooms and other educational settings has met with mixed reception (Hutchinson, 1949; Muzumdar, 2016; Yang, 2003). Concerns regarding the content of comics, their influence on children, and their overall educational value were--and continue to be--much debated by parents, educators, and society at large (Dorrell et al., 1995). Critics of comics suggest the medium lacks literary merit (Maher, 2018; Nesmith et al., 2011), can psychologically harm children through violent representations (Wertham, 1954; Yang, 2003), and leads to a disinterest in traditional reading (Dorrell et al., 1995; Yang, 2003). We recommend visiting Gene Yang's (2003) History of Comics in Education website for a more detailed and historicized discussion of critiques leverages against comics.

In contrast, proponents of comics point to their educational value citing comics' ability to motivate, engage, and interest readers (e.g., Hutchinson, 1949; Jennings et al., 2014; Millard & Marsh, 2001; Sones, 1944) and to support the traditional, visual, critical, and content area literacy development of readers (e.g., (Bosma et al., 2013; Chase et al., 2014; Dallacqua & Sutton, 2014; Gillenwater, 2014; Hosler & Boomer, 2011; Khordoc, 2001; Low, 2015; Ranker, 2007).

Despite comics' historically tenuous acceptance as an educational tool, the medium has gained extensive popularity in mainstream circles. Today, comics' readership is extensive with over forty-two million Americans identifying as comic book readers (Schenker, 2014). This readership is also increasingly diverse with content often targeting women, people of color, children, and middle grade readers (Riesman, 2017; Serafini et al., 2018). Additionally, in recent years, many comics have been adapted for film and television making comic book characters household names. Furthermore, in recent years graphic novels for children and adolescents have received prestigious awards and honors (e.g., *American Born Chinese*, Eisner Award, National Book Award Finalist, and Printz Award; *El Deafo* (Eisner Award and Newbery Honor Book; *March: Book One* Coretta Scott King Honor and Robert F. Kennedy Book Award; and *March: Book Three*, Coretta Scott King Award; Eisner Award, National Book Award, Printz Award, Sibert Award, YALSA Award for Excellence in Nonfiction for Young Adults). These graphic novels, in many cases, were the first comics to receive a particular award. Such acknowledgement by awards committees speaks to a shifting view towards legitimacy of the comics medium in mainstream culture.

COMICS IN THE CLASSROOM

Before we proceed, it should be noted that we use the term *comics* to refer "to the medium itself" and "not a specific object" such as a comic book or graphic novel (McCloud, 1993, p. 4). McCloud (1993) defines the medium as "juxtaposed pictorial and other images in deliberate sequence, intended to convey information and/or produce an aesthetic response in the viewer" (p. 9). As a medium, comics are easily recognizable based on specific conventions (Serafini et al., 2018) such as panels, gutters, and speech bubbles. We consider graphic novels (i.e., book-length comics), comic books (i.e., magazine-like comics approximately 20-40 pages in length), and comic strips (i.e., short comic sequences typically found in newspapers) to be formats within the broader medium of comics (Cary, 2004). Thus, we use the term *comics* interchangeably with these other terms.

In response to mainstream culture's growing appreciation of the comics medium, teachers are becoming increasingly interested, willing, and able to incorporate comics into their classroom instruction. As former high school and middle school teachers, we have used them ourselves in our teaching. Dani documents the challenges and successes of her teaching with comics during a high school literature unit focused on World War II (Kachorsky & Serafini, 2019). She found that students needed to be taught to *look* at images after years of traditional literacy practices that privileged written language. Her other research has explored using graphic novels in disciplinary classrooms (Dallacqua et al., in press) and theoretical perspectives that can support teachers' and students' comprehension of digital comics (Kachorsky et al., 2022). Collectively, we have examined how graphic novel adaptations of young adult novels represent the narratives and position readers differently (Kachorsky & Reid, 2020). Stephanie has focused on reading and composing comics in elementary grades and has explored how some students were able to position themselves differently when representing and communicating narrative through the comics medium (Moses & Reid, 2021; Reid & Moses, 2020).

While research focused on the role of comics in instructional practices is still relatively minimal (Kachorsky, 2018; Mallia, 2007), what research has been conducted is spread across a wide variety of topics. Some scholars have examined educator perceptions of comics, noting that educators typically have little personal experience with comics which results in a lack of interest in the medium and doubt about the medium's educational value (Clark, 2013; Mathews, 2011; Nesmith et al., 2011). Others have considered the role comics might play in supporting reading motivation, interest, and engagement. These studies found that elementary and secondary students alike enjoy reading comics, and, in some instances, prefer reading comics to the books and essays that comprise more traditional classroom reading material (Jennings et al., 2014; Millard & Marsh, 2001; Norton, 2003; Spiegel et al., 2013). Comics have also been found useful in motivating specific groups of students to read, including male adolescents (Gavigan, 2011), special education students (Gomes & Carter, 2010), and English language learners (Martinez-Roldan & Newcomer, 2011).

Scholars concerned with readers' development of visual literacy skills have discovered that comics' visual nature leads readers to attend to certain design features such as typography, interpersonal distance, color, facial expressions, depth-of-field, and layout (Brenna, 2013; Connors, 2013). However, scholars have also found that readers often need training in visual literacy and visual design to aid them in reading or creating comics (Gillenwater, 2014; Pantaleo, 2011, 2012).

Scholarship has also considered how the comics medium can foster critical literacy and social awareness. Due to their visual nature, comics lend themselves to critical discussion and writing about representations of race, gender, and cultural identity (Dallacqua & Sutton, 2014; Low, 2015).

Additionally, researchers have examined how comics can be used to support the development of traditional literacy, content area literacy, visual literacy, and critical literacy. Brenna (2013) and Chase et al. (2014) found that comics were useful in supporting traditional reading comprehension strategies such as predicting, summarizing, synthesizing, and sequencing. Others have found that students of all ages are able to learn material about a variety of subjects (e.g., science, social studies, health, and business) through reading comics (Albright & Gavigan, 2014; Bosma et al., 2013; Brozo & Mayville, 2012; Ching & Fook, 2013; Lin & Lin, 2016; Short et al., 2013).

