Reading Matters

'Out of the Silo'

SOCIAL STUDIES

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Commentary

Looking Ahead

CALL FOR MANUSCRIPTS

SCIRA's *Reading Matters*

Classroom teachers, teacher educators, administrators, and researchers are invited to submit manuscripts to SCIRA's professional journal, Reading Matters. Authors are requested to submit unpublished work not under consideration by any other publication.

Types of Submissions:

Reading Matters welcomes practical, theoretical, and research articles, generally no more than 15 pages, related to all areas of literacy. Articles should be clearly written, purposeful, and discuss the topic in some depth where treatment of the topic is interesting, insightful, and based on the writers' experience. Brief commentary pieces on teaching literacy are welcomed, as well as short teaching tips, teacher or student poetry, vignettes of classroom experiences, and student writing and/or artwork (with parental permission).

Manuscript Form:

Manuscripts should follow APA 6 style guidelines. Please be sure to include an abstract. As manuscripts are subject to blind review, content should not reveal author identities or affiliations. Full references for all citations should be included, following APA guidelines.

Submitting a Manuscript:

Manuscripts should be typed in Microsoft Word and sent as an email attachment to shunt-barron@uscupstate.edu and malloy2@clemson. edu. When naming your file, please use simple, clear file names. Include a cover page giving the author(s)' names, affiliation, complete mailing address, email address, and home and work telephone numbers. Manuscripts will be peer reviewed and edited for style, content, and space limitations by the editor.

The Review Process:

Manuscripts undergo a blind-review process, with at least two reviewers from the Editorial Review Board. Acceptance decisions are based on interest and relevance to SCIRA membership, usefulness, clarity, timeliness, and cohesiveness. The overall balance of the journal's content also influences editors' selections.

Manuscript Deadline: May 30, 2016

Letter from the President

Eddie Marshall

It is with great pleasure that I bring you greetings from the South Carolina State Council of the International Reading Association. *Reading Matters* is a wonderful publication. Sarah Hunt-Barron and Jacquelynn Malloy, co-editors, and their committee have done an outstanding job in producing this professional journal. We are proud of this effort and appreciate the diligent work of the many contributors. As you enter the literacy work zone, you will find these articles inspiring and useful in your classrooms and educational settings.

SCIRA and ILA work to provide opportunities for professional development through annual conferences, a literacy workshop, newsletters, journals, and websites. SCIRA encourages its members to continue to grow professionally by applying for various scholarships and grants. You can find more information about these opportunities at our website, www.scira.org.

Mark your calendar for the 41st annual SCIRA conference, Literacy Work Zone: Construction Underway, scheduled for February 25-27, 2016 at the Marriott Resort, Hilton Head, SC. Cathy Delaney and her committees are working very diligently to provide an outstanding conference program this year. Be sure to renew your SCIRA and ILA memberships to keep abreast of the latest trends in promoting literacy.

Letter from the Editors

Sarah Hunt-Barron & Jacquelynn Malloy

Dear Readers,

It is with pleasure that we bring you this 15th edition of Reading Matters that includes articles from our South Carolina scholars and educators and several from institutions outside of our state. Alongside articles from Winthrop, Coastal Carolina, the College of Charleston, Converse College, Furman and Clemson University, this issue includes voices from authors in Virginia (James Madison University), Georgia (Armstrong State and Georgia Southern Universities), North Carolina (Western Carolina University) and Pennsylvania (Duquesne University). The authors include teacher educators, literacy researchers, classroom teachers, and graduate students. It is exciting to see our journal extend its reach to include more voices, hoping that soon, you too will be inspired to add yours.

The theme of this issue is "Out of the Silo", highlighting the need expressed by many of our authors to move the language arts out of the silo of the literacy block and to integrate listening/speaking, reading/writing, and viewing/representing as tools for learning across the content areas. Suggestions are provided for integrating the language arts with math (Myers), music (Fullerton & Turowetz), and social studies (Pettit, Bertrand, Fleming & Jones), as well as in content vocabulary (Hubbard, Huber, & Salley). Cridland-Hughes & Wilder (You Matter) begin a conversation that includes definitions and viewpoints regarding content area and disciplinary literacy, particularly as they relate to the recent Read to Succeed initiative in South Carolina and how we prepare teacher educators (Ming) to implement the prescribed changes. Dustin Ledford offers his commentary from the viewpoint of a student in the form of poetry.

In other Research Matters, teacher beliefs and student attitudes regarding writing workshop are investigated (White, Hall, & Barrett-Tatum; Gatti & Tracy), while in Teaching Matters, Pringle and Helf make suggestions for goal setting in writing conferences and Wachholz and Warner provide inspiration for guiding struggling high school readers. Our Technology Matters section includes two articles, one addressing disciplinary literacy (Chermer) and another to discuss the use of infographics (Yearta & Mitchell). We are also pleased that Jonda McNair has provided us with another fine installment of book reviews in the Literature Matters section of the journal.
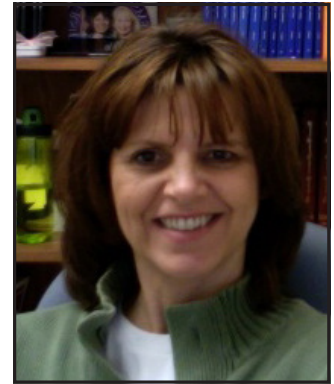
Sarah Hunt-Barron   *Jacquelynn Malloy*

As a preview to the theme for the next issue, volume 16, we are showcasing an article by Shumaker and Quiñones that challenges us not only to use social justice-themed literature with our students but to do so in a way that moves us past a 'pedestrian approach'. We hope that you will be inspired to consider the issues of social justice and equity that are occurring in your schools, colleges, and universities and to confront, investigate, and practice ways that literacy educators can be agents of change in our state and beyond. Be sure to share your challenges, triumphs, and findings with us in the next issue. We will be available at the SCIRA state conference in February to shepherd you through the submission and reviewing process (check the program for our session!).

We are proud to serve you, the teachers and teacher educators who stand between our students and an excellent education for all. Please join in the conversation that starts with the publication of these articles by commenting using the links provided with each article. We look forward to seeing you at the conference and to hearing your voices in Reading Matters.

Be inspired and inspiring,
Jackie and Sarah

Using Digital Storytelling to Improve Student Attitudes Towards Writing

Monica J. Gatti, Western Carolina University
Kelly N. Tracy, Western Carolina University

ABSTRACT — *From my previous writing workshop experience, I noticed that some students were often unengaged and I questioned why. Were they not interested in the topic? Was the task too difficult? Were they insecure about their writing? Could technology be used as a tool for engagement? In an attempt to answer these questions, I designed a ten-week action research study on the use of digital storytelling to engage writers. I administered the Writing Attitude Survey (Kear, Coffman, McKenna, & Ambrosio, 2000) at the beginning and end of the study, which involved 15 students in a combined second and third grade class at a rural elementary school in North Carolina. Results demonstrate that the students' overall positive attitude toward writing improved from 66.7% being happy or very happy to 83.4%. Their attitude towards revising and peer reviewing dramatically increased from an initial 7% to 53% of students reporting being either happy or very happy.*

The first time I, Monica, observed students involved in digital storytelling I was surprised at their engagement with the process. I was a graduate student working as a volunteer assistant in a first grade class, helping students one-on-one to write scripts for their digital stories. The joy that *all* students appeared to have when working on their digital story projects contrasted sharply with my previous student teaching experience with writing instruction. In that experience, I noticed struggling or reluctant writers with their heads down, staring at the page, or just working on their picture during the designated writing time. As I had additional opportunities to work with other kindergarten through third grade students, I continued to see the excitement that digital storytelling generated for students of all skill levels. To help me more fully understand what I had been casually observing, I decided to undertake an action research project examining if and how digital storytelling engaged young writers.

The Power of Digital Stories

Sylvester and Greenidge (2009) explain, "A digital story is a multimedia text consisting of images complemented by a narrated soundtrack to tell a story or present a documentary" (p. 284). Such stories give students the chance to meaningfully meld writing with technology, and doing so often gives students a real audience, purpose, and place to publish (Hicks, 2013). Using digital stories in the classroom can increase student engagement, as well as improve print and media literacies (Bogard & McMackin, 2012; Hartley & McWilliam, 2009; Tobin, 2012). Teachers can integrate digital stories with any subject, offering students an opportunity to engage with content while designing, planning, and producing a multimedia product. As such, digital storytelling is a natural fit with the process approach to teaching writing, a popular method of writing instruction shown to increase student writing achievement

in general education classes (Graham & Sandmel, 2011). Graham and Sandmel (2011) explain that while there is not a universal definition of this approach, there are many shared features including cycles of planning, transferring, and reviewing. Process writing also emphasizes writing for real purposes and audiences. Digital stories can be especially useful as a final authentic product after participating in the writing process. When students are able to share these products with family, peers, and/or friends, it "affords students an intense sense of pride and accomplishment that rarely accompanies the completion of a term paper or set of textbook exercises" (Simkins, Cole, Tavalin, & Means, 2002, p. 8).

Even though digital storytelling has been found to be an engaging way to teach writing, few K-12 schools in the U.S. are actually using the learning tool. According to a 2009 survey, "Of the total 123 digital storytelling programs based in educational institutions, 55 were located in K-12 settings, including associated after-school and/or vacation-care settings, 41 were located in America." (Hartley & McWilliam, 2009, p. 45). This limitation could be due in part to the difficulties teachers often have in gaining access to technology on a regular basis, as well as knowing ways to meaningful incorporate it into the classroom (Wright & Wilson, 2011). Access to technology can vary greatly between schools and districts (Purcell, Heaps, Buchanan, & Friedrich, 2013) with rural teachers often facing distinct barriers to technological access (Howley, Wood, & Hough, 2011),

Digital Storytelling in Action

To further my understanding of engaging students with digital storytelling, I began working with a teacher in a combined second and third grade classroom at Lake View School (pseudonym) in the rural mountains of western North Carolina. Lake View is a small school serving 103 students in grades kindergarten through twelfth. There were 17 students in the class and while all of them participated in the lessons, two did not give consent to participate in the study and thus were excluded from data collection. The school had some technology, but there were no tablets available for student use in the classroom. I was able to write and receive a small grant that allowed me to purchase ten iPad minis that we could share among the students to create our digital stories. I visited the class once per week for ten weeks and worked with the students for approximately forty-five minutes each time. I collaborated with the classroom teacher to design the sequence of lessons, which would center on both science and writing, specifically seasons and descriptive writing. Through these lessons, students would utilize a recursive writing process to develop their ultimate product, a digital story. Although I will describe the weekly lesson that the regular classroom teacher and I taught

(see Table 1 for an overview), a teacher might choose to make this a much shorter unit of study by sequencing daily instruction rather than weekly. Additionally, making the series of lessons part of a consistent writing workshop where students have extended periods of time to write and share on topics of their choosing on a regular basis would likely increase student motivation to write.

Table 1. Overview of Lessons

1.	Practice using senses for descriptive writing. Introduce prewriting strategies. Model how to write a paragraph using prewriting
2.	Divide students into groups for each sense (sight, smell, hearing, taste, touch). Have students write words or phrases describing a weather patter (rain, snow, sunshine –choose one) on sticky notes. Post notes on board under corresponding sense. Discuss examples and create a collaborative description of chosen weather.
3.	Discuss the purpose of editing for publication. Introduce proofreading marks. Practice editing as a whole class then individually. Emphasize how everyone makes errors and good writers edit their own and have other people edit their work before publication.
4.	Students revise an informative paragraph about weather they have written. Give students feedback using two stars and a wish.
5.	Model how to revise a paragraph about your favorite season. Emphasize the use of descriptive words and explaining why. Have the students choose a season and begin the prewriting process by using a bubble map. Students should continue working on this draft.
6.	Students review peers' writing using a checklist and two stars and a wish. Encourage some students to share a sentence they are proud of. Students draw pictures to coordinate with their writing.
7.	Once final drafts are approved, students can begin compiling their digital stories. Demonstrate how to use the digital storytelling app such as 30 Hands. Have students create a practice story with a partner to gain understanding of the application.
8.	Across multiple days, Students create their digital stories by organizing their pictures and recording their scripts with the digital storytelling application (e.g., 30 Hands). Students may need assistance by numbering each picture with corresponding sentence(s). Encourage students to play back their recordings and edit them as needed. Then students will publish their stories to create a movie. As the teacher you can download or upload these movies to share with parents and friends.

Initial Attitude Assessment

Before any instruction related to our digital stories project, I administered the Writing Attitude Survey, or WAS (Kear, Coffman, McKenna, & Ambrosio, 2000). This twenty-eight question Likert-scale survey utilizes cartoon images to depict various attitudes and was designed to measure writing attitudes in grades 1-12. The scored responses provide both a raw score and a percentile rank for students based on a national norm and asks questions such as: "How would you feel if your classmates talked to you about making your writing better?" and "How would you feel if you could write more in school?" For the purposes of this study, I examined the students' raw scores to determine if they had positive or negative attitudes toward writing. After the initial administration, I found that 75% of the students strongly disliked writing overall. I also found that 93% of students strongly disliked revising their own work or peer reviewing other students' work. The average answer on a scale of 1-4 with 4 being the most positive was 1.475 for both revising and peer editing. These results were concerning since peer-review and revising work are key elements of writing for

publication. Through a series of lessons, the teacher and I modeled and discussed reasons for editing and revising and emphasized doing both for publication, in this case through a digital story.

Writing Lessons Prior to Publishing

While ultimately the teacher and I knew the students would be publishing their work as a digital story, there was a significant amount of work we wanted to do to help the students grow as writers *before* they moved into digital writing. As Bogard and McMackin (2012) describe in their research on integrating traditional and new literacies, we wanted students to understand how to plan, draft, and revise as they prepared to create their digital stories. Since I was not be able to be in the classroom daily, the teacher would continue having students writing regularly in between my visits. Each of the lessons I taught connected to both this on-going writing and our ultimate goal of publishing a digital story. While I will share the order and details of my lessons, those wishing to utilize digital storytelling in their own classrooms do not necessarily have to follow my process exactly; rather, I hope they will see how digital storytelling can work seamlessly with more traditional writing instruction.

Lesson one: Prewriting

The week after completing the WAS, we focused our first lesson on prewriting and using our senses to describe. As a whole class, we discussed an example of a prewriting strategy as we described a pig. We explained to students that prewriting strategies would enable development of their best work, which they would be publishing as digital stories. There are many ways students can pre-write, including brainstorming, sharing orally, and using graphic organizers. We combined a bit of each of these as we conducted our lesson on prewriting. Students described the pig's appearance (size, shape, color), movement, and sound. Examples of student responses include: 4 legs, 2 pointy triangle ears, medium size, tennis ball shape nose, black hooves, curly tail, "Oink", and rolling in mud. Students recorded these ideas in their notebooks by creating a graphic organizer. They drew a circle and wrote "pig" in the middle with lines emanating from the circle with the ideas the class had collectively shared to describe the pig. Students were then asked to write a short paragraph describing the pig using at least five sentences. As I observed the students, I noted that some primarily focused on the number of sentences that were required instead of the quality of their writing. While discussing this with the teacher, we decided to be careful of the language we used when giving parameters for the writing tasks and would attempt to leave them as open-ended as possible. We also considered how we might have modeled writing a short paragraph about the pig and then having students select a different topic to describe using the senses strategy so that students were allowed more choice in their writing.

Lesson two: Using our senses to describe

During the second lesson, we reminded students of our previous activity describing the pig. We then assigned each of the five student desk clusters a sense. We gave each student a sticky

note and asked him/her to describe the rain though the sense that the desk cluster was assigned. Once they wrote on their sticky notes, students placed it on the board under the appropriate sense to create a chart that could serve as another example of a prewriting strategy. Student examples included the following: sight - tears, little streaks, waterfall, ice cubes, fog, blanket, drops, and a watering can when you are watering plants; hearing - sh sh sh sh, splat splat, drizzle drizzle, splash splash splash; smell - salty, sweet, "sadness" whenever it rains I picture someone crying, maybe angels; taste - water from a water hose, water; touch - It feels like tiny tears in your hand, needles, softness, smooth. Then the class collectively wrote the following using their new sense prewriting chart: *Rain looks like tears. It sounds like tapping. It smells like sadness. Rain tastes like a glass of water. It feels like tickles on your hand.* As we closed the lesson, we discussed how using our senses in writing enables us to share our experiences with others.

Lesson three: Editing

As noted previously, the students continued to work on writing even on the days I was not in the classroom. As I prepared for the next lesson, I realized that many students were ready for and needed assistance with editing, so we made this the focus of our third lesson. We discussed the purpose of editing for publication and introduced proofreading marks. The teacher made sure to mention that everyone has areas of needed improvement, including adults, and even the best writers make mistakes. To give students a tool for editing, we demonstrating using proofreading marks for ideas such capitalizing words or adding punctuation. As a class, students practiced editing a journal entry using correction marks. Students then worked in small groups to edit a very short play. During this lesson I assisted a small group that needed step-by-step help and scaffolding to complete the independent work. We closed by again discussing the purpose of editing and explained that good writers will edit their own work and can also seek assistance from a peer to see if they find any more mistakes.

Lesson four: Revision

The results of our initial attitude survey indicated students' serious reluctance to revise. Kittle (2003) explains that while students may know that revision is a necessary part of writing, they often resist it. To combat this resistance, we wanted to provide students with concrete ideas on how to revise, as well as model a strategy they would later use with their peers. We began our fourth lesson by asking students to revise an informative paragraph about the sun that they had written earlier in the week with their teacher. We discussed what information in the paragraph was fact and what was opinion. After they revised independently, the teacher and I held individual conferences with students using the two stars and a wish method (two positive compliments and one thing to improve on) to revise their writing. As I conferenced with students about their sun writing, I noticed that students smiled when I gave them the two compliments and eagerly went back to revise their writing after explaining what to improve on. Each student returned to their desk with their paper and a sticky note with the two stars and a wish critique.

Lesson Five: Further revision

Because we really wanted to emphasize revision, we focused our next lesson on it as well. In this fifth lesson, the students helped me revise a paragraph I had written about my favorite season, emphasizing the use of descriptive words and giving reasons why this was my favorite season. After revising, I showed students the bubble map, something the students were familiar with, that I created before composing my paragraph. Students then chose their favorite season and created their own bubble map that included reasons supporting why it was their favorite in the surrounding area. We would eventually be developing this writing into our digital story. We chose the topic of seasons because it was what the students were studying in science. The teacher noticed that many students enjoyed discussing the different seasons and thought it would be a good topic that would support what students were learning in both science and writing. At the end of the lesson, some students shared what season they chose and a few reasons for their choice. During the week, students continued working on their papers and revised with peers using the two stars and a wish method.

Lesson six: Checklist

When I visited the class for the sixth time, I introduced a checklist that I wanted students to use with a peer's writing to see if it contained all of the required components. The checklist included the following questions: Does this writing focus on a favorite season? Does the author explain why the season is his/her favorite with at least three or more reasons? Does the author use sensory (sight, hear, touch, smell, taste) words to describe the season? Does the author use different sentence starters to make exciting writing? Does the author use correct punctuation and capitalization? STAR- Positive Comment: STAR- Positive Comment; WISH- What To Improve. Many students were proud to see that they had multiple parts of the checklist completed. Some students' faces dropped when I said they might have to rewrite their paper before publication, but I reminded them of our work toward publication. Many other students were excited to share their writing. In preparation for their digital story, students had drawn at least three illustrations to go with their writing. One particular student was proud to share a line that demonstrated how he used sensory words in his writing to describe his favorite season summer: "I love the taste of fresh fruits and vegetables especially sweet, juicy watermelon."

At this point in the study, we were getting ready for publication of their digital stories. While we were waiting for the iPads to be delivered, the teacher and I worked together to make sure each student had the following completed: revised and edited final draft about their favorite season that contained at least one sensory description (see, hear, taste, smell, touch) and three or more pictures that connected to their writing.

Creating our Digital Stories

Each of the next four lessons was centered on helping students move from the paper-pencil draft of their writing to a digital story. There are many different applications teachers can use for publishing digital stories, most of them free, depending

on the type of technology they have available (see http://edtechteacher.org/apps/stories/ for potential tools). I selected 30 Hands to publish our digital stories because of the ease of its use, particularly for students who are publishing their first digital story, and because it is available as a free download (see https://youtu.be/F0QOeQI2oa0 for a quick tutorial on using 30Hands).

Lesson seven: Using our iPads

The iPads arrived in time for our seventh lesson and every two students shared one. I projected the iPad using a document camera and modeled how to create a story as students followed along on their iPad. We started with how to turn the iPad on and then opened up the 30 Hands application together. We discussed how to create new slides by taking or drawing pictures. Then we practiced recording. At the end of the explanation, students created a practice test digital story in pairs. Students were extremely excited to use the iPads and were engaged throughout the lesson. They especially enjoyed playing back their voice recording to hear how they sounded. The recording process prompted students to use expression while reading; students would often redo their recording if it did not sound clear or expressive. One student even shared that the iPads "make writing fun!"

Lessons eight through ten: Completing our stories

Across the next three lessons students worked individually at different times to complete their own digital story about their favorite season. The process of completing their stories varied cross students. Some had difficulty dividing their writing into different narrated parts for each slide. A simple fix for this was to have students number the different parts in their papers and then position the corresponding picture in the correct order on the 30 Hands app. This worked well because the application numbers each picture and you can easily add, delete, or move each slide that the student creates. Also, if students needed to add another picture, they could easily draw one using the 30 Hands app. Finding a quiet place to record was one challenge we faced. I found it best to have students go to the corner of the room when they were ready to record. One day we were able to take students to an isolated room, which was the best environment for a clear and crisp voice recording. This time spent publishing their stories resulted in high levels of engagement. Students who did not finish during writing time insisted that they get additional time to complete their digital stories.

Students enjoyed sharing their progress with the teacher, myself, and other students. The digital stories enabled many students to refine their writing. They edited their work by adding pictures and sentences to make their writing flow. This also helped students be expressive when reading their writing. Students loved sharing their digital stories with their classmates, teachers, and anyone else who entered the classroom.

Results

After all of the students had completed their digital story, I administered the WAS again. The overall average of the complete WAS improved from 66.7% to 83.4%, which pleased the classroom teacher and me. Informally, we had both noticed a more positive attitude from many of the students when they were writing. The results also demonstrated that 64% of students were very happy when revising their work and 53% of students were very happy or happy when another student revised their work. Even though this is still not as high of a percentage as I would like, it demonstrates substantial progress in positive attitudes towards writing (up from 7%), especially across one unit. Five students in particular originally reported great dislike of revising or peer reviewing, and at the post survey they reported being very happy. However, two students were still very upset when revising and peer reviewing work. With continued support and exposure to revision and reviewing techniques, I hope students' attitudes will improve even more.

Discussion

My initial research on engaging students in writing found that when students share their writing, they are more engaged in their writing (Troia, Lin, Cohen, & Monroe, 2011). This engagement was reflected in what I observed with these students. Students enjoyed sharing their digital stories and listening to other students' stories as well. When students shared their work during peer reviewing, they were excited to get their "Two Stars and a Wish" sheet back to see the compliments the other student gave them and use the wish to help them improve for their publication. This process helped students have positive experiences with writing, editing, and revising. Giving students a digital way of publishing their work and an opportunity to share it gave purpose to students' revision and editing.

When I started this research I was focused primarily on learning how to engage students in writing. However, once I administered the surveys I was surprised when results demonstrated a high percentage of negative attitudes towards revising and editing. My research focus slightly changed since I hoped I would be able to change students' attitudes towards revising their own and peer reviewing other students' work. Students' attitudes did improve; however, it is difficult for me to pinpoint exactly why they improved. Instead, I believe it is a combination of factors including building community, providing support, and engaging students in a variety of ways including technology. Students' eyes still light up and excitement fills the room when I enter with the bag of iPads for students to use.

