

Using Comic Books to Improve Three Elementary Students' Reading and Writing Skills: A Multi-Case Study Analysis

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Abstract

Education and literacy researchers have acknowledged educational merit in reading instruction that integrates authentic reading texts, such as comic books, which meet the needs of today's multi-modal learners. This qualitative multi-case study explores how three pre-service teachers use a comic book series known as TOON books during guided reading instruction to improve the literacy skills of three elementary students in third and sixth grades who struggled with reading and/or writing. Each pre-service teacher identified four literacy goals prior to tutoring (three reading goals & one writing goal) based on their student's individual literacy needs, which totaled 12 literacy goals in all. The pre-service teachers reported improvements in 11/12 of the students' literacy goals for all students while using these TOON books during their guided reading instruction.

Key words: teacher preparation, guided reading, comic books, reading skills, writing skills

National guidelines such as the *Standards for the 21st Century Learner* (AASL, 2007) and the *Common Core State Standards* (CCSS, 2010) acknowledge the importance of using a variety of information texts, including comic books and graphic novels to teach across the curriculum especially in the early elementary grades (Gavigan, 2014). Specifically, TOON comic books are purposefully aligned to the *Common Core State Standards* to help students build their literacy skills. The TOON Books website (2018) states,

Teachers are using TOON Books as the grade-level exemplar text to teach the Common Core Standards. Every title is carefully designed and constructed to offer the complexity, quality, and range so that teachers can then springboard into meaningful instruction about specific standards, including inferencing, predicting, envisioning, making connections, finding the main idea, and key details. (TOON Books Educators section 4, para. 3)

Building students' literacy skills is pivotal in helping them to be successful throughout their academic careers and ultimately will help them to become productive members of society. Using highly engaging and fun texts, like comic books, for instructional purposes can help to keep the students' interested in what they are reading as well as motivate them to want to continue reading

thus potentially helping to build their literacy skills. The more they read, the better readers they become. There is definitely a need to explore how comic books can support students' literacy skills development. As a result, the primary goal of this qualitative multi-case study was to explore how three pre-service teachers use a comic book series known as TOON Books during guided reading instruction to improve the literacy skills of three elementary students in third and sixth grades who struggled with reading and/or writing. What follows is a detailed look at this current research study and the promising results supporting the potential benefits of using comic books during guided reading instruction to support students' literacy skills development.

Literature Review

In recent years, there has been an increased use of comic books and graphic novels in the classroom (Carter, 2015; Pagliaro, 2014; Syma & Weiner, 2013) to teach, for example, scientific concepts (Ardasheva, Bowden, Morrison, & Tretter, 2015) and to “research instructional techniques, current events, and social dilemmas” (Martin, 2009, p. 30). Indeed, as Carter (2007) noted, “comics and graphic novels are experiencing a burgeoning Golden Age in education today” (p. 1).

“One of the things that make comics such a good fit for education is that students are using a format that provides an opportunity for active engagement. Their minds are lively when reading comics” (p. 5), argued Syma and Weiner (2013). In Jennings, Rule, and Zanden's (2014) study, a multimodal format of a graphic novel was the most popular choice by fifth-grade students who experienced a “greater enjoyment of reading and stronger interest in the story than when reading either of the other two novel forms” (p. 272). Similarly, Edwards (2009) found that middle school students were more frequently drawn to reading comic books and graphic novels than to reading the traditional text during their voluntary free reading activities. Comics and graphic novels have also appealed to adolescents during informal reading communities such as comic book clubs, contributing to their development of the habit of life-long reading (Gavigan, 2011).

In addition to the encouraging effects on reading motivation, research suggests that there is a positive relationship between reading comic books and graphic novels and reading comprehension (Rapp, 2011; Rodríguez, Ferreras, & Pérez, 2009; Seglem & Witte, 2009; Jennings, Rule, & Zanden, 2014). For example, Brenna (2013) showed that reading graphic novels facilitated fourth-graders' use of reading comprehension strategies applicable both to traditional text and graphic novel. The researchers reported growth in critical thinking and analysis as shown in student reflective creative responses and written stories. In a recent study by Moon, Wold, and Francom (2017), gains were reported in reading comprehension by the fifth grade students ($M = 26.167$) after the reading comprehension instruction and comic book creation, as measured by the post AIMSWeb MAZE reading comprehension assessment, in comparison to the same pre-assessment ($M = 21.722$), with effect size of $\eta^2 = .425$.

Additional research indicates that when students read comic books and graphic novels, they use more habitually cognitive competencies (Jee & Anggoro, 2012), critical thinking and problem-solving skills than when they are exposed only to traditional text (Rapp, 2011; Jennings, Rule, & Zanden, 2014). Specifically, Liu (2004) reported that immediate information recall was significantly higher (38.70%) among low performing English Learners who were reading high-level text combined with comics than their counterparts, low-level English Learners who were exposed to the traditional readings. Their recall was only 19.41%.

Research has also indicated favorable effects of comic books and graphic novels on students who struggle with reading and writing (Frey & Fisher, 2008; Stoermer, 2009; Gavigan, 2011). For

instance, Hammond (2012) who studied graphic novels in high school students concluded that graphic novels “can be used to motivate reluctant readers and aid comprehension for less skilled readers who may have had difficulty transitioning from picture books to print only text” (p. 25).