Overall, there is some breadth but little depth in researchers' understanding of the roles comics can play in educational contexts. Furthermore, researchers are often hard pressed to find teachers who are using comics in classrooms despite a renewed interest in the educational merits of the medium. As a result, much of the research at the intersection of comics and education takes place in after school, lunch-time, or library book clubs (e.g., Connors, 2012; Gavigan, 2011; Sabeti, 2012, 2013), in after school programs (e.g., Bitz, 2004; Khurana, 2005; Low, 2015), during summer programs (e.g., Ghiso & Low, 2013; Lawrence et al., 2009), or in clinical contexts (e.g., Jiménez & Meyer, 2016; Martinez-Roldan & Newcomer, 2011; Meyer & Jiménez, 2017) rather than in classrooms. As such, an understanding of how comics are taken up by teachers and students in different content area classrooms (e.g., English language arts, science, math) is underdeveloped.

With this undeveloped area of comics scholarship in mind, the purpose of this study was to explore how secondary content area teachers incorporated comics into their instructional practices and what literacy practices (if any) they draw upon during instruction. For this reason, no professional development related to the use of comics in classroom instruction was provided by the researcher. The following research questions guide this study:

1. How do secondary content area teachers use comics in their instruction when teaching with comics for the first time?
2. What instructional and/or literacy practices do secondary content area teachers draw upon and/or develop when teaching with comics for the first time?

THEORETICAL FRAMEWORK

This study is grounded broadly in a sociocultural perspective of learning and literacy and more specifically in the view of literacy as a social practice. According to this view, individuals learn through interaction with other people in social contexts (Gee, 2015; Wenger, 2009). Historically, learning and literacy have been viewed as cognitive abilities or mental processes (Gee, 2010). In contrast, the view of literacy as a social practice conceptualizes literacy as a range of practices rather than a set of skills, recognizing the everyday meaning making practices of people within their specific social, cultural, and real world contexts (Perry, 2012; Street, 1984). Two key constructs form the foundation for the view of literacy as a social practice: 1) literacy events, and 2) literacy practices.

Literacy events are observable moments when people interact with texts in their daily lives (Barton & Hamilton, 1998, 2000; Perry, 2012). For example, the observation of one student writing an essay for her English class is a literacy event. Literacy events are socially situated and contextualized. They represent specific moments in time. As such, what writing an essay looks like in one English classroom may differ from other classrooms for various social and contextual reasons. There may, for instance, be more scaffolding in a remedial class than in an honors class. Street (2012) noted that people arrive at literacy events with different understandings of what it means to read, write, and be literate. Each literacy event is situated in a social context that may or may not align with event participants' literacy experiences elsewhere (Heath & Street, 2008; Street, 2012).

Literacy routines and habits formulate over time into important *literacy practices* valued by specific communities of people (Street, 1984; Street et al., 2017). They are social processes that are shaped by social rules/expectations and cultural ideologies as well as internal processes mediated by individual values, attitudes, and feelings (Barton & Hamilton, 1998, 2000; Perry, 2012; Street, 1993). As such, literacy practices are embedded within the shared, social, and cultural identities of individuals and their communities (Barton & Hamilton, 1998).

For example, while there may be differences from classroom to classroom when it comes to writing an essay, there are enough similarities across events to make them recognizable to an observer as essay writing, a form of writing that continues to be powerful and valued in school spaces (Gee, personal communication, October 2016). However, the feelings and attitudes of individuals towards essay writing will differ across classroom spaces.

Importantly, scholarship has shown how literacy events can be understood as an instantiation of a specific classroom activity or as part of a broader pattern of literacy practices (Author 2).

Classroom literacy events, when they repeatedly occur over time, may later sediment into literacy practices that become part of the community routine. Stephanie showed how a middle school teacher implemented a multimodal approach to literacy education in a language arts classroom. While some literacy activities represented single occurrences, other literacy activities were repeated and adapted across the course of the curriculum unit, becoming an important part of the work students undertook in his class. Practices are deemed valuable ways of doing and knowing within certain social contexts.

METHODOLOGY

In this study, we utilized a qualitative case study approach to examine our research questions. The purpose of case study research is to describe and understand a particular social unit or bounded system (Dyson & Genishi, 2005; Smith, 1978). Cases can be conceptually bound in a myriad of ways including phenomenon, location, time, circumstance, or social construction (Merriam, 1998; Smith, 1978; Stake, 1995). We examined the events and interactions that occurred in two classroom spaces as bounded cases. These classrooms were conceptualized as bounded cases for several reasons including location, phenomenon, and time. In both classrooms, the high school classroom (i.e., location) teachers were using comics in their instruction for the first time (i.e., phenomenon) in specific units of study that lasted several weeks (i.e., time).

Within this case study approach, we utilized ethnographic tools (Green & Bloome, 2015) to collect the rich, thick, descriptive data necessary for a quality qualitative case study (Merriam, 1998; Smith, 1978; Stake, 1995). Such data allows researchers to "gain analytic insight into the dimensions and dynamics of the phenomenon being studied" (Dyson & Genishi, 2005). We collected data within these case classrooms to gain insights into what happens when content area teachers use comics in their instruction for the first time.

CONTEXT AND PARTICIPANTS

This study was conducted at a science and technology-focused public charter school in the Southwestern United States. The school day and school year were both longer than the national averages--8.5 hours and 200 days respectively. At the time of this study, the school served 379 students in grades seven through eleven--twelfth grade was added the following year. School demographics at the time reported 96.6% Hispanic students, 1.6% African American students, and

1.3% Caucasian students. Furthermore, the school reported that most of their students were economically disadvantaged with 93.9% of students qualifying for free and reduced lunch.

The two case study classrooms were an AP Science elective and a required AP English course. The teachers were recruited and consented first. Then, Dani and the teachers held an informational session about the study. Consent and assent forms were sent home with students and collected prior to the start of the study. The students in both courses were juniors.

Science Classroom.