Student's attitudes are an important element in the learning process. Surveys are a great tool that is underutilized in the primary grades. Surveys are often too complex and require higher level reading skills that primary students do not possess yet. However, by simplifying the response choices as the WAS does using cartoon images, surveys become more accessible to students while still uncovering details and inner thoughts of students. By using fewer words and more images, more students are able to access and respond to the survey. I will implement more surveys, especially interest and attitude surveys in my future teaching. I noticed if I ask a question out loud, students often respond the same as those around them. With an individual survey I have received honest results that are unaffected by peer opinions. This

will help me assess and better understand my students. I can then take that information and build lessons and units to address problem areas and include things that students enjoy as well.

I propose further research be done to determine how attitudes impact student learning. Further research should also be done on how attitudes change through a series of lessons. Interviews may be needed to fully understand how the students' thinking changed about revising and editing their writing.

Implications

Today many elementary students are very comfortable with technology. They are eager to learn new technological skills and absorb the new information easily. They were born with technology surrounding them and are excited to learn new ways to use it. However, many teachers lack access to technology (Howley, Wood, & Hough, 2011; Purcell, Heaps, Buchanan, & Friedrich, 2013). Small devices such as iPads and digital cameras are seldom found in elementary classrooms even though they can be excellent learning tools for students. Helping teachers get the tools they need should be a priority for those making funding decisions.

Many students enjoy using technology; students who are struggling or reluctant are no exception. Struggling and reluctant learners are sometimes given basic rote memorization tasks or more simplistic work to help them be successful in individual work. Students who are always doing rote memorization to catch up are often disengaged and uninterested in learning leading them to slip further behind. While basic skills are essential for these students to grow and continue to grow as learners, we must use engaging tasks to challenge and meet the needs of struggling and reluctant writers.

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Monica Gatti (mjgatti1@gmail.com) recently completed her Masters' degree in Elementary Education at Western Carolina University where she focused her research on how to engage reluctant writers. She is passionate about continuing to research how to engage students in learning to foster their development as life-long learners.

Kelly N. Tracy (kntracy@wcu.edu) is an assistant professor of literacy at Western Carolina University in Cullowhee, NC where she lives with her husband and two daughters, Ella and Madelyn. Kelly's research interests include writing pedagogy and writing professional development.

Meaningful Math:
How Children's Literature Can Pave the Way

Joy Myers, James Madison University

Abstract — Helping students comprehend text and develop a love of learning are two fundamental goals of educators everywhere. The establishment of the Common Core State Standards (CCSS) challenges classroom teachers to closely examine their current pedagogical teaching practices in literacy and across all subject areas. Teachers are altering their instruction to fit the new curricular standards as outlined by each state and utilizing a wide variety of genres with the goal of simultaneously increasing student motivation, engagement and achievement. This study highlights a first grade teacher's quest to pique her students' interest in math by incorporating one of the children's favorite parts of the day - reading picture books.

Meaningful Math: How Children's Literature Can Pave the Way

"Is math over yet?" This was a common question posed by Annie (all names are pseudonyms), a first grader who did not enjoy math time in my classroom. On a typical day, she wandered over to the bookshelf instead of towards the various manipulatives that I placed strategically around the room. At the time, I thought I was engaging students like Annie by having math centers that challenged various skill levels. The students worked at their own pace practicing specific concepts while I met with small groups. Annie, however, was not interested, engaged or impressed with all of my hard work. She loved books and wanted to read during mathematics time. As I looked around the room, I realized that I was missing an opportunity to make math meaningful because although students were busy working, they were not talking, reading or writing about math. Even worse, I suddenly saw that my students were not connecting mathematical concepts to their everyday life.

What could I do to help students like Annie? I had a bucket of mathematics books separated from the other book tubs in my room, but we did not typically work with these texts during math time. Would Annie like those books? How many other students in my class preferred reading time to mathematics? Although I knew that reading choices for young children tended to be skewed toward fiction texts, particularly in the early grades (Duke, 2004; Moss & Newton, 2002), I had never thought about math books as a text option that might engage my students and help me teach math concepts. These wonderings led me to a teacher research project focused on how the use of children's literature impacted my students' understanding and opinions of math. My work draws on case study methodology (Stake 1995), which assisted me in answering my research question by focusing on the experiences of several students and how the use of math picture books influenced how meaningful math became for them. By sharing my journey of conducting research in my classroom and what I learned from my students, I hope to encourage other teachers to embrace the possibilities that math picture books have to offer.

Young Children and Genre

Theory, research and professional wisdom indicate that students learn better if their learning can be contextualized and authentically motivated (Duke, Caughlan, Juzwik & Martin, 2012). Using a wide range of genres can do this because a variety of texts can broaden the curiosity of children and help present familiar things in new ways, which can connect reading to the real world (Hartman, 2002). Genre diversity is prevalent throughout the Common Core State Standards (CCSS) as a way to build a foundation for college and career readiness. "Students must read widely and deeply from among a broad range of high quality, increasingly challenging literacy and informational texts (CCSS, 2010, p. 10). Educators can support young children's experiences with different genres by weaving explicit scaffolds for these texts into the fabric of their daily literacy instruction.

Researchers promote the use of children's literature to support learning math concepts (Bryan & Mason, 2012; Courtrade, Lingo, Karp, & Whitney, 2013). Haury (2001) writes a common thread among teachers who choose to incorporate children's literature into their math instruction is they "provide vicarious mathematical experiences based on real problems or situations of interest to teachers and students" (p. 5). In addition to contextualizing learning, increased exposure to a variety of genres in the early grades may also make children better readers and writers of those genres (Wixson, 2005). When examining genres and math picture books, teachers have a variety to choose from including informational text, narrative nonfiction, realistic fiction, and fantasy just to name a few. In addition to choosing the type of text, educators must determine how to integrate the texts into their instruction.

Context of the Study

This study took place in a K-8 school located in a midsize city in the Southeast. At the time, I was in my fifth year of teaching and I was curious how the use of children's literature would impact my students' understanding and opinions of math. Thus, I began a yearlong journey of revamping my math instruction where traditional teaching had been the norm.

In previous years, I had relied heavily on math textbooks and the accompanying worksheets to teach concepts. Although the students used manipulatives to help them solve problems, math time in my classroom was much less engaging than other parts of the day and I struggled to make math meaningful. My first grade math class had fourteen students, nine boys and five girls. The class reflected the lack of ethnic diversity at the school with all students being Caucasian, but the socioeconomic status of the

students ranged considerably. These students had the highest scores on their end of year assessments from kindergarten and thus were selected to work in my "advanced" math class; essentially I was teaching second grade concepts to first graders.

At the beginning of the year, I administered a baseline survey to all students asking twenty true/false questions such as: *I am sure that I can learn math; Doing well in math is important to me*; and *I can get good grades in math*. This survey provided insightful information about how students view themselves as mathematicians and provided clues as to how I could better meet their needs. Results of the survey revealed that two students thought that boys were better at math than girls, 12 students said they could get good grades in math, and 13 students said they were sure that they could learn math. All 14 students said that doing well in math was important to them and that doing well in math was important to their parents. This helps paint a picture of my first grade math students, some of whom you will learn more about later.

Book Selection

According to the Common Core State Standards, instructional math time should focus on four areas: (1) operations and algebraic thinking; (2) numbers and operations in base 10; (3) measurement and data; and (4) geometry (CCSS, 2010). By carefully selecting children's literature that illuminated the mathematical concepts I was teaching, I hoped students would have the opportunity to not only further their understanding, but become more interested in the math concepts. My plan was to read math books aloud as part of my lesson, similar to what I did during shared reading in our literacy block. I started reading journal articles about incorporating literature and math. I read about the many ways educators use pictures books to teach math (Bryan & Mason, 2012). Some studies focused on the specific impact of a particular math picture book (see Whitin, 2008; Shatzer, 2008). I also learned that literature *can* motivate students to learn, provide a meaningful context for math (Whiten & Wilde, 1992), and that children enjoyed math more when exposed to mathematical related stories and discussions (Hong, 1996).

As I chose books, I relied on recommended book lists from Whiten and Wilde's (1992) *Read Any Good Math Lately?* According to Atkinson, Matusevich and Huber (2009), there is limited information about ways to choose trade books for mathematics instruction. However, Hunsader (2004) and Hellwig, Monroe and Jacobs (2000) suggest examining the content, the visual appeal, and if the story compliments the mathematics. Using a list of children's literature, I began thinking about how to incorporate them into my teaching and how I was going to examine their impact.

As I looked at the various texts, I began thinking more about genre. Researchers recommend providing children with multiple and varied trade books (Powell & Nurnberger-Haag, 2015). I found it easy to determine the genre of some math picture books such as *Money* (Crib, 1990). It is an informational text because the primary purpose of the text is to convey information with the help of text features such as headings and particular vocabulary. The same is true for *A Chair for my Mother* (Williams, 1982). It is

classified as realistic fiction because it is a story that could have actually occurred in a believable setting. However, other genres were less clear. For example *The Greedy Triangle* (Burns, 1994) has illustrations and tells the story of a triangle who visits a local shapeshifter to add angles to his shape until he is completely transformed. This seems like it would fit in fantasy, yet the purpose of the text is to teach mathematical concepts. I later learned that many of the texts I used in this study fall into the category of dual-purpose texts (Donovan & Smolkin, 2001) meaning they have the purpose of telling a fictional story *and* to convey information. Table 1 highlights some of the texts I used in this study.

Table 1. Math Texts

Book Title and Author	Genre	CCSS
Pigs will be pigs: Fun with math and money	Fantasy	Operations and Algebraic Thinking
Jim and the beanstalk (Raymond Briggs)	Fantasy	Measurement & Data
A chair for my mother (Vera Williams)	Realistic Fiction	Operations and Algebraic Thinking
"Smart" (Shel Silverstein)	Realistic Fiction	Operations and Algebraic Thinking
Money (Eyewitness Books) (Joe Crib)	Informational	Operations and Algebraic Thinking
If you made a million (David Schwartz)	Fantasy	Number & Operations in Base Ten
How much is million? (David Schwartz)	Fantasy	Number & Operations in Base Ten
The greedy triangle (Marilyn Burns)	Fantasy	Geometry

Method

Keeping in mind my question of how children's literature could impact students' understandings and feelings towards math, I collected several different types of classroom data including a math survey, student reflections, teacher reflections, and thumbs-up/down slips. The math survey, which I highlighted earlier, helped me understand students' interests and how they really felt about math. I also collected student reflections. At the beginning of the year, the first grade students had trouble writing their thoughts about the books I shared. It was difficult at times to understand whether or not the books helped them understand the concepts. Therefore, I decided to give each student a slip of paper after we read a book during math class. They would circle a thumb pointing up (if the book helped them understand a concept), a thumb pointing down (if the book did not help them), or a thumb pointing sideways (if the book neither helped or hurt their understanding of a concept). Several conversations were necessary to explain to the students that I was not looking to see if they liked the book. I really wanted to know if the book helped them understand the math concept better. My goal was to use these slips to help me assess the effectiveness of using informational texts during math time.

As the year progressed, I moved away from the thumb slips and instead the students chose between three prompts each time I read a picture book during math, which helped them respond in

their math journal: *I remember* (Can you use your prior knowledge to connect this book or concept to another one?); *I notice* (Did the story offer a new way of thinking about the concept we are learning about?); *I wonder* (Did this book make you think of a question, or are you more curious about a concept than before?). After spending a few minutes writing, the students either shared their entries with a partner or sometimes they shared with the entire class. Murphy (1999) suggested that picture books not only engage children and help them make mathematical connections, but they also provide visualization of mathematical concepts in the illustrations. Rogers, Cooper, Nesmith, and Purdum-Cassidy (2015) add that including children's literature provides a natural context for the sharing of mathematics. When students wrote in their journals after they listened to a poem or picture book, they actively communicated their understanding or lack thereof. Thus this served as an authentic way for me to assess whether the students were able to grasp the concept, or not, as I observed and noted their responses to the story.

After each mathematical literacy experience, I wrote detailed field notes regarding how I felt about the lesson, how the students responded, whether students seemed to benefit from the shared reading, and any thoughts I had about what I could do differently next time. Daily reflections helped me to continuously evaluate the students' learning needs and revise my instruction to support the students' understanding.

Data analysis in this teacher research study occurred in three phases. In Phase I, I identified examples from student work and field notes that related to my research question, coded data for themes, and organized the data electronically in a matrix to make searches, sorting, and retrieval easier. In Phase II, I charted my codes, specific examples, and the student associated with the code, recognizing that certain events or statements might be coded several ways. In Phase III, I used cross case analysis to compare students and better understand the larger phenomenon of incorporating children's literature into a content area class.

First Grade Findings

In this section I share four students' stories: Jack, Kate, Ben and Ellie (all pseudonyms). First, I introduce each student and share his or her understanding of math concepts as well as their dispositions towards the subject. Next, I describe their individual reactions to the incorporation of children's literature into the math class and one salient theme that resonated across all of the data collected from that particular student. Finally, I share some of my notes about the student as the year progressed. My hope is that by reading about their experiences and my own reflections on their progress, educators will see how skills can transfer across content areas, consider new ways to differentiate and recognize the importance of incorporating children's literature into math time.

Jack: avid reader and unconfident mathematician

In the baseline survey, Jack responded that he could not get good grades in math, however, his responses on the thumbs up

slips regarding children's literature were very positive, showing the books helped him understand the mathematical concepts. Jack preferred reading and writing to math, so when math time incorporated literacy skills he enjoyed it more. After we read Pigs will be *Pigs: Fun with Math and Money* (Axelrod, 1997), he wrote in his journal: *I remember when I found a nickel and penny just like the pigs did in the hot air duct.* Jack used the reading strategy of making connections to try to relate math to his own life.

Research shows that increased access to a variety of texts can better motivate students who have a strong interest in the topics addressed in such texts (Jobe & Dayton-Sakari, 2002). For Jack, incorporating children's literature into mathematics joined an activity he thought of as favorable (reading) with one he did not feel as successful in (math). Jack's overall reading ability and his self-confidence grew to the point where his negative feelings towards math lessened. In one of his last journal entries of the year he wrote: *Math is not bad.*

Looking over my field notes, I recognized that many of the students were like Jack and their responses were mostly positive towards the incorporation of children's literature during math throughout the year. In my research journal, I wrote about enjoying the days I used picture books more than days I did not. In one entry I describe the students' reaction to *The Greedy Triangle* (Burns, 1994).

The Greedy Triangle was a big hit. Not only did they enjoy the book, but I also really think it helped their understanding. Jack, who always looks so disinterested during math, was on the edge of his seat waiting to say the name of the next shape.

Kate, strong reader and mathematician

Kate believed that she could do math, get good grades in math and gave all thumbs up on her slips, showing she had a high confidence level in mathematics. Kate enjoyed the math books, and may have benefited from them, but she probably would have had the same positive reaction towards math with or without the books. After we read the poem "Smart" (Silverstein, 1974), she wrote in her math journal: *In (the poem) Smart, I noticed that he did not add right. He just wanted more coins.* Kate was able to understand the money concepts presented in "Smart" and express the greed of the child in the poem. Incorporating poetry into math class encouraged Kate to join math concepts and logical reasoning.

When children's literature is used as way of introducing a manipulative, students may see the manipulative as a tool for exploring the math concept as opposed to a device for obtaining an answer (Van de Walle, Karp, & Bay-Williams, 2010). For example, when I taught the money unit, I used texts such as *Money* (Crib, 1990), *If you Made a Million* (Schwartz, 1989) and *A Chair for My Mother* (Williams, 1982). By sharing these texts with my class and using the coins as manipulatives, I provided an opportunity for the students to further understand the concept of authentic purpose for listening – to obtain information that they needed to know. The books also reminded the students about the real world applications of this concept. At the same time, students enjoyed being read children's literature outside of the literacy block.

However, my field notes revealed that I had mixed feelings during this process. *At times, I feel worried. It takes time to do this (incorporate math and picture books) and today I wonder if it is worth it. Should I spend these extra few minutes working with a child one on one? I struggle with how to use the short amount of time I have with these students.* Not all of my students were like Kate and I often felt conflicted about this new way of teaching.

Ben, uncomfortable reader and mathematician

Ben said he could not get good grades in math and gave thumbs sideways or thumbs down to the picture books, which did not seem to engage him. However, he used his math journal to practice other literacy skills. After we read *Jim and the Beanstalk* (Briggs,1970) he wrote: *I wonder if the beanstalk will grow back? I wonder what he will grow next.* Ben used the questioning skills we practiced in reading and applied them during math time.

Although Ben was not particularly interested in the incorporation of children's literature during math, he enjoyed asking questions and writing about possible solutions to his questions. Research suggests that teachers can use math texts to support students like Ben by encouraging them to find answers to questions that matter to them (Williams, 2009). This also helps students make connections to the real world, making math more meaningful and relevant.

In my research journal I wrote: *Working with Ben reminds me that although I have a goal for using these texts, my attempts might not reach all learners in the same way.* Reflecting on my journal entries and other data sources helped me understand that my efforts to incorporate a variety of math texts into math time helped Ben and perhaps other students, in other ways I could not have imagined but were still equally important.

Ellie, ready writer and thoughtful mathematician

Ellie, at the beginning of the year, said that she did not think she could do math. Ellie gave several thumbs sideways on her slips and my observations during math class indicated that she seemed to lack mathematical confidence. After we read *How Much is Million?* (Schwartz, 1985), she wrote in her journal: *I notice they used a lot of big numbers. Like a million. I think that is a lot.* Ellie uses her journal to clarify her thinking. She thought a million was a big number, but may not have been certain enough to verbalize it during our class discussion after reading the text. Without the math journal, I may have missed this "big moment" for Ellie. It made me wonder if there were other content concepts, from the math texts we were reading, that she was trying to process through her journal writing.

Once I started reading the picture books during math, I noticed that students were more interested in looking at these books during self-selected reading and after they finished their work. Although the math books were all grouped together in the same browsing box, students such as Ellie showed little interest in them earlier in the year. This observation supports other research that found students are more likely to select texts for independent reading if their teacher has read it aloud to them (Dreher & Dromsky, 2000).

I also noted in my field notes about the change in saw in Ellie over the year. *I see good progress with Ellie's understanding of math. She is taking the concepts and applying them more consistently in her seatwork and even with the problems of the day. She seems more confident and willing to raise her hand to solve a problem at the board.* Journal entries like that one helped me continue to use the children's literature during math for the rest of the school year.

The Bigger Picture

The various sources of data revealed that both successful and struggling students were actively transferring strategies (such as predicting and asking questions) they were being taught during reading and language arts to mathematics and that the use of children's literature was fostering this transfer by giving them more opportunities to use the strategies with different types of texts. For example, after learning about making connections during our literacy block, several students made connections during math time from the book I was reading to other mathematical books we had read previously. Such findings connect with Hyde's (2006) recommendation that teachers use comprehension strategies to connect literature to mathematical concepts.

Incorporating children's literature into daily mathematical lessons can improve understanding and help children explain their reasoning (Clarke, 2002). The student's journal entries highlighted that some students expressed much deeper thinking about concepts, beyond what I had seen in the past with traditional tests and worksheets. The journals also showed that when a student was struggling to understand a concept, they struggled to write about it. In terms of the students' feelings towards math, utilizing children's literature made math time more enjoyable for some students, it did not impact others, and some students didn't like it despite my efforts to incorporate a variety of math texts.

Final Thoughts

Investigating a new practice, incorporating children's literature into math time, provided an opportunity for deep reflection. Rereading my field notes allowed me to see how over time, the use of a variety of math texts engaged my first graders. This endeavor also forced me to investigate the types of mathematics literature I owned as well as what our school library offered. As a result of what I discovered, I worked with our librarian to order more math books so all students and teachers would have greater access to these materials. Each year more books written that merge the content of math and literacy. Some of my new favorites include: *From Here to Infinity* by Menotti & Labat; *The Wing Wing Brothers Math Spectacular!* by Ethan Long; *Seeing Symmetry* by Loreen Leedy; and *Wumbers* by Rosenthal & Lichtenheld.

Hartman (2002) suggests that using various genres in the classroom helps teachers energize their own teaching. I certainly found this to be true. I became more purposeful about selecting texts to read aloud to students, not only during math time but also throughout the day. I was also able to maximize instructional

time by increasing the intentionality of my instructional choices and reflecting on how those choices impacted my students. Incorporating children's literature can help teachers build upon students' innate interest in learning while at the same time meeting the demands of the Common Core Standards (2010). There will always be students like Annie, who need more support to become engaged in certain subjects. However, taking time to really get to know your students and altering the texts they are exposed to may help you pave the way for meaningful learning.

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Investigating What Matters for Writing Instruction in South Carolina Elementary Schools: Teachers' Perceptions of Effective Writing Strategies and Barriers to Implementation

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ABSTRACT — *Research has demonstrated a variety of instructional strategies that effectively support young children's writing, yet little is known about how often teachers use these strategies. The purpose of the present study was to identify instructional strategies for writing that teachers deem effective, how often they use them, and what they perceive as barriers to implementation. The sample included approximately 100 randomly selected elementary school teachers (grades K-5th) from across the state of South Carolina. Survey results indicated teachers use a variety of effective practices to teach their young writers, notably use of modeling and mini-lessons. However, teachers reported having little time to teach writing with exceptional limitations in the use of technology to build writing skills.*

Introduction

For years researchers have sought to better understand how children successfully acquire literacy skills. While much attention has been paid to children's early reading development, less attention has been paid to children's writing development (Clay, 2001). Writing is a complex and demanding task for children (Lienemann, Graham, Leader-Janssen, & Reidk, 2006) because it involves a great deal of cognitive effort, attentional control, and self-regulation (Graham & Harris, 2003). In order to write effectively, children must use and integrate a variety of skills and processes, while also attempting to make their writing meaningful for the intended audience. Given this complexity, children need strong instructional support to create coherent, well-written texts.

Despite a wealth of data indicating many students struggle with writing (National Commission on Writing, 2003), in general, writing instruction does not often get the attention it deserves in elementary school classrooms. Only twenty-four percent of students at both grades 8 and 12 performed at the Proficient level in writing in 2011 on a national writing assessment. Fifty-four percent of eighth-graders and 52 percent of twelfth-graders performed at the Basic level (defined as partial mastery; the level below "proficient") and only three percent of eighth- and twelfth-graders performed at the Advanced level. Furthermore, college instructors estimate that 50% of high school graduates are not prepared for college-level writing demands (Achieve, Inc. 2005).

Students attending South Carolina schools are no exception. In 2014, close to 30% of eighth graders did not meet the

benchmark on the state's annual PASS test for writing (see https://ed.sc.gov/data/pass/2014/). Similarly, 22% of third graders and 20% of fifth graders also did not meet the benchmark. In particular, third graders struggled the most in using voice and in the development of their writing. In fact only 23% of third graders showed strengths in the use of voice and only 19% of eighth graders, indicating a lack of notable growth in this area of writing in the elementary and middle grades.

Research has provided specific instructional strategies deemed effective for building and enhancing struggling young writers. These include scaffolding (Bodrova & Leong, 1998; Bruner, 1966) and modeling (Burns & Casbergue, 1992; Chapman, 1996; McGee & Purcell-Gates, 1997), yet we know little as to how often teachers use such strategies and/or what barriers they perceive in implementing practices that have been identified as effective. In general, researchers currently have little data on what effective writing instruction actually looks like in schools (Cutler & Graham, 2008).

The purpose of the present study was to identify instructional strategies for writing that teachers deem effective, determine how often they used these specific strategies, and examine what teachers perceive as barriers for implementation. Research questions included: 1) what instructional writing strategies are South Carolina elementary school teachers currently using that they deem effective, b) how often are they using these strategies, and c) what do these teachers perceive as barriers to implementing effective writing instruction? The knowledge gained from this study will help to better understand what teachers perceive as effective writing instruction and what impedes teachers from implementing best practices in writing. This information is beneficial for researchers, teacher educators and professional development personnel to help improve and guide future work in this area.

Literature Review

Research has documented a variety of effective instructional strategies for the teaching of writing in the early grades. Graham and colleagues (2012) conducted a meta-analysis of research on writing with the purpose of identifying effective practices for writing instruction in the elementary grades. After reviewing over 100 studies, results indicated explicit teaching of writing

processes and skills was effective, as were strategies that involved teacher scaffolding. This included involving students in prewriting activities, providing opportunities for peer editing and student goal setting. Finally, analyses also revealed students whose teachers adopted a process approach to writing and those who used the self-regulated strategy development model made greater progress across the school year (Graham, et al., 2012).

