A Developing Superpower: Using Graphic Novels to Increase Reading Motivation

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A Developing Superpower: Using Graphic Novels to Increase Reading Motivation

Andrés Antúnez

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Abstract
The Common Core State Standards have heightened the rigor for English Language Arts students across the country. As schools continue to find ways to help students do well on standard-aligned assessments, they struggle to identify methods that can motivate students enough to help them obtain proficient reading literacy. Research suggests that using graphic novels in the classroom may be an effective way to engage students and motivate those who lack interest in reading. This two-group, pretest-posttest quasi-experimental study compared students’ reading motivation scores with the use of a reading profile survey. The control group received direct instruction, anchored by the reading of a non-illustrated fictional text, and the treatment group received instruction based on the reading of a graphic novel. In order to determine the difference in reading motivation between both groups, independent and paired sample t-tests were conducted. Although the results of this study show a greater increase in reading motivation for the control group than the treatment group’s results, it can be implied that using graphic novels in the classroom may also increase a student’s reading motivation.

_Keywords_: Common Core State Standards, reading, intrinsic motivation, reading motivation, graphic novels
A Developing Superpower: Using Graphic Novels to Increase Reading Motivation

**Literature Review**

Motivation is the driving force behind success (Guthrie et al., 2006). Motivation can inspire learning and curiosity. Without motivation, students may not achieve adequate understanding of the subjects and ideas presented in the classroom setting. In California, one way students’ mastery of these subjects is evaluated is with the use of the Smarter Balanced Assessment Consortium (SBAC) assessments. The SBAC is aligned to the Common Core State Standards (CCSS) adopted by the State of California (“Smarter Assessments,” 2019).

Alarmingly, the 2017 SBAC scores for English Language Arts show that middle school students in Central California struggle to meet the demands set by the reading CCSS (California Assessment of Student Performance and Progress, 2017). Because some students lack interest and motivation to read, many may not develop the skills needed to become effective readers. As a result, their reading scores on assessments like the SBAC may be negatively affected.

A possible solution to this problem is to incorporate innovative and engaging readings for students, unlike the traditional, non-illustrated informational and narrative texts typically used. If a student’s success in reading is measured by the CCSS, then schools should provide more opportunities for engagement with reading materials by adopting new reading genres in the curriculum. Adopting graphic novels – written books that use sequentially placed illustrations to present a narrative – may solve this issue and can help increase students’ motivation to read (Gavigan, 2014; Karp 2013). Further, graphic novels can be included in new academic material and curricula that aligns with the CCSS.
Common Core State Standards

With the adoption and implementation of the CCSS, middle school students are required to work with new academic material. For example, textbooks are currently produced in hardcopy and digital formats. Oftentimes, new class textbooks often require students to read more non-fiction texts than before. As teachers begin work with these unfamiliar tools, students who previously struggled to meet standards continue to demonstrate the inability to reach proficiency with the more rigorous CCSS requirements (Guthrie et al., 2006).

According to a data report by the California Assessment of Student Performance and Progress (CAASPP), SBAC results for English Language Arts/Literacy show that only about 15% of all California middle school students exceeded standards in the 2017 school year, and approximately 33% of students met the same standards in the same year (California Assessment of Student Performance and Progress, 2017). The assessments are text-based, without much use of visuals to aid learners who may need extra support to strengthen comprehension and respond to the questions. If students who need visuals to understand a text are not being given these aids, their ability to demonstrate proficiency is diminished. Furthermore, a student who may benefit from illustrated texts may not find any motivation to read material that lack visuals.

As a result, this lack of motivation may contribute to a 7th grade middle school students’ inability to adequately engage with literary tasks that is needed in order to perform well during assessments. Although newer textbooks have broadened teachers’ in-text libraries to include a wider range of authors and writing styles, the use of illustrated narratives, like graphic novels, is rare (Gavigan, 2014). Consequently, a powerful tool, like graphic novels that may be used to help motivate students, remains relatively unexplored in educational settings.
Intrinsic Reading Motivation

Before middle school students can meet reading literacy demands, like the ones measured by the SBAC, they must be inspired to read and engage with the content. However, they cannot do that if they are not captivated by the material (Becker, Kortenbruck, & McElvany, 2010). If students are not motivated to read, their comprehension of the material may be compromised and test results may suffer (Guthrie et al., 2006). On the contrary, a student who is interested in a reading activity that has been provided by the teacher may be more intrinsically motivated to engage with reading tasks and make meaning of the content (Baker & Wigfield, 1999). In other words, for intrinsically motivated students, it may be more satisfying to understand and discuss academic content.