The AP science course focused on the topic of Sustainability. The teacher, Mr. Hugo (all names are self-selected pseudonyms), had three years of teaching experience, all of which were spent at this school site. It was his first-year teaching Sustainability. He had no experience reading comics or teaching with comics but became interested in using them when he attended a professional development workshop at a local comic book convention. It was at this convention that he was recruited for this study.

There were 22 students in Mr. Hugo's class all of whom participated in the study. School demographic data identified these students in the following ways: 16 females and 6 males; 21 Hispanics and 1 Caucasian. Two students in the class identified as comics readers. One explained that he had not read any comics in a "few years" (fieldnotes, February 24, 2017). The other student, Jimmy, read both mainstream comics and Japanese manga.

Mr. Hugo selected a graphic novel called *#foodcrisis* (Fraser, 2014) as instructional material for a three-week unit (450 minutes) on the topic of food sustainability. The unit involved introducing students to the concepts of food deserts and food crises, discussing produce exportation, water conservation, and local agriculture, and developing solutions to local food sustainability issues. Mr. Hugo selected *#foodcrisis* as a focal text for this unit for several reasons. First, the content of the comic connected to the unit curriculum. Second, teaching resources were provided along with the purchase of the text. Third, he believed the comic would keep students "a little more engaged [in the class material] because it's got pictures" (Interview, February 16, 2017). Finally, the text was grounded in research. *#foodcrisis* is divided into two parts--the first half is a fictional narrative produced in the comic medium; the second half presents a series of prose essays. Mr. Hugo appreciated that the text was created by a university professor and expert in food sustainability ensuring that while fictional, the narrative portion was still based in research and could illustrate

exactly what a food crisis is. Furthermore, he appreciated the presence of the essay portion because it provided "true" information about the topic (Interview, February 16, 2017).

English Classroom

The AP English course was a required class for qualifying juniors. The teacher, Lord Awesome, was a first-year teacher at this school but had four years of teaching experience. Like Mr. Hugo, he had no experience teaching with comics. He did not identify as a comics reader, but he had some experience reading comics because he had taken a college course about comics when obtaining his BA in English.

There were 20 students in Lord Awesome's class. One student did not participate in the study. Twelve of which were also in the AP Science class. School demographic data identified these students in the following ways: 13 females and 7 males; 18 Hispanics and 2 Caucasians. Two students in this class self-identified as comics readers. One student, Jimmy, was in the AP Science class. The other, Samurai Joe, explained that he primarily read mainstream Marvel comics.

Lord Awesome selected the graphic novel *The Complete Persepolis* (Satrapi, 2003/2004) as the focal text of a four-week unit (550 minutes) that was intended to contextualize for students the relationship between the United States of America and the Middle East. Additionally, Lord Awesome wanted to invite "...students to play a role in the conversation of a new literary mode...[by] discussing something brand new that is literary in nature, that needs attention" (Interview, July 6, 2017). He selected *Persepolis* because he believed it to be "an important novel to read given the climate of the world and...the distillation of news, and our lack of understanding of other cultures, especially the Middle East..." (Interview, March 8, 2017).

It is important to note that while data was collected over several weeks in these classrooms, the graphic novel was not the focus during every minute of class time. For instance, the AP English class regularly completed mandated assessments that did not connect to the unit material. Of the 450 minutes spent in the AP Science class and the 550 minutes spent in the AP English class, 183 minutes and 452 minutes of class time respectively focused on the graphic novel in some way.

DATA COLLECTION

Within this qualitative case study, we employed ethnographic tools (Green & Bloome, 2015) for data collection. Ethnographic tools are the methods and techniques (e.g., fieldnotes, informal interviews, video recordings, etc.) often associated or used in traditional ethnographies (Green & Bloome, 2015). Dani was responsible for collecting classroom data which included: 1) classroom

observations and fieldnotes; 2) video recordings and subsequent transcripts of classroom instruction and activities; 3) transcripts of pre-, mid-, and post-interviews with the teachers; 4) transcripts of informal interviews with students during independent work time; 5) and classroom documents (e.g., lesson plans and student assignments).

Dani began data collection with pre-unit, semi-structured interviews (Merriam, 1998) with the teachers which focused on their plans and goals for the instructional units as well as their backgrounds and prior experiences with comics. Two other semi-structured interviews were conducted with the teachers--one halfway through the unit and one weeks after the unit.

Once the units commenced, Dani collected observational data. She wrote daily shorthand field notes (Emerson et al., 1995; Tracy, 2013) and recorded voice notes in which she reflected on her observations. The shorthand and voice notes were combined into descriptive passages. Additionally, Dani collected video recordings of the class sessions. This allowed us to examine interactions between participants over time and to construct additional insights (Bezemer & Jewitt, 2010) that fieldnotes alone would not have provided.

During the unit, Dani also collected artifacts produced by the teachers and the students including completed assignments, lesson plans, handouts, PowerPoints, and assessments. Since artifacts can represent individuals and reflect individuals' interests and perspectives (Saldaña, 2013), examining these artifacts enabled us to become more familiar with the research site (Tracy, 2013) and allowed us to learn about how the teachers and the students constructed knowledge (Anderson-Levitt, 2006) during the instructional units.

Occasionally, Dani conducted informal, unstructured interviews with the students. Unstructured interviews collected during participant observation allow the researcher to adapt to changing circumstances within the research context and to gain insight into the viewpoints of the participants (Tracy, 2013).

DATA ANALYSIS

For data analysis, we employed an interpretive framework for qualitative data analysis (Erickson, 1986) and constant comparative analysis (Strauss & Corbin, 1998). Interpretive analysis and constant comparative analysis helped us to develop an understanding of the social interactions and the meanings people make within socially situated contexts (Erickson, 1986; Glaser & Strauss, 1967).

Interpretive analysis is a recursive and reflective process that involves repeatedly reviewing the data corpus at all stages of data collection and analysis (Erickson, 1986, 2012; Merriam, 1998).