While this study helped to highlight what is important for effective writing instruction, less is known about whether or not teachers actually implement such approaches. Cutler and Graham (2008) administered a survey to a large, national sample of primary grades' teachers to see which practices they were using to teach writing. Results indicated 90% of the teachers reported using most of the writing instructional strategies included in the survey. Yet there was wide variability in how often they used them. They also found 65% of teachers reported they did not use a commercial program to teach writing, but instead used a combination of instructional strategies they deemed effective.

While Cutler and Graham called for teachers to spend more time teaching writing as a result of their national study (as did the National Commission on Writing convened in 2003), more recent research suggests teachers continue to spend little time teaching writing. Puranik and colleagues (2014) observed over 20 kindergarten classrooms and found wide variability in the amount and type of instruction observed. On average, these kindergarten teachers only spent 6.1 minutes teaching writing in the fall and only 10.5 minutes teaching writing in the winter. Furthermore, students spent a majority of that time writing independently versus receiving instruction from their teachers. When teachers did provide writing instruction, it was more often focused on handwriting versus spelling or the writing process (Puranik, et al., 2014). De Smedt and Van Keer (2014) conducted a research synthesis of studies on writing instruction and found, despite overwhelming evidence for the efficacy of such approaches, across studies teachers rarely used strategy-based instruction, made little time for students to write collaboratively, and often had great difficulty integrating technology into their writing instruction.

Furthermore, research on reading has indicated strategies used are not always those teachers deem to be effective. For example, some teachers feel pressure to use literacy strategies recommended by their districts versus those they know to be effective, especially when under immense pressure for students to perform well on standardized tests (Dooley & Assaf, 2008). We wondered whether this holds true for writing instruction in elementary classrooms. Although previous research highlights various ways teachers approach writing instruction, it is not clear how often teachers employ specific strategies or how these align with what they deem as effective. The current study attempted to answer these questions through the use of survey methodology.

Survey research was selected for the current study because it allowed random sampling of multiple teachers throughout South Carolina; thus giving a broader picture of writing practices used than had we simply sampled teachers from one school or district. In addition, an online survey was used because teachers typically have easy access to email and are more likely to answer questions when given a flexible timeframe. The online format also provided anonymity which we thought was important for accurately assessing teachers' perceptions and reported practices.

Method

Recruitment

Elementary school teachers were recruited from randomly selected districts across the state of South Carolina. The first point of contact was the principal at each site. Principals were sent an email explaining the purpose of the study and were provided with a link to the electronic survey. Given the small sample size resulting from this first round of data collection in the spring of 2013, the decision was made to collect a second round of data in spring of 2014.

Participants

Over 150 teachers began the survey, and 103 completed it. Characteristics of the sample can be found in Table A. The majority of teachers were White females. In general, they were fairly experienced (most had been teaching for more than five years) and well educated (over 60% had Master's degrees) and they represented a range of grade levels. Class sizes ranged from 8 to 25 students, with teachers most commonly reporting a class size of 20. A majority of teachers (65%) reported having 10 or more students who received free or reduced lunch and 74% of teachers had between 1 and 5 students with special needs in their class. A majority of students (45%) served by these teachers were White, 35% were Black and 12% were reported as Hispanic. See Table A.

Table A. Teacher characteristics.

Variable	n	%
GENDER		
Female	100	97%
Male	3	3%
ETHNICITY		
White	93	89%
Black or African American	7	7%
Asian	2	2%
Hispanic or Latino	1	2%
EDUCATION LEVEL		
Bachelor's degree	22	21%
1 year or more beyond Bachelor's	15	14%
Master's degree	64	61%
Doctorate	1	1%
EXPERIENCE		
0-5 years	38	39%
6-10 years	27	28%
11-25 years	30	31%
Over 25 years	3	3%
GRADE LEVEL		
Preschool	8	8%
Kindergarten	18	17%
1st	18	17%
2nd	13	13%
3rd	13	13%
4th	11	11%
5th	14	14%

Measures

Teachers completed an electronic survey in which they responded to approximately 100 total items. Most teachers were able to complete the survey in 20-30 minutes. The items were taken from several surveys used in previous research. Items about barriers to effective writing instruction were created for the purpose of the present study.

Classroom Practices Survey. Teachers also responded to 35 items from the Classroom Practices Survey (Cutler & Graham, 2008) in which teachers reported whether or not they saw each practice as effective and also reported how often they used each strategy. Sample items included use of writing conferences, journaling, and worksheets. These were rated on an 8-point scale ranging from "never" to "several times a day." The survey was developed by Cutler, Graham and colleagues who created the items based on a review of research on writing.   Additional researchers established reliability of the measure by correlating observed practices with teachers' survey responses. Reported and observed practices were not statistically different (Lane,

et al., 2010; Olinghouse, 2008). In the present study, correlations between practices reported as effective and those used by teachers ranged from .20 to .69, demonstrating reliability of the measure.

Barriers. Finally, teachers responded to an item measuring the perceived barriers to writing instruction. Response options included "not enough instructional time," "lack of materials," and "lack of administrative support," among others. Teachers were also encouraged to write comments in response to this item to allow for further elaboration. These items were created after discussion and review by teachers in several focus groups conducted as part of another study undertaken by the principal investigators.

Results

Teachers reported using a variety of instructional practices to teach writing. Table B includes data on which practices teachers deemed effective and how often teachers reported using each

Table B. Practices deemed effective and rates of use.

Question	% of teachers who see this practice as effective (N=98)	N	Never	Several times a year	Monthly	Several times a month	Weekly	Several times a week	Daily	Several times a day	Mean
Tchr models enjoyment	88%	97	0%	0%	1%	5%	20%	22%	30%	19%	6.36
Explicitly models strategies	94%	98	0%	0%	1%	5%	22%	21%	35%	14%	6.29
Provides minilessons	95%	98	1%	0%	1%	7%	20%	19%	41%	9%	6.17
Writing across content areas	92%	98	2%	0%	3%	8%	13%	20%	41%	11%	6.15
Tchr monitors progress	81%	97	0%	2%	3%	3%	26%	20%	34%	10%	6.04
Stdnts monitor own progress	83%	98	0%	4%	3%	2%	26%	18%	34%	11%	6.01
Stdnts use invented spellings	76%	97	5%	2%	5%	5%	18%	8%	39%	16%	5.94
Teacher reteaches	90%	98	0%	0%	3%	9%	29%	25%	21%	11%	5.87
Use writing to support reading	90%	98	0%	3%	3%	11%	24%	14%	33%	10%	5.86
Write in journals	95%	98	2%	3%	2%	9%	19%	20%	36%	7%	5.85
Write during free choice time	88%	96	2%	4%	3%	8%	18%	18%	33%	11%	5.84
Stdnts "plan" before writing	97%	97	0%	2 %	1%	10%	31%	22%	29%	2%	5.70
Stdnts write at their own pace	83%	97	1%	1%	1%	11%	36%	14%	30%	4%	5.68
Use graphic organizers	88%	97	2%	2%	4%	4%	30%	22%	30%	3%	5.67
Work at writing centers	74%	98	7%	4%	4%	8%	17%	19%	30%	9%	5.51
Tchr reads own writing to stdnts	91%	96	0%	4%	8%	13%	20%	22%	22%	7%	5.48
Use writing prompts	82%	97	0%	3%	5%	14%	24%	27%	20%	4 %	5.47
Tchr conferences with students	98%	99	1%	0%	3%	21%	27%	27%	18%	2%	5.38
Stdnts help classmates	85%	98	3%	5%	6%	8%	26%	22%	24%	4%	5.36
Stdnts share writing w/peers	94%	96	0%	3%	5%	14%	32%	21%	20%	2%	5.35
Stdnts "revise" writing	94%	96	0%	1%	6%	13%	37%	21%	17%	2%	5.34
Stdnts write informational texts	86%	97	1%	11%	9%	16%	25%	14%	15%	6%	4.91
Stdnts select their own topics	85%	98	3%	6%	8%	21%	29%	14%	15%	2%	4.83
Stdnts use writing portfolios	83%	97	8%	7%	10%	12%	25%	14%	17%	4%	4.74
Stdnts conference w/peers	88%	99	6%	8%	8%	13%	27%	27%	8%	2%	4.72
Stdnts "publish" writing	90%	97	0%	6%	9%	30%	32%	10%	8%	2%	4.65
Stdnts use rubrics	85%	98	13%	10%	6%	8%	32%	10%	15%	4%	4.49
Use computers during writing	62%	98	22%	15%	10%	13%	14%	7%	13%	4%	3.77
Assigns writing homework	47%	98	15%	18%	12%	18%	18%	8%	8%	1%	3.68
Use worksheets for writing skills	38%	98	21%	12%	18%	8%	23%	9%	7%	0%	3.56
Use worksheets for writing process	27%	97	27%	9%	20%	10%	18%	9%	4%	0%	3.27
Stdnts dictate compositions	41%	97	32%	16%	11%	9%	16%	6%	4%	3%	3.10
Use worksheets for handwriting	28%	98	35%	11%	17%	5%	18%	7%	5%	0%	3.01
Uses addl technologies (iPad, etc.)	57%	97	48%	10%	8%	5%	12%	5%	7%	3%	2.82
Use worksheets for homework	15%	97	54%	14%	5%	8%	9%	4%	4%	0%	2.32

practice. The most commonly used practices included use of mini-lessons and writing centers. Approximately 80% of teachers saw rubrics as an effective way to assess student writing and 60% reported using rubrics on a frequent basis. A majority of teachers (93%) valued conferencing with students, yet only 70% made time to do it on a daily or weekly basis. Allowing students to help one another while writing was seen as effective by over 80% of teachers, but less than 70% made time for it on a weekly basis. Many teachers (85%) reported student choice in topic as important (see Table B), as was providing opportunities for students to work at their own pace (83%). However, only 61% of teachers provided opportunities for children to choose their own topics on a weekly or daily basis. Teachers also overwhelmingly reported allowing children to use invented spelling in their writing. Over 40% provide at least daily opportunities to do so, and another 26% provided opportunities for this at least weekly or several times a week.

Few teachers saw assigning writing worksheets for homework as effective (15%). Yet approximately 50% reported doing so (see Table B). In fact, few (25-35%) saw value in the use of any kind of worksheets (even those focused on punctuation, grammar or handwriting). However, approximately 22% reported using worksheets for handwriting on a monthly basis (or more than once a month), 25% used them at least weekly (or more than once a week) and 5% used them on a daily basis.

Few teachers reported using technology in their writing instruction (see Table B). For example, only 26% allowed students to use computers for writing on a daily or weekly basis and 46% of teachers reported never letting students use additional technologies (digital cameras, iPads, etc.) during the writing period. Even more interesting was the fact that only about 50% of teachers saw integration of additional technologies in writing instruction as important.

Teachers reported a variety of barriers to effective writing instruction. Table C includes data on what percentage of teachers perceived each item as a barrier. The most common response was lack of instructional time, with 68% of teachers reporting this as a barrier. Around 30% mentioned lack of materials/resources needed, which included technology, and 20% cited lack of professional development or training in writing. Close to 25% of teachers cited classroom management or behavioral issues as a barrier to effective writing instruction. "Other" barriers teachers wrote in the comment box included students' reluctance to write and students' lack of previous knowledge of and/or experience with writing.

Table C. Perceived barriers to writing instruction.

N = 74	Response	%
Not enough instructional time	50	68%
Lack materials/resources needed	22	30%
Classroom management issues/students' behavior	18	24%
Received little to no training/ professional development	15	20%
Received poor quality training/ professional development	3	4%
Receive little to no support from my administration and/or school district.	3	4%
What I believe to be effective practices are not supported by curriculum used	3	4%
Other barrier(s)...	15	20%

Discussion

In order to avoid proposing "solutions that do not fit the most relevant problems" (Gilbert & Graham 2010, p. 495) this study focuses on the voices of practicing teachers, as it identifies practices they see as effective and reveals barriers they experience in their day-to-day work with elementary school students. Graham et al. (2012) made four primary recommendations for effective writing instruction for elementary students including: 1) providing students with opportunities to practice writing daily, 2) teaching students to use writing for a variety of purposes, 3) teaching students to become fluent with handwriting, spelling and sentence construction and 4) creating an engaged community of writers. While it is clear that a majority of the teachers in this study agreed these would lead to effective writing instruction, all of these recommendations require a strong instructional time commitment, which is the area that teachers in this study felt they struggled with the most.

In general, there were a variety of instructional strategies teachers deemed effective. However, rates at which teachers used individual strategies did not always align with those they deemed effective. For example, quite a few teachers reported use of worksheets as ineffective, yet also reported using them from time to time. We believe this data supports the need to encourage teachers to rely on what they know is best practice and use it to critically evaluate curricular materials, rather than just adopting them at face value. Rather than using worksheets for homework (which, once again, most teachers saw as ineffective), teachers could design writing homework that requires students to write with family members for more authentic reasons. For example, co-creating the week's grocery list with a parent, composing an email to a family member who lives far away, keeping a family blog, or writing thank you notes for birthday gifts.

A lack of time to teach writing is not a new problem for teachers. Research has indicated that teachers do not think they have enough time to include writing on a daily basis nor integrate technology (Hutchison & Reinking, 2011). In order to address this issue, it is important for administrators to make writing a priority in their schools and to set expectations for writing instruction across content areas, as well as across grade levels. Writing instruction can easily be integrated into instruction in other content areas. In fact, helping students write about

what is learned during math lessons has been found beneficial for mastery of new content (Brandenburg, 2002). In addition, writing about what is learned in other content areas brings meaning and authenticity to writing assignments (Moss, 2005).

In this study, teachers found conferencing to be an effective strategy, but reported little time for it during the school day. It can be difficult to confer with each student on a weekly basis. Most teachers who use a writing workshop approach to instruction try to conference with only 4-5 students a day, while the rest of the class may be engaged in independent writing. Teachers generally keep these conferences to no more than five minutes each. Others could build in conferencing during literacy centers. Another idea might be to recruit parent volunteers to help with conferencing. Furthermore, children can be taught to confer with one another and often find value in the feedback provided by their peers.

To address lack of time for writing, teachers should be encouraged to use mini-lessons in their writing instruction. An effective mini-lesson is one in which the teacher identifies a specific focus and highlights the strategy or skill using their own writing, authentic literature, or the students' own writing (Tompkins, 2011). The teacher then provides explicit modeling of the strategy and provides time for guided practice. Research has demonstrated mini-lessons can be a powerful way to focus students' attention on an individual writing skill or strategy when followed by an immediate opportunity to write and apply what is learned (Tompkins, 2011).

To be most effective, professional development on writing should be focused and ongoing. Darling-Hammond (1996) argues that professional development should involve opportunities for teachers to reflect and collaborate with other teachers. Further, professional development opportunities should include opportunities that incorporate demonstration, practice, and coaching (Birman, Desimone, Porter, & Garet, 2000; Lang & Fox, 2004) so that teachers are encouraged and supported in practicing new strategies when they return to their classrooms. For example, trainers could visit classrooms to perform model lessons as well as observing teachers' writing lessons and providing immediate feedback. It is also critical that teachers receive professional development on integrating writing across the curriculum in order to help teachers maximize their instructional time and use writing as part of instruction in other content areas. The National Writing Project has close to 200 sites and serves all 50 states to provide such training, including opportunities for teachers to become instructional leaders at their own schools through participation in summer institutes.

Furthermore, in a previous study by Graham and colleagues (2012) only 12% of teachers indicated their college coursework adequately prepared them to teach writing. Teacher preparation programs should be encouraged to improve preparation in this area by offering additional coursework and/or improving existing literacy courses to increase the focus on writing. Local efforts in response to Read to Succeed legislation at both the College of Charleston and Clemson University have included the creation of a new course focused almost exclusively

on writing to better prepare pre-service candidates.

Another barrier that teachers discussed was the lack of resources available to teach writing. With a focused professional development model, teachers can learn to collaboratively develop new materials and lesson plans without additional financial burdens. There are also a variety of resources available on the internet, including websites of the Teacher's College Reading and Writing Project (http://readingandwritingproject.org/) and the National Writing Project (http://www.nwp.org/).

Results of the present study indicated a need for teachers to better integrate technology in their writing instruction. Previous research found use of technology in classrooms helps to improve children's writing quality (Graham, et al., 2012). Administrators should look to provide greater professional development in this area, as well as find ways to purchase appropriate technology tools for teachers to use in their classrooms. In order for students to be prepared for the work force, they must feel comfortable using technology to communicate their ideas (Skinner & Hagood, 2008). For example, teachers might provide opportunities for students to try journaling on an iPad, share classroom news via Twitter, or compose digital stories with VoiceThread.

Finally, results of the present study indicated some teachers saw classroom management issues and students' reluctance to write as key barriers to effective writing instruction.   Perhaps, the management issues are driven by lack of structure during the writing block which could be addressed via professional development on the writing workshop model. Behavioral issues could be related to a lack of student motivation or interest in writing. Our data does not provide enough explanation in this area so this may be an avenue for future research. For example, we need to know more about the particular behaviors and management issues teachers face before we can suggest appropriate solutions. However, students' reluctance to write may be addressed by providing more choice in topic and genre. Research has demonstrated when students are given opportunities to write about topics that matter to them, they are more motivated to write (Ghiso, 2011). It might also help to find more opportunities for students to write in the context of play and/or for more authentic reasons. For example, creating menus for play in the grocery store or writing letters to the principal to ask for help funding a classroom project.

Teachers have also found success in providing opportunities for peers to collaborate when writing. This allows children to build off one another's strengths and provides opportunities for them to learn from one another in an environment that feels safe, especially to the reluctant and struggling writers. In a meta-analysis of what works in writing interventions, Graham and Perin (2007) found peer response highly effective in improving writing of students across grade levels. Furthermore, collaboration between peers when writing was found most effective when facilitated by a supportive teacher (Hoogeveen & van Gelderen, 2013).

There are several limitations to this research. First, we relied solely on teacher reported data to measure frequency

of instructional strategies used. We know survey data may be less reliable than classroom observations because teachers may report what they want to do rather than reporting what actually happens in their classrooms (Mayer, 1999). We are cautious interpreting the results of this study due to the possibility of response bias which sometimes occurs when teachers with positive dispositions toward the topic of the survey (e.g., writing) respond to the survey more frequently than teachers with a negative disposition. In addition, we are aware that survey respondents sometimes interpret items differently.

It is also important to note that this study only allows us to examine teachers' perceptions of classroom practices. Therefore, the survey design does not encompass school or district policies that also shape instruction, nor does it examine all possible aspects of writing instruction due to the necessary brief nature of online surveys. Though fairly representative of the larger population, we also know the study is limited given the sample is fairly small. While still informative, this study would need to be replicated with a wider pool of teachers in order to be fully generalizable.

In conclusion, it is encouraging that state legislation such as the Read to Succeed Act has placed an increased emphasis on writing instruction in South Carolina and that teachers report using many effective writing strategies identified in current research. This study helps identify roadblocks that teachers may face in implementing these strategies and provides many implications for teachers, teacher educators, and professional development personnel in order to support teachers in improving their writing practices. As educators' literacy paradigms continue to shift to see writing as equally important as reading, students will experience the benefits of more balanced literacy instruction.

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Five Principles to Consider When Teaching a Content Area Literacy Course Across Disciplines

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Abstract — Content area literacy and disciplinary literacy are terms that are used in the context of teaching content area literacy courses. While these concepts refer to the use of literacy strategies in the delivery of content area instruction, their purposes are very different. Teacher educators must apply each of these concepts appropriately as they prepare preservice and inservice teachers to effectively teach in their various disciplines. In this article, the authors distinguish between content area literacy and disciplinary literacy, discuss a commonly used approach in the teaching of content area literacy courses, and share five principles that teacher educators can consider to help them strengthen the design and delivery of content area instruction across a variety of disciplines.

Taking a Second Look at Our Practice

June 11, 2014 was a significant day in the lives of all educators across the state of South Carolina. It was the day that the Read to Succeed (R2S) Act was signed into law. For teacher educators, it represented the beginning of an introspective analysis of what we do to get preservice teachers ready for effectively teaching literacy in the classroom and a thoughtful consideration about how we work with inservice teachers to refine and improve their literacy instruction. For P-12 teachers, it signified the start of a careful examination of how their daily literacy practices are impacting students.

In preparation for implementing R2S at the higher education level, institutions from across the state of South Carolina came together for several curricular development and syllabi preparation meetings. Numerous topics were discussed; however, one that received particular attention pertained to the significance of disciplinary literacy and how it is related to the teaching of content area subjects. Do we need a separate content area literacy course for each content area? If we offer courses where multiple content area subjects are blended, are students truly benefitting? Is disciplinary literacy and content area literacy interchangeable? Can we consider one term without the other? These were questions that we grappled with and for which we needed answers.

The authors of this article teach the content area literacy course at our institution and needed to get to the bottom of some of these questions as this knowledge would help us in strengthening the design and delivery of our undergraduate and graduate content area literacy courses. Therefore, we set out to learn as much as we could about disciplinary literacy and content area literacy and how teacher educators can connect these two concepts as they teach across the disciplines.

Is Disciplinary Literacy the Same as Content Area Literacy?

In order for adolescents to achieve the high levels of literacy required to compete in today's global workforce, literacy teacher educators must rethink what it means to be literate in the academic disciplines. While the idea of content area literacy has been around for a century or more (Mraz, Rickelman, & Vacca, 2009), disciplinary literacy is a rather new concept in the field of literacy education (Moje, 2008). In order to understand the relationship between content area literacy and disciplinary literacy, especially in light of the Read to Succeed (R2S) initiative in South Carolina, we needed to explore the similarities and differences between the two.

After much reading and discussion, we discovered that the terms content area literacy and disciplinary literacy are often used interchangeably; however, they are far from the same thing. Bean, Readence, and Baldwin (2011) define content area literacy as focusing on "developing students' ability to effectively use reading and writing as generic tools for learning from content area texts" (as cited in Fang & Coatman, 2013, p. 627). The term "generic," as it is used here, is the key to content area literacy. Snow and Moje (2010) claim that the "comprehension skills taught in English class are useful throughout the school day, but they aren't sufficient to help students study math, science, history ... Texts in these content areas have different structures, language conventions, vocabularies, and criteria for comprehension" (p. 67). While the idea of generic strategies insinuates that adolescent readers should be taught to use similar strategies for comprehending various texts, it also espouses the need for more discipline specific techniques for reading and writing. "There are differences in how the disciplines create, disseminate, and evaluate knowledge, and these differences are instantiated in their use of language" (Shanahan & Shanahan, 2008, p. 48). This is the premise of disciplinary literacy. Unlike content area literacy that focuses on generic strategies that can be applied across all content areas, disciplinary literacy refers to the application of literacy strategies that are specifically tailored to the characteristics of each content area. According to Gillis (2014), "Often, content area reading seems to impose generic reading strategies on content-specific text whereas disciplinary literacy considers content first and asks, 'how would a scientist (or historian, mathematician, or writer) approach this task?'" (p.615). After attending a reading workshop led by a reading supervisor, "I discovered the power in appropriate disciplinary literacy practices …Content area instruction integrated with discipline-appropriate literacy practices was powerful, effective, and more efficient than instruction in my classroom prior to my exposure to content area reading" (p. 614-

615). This being said, the teacher education programs across the state must address the needs of today's adolescents by preparing our preservice and inservice teachers to deliver the *appropriate* disciplinary literacy instruction that is unique to each content area.