Human development researchers, Becker, Kortenbruck, and McElvany (2010) define reading motivation as a complex outcome of reading that results from a reader’s goals, beliefs concerning text topics, and processes a reader undergoes while completing these activities. Concomitantly, intrinsic reading motivation is a positive experience that results in the enjoyment, interest, and excitement of reading, leading to a repetition of the reading process, which brings positive emotions and satisfaction to the reader (Becker, Kortenbruck, & McElvany, 2010). Thus, intrinsic reading motivation must be fostered within each student in order to engage them in the reading process and develop proficient literacy skills (Becker, Kortenbruck, & McElvany, 2010). Success, in this case, may depend on the students’ intrinsic motivation to engage with a text they find of interest (Rapp, 2011).

**Performance and engagement.** It follows that 7th grade middle school students who are intrinsically motivated to read are capable of achieving success, because they are personally invested in the reading and learning process. Furthermore, engagement with the instructional
reading materials can lead to success in meeting reading goals (Ryan & Deci, 2000). This type of motivation is inherent, and it can be accessed by allowing students to use their creativity to explore new ideas and learning opportunities. Students may be too familiar with the traditional learning environment and teaching methods observed in the classroom; as a result, it may be difficult for them to be motivated by the texts and materials offered (Rapp, 2011).

For example, in a seventh grade English Language Arts class, recommended readings are usually classics which students may either find to be challenging to relate to or be uninterested in the readings. This is often the case in communities where the characters and events in fictional texts do not reflect the student population and culture (Lafferty, 2014). These experiences can lead to negative perceptions of one’s reading ability. Pitcher and his colleagues (2007) suggest students in these environments may develop a low to negative self-concept of who they are as readers. In other words, students notice they are not invested in the reading; as a result, uninterested students may categorize themselves as poor readers. However, when students are inspired by the ideas, topics, and materials presented in an academic content class, it is possible students may be motivated to continue learning, increasing in themselves a positive self-concept as readers.

One way to help motivate students is by allowing educators the freedom to explore the use of new materials. For example, a teacher’s role is not only to present academic content to students, it is also to make the material engaging and interesting for as many students as possible. If teachers can present students with readings that are engaging and entertaining, it is likely that students may be more motivated to work and interact with a text, possibly resulting in higher reading self-efficacy and success in the classroom. This idea is best illustrated by a study conducted by Guthrie, Klauda, and Ho (2013), who measured seventh-grade students’ reading
engagement using the Motivations for Reading Information Books in School (MRIB-S) questionnaire. Findings revealed that intrinsic motivation (i.e., enjoyment of reading) was negatively correlated with informational texts but positively correlated with literary texts (Guthrie, Klauda, & Ho, 2013). In other words, it is more likely that students engage best with literature, rather than with non-fiction informational texts. Hence, an intrinsically motivated reader is more likely to engage in learning at a deeper level—making meaning and strengthening comprehension of the material (Guthrie et al., 2006). Furthermore, making meaning, strengthening comprehension, and increasing reading motivation can be developed by being exposed to media, such as films, television, and graphic novels (Rapp, 2011).

**Implementing Graphic Novels in Class**

Implementing the use of graphic novels in the classroom may be motivation enough for some students, as the rarity of being allowed to read a book with vibrant pictures can be an incentive to engage with the material (Rapp, 2011). A teacher may be more successful at connecting with struggling students who may view reading and writing tasks negatively by presenting them with a tool that will help them develop their visual literacy, the ability to make meaning with visual images (Gavigan, 2014; Karp, 2011; Wiseman, Mäkinen, & Kupiainen, 2016).

To illustrate, developmental psychologist Howard Gardner suggests a person can gain meaning through various avenues (Gardner, 1999). For example, Gardner’s (1999) multiple intelligences theory suggests that a learner can make meaning by tapping into one of several intelligences (e.g., spatial intelligence, musical intelligence, and kinesthetic intelligence). Aesthetic intelligence, learning which occurs through the analysis of images and colors, suggests
that by engaging with the sequentially designed illustrations in a graphic novel, some students may be better equipped to understand its narrative content (Gardner, 1999).