Through repeated viewing, we inductively generated assertions, sought disconfirming evidence, and established evidentiary warrants (Erickson, 1986). We wrote analytical researcher memos at all stages of data collection and analysis to keep a record of ideas, questions, concerns, and reactions to experiences or observations, and "stimulate analytic induction and reflection" around our research questions (Erickson, 1986; p. 146). We repeatedly reviewed these memos to help us construct patterns, develop questions, and determine additional data sources that would help us to better understand the actions of the students and teachers in the case study classrooms.

After data collection, we transcribed all video and interview data. Once transcription was complete, we employed elements of a constant comparative analysis to help create conceptual links across the different data sources (Merriam, 1998). Using a three-step process of open coding, axial coding, and selective coding (Strauss & Corbin, 1998), we compared events and incidents to develop tentative categories (Merriam, 1998) and generate assertions (Erickson, 1986).

Through open coding, we broke the data down into smaller parts, closely examined those parts, and compared them (Saldaña, 2013). While we were concerned with literacy practices as identified in our research questions, we did not begin with a predetermined coding scheme. Rather, we started with open coding because, according to Saldaña (2013), open coding allows researchers to reflect deeply on the data and thus, remain open to different theoretical possibilities. Ultimately, we found that the teachers utilized common or traditional literacy practices, but during data analysis, we wanted to remain open to the possibility of unique, original, or innovative practices that we may not have predicted.

The open coding processes resulted in 256 unique codes including such codes as *answers teacher's question about plot*, *answers teacher's question about content material*, and *answers teacher's question about essay.* Then, through axial coding, we reassembled the data into larger categories that were based on commonalities (Saldaña, 2013). This involved several phases of grouping. For example, the open codes above formed the axial code *student(s) answer questions.* This along with another axial code, *student(s) make(s) a comment*, was grouped under the parent category *students' actions.* When observed next to the open code *teacher asks question* and the axial code *teacher actions*, we noted the larger category *question and answer (Q&A).* Finally, in the selective coding phase, we refined the categories, compared data points, and triangulated the data (Strauss & Corbin, 1998). For example, we revisited the data with the *Q&A* code and other literacy practice codes to ensure we identified all instances of the practice.

FINDINGS

During data analysis, six different literacy practices were noted during class time that focused on the comics: 1) Teacher-initiated question and answer sessions, 2) teacher lecture, 3) teacher or students reading the comic aloud, 4) students answering multiple choice questions, 5) students writing about the comic, and 6) students drawing comics. See Table 1 for a detailed breakdown of the amount of time each literacy practice was performed in each class. In this findings section, we offer a detailed account of each literacy practice observed.

TABLE 1
Time Spent on Each of the Six Literacy Practices Observed in Both Classes

LITERACY PRACTICE	TIME SPENT IN AP SCIENCE	TIME SPENT IN AP ENGLISH
QUESTION & ANSWER	45 minutes	191 minutes
LECTURE	15 minutes	10 minutes
READING THE COMIC ALOUD	0 minutes	37 Minutes
ANSWERING MULTIPLE CHOICE QUESTIONS	0 minutes	23 minutes
WRITING ABOUT THE COMIC	123 minutes	0 minutes
DRAWING COMICS	0 minutes	177 minutes

QUESTION AND ANSWER SESSIONS

The question and answer (Q&A) literacy practice was a teacher-centered practice wherein both teachers posed questions to the class related to the comic and then called upon individual students to respond. This was the dominant literacy practice in the AP English class accounting for 191 minutes of total class. It was also the second most dominant literacy practice in the AP Science class (45 minutes). In both classes, Q&A literacy events consisted of the teachers asking students questions, telling students information, giving feedback, repeating or restating what students said, answering students' questions, and managing classroom behavior. Students performed similar actions, answering teachers' questions, asking questions, and making comments. While the Q&A events focused on the comics themselves or on activities related to comics more generally, a range of topics featured. These Q&A sessions addressed image/comic conventions, narrative elements,

content area material, historical context, author's purpose, activities/assignments, and personal experiences.

The Q&A events in these classrooms were consistent with the Initiate-Respond-Evaluate discourse pattern found in many classroom interactions (Mehan, 1979; Serafini, 2009). In this traditional classroom interaction, the teacher frequently Initiates a discussion by posing a question to which students are expected to Respond; then, teachers Evaluate the responses of the students (Serafini, 2009) based upon some sort of explicit or implicit criteria. In other words, the teacher is often looking for a specific answer. For example, consider the following excerpt in which the English teacher, Lord Awesome, and his class discuss page 140 of *Persepolis*. We recommend that readers either read this section with the book in front of them, or search for an image of this page on the Internet.

Lord Awesome:	Looking at page 140 of the text at the sequence of panels, which of these sticks out to you and why do you think it does?
Mustard:	The first one.
Lord Awesome:	This one sticks out to you? Why do you think it sticks out?
Mustard:	'Cause it's... there's glass. She's walking through shattered glass.
Lord Awesome:	So what? She's walking through shattered glass. Do you think that means anything in terms of the narrative? About what's going on?
Jimmy:	I think it's foreshadowing because it's shattered glass, right? And then in the next page when you see that she goes to a shattered house.
Lord Awesome:	Interesting. So I mean, we know that she's on her way home. Why? Why is she on her way home right now?
Jimmy:	Because of the bombing.
Lord Awesome:	Because of the bombing. So I mean, we could expect some debris. Did anybody else say that there was a different panel that stuck out to you? Or do agree that it's the first one.
Jude:	The first one.
Dragon Nickles:	Even though she was the only one home she survived. And the look on her face, it looks like something terrible has happened. And when you go to the next page, it's really that–
Lord Awesome:	Interesting.
Dragon Nickles:	–everything just died.
Lord Awesome:	Yeah, interesting, interesting. Did anybody pick the second panel?