The Delivery of Content Area Literacy Instruction

Most content area literacy courses have traditionally been taught using a cross-disciplinary model. That is, students from multiple content areas take the same course, learning about generic strategies that may be adapted to fit any content area subject. However, with the emphasis on disciplinary literacy, institutions are moving towards providing literacy instruction that is intra-disciplinary in nature (Fang, 2014; Lesley, 2014). This kind of content area literacy instruction is ideal as it gives literacy teacher educators the opportunity to tailor the literacy strategies presented to fit the unique characteristics of a specific content area. However, with this kind of a delivery model, logistical matters must be considered to determine whether this method is feasible. First, the size of content area cohorts varies greatly depending on the subject area. For example, within one institution, the number of students majoring in social studies education can be vastly greater than the number of students majoring in music education at a given point in time. Therefore, to have a content area literacy course solely for music education majors would not be practical. Second, the manpower that is needed to teach across a variety of content area courses is sometimes not available in smaller institutions. Oftentimes, smaller schools have a handful of literacy faculty who must teach multiple literacy courses. Therefore, asking for multiple content area literacy courses to be taught could put a strain on faculty schedules. As a result, fully moving away from the cross-disciplinary approach to teaching content area literacy courses may not be possible, and as a result, literacy teacher educators may consider how they can adapt their current practices to ensure that the variety of disciplines represented in their courses are being meaningfully addressed. The five principles below are ideas for literacy teacher educators to consider as they move forward in designing and delivering their content area literacy courses.

Five Principles to Consider When Teaching a Content Area Literacy Course across Disciplines

PRINCIPLE 1: Collaborate with content area colleagues in designing and delivering instruction. Literacy teacher educators come from a variety of academic backgrounds and may or may not have formal training in content area subjects, especially as it pertains to middle and secondary level courses (Fang & Coatoam, 2013). For example, a literacy teacher educator who has an elementary education undergraduate degree, a master's and doctoral degree in literacy, and now teaches at the higher education level has training in how to teach content area subjects up to the sixth grade. Unless this individual has sought out opportunities to take courses related to teaching content area subjects to middle level and secondary students, this kind of background knowledge may not be in place. Therefore, literacy teacher educators should work with content area instructors to learn about what it means to read and write in specific content areas. This work could include analyzing textbooks, discussing specific theories and practices within the designated fields, and talking about goals for student learning outcomes (Johnson, Watson, Delahunty, McSwiggen, & Smith, 2011). They could use this newfound knowledge to streamline the selection and teaching of literacy strategies that will be relevant to individual content areas. This could be a reciprocal process as the content area instructor could concurrently learn about literacy strategies from the literacy teacher educator. The content area instructor could in turn apply literacy strategies in the teaching of his or her designated content. Students would experience a strategy being used across multiple contexts, in the content area literacy course and in the subject area course, which would help them to understand the effective integration of literacy and see what it could look like in the P-12 classroom setting.

PRINCIPLE 2: Look for commonalities across content area subjects and group cohorts based on these commonalities. As mentioned previously, there are challenges to offering different content areas literacy courses to students across every discipline. Thus, one of the things that literacy teacher educators could encourage administrators to consider as they plan course schedules is to think about grouping students based on the commonalities across disciplines. Some examples of grouping options could be:

- Grouping students based on the emphasis of reading and writing in the disciplines. Subjects such as art, mathematics, music, physical education, and foreign language have not traditionally been considered to be content areas that heavily focus on reading and writing (Ming, 2012). However, there are designated strategies that are appropriate for these subject areas. In a course with this kind of grouping arrangement, the course instructor would have the opportunity to emphasize why literacy is relevant to each of these four content areas and would be able to select and teach about literacy strategies that are not heavily text dependent. On the other hand, subjects such as science, history, English, and geography rely more heavily on students reading and processing large amounts of connected text. Therefore grouping students based on this need would allow the course instructor to introduce literacy strategies that are more text focused.

- Grouping students based on the academic level where they are currently teaching or plan to teach. Teaching in an elementary school looks very different than it does in a middle or high school setting. Elementary teachers are responsible for teaching all of the content areas on a daily basis. At the middle and high school levels, teachers typically have one or two content areas of focus. Therefore, in working with preservice and inservice teachers at the elementary level, literacy teacher educators need to focus on sharing literacy strategies that are not only pertinent to specific subjects, but that can be easily adapted across content areas. This will enable teachers in this setting to work smarter as they prepare multidisciplinary lessons, and make learning connections as they work with students. As literacy teacher educators work with preservice and inservice middle and secondary level educators, they can target their strategy selection and use very specific strategies that match the characteristics of the disciplines and the needs of adolescent learners (Dew & Teague, 2015).

PRINCIPLE 3: Develop ways to learn about the role of literacy in disciplinary subjects. It is not feasible for literacy teacher educators to take courses to learn about the concepts and practices of all the content area subjects that they will encounter in their teaching. However, it is important that they have some familiarity with the various disciplines and the role that literacy plays in each discipline (Johnson et al., 2011). One of the ways that they can do this is by learning from their students. As literacy teacher educators, we oftentimes feel that we are the sole dispensers of information while our students are always the recipients of what we deliver. However, that does not always have to be the case. Oftentimes these preservice and inservice students come to us with several credit hours of discipline-specific courses that they have taken, and they are well-versed in the principles of their subject area. They know how to read and process the text in their disciplines, and they know the kinds of information that P-12 students need to think about and learn to be considered proficient in their disciplines (Hynd-Shanahan, 2013). And so, either through a formal class assignment, or a question posed for general class discussion, we could ask them to respond to the following: *Based on your knowledge of and experience with your specific discipline, help me to understand what reading and writing looks like in your content area. That is, if I walked into your classroom and observed students' using reading and writing to acquire knowledge, what should I expect to see?* Asking this question each semester will help literacy teacher educators to develop a strong understanding of what it means to use literacy in each discipline.

PRINCIPLE 4: Help students to see how literacy strategies can be authentically adapted to their individual disciplines. Gillis (2014) believes that "strategies adapted (rather than adopted) to fit the content (discipline specific strategies) are more effective than general literacy strategies" (p.616). The literacy teacher educator must think about ways that strategies can be *adapted* to fit learner needs. The literacy teacher educator can also encourage students to think about how they can adapt specific strategies to meet their individual needs. Maybe a weekly activity could be called, *How Can I Adapt This Strategy?* With this activity, students would get an opportunity to analyze strategies that are presented to determine how it would need to be modified to work for a specific topic within their discipline.

Shanahan and Shanahan (2008) conducted a study on disciplinary literacy to discover "how content area experts and secondary content teachers read disciplinary tests, make use of comprehension strategies, and subsequently teach those strategies to adolescent readers" (p. 40). In this study they found that content-area experts and secondary teachers were somewhat reluctant to teach some of the generic strategies suggested by the researchers, saying that the strategies did not promote the disciplinary literacy skills needed for their specific discipline. For example, one chemistry teacher was reluctant to use a particular reading strategy on summarization until he suggested a modification of the strategy. With the modification, "the strategy was not just about understanding text; it was also about understanding the essence of chemistry" (p.54). The strategy was *adapted* to make it subject matter specific. Also, the history content-area experts and secondary history teachers

liked several of the strategies recommended by the literacy researchers; however, suggestions were made for improvement to more closely mirror a historian's way of thinking. As a result of their two year study, Shanahan and Shanahan (2008) found that "the disciplinary teams advocated strategies that mirrored the kinds of thinking and analytic practices common to their discipline" (p. 56). However, they also contended that:

> instead of trying to convince disciplinary teachers of the value of general reading strategies…we set out to see if we could formulate new strategies or jury-rig existing ones so that they would more directly and explicitly address the specific and highly specialized disciplinary reading demands of chemistry, history, and mathematics. (p.57)

This reflects the idea presented in principle four. As literacy teacher educators, we must not simply present a plethora of general reading strategies to our students in the various disciplines; instead we must understand the nuances of the various disciplines represented in our classes and teach our students to *adapt* those general strategies, not simply *adopt* them.

PRINCIPLE 5: Examine the linguistic challenges of academic texts that may make them demanding to read for adolescents. As children move from elementary school to middle school to high school, the reading of academic texts becomes increasingly more complex. The language typically used in elementary texts is closer to the language used in everyday conversation and the topics typically focus on areas of interest to elementary-aged children. On the other hand, adolescents are faced with language demands in their academic texts that are more "advanced, abstract, and complex…the language used to construct and challenge this specialized knowledge thus becomes more technical, dense, abstract, and hierarchically structured" (Fang, 2012, p.35). Not only is the language more complex, but it also varies from discipline to discipline; academic texts in history are distinctly different from those in science or mathematics or music, making the comprehension of academic texts challenging for many readers.

> This linguistic variation across the disciplines does not just occur at the word level; it also takes place at the level of grammar…Recognizing disciplinary ways of using language is important because one cannot fully comprehend the text of a specific discipline … without having a sense of how the discipline organizes knowledge through language. (Fang, 2012, p.36)

As literacy teacher educators we must prepare our students to recognize and examine these linguistic variations in the various disciplines. This requires literacy teacher educators to understand both the quantitative measures and qualitative measures of text complexity (McArthur, 2012).

This presents a problem for literacy teacher educators. As mentioned earlier, just as it is not feasible for literacy teacher educators to take courses to learn about the concepts and practices of all the content area subjects that they will encounter in their

teaching, it is not feasible for literacy teacher educators to fully understand both measures of text complexity in each academic discipline. While the quantitative measures are somewhat objective and typically measured by a computer program – sentence length, word frequency, Lexile measures, readability formulas, and so on – it is the qualitative measures that are more subjective. The Common Core State Standards lists four qualitative measures – structure (low versus high complexity), language clarity and conventions (conversational versus academic language), knowledge demands (prior knowledge), and levels of meaning (literary texts) or purpose (informational text) – to consider when determining text complexity (National Governors Association Center for Best Practices, & Council of Chief State School Officers, 2010). As literacy teacher educators, we can introduce our students to these qualitative measures by talking about what each measure means, and then provide them with opportunities to analyze texts in their own discipline (Carney & Indrisano, 2013).

Conclusion

We are currently preparing to teach the "content area reading and writing" courses (name as it appears in the course catalog) mandated by the R2S legislation in the fall semester. Our syllabi are changing, course objectives are being aligned with the competencies outlined in the R2S legislation, assignments are being altered, and assessments are being updated. These changes come as result of our reading and discussing the similarities and differences between content area literacy and disciplinary literacy. While the names of our courses still reflect the idea of "content area reading and writing," we are working our way through the five principles outlined here in the new design and delivery of these courses. We believe that *disciplinary* literacy will be the focus of our teaching, preparing our preservice and inservice teachers to deliver the *appropriate* disciplinary literacy instruction that is unique to each academic discipline.

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Ready, Set, Goal! Strengthening Writing Conferences through Goal Setting

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Abstract — Conferences are an essential component of Writer's Workshop. They provide teachers opportunities to individualize instruction and offer guidance to students in an effort to support their development as writers. In this article we describe how goal setting can be introduced and implemented in order to improve writing conferences and student engagement in the writing process. Considerations for implementation are discussed.

> *Chase carried his writing notebook back to the conference table and sat down with a sigh. I asked him, "How is your rough draft coming along?" He showed me his rough draft, which was written in one huge block of writing. It lacked paragraphs, indentations, and transition words. He did not have an introduction or conclusion. I thought, "Was he not paying attention when I modeled how to write these in my mini-lessons?" I pulled out a piece of paper and showed him how to rewrite his rough draft using the correct format. I essentially wrote the whole thing for him, using his words and integrating mine. He followed along and nodded in agreement as I pointed out each important element. He took the paper back to his desk and began his final copy. I thought, "That went well. He seemed to understand what he needed to do to make his writing better."*

> *The following week I met with Chase again to discuss another piece of writing. He pulled out his rough draft. Again, it was written in one block of writing, without paragraphs and indentations. Again, it lacked an introduction and conclusion. I was confused and to be honest slightly irritated. Why had he reverted back to his old way of writing when I had clearly shown him how to organize his writing? He did not apply any of the changes I had shown him during our last conference. He was waiting for me to fix his writing for him, instead of doing it on his own.*

I (Amanda) realized I needed to change the way I was conducting writing conferences in my classroom. It was so important to *me* that my students improve their writing. That was the problem! It did not matter how important it was to me; I was not the writer. The improvement needed to be important to the student. I began asking myself, "How can I shift the desire to improve their writing from me to them? How can I give my students more ownership of their work? How can I motivate them to want to improve their writing skills?" My answers to these questions led me to begin involving my students in setting writing goals. This has not only transformed my writing conferences but also the way I plan and implement writing instruction in my classroom. The purpose of this article is to (a) provide teachers with an overview of how goal setting can be introduced and implemented within the framework of Writer's Workshop and (b) describe several considerations for using goal setting during writing conferences.

Writing Conferences

Writing conferences are an integral part of Writer's Workshop. Conferences provide teachers opportunities to individualize instruction and offer guidance to students in a supportive writing environment (Calkins, 2004). The teacher uses this information to evaluate the student's progress, determine whether the student is applying the skills presented during the mini-lessons, support students who require additional instruction, and inform their instructional decisions.

Effective writing conferences follow a predictable structure, focus on a few key points, and specifically address the student's need (Anderson, 2000; Calkins, Hartman, & White, 2005; Graves, 1982). Essential to the success of the conference is student ownership. A writing conference typically begins with the student sharing a piece of writing they're working on and identifying what is being working on as a writer. This provides the teacher insight into how the student thinks about their writing as well as the writing process (Graves, 2004). It is important that writers learn to take ownership over their writing, which might lead to increased motivation and engagement in the process. Among the evidence-based practices associated with effective writing conferences that can be used to increase students' ownership and responsibility is goal setting (Troia, 2014).

Goal setting has been found to be effective in improving writing among a range of learners (Estrada & Warren, 2014; Gillespie & Graham, 2014; Graham & Perin, 2007; Hansen & Wills, 2014; Schunk, 2003). As Troia (2014) describes, in order for writing goals to have the biggest impact on writing behavior, performance, and engagement they should be "challenging (i.e., just beyond the student's current level of writing skill); proximal (i.e., attainable within a short period of time); concrete; and self-selected or collaboratively established (because real or perceived control boosts achievement motivation)" (p. 31). When students set goals for their writing, they are better able to focus on the important aspects of their writing and become more self-directed in their work.

Mermelstein (2013), describes self-directed writers as the "bosses of their own learning" (p. 6). In fact, the process described in this article aligns with Mermelstein's work in *Self-Directed Writers: The Third Essential Element in the Writing Workshop*. Involving students in goal setting and encouraging student participation

during writing conferences helps to develop self-directed and highly motivated writers. This in turn, can lead to increases in self-efficacy, the belief about one's ability to perform at a certain level. Research indicates students who have higher self-efficacy are more likely to be academically motivated and perform at a higher level, even when faced with a difficult task (Schunk, 1990; 2003).

Setting the Stage for Goal Setting

Before beginning goal setting work with students, it is important to spend time explicitly teaching students expectations, modeling with examples and non-examples, and providing ample opportunities for practice with feedback from the teacher. We suggest teachers begin with a mini-lesson on goal setting. The following sections provide a general guide for this introduction. These steps may need to be adjusted based on the students' needs, the teachers' style of instruction, and instructional time (Note: this mini-lesson may need to be repeated over several days).

Steps for Introducing Goal Setting

First, have the class meet in the routine meeting area. This could be in the reading center or on the floor in front of the board. Begin by asking students, "What does it mean to set a goal? Record student responses on chart paper or board (see example, Figure 1). Allow students to share goals they have set. These may or may not be academic goals.

Figure 1. Anchor chart used during goal setting mini-lesson.

Ask students "Why do we set goals?" Help students understand that goals are set in order to improve in a specific area. For example, "When I train to run a race, I like to set a personal goal so I can improve my time. Each time I sign up for a race, I try to train so that I can meet my set goal time. This helps me become a better, faster runner." After sharing a personal example, encourage students to make connections to goals they have set for themselves. Support

students in applying this idea to writing by asking, "What types of things can writer's work on to improve their writing ability?" Record student responses on chart paper (see example, Figure 2).

Figure 2. Student generated list of possible writing goals.
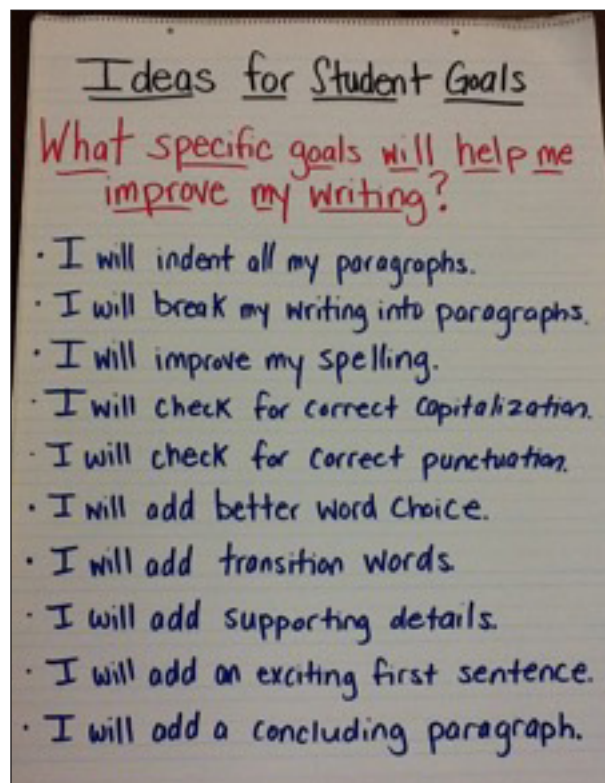
After, explain how students will begin to set goals for their writing development and describe how the goals will be used during writing conferences. Students need to understand the components of an effective goal and what is expected. A sample visual used to communicate expectations for goal creation is provided in Figure 3.

Figure 3. Expectations for goal setting.
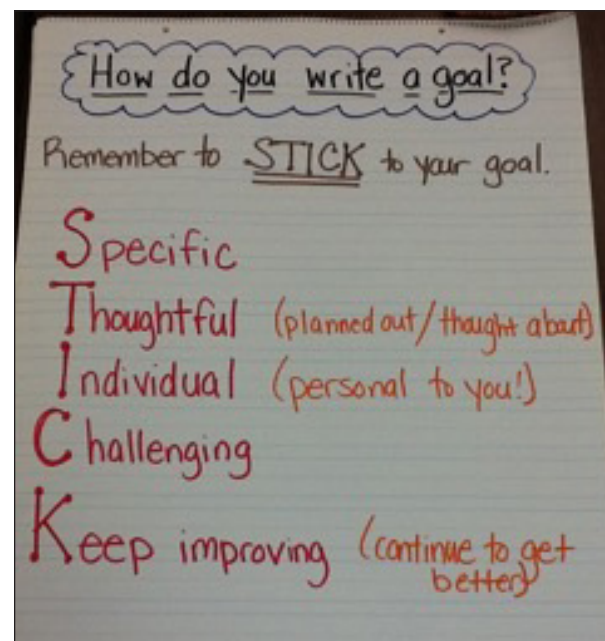
The next step is to introduce the pre-assessment goal sheet (see Figure 4). Demonstrate how these sheets will be used during writing conferences. Begin by sharing a writing sample of your own and show how you identified a goal that matches a need in your writing. Model how to write a goal on the line under Goal 1. For example, "I will add better word choices to my writing."

Then, model how to select the rating that best represents the current level of performance. Think aloud strategies can be used to model for students. For example, "I feel like I use a few higher-level words in my paper (underline those in the sample being shared), but I could definitely add more. I will rate myself as a 3, because I can show the skill, but I can improve on it more." Circle the box marked 3.

Then, think of a specific strategy to help improve that goal. Again, model by thinking aloud: "I know I've learned to use a thesaurus to find synonyms for boring words, so I will write down that I will underline boring words in my writing and use a thesaurus to replace them with more exciting words." Ask students to think of specific goals they could work on within their writing (add to the list started as a class, see Figure 2). This list may help spark ideas among the students as they begin developing their own writing goals. Continue to add to this list throughout the year as new goals are developed.

After meeting as a group, the teacher should distribute the pre-assessment goal sheets. Give students time to draft up to three goals for their next writing conference. Encourage students to look at past writing examples in their writing journals for ideas. Walk around the room to assist as students create goals, rate their skill level, and identify a specific strategy for each goal. Goal sheets should be placed in the front of the student's writing folder so students can reference them each day during independent writing time. *(For reproducible copies of goal sheets for older and younger writers, see the pages immediately following this article).*

Implementing Goal Setting during

Figure 4. Pre-assessment goal sheet.

Figure 5. Pre-assessment goal sheet.

Individual Writing Conferences

After the initial introduction of goal setting, it's time to begin individual writing conferences using the goal sheets. The following guidelines are arranged by writing unit (which includes working on a piece of writing across the stages of the writing process: pre-writing, drafting, revising, editing, and publishing) and provide a general guide for implementation. These steps may need to be adjusted based on student progress, needs, and instructional focus.

Pre-Assessment Goal Sheet

Throughout the writing unit, make time to conference with each student at least once. Some students may need more than one conference, based on how much instructional support they require. Begin the conference by asking the student to share their goal sheet and then read their piece of writing aloud. After, ask them to provide evidence from their writing to support the information on their goal sheet. Many students will need support developing and/or revising their goals, ratings, and strategies.

When the conferencing time of the workshop has ended and the class transitions to the sharing portion of the session, select a student who has a clear goal and appropriately matched strategy to share their work, including evidence from their writing, with the class. It is important to ask the student's permission first to be sure they feel comfortable with sharing their goals.

Post-Assessment Goal Sheet

As students near the end of the writing unit and prepare to publish their work, have the class meet again in the common meeting area for a mini-lesson on how to complete the post-assessment goal sheet. Display the post-assessment goal sheet (see Figure 5) on chart paper or the board.

Using the same information modeled during the introductory mini-lesson, write the goal created on the Goal 1 line. "I will

add better word choice to my writing." The goals from the pre-assessment should be the same on the post-assessment. Review with the students, "What does it mean to find evidence to support your answer?" (e.g., when answering questions about a reading passage, evidence may be a sentence or example from the text).

Next, using the revised piece of writing, use think-aloud strategies and model how to find evidence that shows progress toward the goal. For example, "I have a sentence in my writing (highlight the sentence) that shows I used better word choice. I underlined the boring word, ran, and used a thesaurus to find a better word. My improved sentence is, "My brother sprinted across the lawn to safety. I'll write this sentence on the line under the rating box as evidence."

Then, choose a rating that shows how the goal was reflected in the final copy. Again, think aloud for students, "I think I did a better job with my word choice, but maybe I could have added even more vivid words. I will rate myself as a 4, because I think I still have room to improve." Circle the 4 box on the goal sheet.

After meeting as a group, the teacher should distribute the post-assessment goal sheets. Walk around to assist students as they rewrite their goals, find evidence in their writing, and rate their improvement level. This step may require additional conference time with some students.

Final Copies and Post Assessment Goal Sheets

At the end of the writing unit, students will turn in both goal sheets with the final copy of their writing. Teachers should refer to the goal sheets and provide specific written feedback on the post-assessment goal sheet for each student. This feedback should be shared during an individual conference and the teacher and student should discuss whether to continue with a goal or move on to a new goal for future writing assignments. When it's time to begin the next writing unit, restart the process using new pre-assessment goal sheets.

Instructional Considerations

The steps outlined above can be adapted to fit the needs of any class or grade level. Below are some considerations for teachers interested in using goal setting during writing conferences:

• **Develop a system for taking notes during conferences.** Having a specific procedure for record keeping will not only ensure conferences are held on a regular basis, but it will also allow for better use of instructional time. Conference logs can be used to record students' explanations for writing, possible social influences for their choices, and other common themes found among the students (Kissel, 2008). Reviewing notes before conferences allow teachers to quickly review information from the last conference (what was discussed, what the student was working on, steps student was going to take going forward, and so on). Additionally, teachers should develop a system for archiving

students' goal sheets. These can be reviewed periodically to monitor progress, share progress, and ensure mastery.

• **Be positive.** It is important to provide positive and constructive feedback during conferences. While goal setting allows teachers and students to target specific areas of need, conferences should always begin on a positive note - with a positive comment. What is working with the student's writing? What have they done well? What or where have they improved? Be specific, as this is a great opportunity for teachers to build the student's confidence.

• **Be pragmatic.** For students who struggle with writing and have many areas that need improvement, teachers need to provide support in identifying a high-impact skill that will lead to positive development across writing. For example, it is unnecessary to focus on indenting paragraphs if the student is unable to generate supporting details for the topic of a paragraph. In addition, while there are three spaces for goals, teachers should consider starting with just one goal and increasing the number as the student progresses and demonstrates improvement.