Other studies have discussed the versatile use of comic literature to scaffold basic writing skill instruction and promote the development of composition competencies (Bitz, 2010; Gatta, 2013; Wissman & Costello, 2014). Maldonato and Yuan (2011) explored digital comic creation in 2nd-grade literacy instruction. The project utilized comic strips creator software called respectively “Comics Lab” and “Comics Lab Extreme” and a website, “Professor Garfield” (www.professorgarfield.org/pgf_home.html) to support student creation of digital comics in response to the literature they read. Maldonato and Yuan found that a digital comic’s project had a positive impact on the children’s writing process but they did not discuss the degree of impact. “As the students used the website, they were actively engaged in the entire writing process. They constantly talked about their work, commented on and raised questions about their peers’ object/character/design choices, and revisited their digital writings” (Maldonato & Yuan, 2011, p. 298).

Likewise, Wissman and Costello (2014) reported high levels of engagement in the writing process by eighth grade students enrolled in the Academic Intervention Support (AIS) reading classes because they scored below the grade level on the English Language Arts (ELA) state exam. The students in this study composed digital scripts and comics in response to the novel, *The Outsiders* (Hinton, 1967). The researchers reported that “Comic Life” software provided their reluctant readers with the structure and continuity in the writing process that they needed. The comics the students created reflected their creativity and deep understanding of the novel. Although the findings are based on rich data, no information was provided about the students’ post intervention scores on the ELA state exam, which would have allowed for assessing the effect size.

Collectively, this research shows promise for using comic books for literacy development but there is less research on elementary students who struggle with reading and/or writing and the degree of impact is deficient. There is also a lack of research that focuses on how comic books will specifically impact elementary students decoding skills (i.e. phonics, self-correction rate), fluency (i.e. phrasing, smoothness, pace, expression), vocabulary (i.e. word learning), comprehension (i.e. retelling), and writing skills (i.e. voice, word choice, details). In our study, we explored if comic books, specifically TOON books (www.toon-books.com), used by pre-service teachers during guided reading instruction would have any impact on the literacy skill development of children in third and sixth grades who struggle with reading and/or writing. According to one of the TOON books authors Art Spiegleman, “Comics are a gateway drug to literacy” (Mouly & Spiegleman, 2017). The TOON books mission specifically states, “Each TOON book has been vetted by educators to ensure that the language and the narratives will nurture young minds” (Mouly & Spiegleman, 2017). We wondered if the same general reading and writing gains as identified in current research would be discernible, as well as which specific reading and writing skills would be impacted while reading comic books during guided reading instruction. Our research questions were as follows:

What is the effect of using TOON books in guided reading on elementary students who struggle with reading and/or writing?

Which areas of literacy skill development are the most impacted after reading TOON books and how?

Theoretical Framework

For the purpose of this research study we espoused the cognitive linguistic perspective (Chomsky, 1955), social interaction theory (Bruner, 1960; Vygotsky, 1978; 1986) and guided reading

instruction (Fountas & Pinnell, 1996; 2012) to serve as the theoretical framework that supported this study.

Cognitive Linguistic Perspective

From the cognitive linguistic perspective (Chomsky, 1955), reading is taught, not acquired (Adams, 1990). That is, learning to read does not come naturally unlike learning to speak does. Although having a rich literacy environment is important, mere exposure to the print and alphabet is not sufficient to develop the ability to read (Bentin, 1992). Reading as a learned skill has implications for our work. As evident in the pre-assessments, which we discuss later in the article, the children who came to our literacy center had difficulty in mastering some of the foundational literacy skills. Clearly, they needed further instruction and practice in these skills and they needed interaction with and help from others, especially the skilled readers who could provide the rich literacy environment they needed in order to grow as readers and writers.

Social Interaction Theory

The social interaction theory of learning (Bruner, 1960; Vygotsky, 1978; 1986) that underscores the fundamental role of social interaction in the development of language (spoken or written) also informs our work. Within this view, reading is the process that “needs to be socially mediated through more knowledgeable persons who can impart their knowledge to the learner” (IOM & NRC, 2015, p. 113). Typically, parents are a child’s first reading teacher, however, teachers continue to serve as a child’s “more knowledgeable others” in the school environment.

Although “most children follow a similar pattern and sequence of reading behaviors as they learn how to read: from appreciation for and awareness of print to phonological and phonemic awareness to phonics and word recognition” (Brown, 2014, p. 35), there is no single strategy or approach that educators can provide that will work for all children at all times. This is because learning to read is also a personal experience that young readers attain over a varied lengths of time and in various ways (Piaget, 1959; 1976). As a result, teaching reading requires an individualized process and a differentiated instructional approach.

Guided Reading

Guided reading (Fountas & Pinnell, 1996; 2012) in a tutoring context provides an instructional approach that is facilitate by expert readers, the tutors, especially for learners who may have limited access to readers who can serve as experts “in mediating the learning process” (IOM & NRC, 2015, p. 113) for them at home and beyond (Doggett & Wat, 2010; Roberts, Jurgens, & Burchinal, 2005). In our study, we supplemented this time-tested approach to instruction with an additional TOON book component. While guided reading together with tutoring by pre-service teachers offered a framework for individualized literacy skill development, comics afforded additional learning opportunities (Frey & Fisher, 2008; Stoermer, 2009; Gavigan, 2011) for our elementary students who struggled with reading and/or writing.

Methodology

We chose a qualitative case study design for the study because it enabled the exploration of a specific bounded system (Stake, 2006), which was a pre-service teacher tutor and his/her reader, and “an individual case’s uniqueness” (Miles & Huberman, 1994, p. 173), that is, an individual

child's literacy needs and an impact of a goal-oriented guided reading program using TOON books on that child's specific reading and writing skills.

In addition, it permitted obtaining "more general understanding of generic processes that occur [ed] across cases" (Miles & Huberman, 1994, p. 173) as we were interested not only in the effectiveness of guided reading with TOON books on each child's literacy skill development but also its overall impact across cases. Consequently, multiple sources of data were collected for multiple cases during pre-service teachers' tutoring sessions, resulting in more robust findings.