Samurai Joe:	Yeah.
Lord Awesome:	Yes! Samurai Joe, walk me through that. Why did you say that that one was the one that stood out to you?
Samurai Joe:	I mean, to me, you see all the panels, they're all like with a white background.
Lord Awesome:	They have a white background.
Samurai Joe:	Yeah. And the black background just makes it...it sort of makes me realize how bad a position she's in.
Lord Awesome:	Right. It's a very dark place that she's in metaphorically as presented in this. And what is the one source of brightness there? Her mom calling her name. So that darkness is broken and you can tell with like these action dialogue balloons in the next panel that that is the moment she feels intense relief. I don't know if you've seen it... If you go back a little bit, all these panel sequences, they create profound anxiety. Right? Like you are worried about her parents. You're like, "Oh, my God, what's gonna happen?" And then you finally... There's a lot of darkness, there's a lot of play on light and then you finally get to this and... Sweet relief. Goodness, yes. Good.

(Transcript, May 25, 2017)

In the above exchange, Lord Awesome begins with what is a presumably open-ended question. He asked students which panel "sticks" out to them and why. However, as the Q&A progresses, it becomes clear that Lord Awesome is looking for students to attend specifically to the second panel on the page. While he asked a few follow-up questions and responded that students' perspectives are interesting, he eventually asked if the second panel stood out to anyone. This question suggested that this is the panel he was hoping students would discuss. When he receives an affirmative response from Samurai Joe, he responds with an enthusiastic "Yes!" After inviting Samurai Joe to explain his perspective, Lord Awesome then takes time to build upon Samurai Joe's comment and expand upon the ideas Joe offered. Lord Awesome seemed excited to share his ideas about the comic.

Similar exchanges occurred in the AP Science class. In the transcript below, Mr. Hugo leads a discussion about *#foodcrisis* by asking a series of questions to which students offer brief responses. Mr. Hugo directs the conversation through his questioning technique, ultimately building to a moment of elaboration in which Mr. Hugo expands upon a point that underscores the disciplinary content he wants students to remember.

Mr. Hugo: So, in these chapters we start to see the culmination of everything that has happened so far, you have all that political, we'll call it politics, coming to a head. And you start to see some of the impacts. So, tell me, how does what we talked about yesterday relate to the chapters?

Jude: What did we talk about yesterday?

Mr. Hugo: Food deserts. First off, what is a food desert?

Jude: A place where access to healthy and fresh food options are not available.

Mr. Hugo: Access to healthy and fresh food options that you do not have. So for– Usually, people are going to either community stores or fast food for their main nutrition. So how does that play into what was going on in the last several chapters of *#foodcrisis*? What happened in the last several chapters?

Pixie: Food prices are–went up.

Mr. Hugo: Food prices went up. Why are they going up?

Jimmy: They started rebelling.

Mr. Hugo: Who started rebelling?

Jimmy: The rebels started rebelling.

Mr. Hugo: The rebels started rebelling, along with the [inaudible]/ What did that cause?

Jimmy: It meant there was no one working on making food.

Mr. Hugo: There's no one working on making food. Why else was there, and if they weren't making food, what was not happening to them? Or, if they weren't making food, what was the result of that?

Ted Moseby: The demand would be high and the supply would go low.

Mr. Hugo: Demand goes high. Supply goes low. So, what was happening to food prices?

Ted Moseby Going up.

Mr. Hugo: Going up. And what was happening in the grocery stores?

Jimmy: They were scavenging.

Mr. Hugo: They were scavenging. Was there a lot of food, a little food?

Pixie: A little.

Mr. Hugo: There was little food. Why else was there little food in the grocery stores?

Jimmy: The trucks.

Mr. Hugo: What about the trucks?

Jimmy: They weren't delivering the food.

Mr. Hugo:	They weren't delivering the food. So why were the trucks not delivering the food?
Ted Moseby:	The gas is gone–
Mr. Hugo:	Why was gas going up?
Alex:	There was a hurricane.
Mr. Hugo:	A hurricane. What happened with the hurricane? Why was that causing oil prices to go up?
Jimmy:	It destroyed resources.
Mr. Hugo:	Destroyed the resources. Anything else? Or was it just plain, they didn't have the supply?
Steve:	Mostly because a lot of the oil supply–[outside interruption]--because some of the oil is actually made by food as well.
Mr. Hugo:	Good. So, we've talked about this before. We've talked about biofuels. So, corn additives to oil. So, if you have raised oil prices, it's going to cause people to—[outside interruption]--If you raise oil prices, that raises the cost of pretty much everything. Truckers make their living by shuttling things back and forth. And if they have to pay a higher fuel cost, then they're not making as much profit. Or they're operating at a loss. And so, therefore, they're going to start to rebel. And so, just these simple changes can have cascading effects down to the point where you're having food riots in the streets. 'Cause everybody needs to eat. We've talked about this before, we've seen this in different presentations, that access to food is really what leads to civil unrest.

(Transcript, March 1, 2017)

For Mr. Hugo, the intersection of the text and the unit topic constituted the *right* answer; the students' role was to discover the correct meaning. However, his Q&As often ultimately focused on narrative events making it challenging for students to come to the answer he was looking for. In the above sequence, Mr. Hugo begins the Q&A with a question that connects the narrative with the topic from the previous class session but follows this question with a question about the events of the narrative. Students responded with simple plot-based answers. Mr. Hugo would confirm that the answer was correct or would follow up with additional questions. Eventually, Steve responds with the answer that Mr. Hugo was looking for, as is indicated by Mr. Hugo's response of "Good." Like Lord Awesome, Mr. Hugo then expands on Steve's answer

TEACHER LECTURE

We define lecturing as a teacher-centered practice that provides the teacher with opportunities to tell students information about the comic or comics in general with or without a visual aid. Spoken language is the predominant mode of representation and communication during lectures. This type

of instructional practice is utilized across the disciplines and is common practice in many high school classrooms. It is important to note that lecturing has been critiqued and has been associated with the banking model of education (Freire, 1968/2018) because it tends to position teachers as the knowledge-holders and experts who transfer this important information to students.