• **Be flexible.** Students move through the writing process at different rates. The writing process is not linear; many students revisit stages throughout the development of a writing piece. In addition, there are times a student will start on a piece of writing and lose interest. It is important for teachers to allow students to make these decisions about their writing. Further, while the goal sheet may provide a starting point and structure for your conference, teachers need to remain open and responsive to the "teachable moments" that often present themselves during instruction.

• **Use the information from the conferences to make instructional decisions.** Notes from conferences can provide data for planning future mini-lessons (Kissel, 2008). Teachers may ask themselves, "What patterns do I see? What goals are most common among students?" Analyzing the data is a great way to plan instruction in order to support students as they work toward their goals. Also, identifying patterns can lead to small group conferences. Small group conferences may be a more efficient use of instructional time, and they provide an environment where students may learn from each other.

• **Collect student examples.** Look for strong examples (and non-examples) to share with students. These can be referred to during mini-lessons and used during conferences to develop ideas and strategies for students. Student examples have a strong influence because it shows students that someone just like them is capable of setting and meeting writing goals. Students learn a lot from each other and these examples may help them think about their writing in new ways. Sharing authentic examples also provides students the opportunity to share their success with classmates. This can be another way to boost student confidence and motivation.

• **Be patient.** This process starts with a lot of teacher modeling, practice, and continuous feedback. Modeling is essential in helping students understand the complexity of writing. Students need to both see and hear the teacher as they model how they think and

work through each step (Read, 2010). Some students are going to require much more support than others, especially those with little confidence or motivation in writing. Make sure to take the time to build the skills with each student in an effective way and reteach when needed. The time spent doing this is worth it!

Conclusion

As a result of this work, I have seen my 4th grade students gain confidence and demonstrate lasting improvements in their writing. Now my students talk more during writing conferences than I do! They are able to share their goals, strategies, and evidence from their work and make decisions about how to improve as writers. I have found my role during conferences has shifted to asking guiding questions and providing support, when needed. Goal setting is one component of an effective writing program that can strengthen conferences and facilitate the development of independent, more engaged writers.

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Writing Goal Sheet

Goal 1

Write your goal in one complete sentence.

My writing goal is to_____

Rate yourself on how well you show this writing skill at this time.

1	2	3	4
I need a lot of practice and teacher help.	*I can try on my own but need teacher help.*	I am good at this skill but can still get better.	*I am great at this skill!*

In one sentence, what can I do to work on this goal during my next writing assignment?

To work on my goal I will_____
_____

Goal 2

Write your goal in one complete sentence.

My writing goal is to_____

Rate yourself on how well you show this writing skill at this time.

1	2	3	4
I need a lot of practice and teacher help.	*I can try on my own but need teacher help.*	I am good at this skill but can still get better.	*I am great at this skill!*

In one sentence, what can I do to work on this goal during my next writing assignment?

To work on my goal I will_____
_____

Post Assessment: **Writing Goal Sheet**

Goal 1

Write your goal in one complete sentence.

My writing goal was to_____

Rate yourself on how well you showed this skill in your final copy.

1	2	3	4
I need a lot of practice and teacher help.	*I can try on my own but need teacher help.*	I am good at this skill but can still get better.	*I am great at this skill!*

In one sentence, support the rating you chose. Use *evidence* from your writing.

In my writing, I showed my goal by_____

_____

Goal 2

Write your goal in one complete sentence.

My writing goal was to_____

Rate yourself on how well you showed this skill in your final copy.

1	2	3	4
I need a lot of practice and teacher help.	*I can try on my own but need teacher help.*	I am good at this skill but can still get better.	*I am great at this skill!*

In one sentence, support the rating you chose. Use *evidence* from your writing.

In my writing, I showed my goal by_____

_____

<div align="center">

Pre-Assessment: Writing Goal Sheet

</div>

Goal 1

Write your goal in one complete sentence.

_____
_____

Rate yourself on how well you show this writing skill at this time.

1	2	3	4	5
I do not/cannot show this skill.	*I can attempt this skill but need a lot of help.*	*I can show the skill but I can improve on it more.*	*I show this skill well, but it is not perfected.*	*I am excellent at this skill and do not need further support.*

In one sentence, what can I do to work on this goal during my next writing assignment?

_____
_____

Goal 2

Write your goal in one complete sentence.

_____
_____

Rate yourself on how well you show this writing skill at this time.

1	2	3	4	5
I do not/cannot show this skill.	*I can attempt this skill but need a lot of help.*	*I can show the skill but I can improve on it more.*	*I show this skill well, but it is not perfected.*	*I am excellent at this skill and do not need further support.*

In one sentence, what can I do to work on this goal during my next writing assignment?

_____
_____

Goal 3

Write your goal in one complete sentence.

_____
_____

Rate yourself on how well you show this writing skill at this time.

1	2	3	4	5
I do not/cannot show this skill.	*I can attempt this skill but need a lot of help.*	*I can show the skill but I can improve on it more.*	*I show this skill well, but it is not perfected.*	*I am excellent at this skill and do not need further support.*

In one sentence, what can I do to work on this goal during my next writing assignment?

_____
_____

Progress Assessment: **Writing Goal Sheet**

Goal 1
Write your goal in one complete sentence.
_____
_____

Rate yourself on how well you are showing this writing skill in your Rough Draft.

1	2	3	4	5
I do not/cannot show this skill.	*I can attempt this skill but need a lot of help.*	*I can show the skill but I can improve on it more.*	*I show this skill well, but it is not perfected.*	*I am excellent at this skill and do not need further support.*

In one sentence, what can I do to improve this goal during my edit/revision stage (before final copy)?
_____
_____

Goal 2
Write your goal in one complete sentence.
_____
_____

Rate yourself on how well you are showing this writing skill in your Rough Draft.

1	2	3	4	5
I do not/cannot show this skill.	*I can attempt this skill but need a lot of help.*	*I can show the skill but I can improve on it more.*	*I show this skill well, but it is not perfected.*	*I am excellent at this skill and do not need further support.*

In one sentence, what can I do to improve this goal during my edit/revision stage (before final copy)?
_____
_____

Goal 3
Write your goal in one complete sentence.
_____
_____

Rate yourself on how well you show this writing skill at this time.

1	2	3	4	5
I do not/cannot show this skill.	*I can attempt this skill but need a lot of help.*	*I can show the skill but I can improve on it more.*	*I show this skill well, but it is not perfected.*	*I am excellent at this skill and do not need further support.*

In one sentence, what can I do to improve this goal during my edit/revision stage (before final copy)?
_____
_____

Post Assessment: Writing Goal Sheet

Goal 1

Write your goal in one complete sentence.

_____
_____

Rate yourself on how well you showed this skill in your final copy.

1	2	3	4	5
I did not show this skill.	*I attempted this skill but need a lot of improvement.*	*I showed this skill but I can improve on it more.*	*I show this skill well, but it is not perfected.*	*I am excellent at this skill and do not need further support.*

In one sentence, support the rating you chose. You can attach evidence from your writing.

_____
_____

Goal 2

Write your goal in one complete sentence.

_____
_____

Rate yourself on how well you showed this skill in your final copy.

1	2	3	4	5
I did not show this skill.	*I attempted this skill but need a lot of improvement.*	*I showed this skill but I can improve on it more.*	*I show this skill well, but it is not perfected.*	*I am excellent at this skill and do not need further support.*

In one sentence, support the rating you chose. You can attach evidence from your writing.

_____
_____

Goal 3

Write your goal in one complete sentence.

_____
_____

Rate yourself on how well you showed this skill in your final copy.

1	2	3	4	5
I did not show this skill.	*I attempted this skill but need a lot of improvement.*	*I showed this skill but I can improve on it more.*	*I show this skill well, but it is not perfected.*	*I am excellent at this skill and do not need further support.*

In one sentence, support the rating you chose. You can attach evidence from your writing.

_____
_____

Future Writing Goals: *Write 2-3 writing goals for your next writing assignment. These are things you want to continue to improve on in your writing.*

Goal 1

Write your goal in one complete sentence.

_____

_____

Rate yourself on how well you show this writing skill at this time.

1	2	3	4	5
I do not/cannot show this skill.	*I can attempt this skill but need a lot of help.*	*I can show the skill but I can improve on it more.*	*I show this skill well, but it is not perfected.*	*I am excellent at this skill and do not need further support.*

In one sentence, what can I do to work on this goal during my next writing assignment?

_____

_____

Goal 2

Write your goal in one complete sentence.

_____

_____

Rate yourself on how well you show this writing skill at this time.

1	2	3	4	5
I do not/cannot show this skill.	*I can attempt this skill but need a lot of help.*	*I can show the skill but I can improve on it more.*	*I show this skill well, but it is not perfected.*	*I am excellent at this skill and do not need further support.*

In one sentence, what can I do to work on this goal during my next writing assignment?

_____

_____

Goal 3

Write your goal in one complete sentence.

_____

_____

Rate yourself on how well you show this writing skill at this time.

1	2	3	4	5
I do not/cannot show this skill.	*I can attempt this skill but need a lot of help.*	*I can show the skill but I can improve on it more.*	*I show this skill well, but it is not perfected.*	*I am excellent at this skill and do not need further support.*

In one sentence, what can I do to work on this goal during my next writing assignment?

_____

_____

Groovin' to the Sounds of Music:
Songs as Literacy Instruments

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Abstract — Music is a valuable tool for literacy development at any age. Increasingly, there is awareness that music and singing in conjunction with reading promote phonemic and phonological awareness, concepts about print, phonics knowledge, word recognition, and vocabulary acquisition (Biggs, Homan, Dedrick, & Rasinski, 2008; Fisher, 2001; Iwasaki, Rasinski, Yildirim, & Zimmerman, 2013). Our work with students also suggests that song lyrics have the potential to promote literary interpretation. In this article, we discuss ways that songs support reading and writing throughout the grades and instructional approaches for capitalizing upon its potential in classrooms.

Groovin' to the Sounds of Music: Songs as Literacy Instruments

"Where is Pete going?
The library!
Pete has never been to the library before!
Does Pete worry?
Goodness no!
He finds his favorite book
and sings his song:
'I'm reading in my school shoes.
I'm reading in my school shoes.
I'm reading in my school shoes.'"

The excerpt above from *Pete the Cat: Rocking in My School Shoes* (Litwin, 2011) is actually the second refrain of Pete's song. As Susan observes the librarian read the words above, the children are already primed by the previous pages to chime in and sing along with Pete. The book represents the first day of school, and the main character's self-confidence and optimism shines through, allaying any newcomer's anxiety with the call-and-response, "Does Pete worry?" "Goodness no."

Susan recently observed this musical read-aloud experience while waiting for her next student teacher observation. The librarian invited the children to chime in and every child in the kindergarten class was totally engaged by the read-aloud - singing along, and connecting to the coolness that is Pete. Then the librarian asked them to come over to a large screen and stand as she brought up a YouTube video of Eric Litwin, the author, and James Dean, the illustrator, sharing the text and singing Pete's song: https://www.youtube.com/watch?t=35&v=yrhnMAzDeHY

By the time the kindergartners and the librarian were barely into the video, I (Susan) could hardly stay in my seat! I, too, wanted to get my groove on with Pete! Perhaps Litwin explains it best—he terms such experiences, "musical interactive literacy."

After having difficulties with reading as a child, he began his career as a special needs teacher but became a performer of children's songs—combining music and movement, call-and-response, rhythm, rhyme, and repetition (Green, 2014). These characteristics are also evident in his *Pete the Cat* books.

Although anecdotal evidence on this topic is more prevalent than organized research, the benefits of music and song on literacy development are undeniable. A number of important correlates can be drawn between music and literacy according to numerous experts (Fisher, 2001; Harp, 1988; Iwasaki, Rasinski, Yildirim, & Zimmerman, 2013; Miller & Coen, 1994). Music is undoubtedly present in the world of children, whether they are singing to themselves as they play, dancing along to a song on the radio, or singing chants and nursery rhymes on the playground.

> Strong social bonds are encouraged through music and songs beginning in pre-school, and toddlers can begin to experiment with grammatical rules and and various rhyming patterns in songs. A child's initial introduction to patterned text often occurs first in songs, chants, and rhymes, which are repeated through childhood. (Paquette & Rieg, 2008, p. 228)

In the remainder of this article, we will discuss the tools that songs offer in support of literacy learning. We will begin by providing suggestions for songs as curricular instruments for emergent and early literacy, supported by educational rationales. We then offer ideas for elementary and beyond including English language learners.

Music and Songs in the Early Years

Music is memorable and engaging, making it a perfect tool for early reading development. As represented in the read-aloud experience of *Pete the Cat* described above, songs teach young readers many important aspects of early literacy. Such musical interactions and merriment are reminiscent of early home and play experiences. For example, when Julie babysat for two year old Sarah, one of Sarah's favorite activities was to tune in to YouTube videos of sing-along books such as *Driving My Tractor* (Dobbins, 2009), *The Animal Boogie*, (Harter, 2005), and *Giraffes Can't Dance* (Andreae & Laurie, 2002). As she sang along, she would instruct Julie to turn the pages of the book to go along with the video illustrations as the narrator sang. Julie was surprised to find that Sarah knew exactly when the pages should be turned! She even got upset when Julie got distracted and did not turn the page at the right time. The multimodal effects of music, video, and books were teaching Sarah how books work. These effects

encouraged her to learn how to hold the book and turn the page and discover when the next section of print was coming up. Observing how these tools were effective in teaching Sarah prompted Julie's interest in learning more about how songs, chants, and sing-alongs can promote literacy in early readers.

Anvari, Trainor, Woodside, and Levy (2002) emphasize the relationship between music and reading acquisition, particularly in relation to phonemic and phonological awareness. To clarify, phonemic awareness is a type of phonological awareness and refers to discernment of phonemes. Phonological awareness encompasses "*any size unit of sound*" (Yopp & Yopp, 2000, p. 130); the ability to recognize and say rhyming words, to count syllables, to segment word parts such as the beginning */ch/* and ending */ip/* are examples of such awareness. Early experiences with language, especially speech that is intuitively altered when directed at young infants, involve musical attributes. These attributes include repetition, tempo or pacing, up/down patterns in pitch, much like the rising, falling, drawn out, and staccato notes in a song. Children hear and become sensitized to these differences. This parallel between music and early speech suggests that "early skill with music might enhance reading acquisition to the extent that reading depends on the same basic auditory analysis skills" (Anvari et al., 2002, p. 113). What is most important here is that home and school experiences build sensitivity to the sounds of spoken language. Yopp and Yopp (2000) suggest several guidelines for activities that promote such sensitivity and awareness: (a) playfulness; (b) intentionality in focusing on the sounds of spoken language; and (c) part of a comprehensive reading framework. Combining such experiences with music is likely to incorporate these elements while being memorable and engaging.

Phonological awareness is more likely to develop through repetition, pronunciation, and rhyming patterns within songs and chants. Hearing individual sounds within words and associating phonemes with specific letters can be supported through singing and listening to songs. Hearing the pronunciation of words modeled as syllables as they are elongated in song may be beneficial to readers, especially if they are following along with the text in front of them (Anvari et al., 2002). For example, The *Animal Boogie* (Harter, 2005) video https://www.youtube.com/watch?v=25_u1GzruQM includes many examples of repetition and stretching letter sounds within its verses. Vowel sounds like the oo vowel team in "boogie" are repeated in the chorus of "boogie woogie oogie." While examples such as these may seem silly or simply playful to adults, children love playing with the sounds and do not realize that they are also building necessary understandings for early literacy development as they are singing. The singer in the video stretches out consonant sounds such as the */l/* in leopard and the slithering sound of the */s/* in snake. Emphasizing these sounds while singing and tracking along with the print in the book makes reading appeal to the auditory senses while also accentuating phonemic awareness and letter-sound concepts.

When song picture books are used, concepts about print are more meaningful, and print conventions are learned in context (Fisher, 2001; Paquette and Rieg, 2008). For instance, songs with patterns can be used to support print concepts such as one-to-

one or voice-print matching. To clarify, we might start with a fairly simple text with single-syllable words such as *The Wheels on the Bus* (Kovalski, 1987; Zelinsky, 1990), as it is a song selection the child already knows. Because the child has memory for the words (and tune), he is more likely to match his voice to the single-syllable words on the page as he follows along with his finger. Thus, he is freed up to focus on regulating the voice-print matching, rather than having to also decode the words. As his print concepts mature, the learner is ready for the next step. We might choose to sing and read, *Over in the Meadow* (Galdone, 1986). Once the child is familiar with the words to the song, the text can serve as a self-tutorial for the child, helping him to learn to regulate voice-print matching or pointing behavior with multi-syllabic words. As he follows along with the words, he is likely to recognize that his finger needs to stay on the word, meadow, for two beats.

> "Over in the meadow
> in the sand in the sun
> Lived an old mother turtle
> and her little turtle one."

As an added resource, children can watch videos such as *Over in the Meadow* (https://www.youtube.com/watch?v=C6ljGXMMB-g) and read and sing along. A number of these videos function similarly to an e-storybook with highlighted words and animated dots that track the print for the child. Of course, most children will eventually develop the phonological awareness to understanding that words like meadow have two parts or two claps while bus has one, but the joint access to music and text is likely to speed up such awareness. Research with e-books and CD-ROMs suggest that incorporation of animations and sound as opposed to static visuals (printed texts and illustrations) are likely to assist the development of reading skills, especially in children who are at-risk (Neuman, 2009; Shamir & Shlafer, 2011). Such multimedia learning environments, when high quality, purposeful, and coordinated, offer multiple entries for acquiring literacy as opposed to a single visual print medium (Mayer, 2003). In cases where videos, CDs, or e-books or even picturebooks are unavailable, singing while reading teacher/class-made charts or Big Books offers a multi-sensory substitute. Such created texts, in lieu of, or in addition to, these more costly resources are likely to inspire pride in creativity and reading-writing connections.

To support word learning in reading and writing, children can also create their own variants of familiar songs. To provide demonstrations, teachers might use published variations of a familiar song such as *Over at the Castle* (Ashburn, 2010) or Berkes' *Over in the Arctic* (2008) or *Over in Australia* (2011) to suggest the playful transformation of *Over in the Meadow*. The latter two teach about different types of animals and their habitats but also serve as mentor texts, demonstrating how to create a variant. As an early example, teachers might use a counting song, *Five Little Ducks* (Raffi, 1989) to read and sing:

> "Five little ducks went out one day
> over the hill and far away.
> Mother duck said,
> 'Quack, quack, quack, quack.'
> But only four little ducks came back."

A very simple variant of *Five Little Ducks* using animals and numbers that are familiar and interest children or that comes from their own ideas could be developed:

> *Seven little lambs went out one day,*
> *over the field and far away.*
> *Mother sheep said,*
> *"Baa, baa, baa, baa."*
> *But only four little lambs came back.*

Again, such chart stories or class-created Big Books can be illustrated by the children—young learners take great pride in sharing and reading such class-created texts. Smith (2000) and Jalongo and Ribblett (1997) offer many familiar songs and song book titles that can be used to create variations.

As suggested by the text variant above, creations of their own texts through shared or interactive writing can encourage learners to look carefully at the print and develop a variety of sight words. The rhyming words, in this case, *day* and *away* can also be used to teach analogies or word patterns. Thus, another area in which music instruction can benefit reading instruction is word identification. Young readers must learn to recognize letters and words automatically, much like music students must learn to recognize notes and groups of notes, in order to adjust vocal placement. This action allows both readers and musicians to demonstrate fluent reading/singing. As indicated by the *–ay* pattern of *day* and *away* in the *Over in the Meadow* text, children must also develop orthographic/spelling awareness. Teachers can use familiar songs to help learners understand that letters grouped together (in vowels, blends, diphthongs, and digraphs, as examples) form a range of sounds that can change according to their position in a word and that these groups can represent patterns of onsets, such as the *d* in *day* and the rime, -*ay* in *day*. The rhyming patterns in many songs promote such phonological and orthographic awareness. Finally, Hansen and Bornstorf (2002) affirm that music instruction benefits students in the early stages of reading because music students and reading students alike must acquire an ability to listen for whether something "sounds right." For readers, this involves syntactic, semantic, and graphophonic considerations, aiding the understanding and development of cueing systems as learners read and sing the print.

Music and Songs in the Elementary Years and Beyond

As children become older, their interest and knowledge of music grows. Relating reading to something children hold valuable such as popular music supports motivation to read; hearing the song and reading the lyrics makes reading a delightful and engaging experience. Often in our university summer reading clinic, when we have upper-elementary and middle school reluctant readers, we will ask them to name some of their favorite popular songs, and we then collaborate with them on locating the lyrics and putting together a notebook of songs that they can read, sing, and enjoy. As lyrics are repetitive, using songs in classroom instruction supports students as they read the lyrics. Song structures allow students to hear and anticipate when lines are repeated; predicting

particular language syntax or a word that makes sense in context is an important strategy for reading as well as a resource for decoding unknown words and monitoring comprehension.

Julie experienced the power of such activities during her recent student teaching. Capitalizing upon what she had learned about music and reading, she decided to take advantage of every opportunity to incorporate music into classroom instruction. While teaching a unit on poetry to a group of fourth grade students, Julie was amazed at the shift in attitude that using music had in her classroom. To support students' interest and literary interpretations skills, she invited students to listen to the song "Home" by Phillip Phillips. Students wrote what they thought the song meant in their reading journals before sharing their ideas with the whole class. What a difference! Julie was amazed to see the increased number of students wanting to share their perceptions of the song as compared to the few raised hands the day before when asked to share their thoughts on a poem! Frequently, students would groan when handed a poem or a text that they thought they could not understand, complaining, "It's too hard!" or, "I don't get it!" Julie realized that interpreting the song required basically the same skill set as the poem, but the tools were different—adding the component of music gave the experience elements of familiarity, fun, and light-heartedness that the students needed. The songs they allowed them to take risks and to feel free to share their ideas without fear of having the "wrong" answer. Analyzing a song that contains inferences or literary themes requires the same level of interpretation and higher level thinking as poems and similar types of texts, but familiarity reduces learners' anxiety and processing demands (Almasi & Fullerton, 2012). They are already familiar with the words of the song, so they do not have to decode. They know the rhythm of the song, so aspects of fluency such as phrasing, tempo/pacing, rhythm, pitch, and stress are supported; and because it is something they have prior knowledge of and can relate to, they are more likely to interpret the meaning.

Because her first lesson using music went so well, Julie decided to continue with that approach throughout the poetry unit. She was pleased to see these fourth graders singing along with Katy Perry to the lyrics of "Roar" as they read the words on their sheets. She noted that many of the students who were singing rarely volunteered to speak in class, so seeing them participate in a new way, through song, was a valuable reminder that, as educators, we need to constantly look for ways to involve students and provide different ways to learn so that they will be successful. The students already knew the lyrics by heart just from hearing it on the radio, but using their eyes to read the words through shared and repeated readings was a valuable reading support for them.

One of the most interesting displays of increased student motivation Julie saw was when music was incorporated into a writing lesson. As the culminating task of the poetry unit, each student was required to share an original poem, choosing from many that they had written throughout the week. Julie suggested that one of her students, Janie (pseudonym), write a song to perform in the poetry slam since she sings competitively. Janie and a classmate wrote a beautiful song with a set rhyming pattern, metaphors, similes, and imagery,

which they performed for the whole class on the day of the poetry slam. Using something the students were interested in, songwriting, generated an authentic assessment, and it represented their full understanding of the literary concepts that had been the focus of instruction. Additionally, it gave them an opportunity to experience something they loved and felt capable of doing. Their attitude towards writing the song was vastly different from their initial reluctance to write original poetry.

Music provides an informal, positive environment and makes learning enjoyable; singing while learning gives children a chance to be successful and to build self-esteem when students may be frustrated by their performance in other subjects (Overy, 2000). English language learners, especially, may feel safer and able to take risks when a positive attitude toward learning is present and accompanied by experiences that promote language learning (Paquette & Rieg, 2008). Thus, including music in the poetry unit reduced the pressure that an unfamiliar subject often has on students, allowing them to thrive in a positive and enjoyable learning environment.