The Context and Participants

This study took place during the summer tutoring sessions at a university-based literacy center in the southeastern part of the United States. The college student participants were all majoring in early childhood education and were pre-service teachers who were enrolled in a literacy course that required them to provide six weeks of literacy tutoring sessions for early elementary children who struggled with reading and/or writing. The pre-service teachers were all in their early 20s, all were Caucasian in race, and there was one male and two females. These pre-service teachers were one semester away from clinical teaching and graduation. The three early elementary children they tutored were one sixth grade boy and two third-grade boys all of African American descent. These children were purposefully enrolled in the summer tutoring program by their parents because the parents identified that their child struggled in reading and/or writing during the previous school year. The parents were hopeful that the one-on-one literacy tutoring over the summer break would help their child to gain the literacy skills needed to be successful in their new grade level and quickly approaching new school year.

The literacy course required that pre-service teachers work one-on-one with these children who struggled with reading and/or writing. The pre-service teachers first pre-tested the children using a battery of reading and writing assessments. The pre-test and post-test assessments varied for each child tutored and included an interest inventory, reading attitude survey, writing attitude survey, classroom reading inventory, comprehension retelling, fluency assessment, sight words assessment, phonics assessment, writing assessment, and a spelling assessment (See Appendix A for the Assessment Legend).

After the pre-tests were administered, the pre-service teachers analyzed their data to determine the child's strengths and weaknesses in reading and writing. They then identified four literacy goals for each child based on the child's individual literacy needs. These four literacy goals drove the pre-service teachers' guided reading instruction. They specifically developed an individualized action plan to implement the goals. After that, the pre-service teachers planned the literacy lessons to address the four literacy goals for their child's specific literacy needs. Finally, the pre-service teachers administered post-tests at the end of tutoring to determine educational gains, if any, in their four literacy goals.

The Guided Reading Program

The guided reading tutoring sessions took place three days a week at one hour each session. Each pre-service teacher had a designated tutoring space to provide the one-on-one literacy tutoring. There were three parts to the guided reading teaching sequence: 1. Lesson Plans, which was prepared before a tutoring session; 2. Anecdotal Notes, which were taken during instruction to document the child's strengths and weakness in general and the strategies he used when reading and writing in particular; 3. Narrative Post Lesson Reflections, which was completed after the lesson. The reflection

gave the pre-service teachers the opportunity to consider the effectiveness of their instruction and plan their next instructional step in tutoring.

The literacy lesson plans that the pre-service teachers developed were grounded in the Reading Recovery© model whose overall purpose is skill development in reading and writing (Clay, 2005). Each tutoring session began with the child's reading of a familiar book or passage to build their confidence. This was followed by the child's re-reading of a book or passage that they had read in the previous lesson. During this reading time, the pre-service teacher recorded the child's reading behavior on a running record, noting the strategies the child used or neglected to use as he read from the book. The pre-service teacher also calculated the child's accuracy and self-correction rates.

Next the child participated in word work activities (i.e. phonics strategy instruction) that targeted the child's specific literacy goal. Word work was followed by a guided writing activity that implemented the writing process and also helped the child practice different writing strategies. Finally, the child read a new book or passage while the pre-service teacher guided their reading. The guided reading instruction during this reading time was divided into several components: before reading strategy instruction which included a book introduction, during reading strategy instruction, and after reading strategy instruction. The strategy instruction included word attack and fluency activities and reading comprehension skill practice.

The texts the children read during tutoring were from a TOON comic book series (www.toon-books.com). The pre-service teachers selected an appropriate TOON book for guided reading based on the child's instructional reading level and the text potential to address the target literacy goals for their child. The texts used throughout tutoring ranged from level M to level P and the book characters varied from a bear to super heroes to a shark king. At the time of this study, the number of TOON books available at each level was limited, which made the book selection for tutoring limited.

Data Collection

In this study, the systematic data collection (Stake, 2006) comprised of pre-test and post-test assessments administered by pre-service teachers to each of their children before and after tutoring sessions. The pre-service teachers used a variety of reading and writing assessments based on the child's grade level. These assessments included: the Classroom Reading Inventory (CRI) (Wheelock, Campbell & Silvaroli, 1994) to determine the child's instructional and comprehension reading levels; running records (Fountas & Pinnell, 1996) to calculate the child's accuracy rate and self-correction rate while reading the CRI passages; the Elementary Reading Attitude Survey (McKenna & Kear, 1990) to determine the child's reading attitude; the Writing Attitude Survey (Kear, Coffman, McKenna, & Ambrosio, 2000) to determine the child's writing attitude; the Comprehension Retell (Elish-Piper, Johns, Lenski, 2006) to further determine their listening comprehension levels; the Multidimensional Fluency Scale (Zutell & Rasinski, 1991) to determine the child's phrasing, smoothness and pace while reading; Words Correct Per Minute to determine if the child exceeds, is on target, or is reading below target based on the Oral Reading Fluency (ORF) Target Rate Norms (Hasbrouch & Tindal, 2006); the Name Test (Duffelmeyer, Kruse, Merkley, & Fyfe, 1994) to determine the child's strengths and weaknesses in decoding words with specific phonics patterns; the Six Plus One Traits Writing Rubric (NEA, 2017) to determine the level of proficiency in ideas and content, organization, voice, word choice, sentence fluency, and conventions (See Appendix A for the Assessment Legend).