Lecture occurred across both classrooms at the very beginning of the units. In AP English, the practice was very formal and constituted 10 minutes of total class time. Lord Awesome used a PowerPoint presentation to define certain comic book conventions and explain common comic book reading pathways to students. He duplicated the PowerPoint as a handout on which students took notes. During the lecture, students occasionally asked questions which Lord Awesome answered. In AP Science, this practice was less formal and constituted 15 minutes of total class time. Mr. Hugo passed out copies of the graphic novel. Then, he directed students to turn to several pages and look at certain panels where he identified a few comic book conventions. He also pointed out the common comics reading pathway. During this practice, students turned to the pages when directed to do so.

READING THE COMIC ALOUD

Reading the comic was a practice that involved events where either a teacher or a student reads out loud to the class. This practice occurred exclusively in the AP English class during two distinct events for a total of 37 minutes of class time. The first event occurred on the second day of the unit when most of the class was off campus for a college visit. Together, the teacher and the six remaining students read the first three chapters of *Persepolis* out loud with each individual voicing different characters. Prior to class, Lord Awesome had made a list of characters which he projected on the board. Students volunteered for the roles, or if they failed to volunteer, were assigned roles so that everyone voiced at least one character.

Lord Awesome functioned primarily as the narrator by reading exposition boxes but also filled in for a character he accidentally left off the initial list and when students stepped out of the classroom for various reasons. Students read their assigned parts in their own voices while Lord Awesome affected a feminized voice (i.e., high pitched) when reading female character roles during the few instances he filled in for students. The second event occurred in the last 10 minutes of the fourth day of the unit and involved Lord Awesome reading a chapter of the comic out loud to the class. As with the previous event, when reading female character roles, Lord Awesome sometimes

affected a feminized voice. There was no consistency to which characters were voiced in this manner and appeared to happen when he remembered to do it.

ANSWERING MULTIPLE CHOICE QUESTIONS

Answering multiple choice questions was a practice exclusive to the AP English class. The questions were designed by the teacher. Twenty-three minutes of total class were spent on this practice over the course of a single event. The quiz consisted of 10 multiple choice questions. Five questions were about the narrative, three were about comic book conventions, and two were about Iranian history which had been covered in a lecture. The quiz was taken on computers using Google Classroom. During the quiz, students silently read the questions, selected answers, sat silently, and worked on assignments for other classes when finished. Lord Awesome spent this time monitoring student behavior. Lord Awesome used the quiz to check students were establishing a basic understanding of the text and classroom content. Like the practice of delivering lectures, multiple choice assessment is a standardized practice across educational contexts meaning that it can often be witnessed in classrooms across the curriculum.

WRITING ABOUT THE COMIC

Writing about the comic was a literacy practice that appeared only in the AP Science class. One hundred and twenty-three minutes of class time were dedicated to this practice. It was a student-centered practice wherein students responded to a written prompt about the comic, and it took two distinct forms: 1) the writing of chapter summaries at the beginning of class, and 2) the writing of a compare and contrast essay which functioned as a culminating assignment at the end of the unit. The essay prompt asked students to compare and contrast the reality of the current food problems with what occurred in the graphic novel. Students' essays needed to summarize what happened in the graphic novel, talk about two different food issues, discuss reasons for particular authorial decisions, and include at least four quotations. Both variants of the practice consisted primarily of students writing on laptops, skimming the comic, and asking questions.

When assigned chapter summaries, students often did not begin writing until Mr. Hugo provided them with a two-minute warning. In alignment with the assignment requirements, students' writing focused primarily on the narrative of the comic. Chapter summaries were assigned three times as morning bellwork with the expectation that each student would complete their own summary. Sixty chapter summaries were collected with 54 reporting narrative events through short statements such as "the food riots happened," "Sonia is arrested/framed for poisoning food," and

"the father steps down [from his position as Senator] to help his daughter" (Bellwork, February 28, 2017).

Students managed their time in similar ways when working on the essay. During the two class periods dedicated to writing the essay, some students worked diligently on the assigned task while others waited until the last thirty minutes on the second day to begin. During this time, Mr. Hugo managed students' behavior, answered questions, and gave feedback on students' writing. Students' responses mostly focused on the narrative with 21 students summarizing plot points as directed. However, of the 22 students in class, only ten wrote about food issues (i.e., content area material). As with the Q&A, lecture, read aloud, and multiple choice question practices, the act of writing, especially essay writing, is considered a common literacy practice in schools and is frequently required by mandated curricular standards (e.g., Common Core State Standards, Texas Essential Knowledge Standards, and Arizona's College and Career Readiness Standards). Furthermore, summarizing can be found in both reading and writing standards. As such, it is not surprising that this practice was utilized in this classroom.

DRAWING COMICS PRACTICE

The drawing comics literacy practice occurred exclusively in the AP English class. It was the second most dominant practice in this classroom at 177 minutes of total class time. This practice developed because Lord Awesome assigned the making of three-page comic sequences twice during the unit. The first drawing event was a post-introductory lecture assessment in which students were expected to use all the comics conventions (i.e., panels, gutters, and speech bubbles) he introduced them to. The second drawing event was assigned as a culminating project. Students were encouraged (but not required) to draw personal narratives which emulated the genre of the focal graphic novel. As with the first assignment, students were required to use comics conventions that Lord Awesome introduced during the reading of *Persepolis*.

In addition to drawing (Figure 1), the students completed several other actions during this literacy practice including making comments about each other's work, asking questions about each other's work, asking questions about drawing comics, giving each other feedback on their comics, and assisting each other with the task of drawing. While students worked on their comics, Lord Awesome told the students information, answered students' questions, and gave students feedback on their comics. Consider the following excerpt from Dani's fieldnotes:

The noise level rises as students begin to chat while they draw. Some of their conversations deal with the comics but mostly they just talk about whatever. Occasionally, one of them will ask another for help. Mrs. Flamethrower isn't sure how to draw straight lines, and Acorn Winters gives her a ruler.

Lord Awesome sits down with Mustard, Mama Bear, and Sylvia to talk about their comics. Once he's finished, he goes back to the front of the room to sit in his swivel chair. He listens to the conversations that flow around him occasionally adding his opinion into the mix.