Furthermore, students are more likely to read when offered different types of reading material (Gavigan, 2014). Rather than just reading texts with no visual stimulation, a graphic novel can better attract the attention and strengthen the understanding of visual learners because graphic novels have the power to communicate differently than traditional texts (Karp, 2011). For example, the sequencing of a graphic novel’s images can help a student piece a story together. As a result, it seems traditional approaches to teach reading literacy skills are not always the best at reaching all students. Therefore, the use of modern and more attractive texts, like graphic novels, may be able to help students motivate themselves to become intrinsically motivated readers.

**Challenges Against the Use of Graphic Novels.** When new, district-adopted material is first delivered to educators, it is expected that the educator will use the new materials to teach students. Unfortunately, the integration of graphic novels into new curricula is not yet common. However, the future seems promising, as textbook publishers are becoming increasingly aware that a need for a variety of literature is present (Killeen, 2013).

One way publishers can include a variety of literature in textbooks is by integrating graphic novels into their content. Graphic novels, which are sequentially illustrated narratives similar to comic books, can help students develop their literacy. As interest in superhero figures gains momentum, students may be motivated enough to seek graphic novels in school libraries. However, many educators and librarians do not see the value in comics and graphic novels; they do not consider them literature (Killeen, 2013). Thus, the view that graphic novels are not
academic enough, or worthy of educational time, may be the reason why there is limited research on the effects of graphic novels in the educational environment.

**Methods**

The purpose of this study was to understand whether the inclusion of graphic novels into a seventh-grade English Language Arts class improved student motivation to read a text. Studies showing a positive correlation between graphic novels and motivation to read, demonstrate the need for more research on this subject in a middle school setting (Karp, 2013; Killeen, 2013; Schwarz, 2006). Unless educators explore creative methods of teaching reading, they may be unable to spark interest in their students to learn and understand.

**Research Question**

Does the use of graphic novels intrinsically motivate 7th grade English Language Arts students to read a text?

**Hypothesis**

Based on the research, it was hypothesized that middle school students’ intrinsic motivation to read a text would improve when they were offered graphic novels (Baker & Wigfield, 1999; Becker et al., 2010; Guthrie et al., 2006; Lavin, 1998; Schwarz, 2006).

**Research Design**

This study was a quantitative, quasi-experimental, non-equivalent two-group, with a pretest-posttest design. The sample consisted of two different 7th grade English Language Arts classes from the same school. During the study, the treatment group was assigned to read a graphic novel by Chris Claremont and Brent Anderson titled *X-Men: God Loves, Man Kills* (Claremont & Anderson, 1982), while the control group was assigned to read a non-illustrated fiction text by Edward Bloor titled *Tangerine* (Bloor, 1997). Both groups participated in the
study for four weeks, and both the treatment and control groups took the same Adolescent Motivation to Read Profile survey (i.e., AMRP) to measure their reading motivation (Pitcher et al., 2007). The treatment and control groups participated in the same learning unit sequence published in the Springboard English Language Arts 7 textbook, which focuses on the reading of narratives that recount characters’ choices and the consequences of their actions (Springboard: English Language Arts: Grade 7, 2014). At the end of the unit, the treatment and control groups took the AMRP again as a posttest (Pitcher et al., 2007). Both, the pretest and posttests, were the same AMRP survey, containing the same number of questions.

**Independent variable.** The independent variable in this study was the graphic novel intervention administered by the researcher. A graphic novel is a written book that uses sequentially placed illustrations to present a narrative (Gavigan, 2014; Karp 2013). The thematic content of the selected graphic novel mirrored the topics of making choices and lessons learned found in the non-illustrated text read by the control group.

**Dependent variable.** The dependent variable in this study was students’ intrinsic motivation to read. Motivation is defined as behavior that is repeated based on intrinsic or extrinsic motives that drives a person to engage (Ryan & Deci, 2000). Motivation will be measured through the use of the Adolescent Motivation to Read Profile reading survey (AMRP; see Appendix A), before and after the intervention.