In addition, we collected narrative responses written by the pre-service teachers all throughout tutoring. These narrative responses included: the action plan goals developed by the pre-service teachers for their particular child that identified the four areas for remediation in reading and writing; lesson plans that incorporated the TOON books during guided reading instruction; and final summary report of findings prepared by the pre-service teachers at the end of the tutoring program for their particular child. The latter data enabled the pre-service teachers to determine whether their four literacy goals were met or not met that they had set for their particular child at onset of tutoring.

Our final data collected involved conducting individual interviews with each pre-service teacher as well as a focus group interview with all of the pre-service teachers together after tutoring was complete. The interviews were semi-structured (Galletta, 2013) in nature in that there were specific questions asked of each pre-service teacher with impromptu follow-up questions as needed for clarification. A semi-structured interview, “is sufficiently structured to address specific topics related to the phenomenon of study, while leaving space for participants to offer new meanings to the study focus” (Galletta, 2013, p. 24). Each interview was tape recorded and later transcribed for further data analysis.

Data Analysis

First, the pre and post assessment data were qualitatively analyzed using descriptive statistics (how many out of how much) (Miles & Huberman, 1994). Descriptive statistics allowed us to determine the overall literacy growth of each individual child as well as across cases, and to identify the level of improvement in the specific literacy skills from the child’s individual action plans. These findings were recorded in both narrative and visual formats (i.e., tables) and we reported these numeric values using the associated scales/rubrics.

We then conducted a thematic analysis (Stake, 2006) of the pre-service teachers’ action plans, lesson plans, anecdotal notes, post-lesson reflections, interview transcripts, and the summary report of findings they wrote about each child after tutoring. This involved assigning and labelling codes and grouping the codes into clusters and then themes (Stake, 2006) for an individual child. We mapped out the comments from this data analysis against the numerical data from the pre and post assessments. The qualitative comments thus provided illustration, explanation and elaboration of what we were seeing or not seeing in the numerical data. The quantitative information, on the other hand, was “complimentary to qualitative information rather than substituting it” (Maxwell, 2010, p. 478).

Findings

Results are presented first as individual case studies (within-case analysis), followed by a thematic across multiple-case studies (cross-case analysis). All names are pseudonyms to protect the participants' confidentiality.

Case Study 1: Adam (Pre-Service Teacher) & Brian (6th Grade Student)

Adam first administered reading and writing pre-tests and was able to gain important information about Brian’s literacy interests, attitudes, behaviors, and skills. After administering the Classroom Reading Inventory (Wheelock, Coambell, & Sivaroli, 1994), Adam was amazed to find out that the 8th grade passage was an independent reading level for Brian, but he did score lower on comprehension. Overall, Adam identified Brian’s areas of strengths as being reading level and phonics, while Brian’s specific literacy weaknesses consisted of self-correction rate, comprehension, fluency, and writing/voice. Brian’s scores on the pre-tests led Adam to set up his four goals for improvement in these identified areas of weaknesses. Adam stated specifically in his action plan,

“[Brian] is a very fast reader at 141 WCPM but at times I feel as though his reading is more robotic lacking in emotion...His self-correction [rate], I believe that this and his reading speed may be connected...” All of Adam’s instructional decisions and purposeful use of the TOON books were intentional to increase Brian’s self-correction rate, fluency, comprehension, and writing/voice skill level. The TOON books that Adam used during his guided reading instruction included, *The Shark King* (Johnson, 2010), *The Cow* (Spieglemen & Loeffler, 2012), and *Mo and Jo Fighting Together* (Lynch & Haspiel, 2008). (For more information about the TOON books used in Adam’s guided reading lessons visit www.toon-books.com.)

Reading Goal 1: Self-Correction Rate

Self-correcting is an action the reader takes to fix a miscue, or error, during reading (Fountas & Pinnell, 1996). The reader is paying attention to their reading, or monitoring, and realizes that what they just read did not make sense and subsequently has to do something to fix the mistake (i.e. looking at the pictures, looking closely at the word, and think about what would make sense and/or sound right). Adam noted in his post-lesson reflection, “[Brian] is repeating words which shows me that he is paying more attention to his reading...Brian showed signs of using cross-checking as well as monitoring his reading...[He] self-corrected himself on 3 occasions.” Brian was actively engaged while reading the TOON books and monitored his reading to make sure that what he was reading made sense.

Reading Goal 2: Comprehension/Retelling

Adam’s second goal for Brian was to increase his comprehension of text during reading. The different comprehension strategies that Adam had Brian use to pay attention while reading included: looking at the pictures, making predictions, making connections, and generating and answering his own questions. In a post-lesson reflection Adam stated, “He retold the story of *The Shark King* and was spot on! He used the illustrations to comprehend what was going on in the story.” The illustrations in the TOON books helped Brian to better comprehend the texts.

Reading Goal 3: Fluency

Fluency is reading text with intonation, proper phrasing, good pace and appropriate expression. Reading fluently subsequently helps to build comprehension of the text being read as well. The fluency strategies that Adam introduced to Brian during the guided reading lessons included: modeling fluent reading, talk like the character, rereading, and index card slide. Adam specifically stated during his individual interview, “Doing that [index card slide], having him slowly reveal a line really helped him think about expression, and it worked really good with his phrasing.” Using the index card slide helped Brian to slow down his speed and also build expression. Adam also noted in a post-lesson reflection, “[Brian] is reading with more expression and reading the sound effects as well. I don’t have to remind him before he reads to read like the characters or to slow down.” The TOON books utilize dialogue between characters throughout the text. Brian used the TOON book speech bubbles to talk like the characters which promoted fluent reading.