A few studies conducted with older students provide similar results. Hines (2010) documented the progress of several adolescent students with learning disabilities. The students were resistant to reading instruction and had poor progress; song lyrics served as the instrument of change, producing increased ability in phonics, decoding, and word recognition. Biggs, Homan, Dedrick, & Rasinski (2008) found that repeated reading and singing of lyrics aided struggling middle-schoolers who made greater reading progress than those in a comparison intervention group.

Music Supports Language Learning for English Language Learners

Language learning programs that incorporate music and songs have been especially effective in the education of English Language Learners [ELLs] (Fisher, 2001; Lems, 2002; Peregoy & Boyle, 2008). The repetition in songs allows students to hear words and phrases numerous times, making songs easy to follow (Paquette & Rieg, 2008). Murphey (1992) suggests that lyrics in songs are effective tools because they contain high frequency vocabulary and have fewer referents that may confuse language learners. In a longitudinal study of kindergarten-first grade children who spoke Spanish at home, 80 students were randomly selected and assigned to one of four classrooms (Fisher, 2001), staying with the same teacher for two years of instruction. Two of the teachers incorporated music into the literacy block during while the other two teachers did not. Unannounced observations occurred in each classroom across the two years. Pre- and post-assessments were collected on all students. Findings indicated that the students who experienced music in their classroom performed significantly better on the Student Oral Language Observation Matrix [SOLOM] (California Department of Education, 1981), averaging 13.2 on the SOLOM compared to 8.4 for students without music. Likewise, children whose literacy program was combined with music performed significantly higher on the Yopp-Singer Test of Phoneme Segmentation (Yopp, 1995), averaging 19.5 versus 17.1. The classrooms integrating music into their instructional activities outperformed the other classes on the Yopp-Singer Test of Phonemic Segmentation (Fisher, 2001). Although progress on the third assessment, the Developmental Reading Assessment [DRA] (Beaver, 1997) was less widespread, ten students in the "music rich" classroom were reading at grade level in English and Spanish; only one student in the classroom without music was reading at grade level. Music and songs were incorporated into morning opening, word work, centers, content areas, and instructional units. Further information about classroom differences and music incorporation can be explored at http://scholarworks.wmich.edu/cgi/viewcontent.cgi?article=1179&context=reading_horizons.

As Fisher (2001) and many other experts cited in this article suggest, music has the ability to promote many components of literacy. It does not take away from other subjects or aspects of the curriculum; instead, it can be incorporated as literacy materials or tools throughout the day. The observations conducted in the Fisher study suggest that music influenced more enthusiastic demeanors from the teachers and a classroom climate that represented general excitement and joy for learning. It is hard to frown when you are singing!

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From Canoes to Titanic: Contextualizing Reading Instruction for Struggling Readers

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Abstract — Teachers and university researchers in one high school contextualized learning experiences for struggling readers, making room in the classroom for disengaged students' voices, their literacies and their curiosity. Questioning about what would happen if literacy learning was structured around not standardized test preparation, but instead one "disinterested" student's interests, the authors took a first step in making their classroom a successful learning space for all students. The growing numbers of students who struggle with test-driven literacy instruction suggest that we "rethink" our work as teachers in some fundamental ways. As we consider the impact our teaching will have on students' futures and on our own outcomes as a people, finding ways of connecting academic experiences with relevant "outside of school" literacies becomes of great importance.

Meeting Joshua

Joshua (all names are pseudonyms) was a high school senior who, after three tries, had yet to pass the state-mandated reading test and now faced the possibility that he would not graduate high school. He was enrolled in a project that I was involved in at the university where I served as an administrator and reading professor. The project, "Reading Buddies," paired low-performing high school students with at-risk elementary children. We were visiting the elementary school where these high school students would read picture storybooks to non-reading first graders. In the breezeway of the school sat a magnificent dugout canoe that stretched nearly fifteen feet. The high school boys were admiring the canoe when one of them turned to me and asked, "How did they make these things anyway?"

"I'm not sure," I answered. "I guess they cut down a tree and chiseled out the inside."

Joshua rolled his eyes. "No, they didn't," he said quietly. "Canoes like this one are hundreds of years old. The Indians used canoes for thousands of years and made them before they had the tools to chop down trees or chisel anything."

The boys snickered. "So," taunted one. "How did they make them, Joshua?"

"With fire."

Joshua proceeded to tell us, in vivid detail, how native Americans would locate the right tree, near the waterway, fell it by burning, and then use fire to hollow it and flatten the bottom, and primitive tools, like oyster shells, to smooth the wood, mud to seal it and bear grease, perhaps, for periodic seasoning. It would take six or seven men days or even weeks to make one canoe. He also explained to us that some high school students in Florida discovered more than a hundred canoes near Newnan's Lake and some of those canoes, representing the world's largest such archeological find, are on exhibit in the Florida Museum of Natural History at the University of Florida.

I listened, amazed. This was a boy who, on paper, was a failing at-risk student. Yet, he possessed knowledge of this subject that would rival that of a university professor. He used a technical vocabulary to explain the canoe-making process, which he understood well.

"How do you know all of this?" I asked him, incredulous.

"I've done a lot of research in this area- native American culture. If you want, I could send you some web links so you can read up on it."

His low test scores and failing grades aside, Joshua exhibited significant literacy skills that fell clearly under the radar of traditional school assessments, particularly those high-stakes assessments by which students and schools are judged. As Apple (2005) points out, the focus in contemporary U.S. schools on high stakes standardized tests reduces the fullness of life so that "only that which is measurable is important" (p. 11). It is no wonder then that it is harder for some students to connect to thin curriculum and the concomitant skill and drill teaching (or drill and kill, as students often call it) it engenders. Perhaps it is our struggling learners, for whom contextualized learning experiences would offer a richer and fuller learning experience, who are most disadvantaged by this reality.

Contextualized learning is nothing new. In fact, it dates back to John Dewey who, at the turn of the 20th century, advocated a curriculum and a teaching methodology tied to the child's experiences and interests. One of our problems in schools is that what we want students to learn is detached from real-world referents. Because learning is decontextualized, it often holds little meaning, especially for struggling students.

Despite his reading test scores, Joshua loved to read about things that were interesting to him. Over the six months that I worked with Joshua's teacher, I observed Joshua reading Sharon Draper's *The Battle of Jericho*, as well as Elie Weisel's *Night*. He was an everyday newspaper reader, mostly sports. But, he also became interested in several articles about an engine failure incident on a Qantas Airbus 380, a double-decker plane that, amongst other innovations, touted a luxurious interior. Beneath his quiet exterior was a boy who had plainly

made significant connections with complex texts outside of the school curriculum. Joshua had come across an article about a Qantas airliner that had suffered what was called an "uncontained engine failure." Although no passengers or crew were injured, several media sources had referred to the airliner as the "Titanic of the Sky." Struck by the disparity between Joshua's literacies and his schooled literacy performance, I wondered what would happen if literacy learning was structured around not standardized test preparation but instead one "disinterested" student's interests. So, for the next six weeks, we focused our attention back to 1912 and raised questions about man's relationship to advances in technology.

Titanic of the Sky

Joshua's teacher and I discussed what a study of the *Titanic* disaster would look like and began to connect our ideas to the state standards that she needed to cover in her class. We purchased 20 copies of Robert Ballard's book *Exploring the Titanic,* no longer in publication but available from Amazon used books. We also sent notes home to parents, asking them to purchase a paperback copy of Walter Lord's account, *A Night to Remember*. Some students came to class without the book, but I had purchased a set of 10 (the books in mass market sold for around two dollars). So, each student had a take-home copy. We launched t he unit by handing each student a "boarding pass" when he or she entered the classroom. We had done our homework (yes, preparation for this kind of study is demanding, the first time, for the teacher) and had chosen interesting passengers about whom there is information online. Each student was given a "valise" (a vocabulary word) made from plain white construction paper. Over the next several weeks, they would decorate and "pack" their valises with their Internet-researched journals and their own creative writing, reflecting their roles as passengers who shared the experience as the tragic events unfolded.

Our first day's discussion surrounded the Qantas A380 incident that had interested Joshua and the parallels we could draw between *Titanic* and other technological disasters (Challenger explosion, Three Mile Island and Chernobyl nuclear disasters). We wanted to find out what students already knew about Titanic (much of it, it turns out, came from the James Cameron film). So, we lined the walls with KWL charts on large 3M chart paper, intentionally leaving several "L" sheets blank, for students to add new information that they learned from their reading and Internet research. Students created character journals reflecting the life on board the ship from the vantage points of their passengers. We also had daily discussions of the cultural context in which these people lived. For example, women's suffrage was an important political and social issue of the time, and in fact, some of the commentary subsequent to the sinking of the ship questioned "votes for women" when "boats for women" was reflected in the final hours of Titanic. Indeed, Ida Strauss, wife of Macy's co-owner Isador Strauss, was lauded in several editorial presentations as an ideal of wifely virtue (Mrs. Strauss refused a lifeboat seat, choosing to remain aboard the ship and perishing with her spouse at sea).

Students in this class did not have good background knowledge of women's suffrage, having given little or no thought to what it would be like for women *not* to have the right to vote. This prompted one girl to suggest *Reading Lolita in Tehran* as a good book for girls in America. These students continued to surprise me. This was a remedial reading class, readying failing students to try again to pass the state required reading test.

As days and weeks passed, it was clear that the students in this class were motivated and engaged in reading and writing about *Titanic*. They created their journals in creative ways. One girl, whose character was a third class Lebanese mother with two children, wrote her entire journal on paper napkins. She reasoned that a third class passenger would probably not have the money to invest in a personal journal. Her entries were letters to her husband, whom she and the children were joining soon in America. Two girls in the class had been assigned the passengers, Edith Corse Evans and Caroline Brown. Ms. Evans was a single woman in her mid-thirties. Ms. Brown had children, so Ms. Evans gave up her seat in a lifeboat to Ms. Brown, who was the last passenger to board a lifeboat before the sinking. Ms. Evans perished in the sinking. When the two students discovered this connection, they hugged each other and cried.

At the end of our time together, the teacher was able to get school funding to take the students via school bus to a Titanic exhibit that was being held in a city a couple of hours away. The exhibit docents told the teacher that they had never encountered a group of students who knew so much about the sinking of the great ship. I recalled Joshua's intimation that he could not remember things he read and that his interest in a real-world event had prompted the study that ensued.

Discussion

Adolescent Literacy

Adolescent literacy is about complicated relationships between emotionally- and socially-driven adolescents and their visual and verbal-rich environments. The beliefs that adolescents hold about themselves are powerful influences over their behaviors and vital forces in their success or failure, particularly in school (Pajares & Schunk, 2001). Research on efficacy perceptions links effort and persistence with perceptions of capability, i.e. students who have low self-efficacy beliefs easily give up on reading tasks even before they start, particularly if they believe the only motivation is to complete an assignment (Vacca, 2006). Struggling adolescent readers fuse their beliefs of academic incompetence with their own identity, making it difficult to separate self from belief. For this reason, it may be that students' beliefs about academic capabilities affect more general beliefs about themselves as individuals. In response to such personal assault, the strategy of such students becomes avoidance (Wachholz & Etheridge, 1996). Moreover, unmotivated readers may be the most difficult to connect to reading because they do not value reading or people who enjoy reading (Beers, 2003). Beers suggests that we must work from student interests to foster motivation. From this perspective, our work as teachers of adolescent literacy requires that we must negotiate the territory where adolescents live and

work, developing an understanding of the "social languages" (Gee, 2000) that characterize adolescent discourse. Part of our dilemma is that what adolescents find worth reading has often not, to this point, been valued in the school curriculum. Additionally, the increasing demands of high-stakes testing force some otherwise willing teachers *away* from allowing students to choose reading texts and *toward* test preparation.

Yale Professor emeritus Seymour Sarason (1998) maintained that schools are uninteresting places in which the interests and concerns of students have no relevance to what they are required to learn in the classroom. There is now, suggested Sarason, almost an unbridgeable gap that students perceive between the world of school and the world outside it.

School is an institution that depends on some fairly complex and unnatural forms of compliance. We tend to elevate in importance those behaviors that make institutional arrangements run more smoothly. Although student achievement has always been—at least, rhetorically—the central issue of education, if anything, education per se appears less relevant to students today than ever before.

For more than a decade, literacy researchers have been making the case for expanding education definitions of literacy to incorporate the vast range of multimodalities, multimedia, and multiliteracies, with their concomitant 21st Century digital technologies, into the literacy teaching of k-12 schooling (Jewitt, 2008; Kress & Jewitt, 2003; Lankshear & Knobel, 2003). Teenagers are the biggest consumers of online video and are highly social and creative in how they use and engage with the Web. They watch half as much television but spend, on average, seven times the amount of time viewing online video than do adults (Goodacre, 2015). As we consider the impact our teaching will have on what the New London Group (1996) referred to as students' social futures, finding ways of connecting academic experiences with relevant outside of school literacies becomes of utmost importance.

In the end of year course reflection, Joshua and his classmates were asked what their favorite and least favorite work was in class. Joshua did not say that his favorite activity was *Titanic*. He said, "Of all the books I read this year, *The Battle of Jericho* was my favorite. It was mysterious and interesting, when the chapter ended with a remark or some kind of clue, I just wanted to flip the page and read on." He added, "A lot of the books that I read this year were written by Gary Paulsen. I like his books because he mostly writes about adventure and surviving." His least favorite reading? "Out of all the information text that we did, the one that I hated the most was working with (state test prep book) passages. It was my least favorite, because they were all long and boring just like the test."

The growing numbers of our students who struggle with literacy tasks and the engagement of adolescents with language—traditional as well as popular, along with the nonlinear texts of the Internet and other media--suggests our need to rethink our work as teachers in some fundamental

ways. Making room in schools for student voices is the first step in making schools successful learning places for all students (Ma'ayan, 2010). As adolescents transition to adulthood, developing literacy skills that move beyond the basics, the ways texts in their world impact their belief systems, and the ways in which ideology and persuasion in traditional and popular culture, as well as corporate and citizen life, work to manipulate, define, shape, and sell at every juncture become significant to students' futures. Creating a school climate that embraces disengaged learners, their literacies, their experiences, and their interests is of fundamental importance to our social and cultural outcomes as a people.

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They're Not Too Young: Unpacking Vocabulary Strategies for Use with K-2 Students

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ABSTRACT — This article highlights, through examples from classrooms, the possibilities of modifying vocabulary strategies intended for use in upper and secondary grades to use with young learners. The authors introduce three strategies, Preview-Predict-Confirm (PPC), Listen Sketch Label, and the Frayer Model, and provide examples of their use in primary classrooms. These instructional strategies were used during read-alouds of informational texts with the purpose of expanding students' content specific vocabulary. Read-alouds are established as a widely accepted instructional method for teaching vocabulary in the primary grades.

As Miss Brown prepared to teach a thematic unit on pumpkins with her kindergarten students in late October, she knew she wanted them to internalize the vocabulary introduced during the three-week unit. Miss Brown planned to read informational texts aloud as a primary source of science content during the unit. She carefully combed through texts to determine the important terms her students would need to grasp in order to comprehend the material. Although these texts provide an introduction to new and interesting words, she knew this one-time exposure during read-alouds would not be enough for her students to understand the vocabulary introduced. She began to seek out vocabulary strategies to use in her classroom.

Miss Brown found several vocabulary strategies that were well suited for the upper grade levels, but what could she use for kindergartners? There were not many options. She knew that she would have to modify and scaffold the vocabulary strategies created for the upper grades to meet the distinct needs of her young learners.

Vocabulary and Read-Alouds

Read-alouds provide a venue for rich and diverse language (Kindle, 2009), which does not typically occur in our everyday conversation. On their own, read-alouds are considered an instructional approach for implicitly teaching new and interesting words within a context (Nagy, Herman, & Anderson, 1985; Newton, Padak, & Rasinski, 2008). While reading aloud a text, students incidentally learn vocabulary through exposure (Carey, 1978), and teachers have opportunities to explicitly teach vocabulary words (Antonacci & O'Callaghan, 2012). Repeated readings of these texts, and therefore repeated exposure to the vocabulary, provide students with a deeper understanding of new words (Biemiller & Boote, 2006; Carey, 1978; Dale, 1965).

Vocabulary Strategies

Many existing vocabulary instructional strategies are geared towards working with upper elementary and adolescent students. We found that we were able to modify these strategies to work for younger children, particularly those strategies requiring a higher level of independence and writing skills than many young children are capable of demonstrating in the early grades. While working with students to encourage greater skill and independence, each strategy allows a gradual release of responsibility. For example, teachers working with pre-writers would need to complete all of the writing tasks; however, students in the invented spelling stage may have the ability to take on more writing responsibility. With a host of preexisting vocabulary strategies, early childhood educators should take advantage of the opportunity to modify and scaffold these strategies to meet the needs of their students. Below are a few examples of how this has been done in the classroom.

Preview-Predict-Confirm

According to the work of Yopp and Yopp (2004), Preview-Predict-Confirm (PPC) is an instructional strategy that encourages students to think about vocabulary relevant to the informational text prior to being read aloud. By encouraging students to activate prior knowledge and predict vocabulary before reading a text, students' comprehension during the read-aloud should improve (Alvermann, Smith, Readence, 1985; Bransford & Johnson, 1972). Critical to PPC is the opportunity for students to engage with each other and share their vocabulary knowledge related to the topic, while expanding on what they already know.

Preview-Predict-Confirm in the classroom.

Miss Brown used PPC in the classroom with her kindergarteners during her thematic unit on pumpkins. Using *The Pumpkin Book*, by Gail Gibbons, Miss Brown sat in front of her class, flipped through the pages of the text, and discussed some of the pictures before she turns the page. Following the preview of the book, Miss Brown asked for volunteers to share their predictions of any words they think the author might have used. Miss Brown modeled this procedure with the students by saying, "I think the author might use the word 'gardener' because I saw several pictures of people working in a garden, and I know pumpkins can grow in a garden."

Students then moved to literacy centers while Miss Brown worked with small groups. Miss Brown realized her students were not ready to work without guidance in small groups on the next task, so she modified this instructional approach to support students through the process. In small groups, Miss Brown wrote down other predictions students shared on blank cards and then instructed them to find words that can be grouped together in a meaningful way. Miss Brown modeled this process for her

students: "The words 'gardener' and 'tractor' could be put into a group, because the gardener may use a tractor to work in her garden. Now we need to see if we have other words that could go in this group too." With the guidance of Miss Brown, students continued to sort words, glue them down on large paper, and determine a label to summarize each group. For example, the group of words containing "gardener" and "tractor," may be labeled as "gardening." Once the small group has finished their sort, using the words they have predicted, each group must come up with a word that they believe no other group predicted, an unique word, and a word that they believe every group predicted, a common word. One of the small groups decided their unique word was 'angel,' and their common word was 'orange.' Miss Brown wrote these words on a sentence strip for students to share later.

After literacy centers, the class comes together and Miss Brown leads a discussion on the sorts and special words chosen by each group. As the sorts are shared, the members of the group come forward and help Miss Brown discuss their work. Students choose a word and justify why they chose it. After sharing their predicted words, Miss Brown reads *The Pumpkin Book* aloud to the class, confirming some predictions as the text is read. Following the read-aloud, the class compared and contrasted their word selections with the author's use of words, writing down additional vocabulary words students did not predict. Groups were given the opportunity to draw pictures next to words on their sorts, to make identification easier. These were then displayed in the classroom as a reference throughout the thematic unit (See Figure 1).

Figure. 1. An example of using the Preview-Predict-Confirm vocabulary strategy in kindergarten.

PREVIEW: Flip through the images of the informational text, *The Pumpkin Book* by Gail Gibbons.	RESULTS OF STUDENTS' SORTING		
PREDICT: Write down on blank cards the words students predict the author used in the text.	**garden**	**plants**	**colors**
	farmer	seed	green
STUDENTS' LIST OF PREDICTED WORDS	garden	flowers	orange
	shovel	weeds	
farmer flowers corn	rake	leaves	
seed weeds pumpkins	tractor	corn	
apples leaves digging	digging	apples	
garden orange green		pumpkins	
shovel rakes tractor	Common Word: pumpkins		
	Unique Word: rake		

CONFIRM: Allow groups to share their sorts, their common word, and unique word. After reading the book discuss whether the predictions were correct or incorrect.

Listen Sketch Label

Listen Sketch Label (Herrera, Holmes, & Kavimandan, 2011) is a strategy that taps into the students' existing schema and harnesses the use of visualization to make meaning. Students are asked to use what they already know and make connections to vocabulary used in the informational text. Critical to the Listen Sketch Label strategy is the idea that students enhance their understanding of the text through repeated exposure to vocabulary words and concepts, and make sensory connections as they do so. Components of the Listen Sketch Label strategy are: (a) activation of prior knowledge; (b) connecting the known and unknown by interacting with others; and (c) affirmation of what we know.

Listen Sketch Label in the classroom.

Mrs. Oliver, a first grade teacher, used the Listen Sketch Label strategy with "Penguin Power" an article from the *National Geographic Extreme Explorer* magazine during her January thematic unit on polar animals. Mrs. Oliver read sections of the article over two days, using the Listen Sketch Label strategy on a portion of the article entitled "Some Like It Hot."

Mrs. Oliver gave students the Listen Sketch Label template that she modified to limit the number of vocabulary terms and enlarged sections to accommodate the larger writing and drawings of her young students. The template included three terms she wanted her students to understand: *glacier, survivor*, and *burrow*. Instead of asking students to immediately sketch their understanding of each word, Mrs. Oliver realized that many of her students would not have prior experience with this vocabulary, so she provided the words in context before she asked them to sketch their understanding of the word. She permitted students the time to turn-and-talk to a neighbor to activate any prior knowledge of the term they have. As Mrs. Oliver read aloud, she read small chunks from the passage twice so that students could listen and then sketch their interpretation of the word on their paper. Students were asked to create a visualization in their head before they sketched it on their paper. Mrs. Oliver modeled this strategy for her students using the first chunk of information, focusing on the term 'beach' for understanding: "You can find African penguins in an even hotter place. They live on sunny, sandy beaches along the southern tip of Africa" (Ebersole, 2014, p. 8). Mrs. Oliver drew the outline of sand and shells beside the ocean, which is indicated by the waves. As Mrs. Oliver talked, she thought aloud for students to understand why she is making this connection: "I went to the beach before with my family, and like the article says, it was sandy and sunny there. I remember stepping on seashells and kicking my feet in the ocean. So I should draw shells and the water, with big waves. The ocean had big waves that knocked me down." Mrs. Oliver also labeled the picture with the words, 'ocean,' 'sand,' and 'seashells.'

As Mrs. Oliver continued to read, she asked students to listen to how the vocabulary word was used, then to sketch their understanding of the word as she reread the information. Students had the option of writing sentences, phrases, or words that elaborated on their understanding of the vocabulary. Mrs. Oliver finished reading the section and asked students to sit in a rectangle along the edge of the carpet. Students were given one minute to turn, talk with a partner, and share the information they wrote and sketched on their paper. As a whole group, the students and Mrs. Oliver came to a consensus about the meaning of the words. She then reread the entire passage to the group, emphasizing the three vocabulary words (see Figure 2).

Figure 2. An example of the Listen Sketch Label strategy is a first grade classroom.

Listen and Sketch Label	Listen Sketch Label Strategy
glacier survivor burrow	(used with "Some Like It Hot") • Introduce vocabulary terms to students and provide them with the Listen Sketch Label template. Allow students time to turn-and-talk with a partner to discuss any ideas around the meaning of the word. • Read aloud "Some Like It Hot" from "Penguin Power. Reading the section in small chunks and stopping in pertinent points so students can listen to the vocabulary used in context. Read this portion twice. • Students visualize their interpretation of the term in their mind, and then sketch that image on their template in the correct section. (Optional: Students add words, phrases, or sentences for clarification.) • After reading aloud the section, students turn-and-talk to a partner to share their interpretation of the terms. • Together the class discusses the words and comes to a consensus on their meaning. (Optional: Students revise their sketch to indicate a correct understanding of the term.) • With this new understanding, "Some Like It Hot" is read-aloud again.