**Setting & Participants**

This study was conducted at a seventh and eighth grade middle school located in Central California. The middle school has an enrollment of 1,102 students; 98.7% of the student population is Hispanic or Latino, 482 students are female and 620 are male (EdData, 2018). The study used convenience-purposeful sampling as students from two specific classes were chosen
because they attended classes on the school site and were available for the researcher to study. Also, the participants were purposively selected because the sample of students struggled to demonstrate success with literacy and reading assessments. Therefore, the sample participants reflected an adolescent group that could benefit from the purposes of the study. In total, 56 students enrolled in the seventh grade, participated in this study. Both groups selected by the researcher typically perform equally academically and are similar in ethnicity and demographics.

**Treatment group.** The treatment group consisted of 28 students. Of these students, 14 are female (50%) and 14 are male (50%). The treatment group also consisted of 14 (50%) Reclassified Fluent English (RFEP) students, 12 (43%) English Learners (EL), three (11%) English Only (EO), and two others (7%) identified as Special Education receivers. In total, 100% of the students are Hispanic or Latino. All students were eleven to twelve years of age.

**Control group.** The control group consisted of 28 students. Of these students, eight are female (28.5%) and 20 are male (71.5%). The control group also consisted of 16 (57%) RFEP students, 12 (43%) ELs, one (4%) EO, and two others (7%) identified as Special Education receivers. In total, 100% of the students are Hispanic or Latino. All students were eleven to twelve years of age.

**Measures**

The AMRP survey (see Appendix A) was administered before and after the intervention (Pitcher et al., 2007). The survey was created to measure students’ motivation and attitude towards reading. The AMRP consists of 20-questions, and the questions are measured on a 4-point Likert scale with response choices ranging from high-to-low agreement. For example, one question asks “Knowing how to read well is ____”, with four answer choices given ranging from “very important” to “not very important” (Pitcher et al., 2007). This 20-question survey measures
two areas of reading motivation: self-concept as a reader and the value of the reader. The AMRP is adapted by Pitcher and his colleagues (2007) from The Motivation to Read Profile (Gambrell, Palmer, Codling, & Mazzoni, 1996), which is the same survey designed for students in grades first to sixth. The printed paper version of the AMRP was administered in the classroom, during a 20-minute session for each group.

**Validity.** Because of prevalent and reliable usage of the elementary-level Motivation to Read Profile (Gambrell et al., 1996) in previous studies, Pitcher and his colleagues (2007) revised the MRP for use at the secondary school level (Pitcher et al., 2007). The construct validity is strengthened by the fact that the AMRP measures more than one aspect of reading motivation: one’s self-concept as a reader and the value of the reader.

**Reliability.** The AMRP survey has been proven as a stable way to measure reading motivation through an international study conducted by Pitcher and his colleagues (2007) on adolescent students from middle and high school. Internationally, the AMRP survey has found a higher motivation to read in males and females in the middle school years (Pitcher et al., 2007). To ensure reliable scoring of the student responses for the AMRP, the scoring rubric for the Motivation to Read survey was used, as it is attached and adapted by Pitcher and his colleagues (2007) for the AMRP reading survey. In order to ensure inter-rater reliability, 20% of the same AMRP responses were scored by the researcher and two partner teachers (i.e., Teacher A and Teacher B).

**Intervention**

Inspired by Gardner’s theories on multiple intelligences and aesthetic learning, this study’s intervention was a graphic novel which uses traditional narrative writing, alongside illustrated panels that depict the events in a story (Gardner, 1999). The graphic novel used was
Chris Claremont and Brent Anderson’s *X-Men: God Loves, Man Kills* (Claremont & Anderson, 1982). The graphic novel was used as the anchor text for reading during the four-week intervention. In theory, using a graphic novel in class allows students to visualize a narrative with its use of colorful imagery commonly found in comic book formats, leading to higher interest, engagement, and motivation to continue reading (Illeris, 2009). The graphic novel was selected because it features superhero characters that many students are already familiar with through popular culture, animated series, and major motion pictures. Most importantly, Claremont and Anderson’s (1982) *X-Men: God Loves, Man Kills* also explores similar thematic content and elements of literacy (e.g., characterization, conflict, and setting) that was explored through the district-adopted curriculum. The control group was exposed to these elements as well, through the reading of excerpts from a district-adopted, non-illustrated narrative titled *Tangerine* (Bloor, 1997).