Writing Goal 4: Writing/Voice

Adam’s final goal for Brian was to increase the voice in his writing. Adam’s pretest analysis stated, “[Brian’s] writing didn’t show much enthusiasm or any personality.” Since reading

and writing are reciprocally related, the TOON books may have helped Brian to realize that his writing can also include a more descriptive style that helps the reader to paint a picture, or visualize, the actions that are described. Adam noted in a post-lesson reflection, “[Brian] used more colorful and descriptive words during the revision phase.” The TOON books not only use illustrations to help the story line, but the text in the TOON books also is very descriptive. Reading the TOON books may have helped Brian to use more descriptive language in his own writing as well.

Comparing Brian’s pre-test scores/analysis and post-test scores/analysis reveal an increase in four out of four literacy goals that Adam set for Brian throughout the tutoring semester (See Table 1). Overall, Adam felt that the TOON books were directly related in helping Brian to increase in his literacy skills. According to Adam, the illustrations in the TOON books helped Brian to better comprehend the texts. During the interview Adam specifically stated, “[Brian] likes looking at the picture...I think using those builds more comprehension.” Adam also stated in a post-lesson reflection, “Because of the superhero genre of the book I believe Brian is very interested in it.” The TOON book genre as well as the content helped Brian to become actively engaged with the books and subsequently increased his skill levels in self-correcting, fluency, comprehension and descriptive writing. Refer to Table 1: Brian’s Pre-test/Post-test Scores in Appendix B.

Case Study 2: Claire (Pre-Service Teacher) & David (3rd Grade Student)

Claire also administered literacy pre-tests with her study buddy David and developed four literacy goals. These goals included: comprehension, fluency, phonics, and writing/description. After analyzing her pretest data she reported in her action plan, “David is very strong in reading. He can comprehend most of what he reads, but needs assistance with comprehending.” Claire also noted, “David is strong at reading smaller/one-two syllable words, but needs assistance with bigger/more syllable words.” All of Claire’s instructional decisions and purposeful use of the TOON books were intentional to increase David’s skill level in each of the four goals. The TOON books that Claire used throughout her guided reading instruction with David included: Benjamin Bear in Bright Ideas! (Coudray, 2013), Otto’s Backwards Day (Cammuso, 2013), and The Shark King (Johnson, 2012). (For more information about the TOON books used in Claire’s guided reading lessons visit www.toon-books.com.)

Reading Goal 1: Fluency – Reading with Expression

David scored a 6.5/12 for his fluency on the Multidimensional Fluency Scale (Zutell & Rasinski, 1991) which indicated that he had definite difficulty with his fluency. The fluency strategies that Claire implemented during her guided reading lessons included: modeling, partner reading, echo reading, and rereading. Claire specifically targeted David’s expression while reading. Claire stated during her individual interview, “In a couple of the lessons, if there were two characters, he would read one character and I would read the other character. Then he would go back and reread all of it himself with expression and making the characters’ voices and stuff.” David’s fluency increased while reading the TOON books during the guided reading lessons. He enjoyed creating and using the individual character voices and his expression was also enhanced as a result of reading the TOON books.

Reading Goal 2: Comprehension

Claire targeted comprehension as her second goal for David because he had a difficult time recalling what he read during pre-testing. The comprehension strategies that Claire implemented during her guided reading lessons included: making predictions, as well as generating and answering his own questions. Claire's post-test data reveals a dramatic increase in comprehension going from 9.5/15 on the Comprehension Retell (Elish-Piper, Johns, & Lenski, 2006) pre-test to 15/15 on the post-test. Claire explained during her individual interview, "I think it helped [David], especially with his engagement in the lesson. It was very easy for me to pull out the [TOON] book and his face light up and want to read it." David's interest and engagement with the TOON books may have helped his comprehension of the books.

Reading Goal 3: Phonics – Vowel Digraphs & Multisyllabic Words

There were many phonics skills assessed during pre-testing, but Claire specifically identified vowel digraphs and multisyllabic words as being David's greatest phonics need. Vowel digraphs are two vowels next to each other that produce one sound. Multisyllabic words are words that have more than one syllable. The phonics, word work strategies that Claire used during her guided reading lessons included: Elkonin sound boxes, word sorts with vowel digraphs, as well as reviewing and prompting word attack strategies (i.e. look at the beginning, middle, and end of the word). Claire made an interesting observation during her guided reading instruction using the TOON books. She stated during her individual interview, "...with the bigger words...I would say it was the print because they were typed in a different font. It seemed more child friendly...it was easier for him to decode the words and break them apart." TOON books are not traditional texts with a traditional style of font. The larger font size and nontraditional font style of the TOON books helped David to look more closely at the words in order to be able to accurately decode the words, which helped to build his phonics skills regarding word parts (i.e. vowel digraphs) as well as multisyllabic words.

Writing Goal #4: Descriptive Writing

Claire's last goal for David was to increase his ability to write using more description in order for the reader to be able to visualize what he is describing. David may have been able to use the TOON books as an authentic text example to increase his use of description in his own writing. Unfortunately, David did not have significant gains with this goal by the end of the semester. Although David was beginning to include descriptive words in his writing, Claire realized that she did not have enough time to help him really improve in this skill.

Claire did document improvement in David's literacy skills from pre-test to post-test in her goals for David (See Table 2). David's fluency definitely increased possibly as a direct result of reading the TOON books during guided reading. He enjoyed creating and using the individual character voices and his expression was also enhanced while reading the TOON books. David's interest and engagement with the TOON books also helped his comprehension of the books. It can also be surmised that because of the larger font size and nontraditional font style of the TOON books, David looked more closely at the words in order to be able to accurately decode the words. When considering the effectiveness of the TOON books specifically, Claire stated in her last post-lesson reflection, "David is thoroughly enjoying this leveled text and it shows in his running record that he is reading it well." The TOON books may have helped David to increase his skill levels in fluency, comprehension, and phonics. Refer to Table 2: David's Pre-test/Post-test Scores in

Appendix C.