The Frayer Model

The Frayer Model, developed by Frayer, Frederick, and Klausmeier (1969), is a visual word map that teachers and students create to better understand content vocabulary. This strategy uses a graphic organizer to define words and concepts. This model is divided into five parts - four large squares with one circle in the middle. The Frayer Model asks students to organize their thinking about a word in four ways: a definition, characteristics, examples, and non-examples. With the vocabulary word in the center circle, each of these descriptions is placed in one of four surrounding squares on the graphic organizer. Students then have a visual representation of a sophisticated vocabulary term they can reference.

First students must analyze the word or concept to create definitions and characteristics; next, students synthesize information to find examples and non-examples. Allowing students to differentiate between what the meaning of the term *is* and *is not* allows for greater understanding of the term, which leads to language arts skills like finding synonyms, antonyms, and comparing and contrasting. The Frayer Model activates prior knowledge and helps students build connections to other concepts.
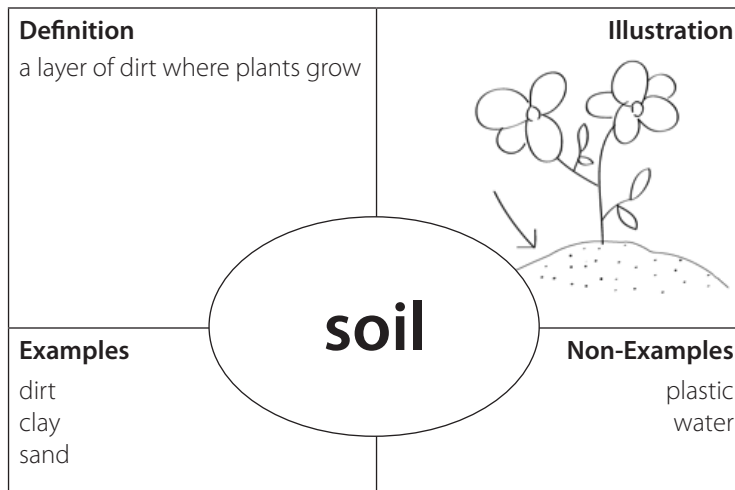
The Frayer Model in the classroom.

As Spring approached, Mr. Stevens was about to begin a new science unit on plants and soil. His second graders were going to be exposed to a host of new vocabulary in this unit. He planned to begin the unit by reading *Different Kinds of Soil* by Molly Aloian, an informational text in the *Everybody Digs Soil* series, with his students. In this text, he has already determined that students will need to know and understand some key words*: soil, topsoil, humus*, and *bedrock*. On four pieces of chart paper, Mr. Stevens drew the Frayer Model outline, labeling each section according to the vocabulary concept. While reading aloud *Different Kinds of Soil*, Mr. Stevens allowed his students to help him create the concept word map. To modify this strategy to meet the needs of his young learners, Mr. Stevens decided his map should include a student-friendly definition, an illustration, and a few examples and non-examples. This modifies the Frayer Model's original intentions just slightly to better serve his students.

The first word the students encountered in the text was *soil*. Mr. Stevens reread the page and asked students for help creating a definition of soil. Together, the students decided that soil should be defined as 'a layer of dirt where plants grow.' Mr. Stevens showed his students where to write the definition. He then asked his students to explain how they thought soil could best be depicted in a drawing. After gathering several ideas, Mr. Stevens drew a picture of soil in the next square. The class then created a list of different soils, such as dirt, clay, and sand. In the last square, the class decided on some non-examples of soils such as plastic and water. After clearly modeling the process for students, Mr. Stevens allowed his class to work together in groups to create word maps for the remaining three vocabulary words. Mr. Stevens allowed each group to display their completed Frayer Models around the room for reference during the rest of the unit (see Figure 3).Fig. 3. An example of the Frayer Model used in a second grade classroom.

Figure 3. An example of the Frayer Model used in a second grade classroom.

Definition	Illustration
a layer of dirt where plants grow	
soil	
Examples dirt clay sand	Non-Examples plastic water

Conclusion

Students learn vocabulary as members of a learning community through interactions with others (Scott, Nagy, & Flinspach, 2008). Simply exposing children to sophisticated words, then, is not enough for them to completely understand the meaning of content-specific vocabulary. Instead, students must be immersed in a language- and word-rich environment that promotes both incidental and intentional word learning (Blachowicz, Fisher,

Ogle, & Watts-Taffe, 2006). The reading aloud of informational texts places students in a ripe learning environment, but teachers of young learners often come up empty handed for vocabulary teaching strategies when the majority of these are aimed toward learners in the upper grade levels. Instead of focusing on what is not available, teachers of K-2 grade students need to try their hand at modifying more difficult strategies for vocabulary success. Presented here are just three strategies that have been modified for successful use in the K-2 classroom, yet there are countless vocabulary strategies that could be suitably adapted. Early elementary teachers can and should be resourceful when it comes to exposing students to content-specific vocabulary.

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Traditional with a Twist: Implementing Unplugged and Web-based Literacies in Social Studies

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Incorporating technology into the classroom requires knowing when traditional methods are best and when the use of technology may improve and extend instruction. A focus on strategic learning coupled with content and technical expertise, whether on paper or plugged in, promotes instructional balance. Many educators are devising ways to incorporate technology-focused media and interfaces and are seeking methods of using technology that extend the learning instead of falling into the mindset of simply replacing our paper and pencils with tablets and laptops (Celsi & Wolfinbarger, 2002). Using technology in the social studies classroom allows the teacher to apply constructivist principles to his or her instruction (Dils, 2000). Incorporating technology as a means of conducting inquiry in social studies provides students with practical experiences that can be transferred to other aspects of social studies instruction. This article provides teachers with literacy-based instructional strategies for social studies that can be both unplugged and plugged in.

Cognitive Strategies for Comprehension

Researchers agree that teachers who are aware of student thinking are better able to support student learning (Lee, Irving, Pape, & Owens, 2015; Marzano, 2009; National Reading Panel, 2000). Quality formative feedback improves student understanding and knowledge construction. Therefore, when strategies are taught for making sense of texts, and when learners understand how the construction of knowledge occurs, they are better able to discern how to best demonstrate their skills and strengths. When students have the power of choice, motivation increases (Bender, 2002; Diller, 2011; Wilson & Conyers, 2000). The following two activities provide for student choice in demonstration of understanding, increasing both autonomy and purpose while striving for mastery of skills.

Unplugged

A think-tac-toe consists of a nine-square grid, much like the grid used to play a traditional tic-tac-toe game (see Figure 1). Each square is centered on a common theme, but differs by learning preference or perceptual modality. Students complete three activities to form a tic-tac-toe line, just as they would in a traditional game, and are encouraged to choose activities they feel would best demonstrate their skills. Think-tac-toe can be used specifically to differentiate instruction by adjusting the board according to student reading levels or instructional needs. It also serves as an effective tool to address multiple learning preferences while teaching the same topic.

The activity is most effective when students are familiarized with the concept of learning preferences and given instruction on cognitive processes (Dotger and Causton-Theoharis, 2010; Lee, Irving, Pape, & Owens, 2015). The effectiveness of think-Tac-Toe as an instructional activity is bolstered by its ability to create a more engaging and meaningful learning experience for students. It is also a flexible strategy that can be used across the curriculum and can be applied to multiple content areas (Dotger and Causton-Theoharis; Samblis, 2006).

Figure 1. Unplugged Think-Tac-Toe

Another primary strength of this strategy is its customizability. Think-tac-toe activities can be designed to be similar from topic to topic (to provide students with a consistent experience), or can be modified and adjusted to provide students with a unique experience each time, regardless of the focus standard. The example in Figure 1 shows nine activities that showcase student learning focused on the theory of a land bridge between what have become our modern continents, using the theory of multiple intelligences (Gardner, 1983). Teachers in fifth grade could also organize the think-tac-toe with inventions in columns and higher order thinking skills in rows (see Figure 2). This way, students are exploring each of the inventions required by SC state standards, but have choice in which ways to showcase their understandings. Much the same way, teachers in kindergarten and first grade can use their columns for Benjamin Franklin, Thomas Jefferson, Dorethea Dix, Frederick Douglass, Mary McLeod Bethune, and Franklin D. Roosevelt (see first grade indicator 1-3.3).

Figure 2: Blendspace DOK with Inventions (SC Standard 5-3.1) available at https://www.blendspace.com/lessons/UtT-nwA_adbjTQ/dok-with-inventions-advancement

Plugged In

From think-tac-toe, it is particularly simple to transition to an online format for the same activity using Blendspace (www.blendspace.com), a web-based platform that allows teachers to construct unique lessons with interactive components. Blendspace allows teachers to search, drag, and drop all within one window. The search tool is an embedded YouTube, Google, EduCreations, Flickr (and many more) search, so the options and resources are nearly unlimited. Teachers can also choose to import files from Google Drive or Dropbox, thus easily transforming an unplugged lesson, such as think-tac-toe in Figure 1, into one that combines technology with constructivist experiences.

The use of technology to conduct historical inquiry through the examination of primary and secondary sources is an important skill for students to learn, and the use of think-tac-toe can serve as a foundation for this and other similar experiences (Hicks and Swan, 2006). The diverse nature of social studies as a content area also lends itself to the use of Blendspace to create think-tac-toes because they can be used for multiple topics. Additionally, Blendspace is an effective way to incorporate cooperative learning models in an integrated setting, thus addressing the learning needs of students with disabilities in the general education environment (McCoy,

2005). The use of Blendspace may eliminate the need to create large-print copies of the activity because the student has the capability to enlarge the font on his or her screen to be better able to see it. Also, many newer devices have accessibility features that will meet the needs of learners without much advanced preparation required of the teacher.

Using Blendspace to create think-tac-toe lessons (see Figures 2 and 3) provides a way for teachers to modernize a classic instructional strategy and provide students with more meaningful, independent learning experiences in social studies.

Land Bridge Theory Think-Tac-Toe

Figure 3: Blendspace Think-Tac-Toe (available from https://www.blendspace.com/lessons/nTRbbapd4Iy4_w/land-bridge-theory-think-tac-toe)

Activating Prior Knowledge

Grounded in schema theory, the activation of prior knowledge facilitates comprehension because it encourages the integration of new knowledge with a network of existing experiences. Harris and Hodges (1995) suggest that reading is an active and schema-building process because students are encouraged to ask themselves why facts in a text make sense. The relationship between activating prior knowledge and text comprehension is validated by a number of studies (Amadieu, Van Gog, Paas, Tricot, & Marine, 2009; Chi, de Leeuw, Chiu, & Lavancher, 1994; De Grave, Schmidt, & Boshuizen, 2001; Kostons & van der Werf, 2015; Ozuru, Dempsey, & McNamara, 2009). To answer questions about the text, students must connect prior knowledge with new information, thus constructing meaning from the text. The activities of a) question elaboration, b) generation, and c) answering all work together to activate and use prior knowledge (National Reading Panel, 2000).

Unplugged

Table-top blogging is a pre-reading, or pre-unit, activity for engaging students in thinking about the idea, theme, or meaning of the class' instructional topic by activating prior knowledge and making predictions using teacher selected artifacts. This practice uses a selection of photos, political cartoons, primary source documents, pictures, newspaper articles, poetry, music lyrics, and videos that pertain to a unit of study. Teachers can combine tabletop blogging with both narrative and expository text to activate prior knowledge before a unit of instruction (Beers, Probst, & Rief, 2007).

Here is how Table-top blogging works:
1. Select 4-6 artifacts related to the content being studied, such as photos, political cartoons, primary source documents, pictures, newspaper articles, poetry, music lyrics, or videos. Place each artifact on its own poster board or large paper.
2. Place the poster boards or large papers at various stations around the room.
3. Partner students in small groups and explain that students are not allowed to talk during the activity. At each station the students are to respond to the article by writing a summation, question, or thought related the artifact on the poster or paper. The students are also encouraged to respond to one another's comments, just as one would comment on a blog post. Depending on the nature of the content, you may want to have each student initial his/her responses; for more controversial topics, anonymity may engender unguarded thoughts.
4. Once the groups have visited each station, the teacher reviews each poster board article and student responses with the class, keeping in mind the day's or the unit's learning objective.
5. At the conclusion of the activity, posters can be displayed on the classroom wall so students can refer back to them during the unit's study.

Figure 4: Tabletop blogging in action

Plugged in

The paper format of tabletop blogging can also be modified by using a class Twitter page, a classroom blog, or a Google doc. For younger students, a site such as Kidblog (www.kidblog.org) allows for safe interaction between classroom members and invited guests (see Figure 4).

Blogging in the classroom has become increasingly popular with the one-to-one and Bring-Your-Own-Device movement in schools. According to Halic (2010), "[e]ssentially a form of personal publishing, the blog is a text-based online environment which allows for embedding links to other online resources and in which the author's posts appear in reverse chronological order" (p. 206). By allowing students the opportunity to communicate with each other via a weblog, educators shift from a traditional teacher-student linear communication flow to learner-centered knowledge construction. This shift not only creates a broader, more authentic audience for student work, but it also encourages student ownership of texts, and promotes critical thinking (Boyd, 2013). Blogs also utilize the development of intertextuality in writing, the component of blogging in which the author links to other texts, visuals, and videos. As Gallagher suggests, "[t]here is a genuine feeling of interchange here, of writers/readers reacting to and with each other" (2010, p. 288). Figure 4 shows an example of a blog prompt from a fifth grade social studies classroom that requires students to follow the links to primary sources and use higher order thinking skills to form an opinion and justify their response. Lower grades may consider using a blog to discuss aspects of community. Students can use images in their posts to explain the role of community workers. Depending on the availability of at home devices, students can take photos of leaders in their own community and blog what they have learned about that person's job.

Figure 4: Kidblog prompt

Data suggests that teachers who use blogging in the classroom experience multiple student benefits: growth on student consideration of audience in writing; wider perspectives in discussion; more effective revision techniques; improved grammar and spelling, and; growth in confidence with communication skills – all essential skills for improved literacy (Anderson-Butcher, et al., 2010; Berezina, 2011; Boling, et al., 2008; Chen, et al., 2011).

Fluency

Fluent readers can read text with speed, accuracy, and proper expression (National Reading Panel, 2000). Oral reading practice to increase fluency skills is supported by research, while silent reading has had less consistently positive results (Learning Point Associates, 2006; National Reading Panel, 2000; Reutzel, Fawson, & Smith, 2008). So, how do we, as classroom

teachers, increase the amount of time spent reading aloud?

Unplugged

Reader's Theatre is the dramatic interpretation and oral reading of a play script (Walker, 2005). The use of dramatic reading results in multiple benefits in the content-area classroom, including fluency building, enhanced comprehension of text, and interest-building and enthusiasm for learning (Kimbell-Lopez, 2003; Levy, Coleman, & Alsman, 2002; McMahon, Raphael, Goatley, & Pardo,1997; Trainin & Andrzejczak, 2006). There is virtually no cost for utilizing this instructional strategy because of the plethora of free online script resources (see Table 1) and the lack of need for costumes or sets. Students do not need to memorize lines for this theatre; instead, rehearsal with scripts is the focus for skills practice. Repeated reading is well documented in the literature as helping to increase reading fluency (Hasbrouck & Tindal, 1992; Meyer & Felton, 1999; McMahon, Raphael, Goatley, & Pardo, 1997; Rasinski, 2003; Samuels, 1997; Shanker & Ekwall, 1998; Torgesen, Wagner, & Rashotte, 1994; What Works Clearninghouse, 2014). When Reader's Theatre is embedded in social studies instruction, students are able to achieve fluency goals while practicing with meaningful and purposeful content (Jones, Burr, Kaufmann, & Beck, 2013; Yearta, Jones, & Griffin, 2014). Students can work in groups to convert sections of a historical fiction novel into Reader's Theatre scripts. *Monster*, by Walter Dean Myers (1999), was written in the form of a screenplay and would adapt easily to the reader's theater format (O'Shea, McQuiston, & McCollin, 2009). Another idea is to have students write an oral history of their own cultural or personal experiences including oral readings from seminal, applicable works, e.g. poetry about the fall of the Berlin Wall, lines from the dedication of a monument.

Plugged in

While there are currently no apps in the iTunes store that provide free Reader's Theatre scripts, this innovation may not be far off. Even still, teachers can maximize student creativity by combining unplugged and plugged in resources concurrently with the use of apps (see Table 1). Some apps, such as iMovie, will allow students to record and edit their production. Moviemaker, included in the Windows Essentials

2012 program suite, is another software application that can do much the same thing. Students may even enjoy creating a movie of still shots, then using voiceover technologies to record the Reader's Theatre script. A twist to this idea is using an application with Green Screen technologies (see Figure 5). Both Green Screen by Do Ink and Veescope Live are applications that allow students to record themselves in virtually any setting. If you're concerned over student images on the Internet, consider using an application such as Tellagami that lets students select an avatar. Social studies instructional ideas include students acting out The Star Spangled Banner story with historic scenes playing in the background, presenting a speech from history while a slideshow presents images of the era, or hosting a mock trial to determine who is the guilty party in the Triangle Shirtwaist Factory fire.

Other applications allow students to create virtual puppets that lip sync to students' reading. Both Sock Puppets and Puppet Pals are examples of free apps available in the iTunes App Store, but they are just two of many examples of this type.

While some studies show that technology alone does not significantly affect reading fluency and comprehension compared to paper-based instruction, (see Bryan, 2011), we know that providing opportunities for repeated practice is a validated technique. This understanding, combined with the novelty and motivation provided by the use of technology, has positive outcomes (Bramlett, 1994; Cheung & Slavin, 2013; Day & Kroon, 2010; Delacruz, 2014; Kimbell-Lopez, 2003; Levy, Coleman, & Alsman, 2002; McMahon, Raphael, Goatley, & Pardo,1997; Trainin & Andrzejczak, 2006).

Collaborative Learning

Encouraging peers to interact and use reading strategies leads to an increase in the learning of the strategies, promotes intellectual discussion, and increases reading comprehension (Cheung & Slavin, 2013; Delacruz, 2014; National Reading Panel, 2000). When students collaborate to learn, they often experience improved academic performance, greater motivation toward learning, and increased time on task (Bramlett, 1994; Cheung & Slavin, 2013; Day & Kroon, 2010; Delacruz,

Theatre Resources

Websites	Unplugged	Plugged in
Education Resource Guide (free)	X	
Internet Resources for Conducting Reader's Theatre (free)	X	
Lesson plans with resources (free)	X	
Now Showing… Reader's Theatre (free)	X	
iTunes Apps		
iMovie: Students can record their Reader's theatre performances. ($4.99)	X	X
Puppet Pals: Students can create and record their own animated shows. (free; $2.99 premium)	X	X
Sock Puppets: Students create their own lip-synched videos, add puppets, props, scenery, and backgrounds and start creating. Hit the record button and the puppets automatically lip-synch to your voice. (free)	X	X
Featured in "Best New Apps in Education" in iTunes. Green Screen by Do Ink makes it easy to create incredible green screen videos and images right on your iPad. ($2.99)	X	X
Veescope Live: Real-time Green Screen/ Chroma Keying (free)	X	X
Tellagami: Students can create and share a quick animated video called a Gami. (free)	X	X

Table 1: Resources for Reader's Theatre

2014; Kimbell-Lopez, 2003; Levy, Coleman, & Alsman, 2002).

Unplugged

Collaborative Strategic Reading (CSR) teaches students to use and build comprehension strategies while working cooperatively (Dimino, Simon, & Vaughn, 2007; Klingner, Vaughn, Arguelles, Hughes, & Ahwee, 2004; Sencibaugh, 2007). When CSR is first practiced in the classroom, a nonfiction publication such as *Weekly Reader*, *Junior Scholastic*, *Time for Kids*, or a similar nonfiction publication with high interest content is recommended. But once the strategies (preview, click and clunk, get the gist, and wrap up) have been taught and students develop proficiency, the CSR technique can segue nicely to other reading practices, such as a literature circle. At that point, the roles students assume during CSR can transition to traditional literature circle roles to maximize comprehension. For more information on Collaborative Strategic Reading and accompanying materials, visit the Iris Center online resource page.

Plugged-in

Even though Collaborative Strategic Reading is an effective way to foster comprehension of non-fiction texts in the classroom, monitoring independent work in the groups can be a difficult undertaking. One method of streamlining the supervision and assessment of reading groups uses Google Docs, which has a capacity for multiple accounts to be simultaneously connected to the same document so that modifications can be made by all of the group members in real time. Imagine the CSR group no longer being confined to your classroom walls! You can collaborate group work with a class across town, across the state, or on the other side of the world! Just imagine the impact on geographical understandings. The sharing capabilities offered by Google Apps not only allows the group members to see each other's work, but also allows the teacher to see the progress of each group and comment on the content whether during discussion or afterward. This flexibility allows teachers to formatively assess each group without interrupting the flow of CSR group.

To transition students from face-to-face CSR to online collaboration, teachers can have students use sticky notes to mark interesting text passages with notes for future discussion. Students can also keep a journal to record thoughts and feelings as they read, later noting parts that lend themselves to discussion with a star. In one study of middle school students involved in online cooperative groups, 298 student self-reflections and 8 student interviews resulted in three themes: (a) students were excited and engaged, (b) students experienced technology trials and triumphs, and (c) reflective teaching was essential (Day & Kroon, 2010). These themes are not surprising; student skills at both interacting socially and digitally continue to develop with experience. And, as teachers, we are reflective practitioners, constantly seeking ways to improve instruction for a greater educational experience.

Another benefit of online cooperative reading groups is the ability to research topics online or to quickly find information about the book's setting. Because the students can copy information directly from the browser on their device to a Google Doc, information gathering and sharing is simplified. This potentially

allows for more information to be collected in a shorter amount of time. The use of devices may not only make group work easier in the classroom, but also make it easier at home. Students can access their accounts at home and complete their assignments for the next day on the collaborative document. The activity tracker tool in Google Apps encourages students to be accountable and gives the teacher an idea of who is participating in the group work and who is not. This technology provides the teacher with an understanding of classroom leaders for future group design. Overall, the digitization of cooperative reading may make it easier to allow group work to become cohesive by allowing all of the group members to see each other's work instantaneously. This may enable all of the participants to feed off each other's ideas and obtain greater understanding of the text that is being studied.

Research supports technology as a tool for comprehension, and reading development with online tools has slight positive outcomes. One study found that students preferred online reading (using the Nearpod app) for guided reading using traditional books (Delacruz, 2014), citing interactivity as the most common reason. While it is not surprising that students prefer technology integration, teachers may question its effectiveness. In a meta-analysis of 20 studies based on approximately 7,000 students in grades 1–6, educational technology applications produced a positive but small effect on the reading skills of struggling readers (ES = .14) in comparison with "business as usual" methods such as drill and practice (Cheung & Slavin, 2013).

Conclusion

In an age where technology is increasingly integrated into education, it is important to consider when to use high-tech applications and when traditional strategies are beneficial to effectively deepen understandings in the classroom. An understanding of how traditional and high-tech applications support cognition and learning may lead to a harmonious balance of these strategies in the classroom. Cheung & Slavin (2013) caution, "there is no magic in the machine," stressing the importance of the combined choice of software, role of the teacher, nature and quality of professional development, time devoted to unplugged and plugged-in activities, and time allowed for each type of practice.

This article has provided 4 tasks, each with an unplugged and plugged-in option: a) Think-tac-toe and Blendspace, b) Table-top blogging and weblogs, c) Reader's theatre and Applications for production, and d) Collaborative Strategic Reading and Google Docs. As educators continue to make decisions on ways to extend classroom learning, there is no question technology will be a part. How we use technology effectively in the classroom and how we make instructional decisions involving the use of plugged-in and unplugged interventions will remain a focus of curiosity and study.

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Technology Matters: Using Technology to Develop Students' Disciplinary Literacy Skills

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Abstract — Using technology to develop students' disciplinary literacy skills in the content areas is critical. As technology has become interwoven into society, students must be able to use it competently for academic purposes if they are to be prepared for college and the workforce. Additionally, academic standards and assessments have shifted from being content-based to being performance-based. This shift means students must first learn content-area "knowledge" and then apply it to complete a learning task. Because there are a variety of ways for providing this type of instruction, teachers have flexibility when designing lessons that prepare students for these new demands; however, teachers need support and examples before doing so. This article provides support for and examples of that type of instruction by first offering a framework that can be used when designing those lessons and vignettes of lessons that use technology to develop students' disciplinary literacy skills.