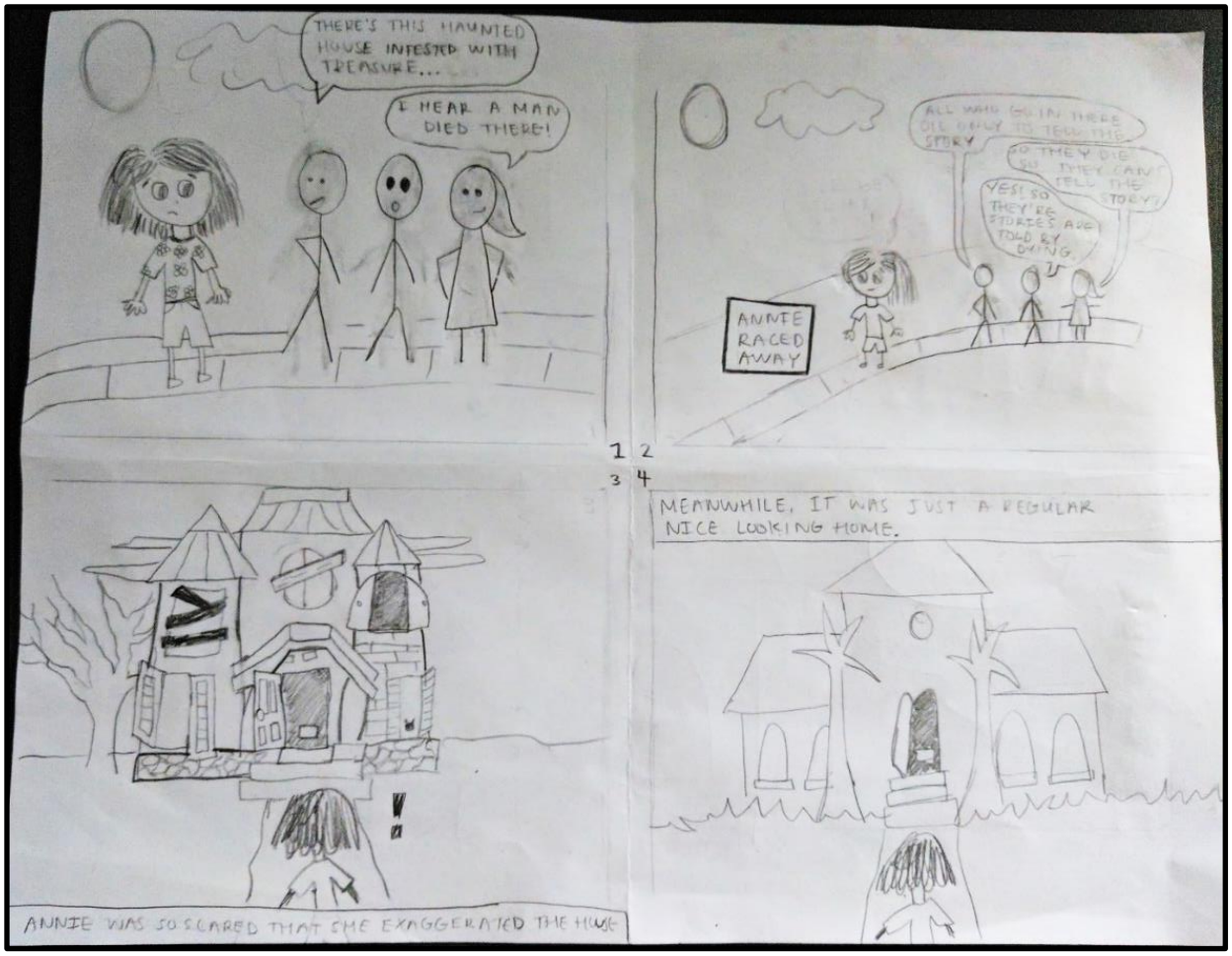
Mrs. Flamethrower calls Lord Awesome over to explain the purpose of the assignment to which he responds: "To show that you know how graphic novels work. You're intentionally using gutter space to your advantage and captions. You understand embellishment, contradiction, salience. That sort of thing." She nods in confirmation and bends back to her drawing.

Jimmy examines images on his laptop. He studies what they look like and then applies what he's seeing to his sketches. Behind him, Mama Bear and Sylvia chat while they draw. They're talking about the weekend and makeup.

Acorn Winters gets up from his seat and gives his comic to Jimmy and asks Jimmy to draw an "enemy with anime eyes" for him. On the other side of the room, Samalamadingdong is trying to decide what is the best order in which to tell her story. She calls over the classroom to ask Acorn Winters for advice. He returns to his seat so she can tell him a couple different options. He gives her another idea but then tells her it is up to her to decide.

There were no recorded instances of students participating in an activity that was not assigned or sanctioned in some way by the teacher while drawing comics. No student appeared unengaged or off-task. Due to students' high levels of engagement with the drawing task, Lord Awesome did not spend much of his time managing classroom behavior or redirecting students' attention.

FIGURE 1
Example of Comic Produced from Second Drawing Assignment



DISCUSSION

This study highlights how prevalent traditional literacy practices were across both the AP Science and English classrooms, even though a non-traditional text had been introduced into the curriculum. Thus, both teachers seemed to enact a traditional or autonomous understanding of literacy as a set of decontextualized skills that students can acquire (Street, 1984) and often involve teacher-centered instructional practices (Resnick, 1990; Street 1984). Significantly, these practices limited student voice and agency in these two classrooms. For example, both the lecture and Q&A sessions were teacher-initiated and teacher-centered. Even when the literacy task required student participation, the multiple-choice questions and writing tasks assigned meant that students' comments were restricted to selecting a single answer option or summarizing textual information. While student agency was limited by these practices, students in the AP Science class began to exercise agency

through disciplinary literacy practices initiated by the expansion of the science curriculum to include a graphic novel. For an in-depth examination of this topic, please see Kachorsky (in press).