Case Study 3: Ellen (Pre-Service Teacher) & Franklin (3rd Grade Student)

Ellen also administered literacy pretests with her study buddy Franklin and developed four literacy goals. These literacy goals included: comprehension, fluency, vocabulary, and writing/details. All of Ellen's instructional decisions and purposeful use of the TOON books were intentional to increase Franklin's skill level in each of the four goals. The TOON books that Ellen specifically used during her guided reading instruction included: *Otto's Backwards Day* (Cammuso, 2013), and *The Shark King* (Johnson, 2012). (For more information about the TOON books used in Ellen's guided reading lessons visit www.toon-books.com.)

Reading Goal #1: Comprehension

Ellen specifically stated in her action plan, "As far as weaknesses, I think that Franklin hit his frustration level on comprehension questions early. I can also see that answering questions after he reads is not something that he likes to do." The comprehension strategies that Ellen implemented during her guided reading lessons included: making predictions, and making connections. Using the TOON books may have helped Franklin to pay attention to the details in the books which helped his overall comprehension. Ellen stated during her individual interview, "Well I think that it [TOON book] was very effective because it has helped Franklin with his comprehension drastically." On the comprehension post-test Franklin scored a perfect score. He was able to recall and retell all the details in the book.

Reading Goal #2: Fluency

Although Franklin was not experiencing extreme difficulty with his fluency during the pre-tests, Ellen noted that his fluency could be improved. Because the TOON books have speech bubbles and a lot of character dialogue, Ellen was hopeful that Franklin's fluency skills would increase. Ellen stated in her individual interview, "I like the way that the writing is set up in TOON books, in speech bubbles, where it makes it obvious who is saying what and when." The fluency strategies that Ellen implemented during her guided reading instruction included: modeling, reading the punctuation, rereading, echo reading, and tape-recorded reading. For the tape-recorded reading Ellen specifically noted in a post-lesson reflection, "Franklin is hearing his own lack of expression." This prompted Franklin to reread the text to try to use more expression. After Ellen's fluency strategy instruction and use of the TOON books during her guided reading lessons, Franklin's fluency score went from mild difficulty on the pre-test to fluent reading on the post-test. His fluency was not perfect, but he did improve throughout the tutoring.

Reading Goal #3: Vocabulary

During pre-testing, Franklin was not able to recall what the vocabulary terms were even within the context of the reading passages. Knowing the meanings of vocabulary words within reading passages is essential to being able to comprehend the passages. The vocabulary strategies that Ellen implemented during her lessons included using word maps that helps children to dissect complex terms into four parts: definition in your own words, examples, non-examples, and a picture. Ellen specifically chose words that Franklin needed to know while reading the TOON books. During post-testing Franklin was better able to answer questions specifically related to vocabulary terms within the passages.

Writing Goal #4: Writing – Details

Ellen's final literacy goal for Franklin involved increasing his ability to include details within his writing. The TOON books include detailed illustrations as well as text and dialogue that are also very detailed regarding the story line. Reading the TOON books could potentially help Franklin to realize the importance of including details in his own writing. Unfortunately, this is the only goal that Franklin did not show any improvement.

Overall, Franklin did improve in his comprehension, fluency, and vocabulary knowledge using the TOON books during guided reading (See Table 3). Specifically, Franklin scored a perfect score on the comprehension post-test. He was able to recall and retell all the details in the book. Even though Franklin's fluency was not perfect at the end of tutoring, his fluency did improve through the instruction. To help Franklin increase his vocabulary knowledge Ellen specifically used word maps. This focus on increasing Franklin's vocabulary knowledge also helped him to increase his comprehension as well. Ellen's final summary report of findings stated, "Franklin's comprehension has blossomed over tutoring time this summer...Franklin's expression in fluency has expended vastly. He has been reading with such excitement and character!" Refer to Table 3: Franklin's Pre-test/Post-test Scores in Appendix D.

Cross-Case Analysis

During post-testing, three out of three student's scores increased in comprehension and two out of three student's scores increased in fluency. Out of the 12 total literacy skills for all of the children, eight out of 12 increased during post-testing and three out of 12 that did not increase during post-testing did show some improvement during the guided reading lessons. Only one out of 12 skills (Writing-Details) did not see any increase (See Table 4 for Cross-Case Comparison). Refer to Table 4: Cross-Case Comparison in Appendix E.

Discussion and Implications

This study explored the benefits of using comic books by pre-service teachers in support of literacy skill development among young struggling readers and writers during guided reading. In this discussion we review the literacy-based and psychological benefits of using comic books to increase the children's specific reading and writing skills and offer suggestions for teaching. We also discuss the limitations of our study as well as the implications for future research.

In terms of literacy development, all pre-service teachers found comic books to be an effective teaching tool for enhancing the literacy skills among children who struggle with reading and/or writing. Specifically these pre-service teachers achieved almost all the reading and writing goals they identified for these children based on their pre-assessments. Brian improved in all four goals including: self-correcting, fluency, comprehension in reading, and descriptive language use in writing. Both David and Franklin increased performance on three out of their four literacy goals specifically fluency, comprehension, and phonics for David, and comprehension, fluency, and vocabulary for Franklin.