**Procedures**

Both the control group and the intervention group were given a pretest (i.e., AMRP) prior to the administration of the intervention. Then both groups began the reading process; the control group read excerpts from Bloor’s (1997) *Tangerine*, while the treatment group read Claremont and Anderson’s (1982) *X-Men: God Loves, Man Kills* graphic novel. As the reading progressed throughout the four weeks, students in both groups responded to discussion questions and writing prompts that required students to discuss the choices and consequences that resulted from a character’s actions. At the end of the four weeks, students were given the same AMRP survey as a posttest.

**Data collection.** The results for this study were collected from the pretests and posttests before and after the four-week process. Both groups took the same pretests and posttests at the
start and conclusion of the study. The students in the treatment and control groups were given the AMRP survey (Pitcher et al., 2007) to measure the level of reading motivation. The same tests were given again at the end of the study, after both groups had finished reading their respective texts.

**Fidelity.** The fidelity of the intervention was maintained by having two partner teachers (i.e., Teacher A and Teacher B) observe the study and the researcher 20% of the time (i.e., four observations each), in order to confirm 100% fidelity to the intervention. Teacher A was selected to observe the control group, while Teacher B was asked to observe the treatment group. The researcher and the partner teachers discussed the objectives of the study and came to a consensus about its goals and outcomes, in order to maintain validity. Whereas Teacher A ensured that the graphic novels were not being used by students during control group observations, Teacher B confirmed that the graphic novel was being read and discussed during observations for the intervention group. Both teachers were asked to date and sign a fidelity checklist (see Appendix B) after observing the assigned class. Students in the treatment group were told not to mention the content of the graphic novel to their peers from the control group. The study concluded after a four-week period and was not extended.

**Ethical Considerations**

The researcher ensured complete anonymity of the participating population throughout the study. Student names were not used or released to anyone. None of the students were placed in physically dangerous situations; however, the contents of Claremont and Anderson’s (1982) *X-Men: God Loves, Man Kills* graphic novel revolve around the topics of persecution, discrimination, and death, which may have affected some students’ emotions. The students were made aware of these topics beforehand and allowed to discuss their feelings regarding the
content as the intervention progressed. Students were not required to exercise unusual or unfamiliar practices that could intervene with their safety or comfort, within the educational setting of the classroom.

Validity threats. Both groups were selected because they were similar in size. The researcher specifically selected the treatment and control groups because they consisted of the same number of students of similar demographics. Both groups were selected because they contained the same number of English Learners and approximately the same number of students labeled RFEP. The personal bias of the researcher was reduced by ensuring that both groups were taught the same fundamental skills by adhering to the Common Core State Standards.

Some extraneous variables that may have affected the validity of the study included the structure of the learning unit, as it was taught by one teacher—the researcher—for the treatment and control groups at the same middle school site. The treatment group was the only seventh grade English Language Arts class that read a graphic novel at the middle school site of study. In contrast, the control group read a non-illustrated text instead of the graphic novel. Another possible factor that may have affected the bias of the researcher was the middle school site’s rotating schedule, which ensured that the treatment and control groups were taught at different times of the day as the weeks progressed.

Data Analyses

All data was entered into the Statistical Package for the Social Sciences (SPSS) for Windows, version 24.0.0 (SPSS, 2016). No names or identifying information were included in the data analysis. Before analyses were conducted all data was cleaned to ensure no outliers were present (Dimitrov, 2012). After cleaning the data, Independent samples t-tests (control and treatments groups) and dependent samples t-tests (pretest and posttest) were conducted to
determine the significant difference in reading motivation between the two mean scores on AMRP (Pitcher et al., 2007). Further, before interpreting the analytical output, Levene’s Homogeneity of Variance was examined to see if the assumption of equivalence had been violated (Levene, 1960). If Levene’s Homogeneity of Variance was not violated (i.e., the variances were equal across groups), the data was interpreted for the assumption of equivalence; however, if the variances were not equal across groups the corrected output would be used for interpretation.