The dominance of these traditional literacy practices also raises questions about the roles of texts and readers in high school classrooms. In both classrooms, comprehension of narrative and plot were prioritized. Both teachers felt that it was important that students understood the text. The comic conventions both teachers shared were also intended to support students' text comprehension. Their focus on text comprehension may be connected to the fact that both teachers selected these texts for informational purposes. In the science classroom, Mr. Hugo also wanted students to learn important information about food sustainability. In the English classroom, Lord Awesome hoped that his students would learn about relationships between the Middle East and the United States. Both teachers viewed the comics as a source of factual information and reading them as an opportunity to learn that information. Reading for information left little room for students' interpretive and transactional work (Rosenblatt, 2019).

The ideological nature of texts and reading (Street, 1984) was not addressed in either classroom. All texts students encounter (including their textbooks) are not presentations of truth but, rather, representations of reality (Janks, 2010). As Kersten and Dallacqua (2017) demonstrated, comics can offer visual and verbal perspectives on our world–but they are perspectives only. In positioning the comics as factual and informational texts, the students read the texts as uncritical consumers of information and plot. There was little curricular space for students to offer their interpretation of the text or to take-up, question, challenge, or critique each comic's take on reality. Both teachers used their Q&A discussions to guide students' attention to particular points of interest and listen to their interpretations, a practice that seemed to assert a dominant reading that the teachers wanted students to accept.

Student agency and voice were most visible during the comics composition that took place in Lord Awesome's English class. When students were drawing comics, the classroom became an informal workspace. Students were free to sit in different seats, retrieve materials as needed, and have social conversations. Some students consult each other, one student utilizes the Internet, and other students lend each other tools. In her fieldnotes, Dani writes that Lord Awesome "listens to the conversations that flow around him, occasionally adding his opinion into the mix" (fieldnotes, June 5, 2017). During students' comic-making, Lord Awesome is no longer controlling the conversation or the flow of students' work. The teacher-student hierarchy upheld across the other

more traditional literacy practices seemed to flatten out during this phase of his curricular unit, aligning with findings in other scholarship (e.g., Reid, 2020). Furthermore, Dani's fieldnotes noted that students enjoyed and were fully engaged in this interpretive work. The informality of the classroom space reflected the students' freedom to compose during this curricular phase.

Ultimately, the dominance of traditional literacy practices is unsurprising. As Bridwell-Mitchell (2015) notes, instructional practices are often so institutionalized that they can be highly resistant to change and reform. While both teachers were using a non-traditional format–comics–for the first time, they continued to rely on familiar practices. Teachers tend to rely on and replicate the instructional practices found in their own schooling experiences when teaching both familiar and new material (Sampson & Blanchard, 2012). Interestingly, both teachers appeared to be aware of this. Mr. Hugo noted in an interview that he relied primarily on practices he'd been taught in his content area reading course during his teacher preparation program. Similarly, Lord Awesome told Dani that he was "not Prometheus," reflecting that he was "not bringing fire" or anything unique or new to the teaching of comics in his classroom (Interview, July 6, 2017).

IMPLICATIONS AND CONCLUSION

While using non-traditional texts in classroom spaces does have the potential to positively disrupt educational norms (Dallacqua, 2016; Dallacqua & Sheahan, 2020; Kersten & Dallacqua, 2107), simply including a non-traditional text into the classroom does not necessarily mean that traditional literacy practices will be disrupted. Comics, as well as other forms of text, are not a proverbial magic bullet that will change or improve literacy merely by being included in the classroom. Thus, teachers hoping to leverage comics in the classroom should not assume that student interest, content learning, or literacy will be improved through such inclusion.

Rather, teachers need specific knowledge regarding comics history and how visual texts work in order to capitalize on the potential of these texts. Specifically, we recommend professional development to assist teachers in developing a metalanguage to name and describe the different design features found in comics (e.g., gutters, panels, bubbles, lines, etc.). This also has implications for teacher educators who are charged with the preparation of classroom teachers and for those individuals in charge of professional development. Neither of the teachers featured in this study had any formal training in using comics in classroom spaces to support learning or literacy. Thus, they relied on what they already knew. Teachers need training and development focused on developing

multimodal text sets and designing learning experiences that can carry across different media. To support current and future teachers, teacher educators and professional development coordinators need to expand their own instructional practices to include these texts and supporting strategies.

Second, critical literacy is the work of all teachers regardless of content areas. It is essential that students understand the ideological and representational nature of all texts they encounter. Each curriculum text–the textbook, the graphic novels in this study, the teacher's created materials–is person-made and represents a particular take on the world (Janks, 2010). Information and content are not neutral and cannot be separated from the text-maker, their context and knowledgebase, or their design intentions. The inclusion of comics in content areas like science offer an opportunity to highlight that there are multiple ways to represent and communicate ideas about a particular subject. How information is communicated to an audience impacts how it is received and interpreted by readers or viewers. From this critical literacy perspective, comics metalanguage becomes more than labels for the design features. Instead, comics metalanguage becomes theoretical tools that students can use to think not only about the content of the text, but how texts work. Most importantly, such metalanguage can help students think about how texts work on *them*. Again, teacher educators and programs must consider how texts are talked about and positioned across the curriculum. This might include professional development focused on various theoretical tools and perspectives such as critical literacy (e.g., Haddix & Rojas, 2011), multimodality and visual literacy (e.g., Kress & van Leeuwen, 2006; Serafini, 2014; Kachorsky et al., 2022), and games and film studies (e.g., Kachorsky et al., 2022). These perspectives can equip teachers with analytical tools and questions to guide students in comprehending and questioning visual and multimodal texts such as comics.

Furthermore, as a one-time introduction of comics into the curriculum, new literacy events such as the drawing of comics may not have the opportunity to become sedimented or solidified into a valuable literacy practice. Rather, if only utilized once in the course of a year, the event becomes a novelty. If visual literacy and multimodal texts such as comics were incorporated into multiple units across years and grade levels, visual representational and interpretive work could rise to the level of literacy practice. Again, we call for the continued educational and professional development support of teachers who have need of pedagogical tools in order to use the materials in effective and authentic ways. Considering the visual nature of the contemporary communication landscape both in and beyond school, such practices have the potential to support students' literacy development in crucial ways.

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