These results add to the previous findings, which have shown a positive influence of comic books on reading comprehension (Brenna, 2013; Moon, Wold & Francom, 2017; Rapp, 2011; Seglem & Witte, 2009), reading fluency, and vocabulary development (Smetana & Grisham, 2012), and writing (Gatta, 2013; Wissman & Costello, 2014; Maldonado & Yuan, 2011). In particular, our findings help to understand the level of impact of guided reading instruction with TOON books

specifically on different reading and writing skills of young readers, based on the multiple and skill specific pre and post assessments that the pre-service teachers gathered on these readers and writers. This element was less evident or discussed explicitly in earlier research.

Another important insight from this study is the pre-service teachers' recognition of the importance of visualization in connection to reading fluency and comprehension. That is, they discovered that in order to read with expression, emotion, good pace and phrasing and to comprehend text, the young readers needed to be able to visualize as they read text so they could then read it back (with ease and meaning) to others. Text visualization, like other reading skills (Adams, 1990), has to be taught explicitly though. According to the cognitive linguistic perspective on language development (Chomsky, 1955), reading in general, as well as reading the visual text of the TOON books in our study specifically, does not develop naturally. In other words, just because the young readers in our study could see and even enjoy the images, pictures and other graphic elements (i.e. sound effects, speech bubbles with dialogue) in the TOON books they read during tutoring did not mean they could automatically decode and interpret these representations, which would have led to fluency and comprehension. Rather, their reading of the visual images and accompanying text in the comic books was a receptive process, not an interpretative process (Beers, 2003).

It is only when the pre-service teachers modeled to these readers how to read the visual content and how to connect it to the story and characters that the children began to improve their fluency in reading and reading comprehension. The pre-service teachers employed strategies such as modeling, talking like the character, or sliding the index cards over speech bubbles to help the readers to paint a picture, or visualize, the actions that are described. In order to tap into the young readers' visualization skills in support of fluency and reading comprehension, we also recommend prompting meaning conversations related to the visual images and text. Our pre-service teachers intentionally engaged the young readers in conversations about what they visualized or what they saw and heard in their mind and then invited them to reread the text with the mental pictures they created. Teachers may use these and similar strategies as they plan and teach visualizing as a literacy skill in connection to fluency and comprehension in the K-12 classrooms. Teacher educators will also need to provide pre-service teachers with instructional methods to teach the visualization processes and ways to assess whether and how much progress students are making.

Hatfield (2005) argued that comic books are "texts that require a reader's active engagement... in making meaning" (p. 33). Indeed, the pre-service teachers noted that Brian, David, and Franklin became actively engaged readers, and most importantly, they enjoyed and looked forward to reading comic books. The ongoing social interaction and individualized targeted support for literacy development that they had received from their tutors played a critical role as well. In light of the social learning perspective (Vygotsky, 1978; 1986), the tutors served as the more knowledgeable readers who modeled and facilitated their reading skill development. They also served as the caring and supportive reading partners, which created an emotionally safe learning environment for these readers and writers.

Research has shown that "there is a clear theoretical base for connecting students' feelings of emotional security and their ability to focus on learning" (Protheroe, 2007, p. 51). Teachers and teacher educators may want to experiment with different approaches (e.g., one-one conferencing, small group discussion, or Q & R sessions with the teacher) to develop personal relationships with their students and to provide individualized literacy supports they need. These efforts will make their students feel safe, valued, willing to take risks, and become confident in their ability to learn to read and write. Providing such an emotionally safe and supportive environment is a foundation for student

emotional well-being and also academic success.

Limitations

This study explored using TOON books by pre-service teachers in support of literacy skill development among children who struggle with reading and/or writing during guided reading. The sample size for the study was limited to three pre-service teachers and three children in third or sixth grades who struggled in reading and/or writing. The pre-service teachers in this study had burgeoning knowledge of effective literacy strategy instruction and may not be the most objective observers as a result. At this point in their college education, these pre-service teachers had somewhat limited experience with planning guided reading lessons, implementing literacy strategy instruction, and tutoring children one-on-one over an extended period of time. They also had limited exposure to intentionally choosing texts (i.e. traditional texts, TOON books) that were appropriate for their child's specific literacy needs for their guided reading instruction. The leveled TOON books might have however mediated this challenge.

This study also only focused on using TOON books to increase the children's literacy skills and did not compare similar instruction using traditional texts (i.e. chapter books). We did not have the opportunity to explore the student literacy gains reported here in comparison to the gains they would have made during reading a traditional text and in a traditional classroom rather than a tutoring context. To what degree did the text form and the learning context mitigate the educational gains of these struggling readers and writers? Would their gains and challenges be greater or smaller, and would they be in similar or different literacy skills?

Implications for Future Research

Future research could include using an experimental design with classroom teachers at different grade levels using both traditional texts (control group) and comic books (experimental group) to help their students to increase in their reading and writing skills. Future research should address these and related questions ideally with a larger student and teacher populations.

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Appendix A: Assessment Legend

Assessment	Score
Elementary Reading Attitude Survey (McKenna & Kear, 1990)	20 Total Question – 4 Point Likert Scale Recreational Reading: 10 Questions Raw Score 10-40 Academic Reading: 10 Questions Raw Score 10-40 Full Scale Raw Score: 20-80 Convert Raw Scores to Grade Level Percentiles 0-99
Writing Attitude Survey (Kear, Coffman, & McKenna, 2000)	28 Total Question – 4 Point Likert Scale Full Scale Raw Score: 28-112 Convert Raw Scores to Grade Level Percentiles 0-99
Comprehension Retell (Elish-Piper, Johns, & Lenski, 2006)	3 = Complete/Detailed 2 = Partial 1 = Fragmented 0 = Omitted or Inaccurate
Multidimensional Fluency Scale (Zutell, & Rasinski, 1991)	10-12 = Fluent Reading 8-10 = Mild difficulty 6-8 = Definite Difficulty 4-6 = Extreme Difficulty
Fluency: Words Correct Per Minute (Hasbrouch, & Tindal, 2006)	Oral Reading Fluency (ORF) Target Rate Norms
Self Correction Rate $\frac{E + SC}{SC}$ (Fountas, & Pinnell, 1996)	1:1 or 1:2 = Excellent 1:3 or 1:4 = Good Below 1:4 = Poor
Phonics – Name Test (Duffelmeyer, Kruse, Merkley, & Fyfe, 1994)	26 Names Scoring Chart for Decoding
Six Traits Writing Rubric (National Education Association, 2017)	6 = Exceptional 5 = Experienced 4 = Capable 3 = Developing 2 = Emerging 1 = Beginning