**Results**

Two independent samples t-test were conducted on the whole sample ($n = 56$ of total participants) for both the pre and post assessment scores. Results for the pre-test were: Levene's Homogeneity of Variance was not violated ($p > .05$), meaning the variance between groups was not statistically different and no correction was needed and the t-test showed non-significant differences between the mean scores on the pre-tests between the two groups $t (53) = -0.736, p > .05$. Based on the data, the means of both groups’ scores show similar comparability (see Table 1). Results for the post-test were: Levene's Homogeneity of Variance was not violated ($p > .05$), meaning the variance between groups was not statistically different and no correction was needed and the t-test showed significant differences between the mean scores on the post-tests between the two groups $t (53) = -2.34, p < .05$. In other words, the post-test results for the treatment and control groups demonstrate a statistically significant difference between the intervention group receiving the intervention and the control group reading a non-illustrated text (see Table 1).
After determining the differences between pre and post assessment scores between groups, two paired t-tests were run for both groups (i.e., treatment and control) to determine if participants mean scores from pre to post were significantly different within each group (see Table 2). Results for each group were as follows: treatment group, $t(26) = -.241$, $p > .05$; control group, $t(27) = -2.471$, $p < .05$. The results show that, there was no significant difference between pre to post test for the treatment group. However, the control group’s posttest mean scores were significantly different from the pretest scores. Even though both groups showed an increase in reading motivation, the control group’s posttest average scores were demonstrably higher. Additionally, the negative t-value for each group indicates an increase in scores from pre to post assessment with the treatment group’s score increasing by .22 points, compared to the control group whose score increased by 3.00 points.

Table 1

<table>
<thead>
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<th>SD</th>
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<tr>
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<tr>
<td>Treatment</td>
<td>49.93</td>
<td>9.339</td>
</tr>
<tr>
<td>Control</td>
<td>51.68</td>
<td>8.300</td>
</tr>
<tr>
<td>Post Test*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treatment</td>
<td>50.15</td>
<td>8.184</td>
</tr>
<tr>
<td>Control</td>
<td>54.68</td>
<td>6.056</td>
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</tbody>
</table>

Note. SD = Standard Deviation. * = $p < .05$. 
Table 2

**Results of Paired T-Tests**

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
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<tbody>
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<td><strong>Treatment Group</strong></td>
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<tr>
<td>Pre</td>
<td>49.93</td>
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<tr>
<td>Post</td>
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<tr>
<td><strong>Control Group</strong>*</td>
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<td>54.68</td>
<td>6.056</td>
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*Note. SD = Standard Deviation. * = p < .05.

**Discussion**

The purpose of this study was to experiment with the use of graphic novels in an English Language Arts classroom, in order to increase reading motivation in seventh grade students. As the CCSS have increased the rigor of education, students have struggled to demonstrate proficiency in their assessment scores. This may be a result of their lack of motivation to engage with the readings, which are aligned to the CCSS. This study included 28 students (i.e., treatment group) who were instructed using a graphic novel reading intervention and 28 students (i.e., control group) who received instruction using only a non-illustrated, fictional text.

Considering previously cited research, the results of the study do not confirm the hypothesis that graphic novels help increase a students’ reading motivation (Baker & Wigfield, 1999; Becker et al., 2010; Guthrie et al., 2006; Lavin, 1998; Schwarz, 2006). However, even though the treatment group had an increase in reading motivation after the intervention, the posttest scores on the AMRP (see Appendix A) were not significantly different than the results for the control group. Furthermore, it should be noted that, even though the control group also
demonstrated an increase in reading motivation, their posttest scores on the AMRP showed a higher motivation to read than did the treatment group’s results (see Table 2).

Another consideration is that the control group scored higher on their pretest than the treatment group (see Table 1), meaning that the control group scored consistently higher than the treatment group on the pretest and posttest. This may have been because it was easier for the control group to engage with a familiar text format (i.e., reading from left to right, line by line), rather than having to engage with a graphic novel, which can be read in a variety of ways depending on its design. The short intervention period may not have allowed students enough time to adapt to reading graphic novels. The results from the current study showed only a slight increase in students’ reading motivation after the intervention, which is in contrast to previous research. For example, Guthrie (2006) as well as Pitcher and colleagues’ (2007) found that providing different texts did have a positive impact on adolescents’ reading motivation. The current study had limitations that may have contributed to the differing results.

**Limitations and Future Directions**

One limitation to this study is that participants were selected through convenience-purposeful sampling. This choice was made because of the researcher’s limited accessibility to the sample. Also, the sample consisted of two separate classes, from two different periods, taught by the researcher. The researcher specifically selected both classes because of their size, as each one included the same total number of students, facilitating the data collection. In addition, the length of the study may have been too short to identify concrete, long-term impacts of the intervention. Further, student fatigue should be considered when selecting a window for future studies. Future studies may want to consider conducting the study in the first semester when students are less exhausted.
Moving forward, research should continue to analyze the long-term implications of the study. Students should be taught how to read graphic novels, which may materialize with more frequent use of these texts in the classroom. Also, future research should explore the impacts of using graphic novels in class with larger, random samples of middle school students in both seventh and eighth grades, and in different content areas. In doing so, future research may provide more insight as to what actually motivates students to engage with a text: its visual, textual, or subject matter content.