Appendix B

Table 1: Brian's Pre-test/Post-test Scores

Literacy Goal	Pre-test Score	Comments/Evidence	Post-test Scores	Comments/Evidence
Self-Correcting	1:4 = Good	Brian's monitoring skills could be improved upon.	1:2 = Excellent	I believe that Brian is really beginning to notice his mistakes by his repeating which I feel can be him monitoring himself for understanding.
Comprehension/Retelling	10/15	Looking back at the data, it shows that Brian has the ability to fully retell the main points of a story but he doesn't.	15/15	Looking back at the data, Brian has definitely improved on his comprehension skills since the pretest.
Fluency	10/12	Brian is a fast reader and sometimes that speed hurts his phrasing. He pauses mid-sentence for breath occasionally and pauses a few times after a period. He reads very monotone with no to little expression.	10/12	Brian's phrasing has improved slightly but not enough for a higher score on the Fluency Scale. He is reading with less stop-to-breathe but it still is not seamless. The smoothness has improved since the beginning of the tutoring sessions but still can be improved. Brian's expression begins in the passage with a great amount of animated expression which he shows a lot of during our guided reading sessions but at the mid-way point Brian went back into a monotone voice while reading which makes sense since the passage is more informational rather than emotional.
Writing/Voice	Voice 2/5	His writing didn't show much enthusiasm or any of a personality with it. It was very much like a list of where he was going.	Voice 4/5	While his voice is not to the best of what I believe his ability can be in this writing, it is definitely better than in his pretest writing but there is definitely room for improvement.

Note. See Appendix A for Assessment Legend

Appendix C

Table 2: David's Pre-test/Post-test Scores

Literacy Goal	Pre-test Score	Comments/Evidence	Post-test Scores	Comments/Evidence
Fluency – Reading with Expression	6.5/12 = Definite Difficulty	David has difficulty with expression. He seems uninterested in the topics presented.	9/12 = Mild Difficulty	David reads with little to no expression, and I believe this is due to the way the texts are written with no pictures or characters. During guided reading lessons David read with perfect expression, creating specific voices for each individual character.
Comprehension	9.5/15	David cannot remember how the story begins and the setting from the beginning. If the setting changes multiple times he will only remember the main setting (usually the middle) David really knows the characters and their names or what they do. David is good about remembering most details about at story.	15/15	David remembers all parts of the story including main characters and supporting characters. David remembers details to the story quoting parts of the book...David's comprehension is one where if I had never heard the story before he could tell me everything about the book to where I understood the plot of the book and what happened throughout.
Phonics – Vowel Digraphs and Multisyllable Words	Vowel Digraphs 4/5		Vowel Digraphs 4/6	David monitors his reading by rereading words and phrases as well as pausing to look at the entire word before reading it. According to the decoding chart David has difficulty with vowel digraphs.
Descriptive Writing	Word Choice 1/6		Word Choice 1/6	David used simple words that had no real depth of meaning to them.

Note. See Appendix A for Assessment Legend

Appendix D

Table 3: Franklin's Pre-test/Post-test Scores

Literacy Goal	Pre-test Score	Comments/Evidence	Post-test Scores	Comments/Evidence
Comprehension	9/15	Franklin needed assistance recalling the setting and solution to the problem. Franklin should use more detail.	15/15	During his story retelling, Franklin received a perfect score. He included great detail in his retelling. For example, he recalled that not only did the story occur in a house, but that it occurred in the oldest house in the neighborhood. Franklin retold every important aspect of the story.
Fluency	8/12 = Mild Difficulty	There were a couple of spots of hesitation. Generally smooth. Some breaks, but corrected quickly. Pace was a bit slow. Expression was good, but could be more varied.	10/12 – Fluent	There were a couple spots of hesitation due to Franklin thinking about his reading. Generally smooth. Still some hesitation, but he self corrects quickly. Franklin reads at a moderately slow pace. Expression was very good!
Vocabulary	Independent Level = 1-2	We had to discontinue finding Franklin's instructional reading level because of reaching his frustration level in comprehension first.	Independent Level = 2 Instructional Level = 3 Frustration Level = 4	The level 2 and 3 comprehension questions were at his instructional level.
Details	Ideas: 4	Main idea and events are evident. Could be more detailed.	Ideas: 4	Franklin has good ideas, but his supporting details are lacking.

Note. See Appendix A for Assessment Legend

Appendix E

Table 3: Cross-Case Comparison

Brian (Pre-Post Scores Table 1)	David (Pre-Post Scores Table 2)	Franklin (Pre-Post Scores Table 3)
INCREASE: Comprehension	INCREASE: Comprehension	INCREASE: Comprehension
*Fluency	INCREASE: Fluency	INCREASE: Fluency
INCREASE: Self-Correcting	*Phonics/Multisyllable	INCREASE: Vocabulary
INCREASE: Writing/Voice	*Writing/Descriptive	NO INCREASE: Writing/Details

Note. *Improved during the guided reading lessons, but not during post-testing.

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