Ultimately, it is important to study the impact of graphic novels on student reading motivation. With its use of images and colors, graphic novels may engage students and inspire them to become better readers, thus improving their academic achievement (Guthrie et al., 2006). As a result, future research on graphic novel use in the classroom could add significant support to implementing interventions like these in more educational settings.
References


Appendix A

Adolescent Motivation to Read Profile (AMRP)

Figure 1
Adolescent Motivation to Read Profile reading survey

Name: ___________________________ Date: ___________________________

Sample 1: I am in ________.
- Sixth grade
- Seventh grade
- Eighth grade
- Ninth grade
- Tenth grade
- Eleventh grade
- Twelfth grade

Sample 2: I am a ________.
- Female
- Male

Sample 3: My race/ethnicity is ________.
- African-American
- Asian/Asian American
- Caucasian
- Hispanic
- Native American
- Multi-racial/Multi-ethnic
- Other: ___________________________

1. My friends think I am ________.
- a very good reader
- a good reader
- an OK reader
- a poor reader

2. Reading a book is something I like to do.
- Never
- Not very often
- Sometimes
- Often

3. I read ________.
- not as well as my friends
- about the same as my friends
- a little better than my friends
- a lot better than my friends

4. My best friends think reading is ________.
- really fun
- fun
- OK to do
- no fun at all

5. When I come to a word I don’t know, I can ________.
- almost always figure it out
- sometimes figure it out
- almost never figure it out
- never figure it out

6. I tell my friends about good books I read.
- I never do this
- I almost never do this
- I do this some of the time
- I do this a lot

7. When I am reading by myself, I understand ________.
- almost everything I read
- some of what I read
- almost none of what I read
- none of what I read

8. People who read a lot are ________.
- very interesting
- interesting
- not very interesting
- boring

9. I am ________.
- a poor reader
- an OK reader
- a good reader
- a very good reader

(continued)
Figure 1 (continued)

Adolescent Motivation to Read Profile reading survey

Name: __________________________  Date: __________________________

10. I think libraries are ________________.
   - a great place to spend time
   - an interesting place to spend time
   - an OK place to spend time
   - a boring place to spend time

16. As an adult, I will spend ________________.
   - none of my time reading
   - very little time reading
   - some of my time reading
   - a lot of my time reading

11. I worry about what other kids think about my reading ________________.
   - every day
   - almost every day
   - once in a while
   - never

17. When I am in a group talking about what we are reading, I ________________.
   - almost never talk about my ideas
   - sometimes talk about my ideas
   - almost always talk about my ideas
   - always talk about my ideas

12. Knowing how to read well is ________________.
   - not very important
   - sort of important
   - important
   - very important

18. I would like for my teachers to read out loud in my classes ________________.
   - every day
   - almost every day
   - once in a while
   - never

13. When my teacher asks me a question about what I have read, I ________________.
   - can never think of an answer
   - have trouble thinking of an answer
   - sometimes think of an answer
   - always think of an answer

19. When I read out loud I am a ________________.
   - poor reader
   - OK reader
   - good reader
   - very good reader

14. I think reading is ________________.
   - a boring way to spend time
   - an OK way to spend time
   - an interesting way to spend time
   - a great way to spend time

20. When someone gives me a book for a present, I feel ________________.
   - very happy
   - sort of happy
   - sort of unhappy
   - unhappy

Note. Adapted with permission from the Motivational to Read Profile (Gambrell, Palmer, Golitng, & Mazzoni, 1996)
## Appendix B

### Fidelity Checklist

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<thead>
<tr>
<th>Date</th>
<th>Control Group</th>
<th>Initials</th>
<th>Date</th>
<th>Treatment Group</th>
<th>Initials</th>
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<td></td>
<td><em>X-Men: God Loves, Man Kills</em> Graphic novel is:</td>
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<td>- <em>X-Men: GL, MK is not available</em></td>
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*GL: X-Men, GL, MK: God Loves, Male Kills*