Technology's explosion since the advent of mobile devices – smartphones, tablets, and now even watches – is reshaping the field of education. No longer are textbooks, graphic organizers, worksheets and PowerPoints the primary resources used in the classroom. These static resources are being replaced with dynamic instructional tools (e.g., educational apps and instant Internet access), which represents a significant change in the ways teachers prepare students to be successful in college and the workforce (Khun, 2012). Concurrently, education in the United States is experiencing a change in academic standards, moving away from the content-based standards and assessments used by the No Child Left Behind act to a new generation of performance-based standards and assessments (Elmore, 2007; Phillips & Wong, 2010; Schmoker & Marzano, 1999). It is in this transitional context where we, today's educators and teacher educators, find ourselves working. Although multilayered, the challenge before us is to find meaningful ways of using today's technologies to teach our students the disciplinary literacy skills needed to be successful in school and the workforce. In this article, I will first present a theoretical framework that can be used as a guide for designing technology enhanced instruction before offering three examples of teachers using emerging technologies to develop students' disciplinary skills.

Using TPACK and Disciplinary Literacy as Instructional Guides

To frame the use of instructional technology, the Technological, Pedagogical, and Content Knowledge Framework (TPACK) serves as an effective guide. TPACK, as depicted in Figure 1, is a three-bubble Venn diagram.
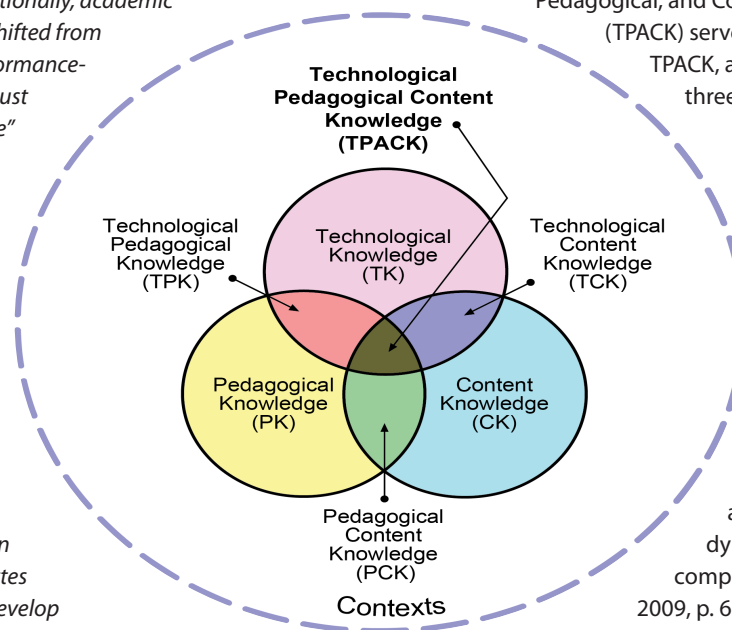
Figure 1. Technological Pedagogical and Content Knowledge Framework (TPACK)
The TPACK image has been reproduced by permission of the publisher, © 2012 by tpack.org

Mishra and Koehler (2009) explained that teachers must be able to align their content knowledge to their use of pedagogy in a way that is enhanced with technology. They state that "Teaching successfully with technology requires continually creating, maintaining, and re-establishing a dynamic equilibrium among all components" (Koehler & Mishra, 2009, p. 61). To use TPACK effectively, teachers cannot simply "add" technology to a pre-existing lesson. Rather, they must integrate technology so that it deepens students' knowledge of both the content learned and the technology used. This "integration" then represents middle and high school teachers' pedagogical knowledge in that they have to craft lessons to be both rich in rigor and relevance, which should ideally develop students' disciplinary literacy skills (Shanahan & Shanahan, 2008).

Disciplinary literacy and *content area literacy* are two popular terms used in education. Though they appear similar, each term represents a different type of literacy, as explained by Shanahan and Shanahan (2012):

> Content area literacy focuses on study skills that can be used to help students learn from subject matter specific texts. Disciplinary literacy, in contrast, is an emphasis on the knowledge and abilities possessed by those who create, communicate, and use knowledge within the disciplines (p. 8).

Moss (2005) further explains that whereas content area literacy is used to mean reading and writing to learn in the content area specific texts (e.g., textbooks and articles) (McKenna & Robinson, 1990), it now extends to students learning from multiple texts

(e.g., blogs, reviews, magazines, novels) and the literacies needed to make sense of them. Disciplinary literacy then becomes something more specialized, more fine-tuned to specific subject-area discourse. Moje (2008) conceptualizes disciplinary literacy as a person's ability to communicate their knowledge of a subject area gained from the reading, writing, viewing, and listening of texts in a way that combines diverse ideas and expands the discipline's knowledge base. At the secondary level, disciplinary literacy means students engage and produce subject-specific texts – including written, oral, and digital texts – that demonstrate their deep understanding of a subject area (Cook & Dinkus, 2015; Nicholas, Hanan, & Ranasinghe, 2013). In this model, content-area literacy is used when students are engaging subject-specific texts to learn, and disciplinary literacy requires students to read and then communicate the knowledge they gained from the subject-specific texts. As importance is given to students developing their disciplinary literacy skills in the content areas, it is reflected in the standards teachers are required to teach.

Academic standards and the standardized assessments used to measure student learning are rapidly changing. In South Carolina, for example, the state has moved from the content-based standards and assessments used by No Child Left Behind to the Common Core State Standards that relied on the Smarter Balanced tests to new academic standards paired with the ACT Aspire assessments. This evolution of standards and assessments has shifted instruction from being content-based to performance-based (Marzano & Kendall, 1997; Zvoch & Stevens, 2003), with an emphasis on developing students' disciplinary literacy skills (Darling-Hammond, 2012), as shown in Table 1.

There is a direct connection between TPACK and the performance-based standards that promote disciplinary literacy. Because today's society depends on and uses technology ubiquitously, it has changed both the types of texts we read and how we read them. However, that is not to say "good" teaching requires the use of technology, but preparing students for post-secondary opportunities, whether it be continuing their education or joining the workforce, does require they develop a certain technological aptitude (Darling-Hammond, Wilhoit, & Pittenger, 2014; Pittman, 2010). The best practices that will next be described all offer innovative approaches to integrating technology in ways that develops students' disciplinary literacy skills.

Classroom Contexts

This paper is a reflective case study (Maclellan, 2008) of best strategies that I saw while making classroom observations along South Carolina's Grand Strand during the spring 2014 and 2015 semesters. As a teacher educator at one of South Carolina's public universities, I am afforded the opportunity to visit classrooms in a variety of school districts, which allows me to see authentic instruction. I use the term *authentic* in this context because my classroom visits are typically unannounced, so the teachers who I am observing are not able to "plan" instruction for my visit. This case study is bound to two groups of participants, who are both connected to a teacher licensure program. The first group is comprised of 15 teachers who served as mentors to the second group, which consisted of the 14 pre-service teachers I supervised while they interned. In my role, I observe my interns multiple times during the spring semesters and specifically look for criteria aligned to the domains of South Carolina's ADEPT evaluation for classroom teachers (South Carolina Department of Education, 2015) that includes: (1) Planning, (2) Instruction, (3) Classroom Environment, and (4) Professionalism. Because this paper keys on the integration of technology into classroom instruction as a way of preparing students for college and the workforce, I focused on ADEPT's second domain, *Instruction*.

To collect data while conducting my observations, I keep a "Reflective Notebook" where I record teaching methods I found effective. To operationalize "effective" regarding teaching methods, I used the checklist shown in Table 2.

I use this checklist as a tool for analyzing the effectiveness of teaching methods. When creating it, I designed the prompts so a variety of instructional methods could be applied to them. My premise is that there is no "correct way" to teach; rather, there are a variety of ways that can be used to teach effectively. This

Table 1. A Comparison of Standards: Content-Based vs. Performance Based

	Content-Based Standard	Performance-Based Standard
Focus of Standards	"Describes what students should know and be able to do" (Marzano & Kendall, 1997, p. 12)	"Descriptions, via tasks, of what it is students should know and be able to do to demonstrate competence" (Marzano & Kendall, 1997, p. 14)
Example of Standards	Academic standards used by the No Child Left Behind act	Common Core State Standards The Next Generation Science Standards College, Career, and Civic Life Framework
Area of Emphasis	Lower-Order Thinking Skills	Higher-Order Thinking Skills
Literacy Demands	Foundational and General	Building to Disciplinary Literacy

As South Carolina and other states continue their implementation of performance-based standards, it changes the definition of knowledge and how teachers develop students' literacy abilities. No longer can teachers use a "transmission style" of instruction that "deposits" facts and other information into students' heads that they recall for tests (Brown, McNamara, Hanley, & Jones, 1999). Rather, teachers now must develop students' literacy abilities, as they progress through their compulsory education. According to Shanahan and Shanahan (2008), students must learn foundational and intermediate literacy skills (e.g., decoding, fluency, word recognition) in grades K-6 before developing their disciplinary literacy skills in grades 6-12. These disciplinary literacy skills teach students how to read and communicate like mathematicians in math, social scientists in history, musicians in music, and so forth. These disciplinary literacy skills represent the knowledge students now need if they are going to pass this new generation of standardized assessments and be prepared for college and the workforce.

checklist was designed to be flexible and inclusive, so it honored the "effectiveness" of diverse teaching methods. Plus, I wrote the first two qualifiers so they directly addressed the ability to read and communicate content-area texts, which is a central premise of disciplinary literacy (Moje, 2008; Moss, 2005). As I visited classrooms, I recorded the effective teaching methods I observed, and I will next offer a synopsis of three exemplary methods.

Inspiring Approaches

In my classes, I often tell my pre-service teachers, "There is no one way to get to Denver. The point is that you get to Denver." By this statement, I mean that there is not a single, magical method for correctly teaching a topic. Instead, the purpose of teaching a lesson is that students learn the objective that was taught (e.g., the "getting to Denver"). In this section, I offer three mini-vignettes that each capture a teaching method and analyze them using the Effective Teaching Traits checklist from Table 2.

Method 1: The Silent Seminar

I sat in the back of a high school American government classroom with another university supervisor, and 20 students were seated in rows of tables (averaging two students per table and three tables per row). All of the students had a tablet device and were logged onto a shared Google Drive document. Before starting the seminar, the teacher and intern quickly discussed their opinion of the article students read for homework about civic responsibility, and their conversation was intended to be a model. Next, they reminded students of the seminar's two rules: (1) There was to be no verbal communication, and (2) Everyone had to contribute a thought. With that, the intern typed the seminar's prompt on the document's top line: *What is your opinion about the article's central argument? Do students have a responsibility to be engaged citizens before they are 18, if they can't vote?* After the prompt was displayed on both the overhead projector and on the students' tablets, there was a pause. I counted in my head, "1, 2, 3, 4…" As I was nearing five, I heard the first tapping of keys on a tablet – like a small leak in a dam that would lead to an onrush of water. I saw words begin to appear under the prompt on the overhead screen. The words were one student's response to the prompt. I then heard more typing and watched as words quickly appeared, or rather flooded, on the screen. The words were both responses to the prompt and responses to other students' responses to the prompt. The responses rushed onto the screen, and it challenged me to keep track of them. I flipped my eyes from the overhead screen to the different students' tablets. Each student had a different view of the

Table 2. Checklist of Effective Teaching Traits

Qualifier	Justification of Qualifier
1. Are students reading and/or communicating texts specific to the content area?	Each discipline contains texts that are unique to it, and students must be taught how to engage the texts as readers and writers of that discipline (Fang, 2012; Shanahan & Shanahan, 2008).
2. Are students using technology to collaborate?	To be part of a globalized community, students must be able to connect, share, and team with a variety of individuals (Simonson, Smaldino, Albright, & Zvacek, 2014; Whitehead, Jensen, & Boschee, 2014).
3. Will the skill students are using or the task students are completing transfer to other content areas and/or their life outside of school?	If they are to be meaningful, the abilities students develop in a classroom must be applicable and relevant to learning opportunities that exist in other classrooms and in their personal/professional lives (McClanahan, Williams, Kennedy, & Tate, 2012; Smith, Given, Julien, Ouellette, & DeLong, 2013).
4. Are there high levels of student engagement?	Students must be interested and see the value of the learning task in order for it to be effective and engaging (Ainley & Ainley, 2011; Christenson, 2012).

Google document and was responding to different prompts synchronously (Botzakis, Burns, & Hall, 2014; Duke, 2013). After five minutes, I heard the pace of typing slow and then peter out. The teacher and intern were both smiling, and the intern eagerly said, "So, let's see what we have." Soon, the class began discussing their different experiences responding to the original prompt and how they responded to both their classmates and their classmates' responses.

Applying the Checklist

The Silent Seminar required students to use multiple skills to engage the teacher's original prompt, their classmates' responses to the prompt, and their responses to their classmates' responses. In this way, the students engaged higher-order thinking skills in multiple ways, which can be unpacked using Effective Teaching Traits checklist.

Are students reading and/or communicating texts specific to the content area? The students read a content-area text previous to engaging the Silent Seminar and the comments they provided were in response to both the text and their classmates' responses. Their classmates' responses constitute a content-area text, and the responses each student wrote are content-area texts they authored. Students' responses to both the text and their classmates' responses align to disciplinary literacy skills in that they are reading and communicating in the specific subject area.

Are students using technology to collaborate? The use of a Google Drive document in this manner allowed students to share their thinking via their responses to the original prompt and each other, which supports their development of disciplinary literacy. As the document came alive with student writing, I saw them make connections between comments and build on each other's comments to make meaning. In this way, the students did collaborate using technology.

Will the skill students are using or the task students are completing transfer to other content areas and/or their life outside of school? In this activity, students are using multiple skills simultaneously to complete the task of responding to the prompt and their classmates. Students are using text-analysis skills to form their opinion of the article, interpersonal analysis skills to interpret the meaning of their classmates' responses, and digital literacy skills to read and interpret an evolving, synchronous text. These skills transfer over to students' lives when they read a variety of both print and digital texts in their academic and personal lives.

Are there high levels of student engagement? Students were actively engaged in this activity as they first considered how to phrase their response to the original prompt and then how they responded to their classmates' responses. Additionally, because students had a level of anonymity in this activity (Park, 2013) – in that they could express themselves digitally instead of verbally – students were very interested regarding if and how their classmates' responses built on their response.

Method 2: A Musical Chairs Think-Pair-Share

I am sitting off to the side of an English II college-placement classroom, and there are 12 pairs of desks snaked throughout the room. A student is reading Langston Hughes' poem *I Too Sing America* to the class. While observing, I noticed the teacher, who is an intern I am supervising, has not stopped the reading of the poem to explain it. He trusts his students to comprehend the poem as it is read (Gallagher, 2009). Following the reading, the teacher instructs students to read through it once more, with the purpose of annotating the poetic devices Hughes used (Robillard, Bach, & Gulden, 2015). As the students reread the poem to themselves, the teacher makes sweeps of the class and answers questions. After a few minutes pass, the teacher pauses students and plays a video of the poem being read by Hughes. At this point, the teacher asks if they are ready to discuss the poem's meaning, and the students say they are. The teacher then announces they will be doing the musical chairs activity.

To begin, the teacher reminds students of the activity's rules: (1) Students have to put their belongings under their desk and only have a copy of their poem, paper, and a writing utensil; (2) Students can only talk with their partner while forming their response to a prompt; (3) Pairs have to have a response ready to share if called on; and (4) Students have to move around the room in an orderly fashion. Following that, the students put their belongings away and stood by their desk with their materials.

The teacher begins this activity by playing jazz music from the Harlem Renaissance on the computer, and the students begin moving around the room, from one pair of desks to the next. After about 30 seconds, the teacher stops the music, and each student quickly takes a seat at a vacant desk. The teacher then projects a prompt for students related to the poem, and all the students begin drafting their response. After three minutes have passed, the teacher instructs students to share their response with their partner and together combine their thoughts to make the best response possible (Allington, 2014). With that, the classroom burst with conversation. Students were reading their responses, exchanging thoughts, and drafting collaborative responses. As students were discussing, the teacher quickly volleyed himself from one group to the next, listening to conversation and adding the occasional comment. Following this moment, the teacher quieted the class and called on different pairs of students to share their responses. After each pair shared, other pairs would comment and offer their own thoughts. The conversation was rich with interpretation that used text-based evidence (Fisher & Frey, 2014). When the conversation waned,

the teacher instructed students to stand up with their materials and then played a different jazz song. The students began moving from desk-to-desk and the activity repeated itself.

Applying the Checklist

The Musical Chairs Think-Pair-Share activity required students to close read (Boyles, 2013) a poem by engaging it three times before developing and then articulating their own interpretations of its meaning(s). The teacher presented the poem and this activity so it incorporated audio, visual, and kinesthetic elements, which appealed to a variety of learners and can be analyzed using the Effective Teaching Traits checklist.

Are students reading and/or communicating texts specific to the content area? In this activity, the students read the poem as a lettered text and viewed Hughes reading it. Plus, in order to annotate the poem's devices, students had to reread it. Concerning the writing, students composed constructed responses, opinions, and commentary about the poem, which all required the use of text-based evidence. In these ways, students were reading and writing texts specific to the English language arts content area in ways that promoted disciplinary literacy.

Are students using technology to collaborate? The way this activity used technology was not for direct collaboration; rather, it catalyzed collaboration. Technology was used to present Hughes' reading of the poem, to play music specific to the time period, and present writing/discussion prompts to students. Each of these attributes used technology to contextualize the poem and was part of the activities, which supported their collaboration and understanding of the poem.

Will the skill students are using or the task students are completing transfer to other content areas and/or their life outside of school? There is high transferability regarding the skills students used in this lesson that includes: (1) text analysis and interpretation, (2) use of text-based evidence in writing, and (3) sharing of opinions. In all academic subject areas and life outside of school, students are continually exposed to a variety of texts. Teaching students to annotate texts is a skill that carries over to other texts. In math, for example, students will need to annotate word problems for keywords before solving. In social studies, annotating the names of significant people and dates of historical events aids students' comprehension. When reading an article of personal interest, students can annotate it in a way that distinguishes facts from opinions. In all these cases, annotating texts leads to students being able to identify text-based evidence that students will need to complete a task, which is a highly transferable skill.

Are there high levels of student engagement? Throughout this activity, students actively participated while they annotated the text, viewed Hughes' reading of the poem, and throughout the think-pair-share activity. For example, during the "pair" component of this activity, students were particularly eager to exchange thoughts with their partner. When crafting their responses, students offered each other ideas about the poem and text-based evidence to support those ideas. That way, when

the teacher progressed the activity to its "share" component, students felt prepared and were excited to offer their responses.

Method 3:
Kahoot as an Anticipation Guide

I am sitting in the back left of a high school English IV classroom and the 20 students' desk are scattered about the room – some in clusters, others in a 3x3 desk row formation, and a few just randomly placed in the room. The teacher, who is my intern, is beginning a unit on The Canterbury Tales. Before the lesson, the teacher explains to me that she wants to engage students in the moral issues faced by the characters. To do so, she will use Kahoot (https://getkahoot.com) – a free, web-based resource that uses a game-like format – to engage students. To organize the activity, Kahoot will present a value statement to students (e.g., The purpose of poems and songs should be to teach a lesson, A good story includes a moral, It is not okay to like the antagonist, etc.) and a four-point Likert scale (e.g., Strongly Agree, Agree, Disagree, and Strongly Disagree). Students respond to the prompt by tapping the corresponding Likert scale option that best aligns to their perspective, and Kahoot instantly analyzes the data and reports the responses as a bar graph. The teacher will then facilitate a discussion using preplanned questions.

After the students came into the class and the teacher reviewed the day's agenda, she prompted students to take out their tablet devices and log into Kahoot using the code displayed on the board. Each Kahoot requires a code. Once ready, the teacher projected the first prompt, "Does a character have to be ethical to be a protagonist?" Students read it, considered it for a moment, and then selected their response. Once all students replied, the response bar graph is shown. The majority of students agreed or strongly agreed with the statement, and the teacher asked, "Why does a character have to be ethical to be a protagonist? What about characters who realized the error of their ways and want to repent? There was a pause while students considered this question (Barnett & Francis, 2012), and then hands shot up. However, before the teacher called on students, she had them write their thought(s) as bulleted lists, journal entries, brainstorms, and any other way they pleased. The teacher explained that she wanted students to first consider their thinking before responding, and pausing to write allowed a mechanism for them to do so (Certo, 2011). After about two minutes passed, the teacher then asked if anyone wanted to share, and the students were more eager to offer their ideas than before the pause for writing. The teacher reminded students to raise their hands and she would call on them because, as she said, "If we all talk at the same time, no one is listening to what we say." The teacher then called on the first student to share his response, and the class conversation quickly took off.

Students were raising their hands and responding to their classmates while adding their own thoughts. When the conversation started to fizzle, the teacher advanced the activity to the next Kahoot prompt and followed the same procedures, which quickly reignited the discussion. The teacher did this five times before concluding the activity by saying, "These ethical dilemmas are what I want you to consider while we read The Canterbury Tales."

Applying the Checklist

By using Kahoot as an Anticipation Guide, the teacher activated student background knowledge regarding some of *The Canterbury Tales'* major themes. This activity resulted in building students' awareness for these themes, which would impact how they read the text. When analyzing this activity using Effective Teaching Traits checklist, it demonstrates how a pre-reading strategy prepares students for reading in the content area.

Are students reading and/or communicating texts specific to the content area? Unlike the other activities where students read a text and then articulated their interpretation of it, this activity activated student schema about the text they would be reading (Ming, 2012). Furthermore, students had to compose a brief text that explained their position regarding their stance as related to the prompt. This activity, therefore, prepared students for the reading while sill requiring them to produce a text. In fact, the preparation for reading the text and composition of the text were both disciplinary acts of literacy because students were activating their schema specific to the English language arts content area.

Are students using technology to collaborate? Kahoot itself is a website that presented students with the prompts, recorded responses to the prompts, and reported response data as a bar graph. Kahoot then was used as a tool that catalyzed a collaborative activity for the students and teacher using response data.

Will the skill students are using or the task students are completing transfer to other content areas and/or their life outside of school? There were two main skills used in this activity: (1) The ability to compose a written justification that substantiates a claim, and (2) The non-hostile exchange of moral/ethical ideas and beliefs with peers. First, being able to justify an opinion with reasoning transfers into all areas of life, including: academic, professional, and personal. Being able to offer a rationale for an opinion lends credibility to the opinion. Second, being able to discuss opinions in a way that promotes shared learning and understanding, as opposed to heated argument, is a skill that serves people well in all areas of life. Therefore, both of the skills used in this activity have high transferability.

Are there high levels of student engagement? Students were very engaged throughout this activity. They were excited to read the prompts, compose their responses, and exchange their ideas with classmates. By appealing to students' opinions about moral topics, the teacher successfully engaged students in the entire activity.

Discussion

As students progress into middle and high school, teachers must develop their disciplinary literacy skills, and TPACK provides a frame for having students read and write in the different content areas. Though a quintessential way for using TPACK does not exist, the teachers who planned these activities each aligned their pedagogy, content, and technology usage in a way that interested students while developing their disciplinary literacy skills.

The "Silent Seminar" had students read a content-area article before responding to the teachers' prompt and their classmates' responses. The "Musical Think-Pair-Share" allowed students to read and write content-area texts and then share those texts with both their partner and entire class. Finally, the "Kahoot as an Anticipation Guide" activated students' background knowledge by their responding to prompts first in writing and then by sharing, so they were prepared to read a content-area text. The commonality that cuts across these three activities is that technology is used to spur students' responses, and the way students responded was specific to the content area while the skill could transfer to other content-areas and be applied to students' personal and professional lives. In these ways, the activities presented here each were uniquely designed to support students engage and develop their disciplinary literacy skills. Through these activities, and the skills students utilized were transferable to their academic, professional, and personal lives.

Conclusion

As the calls for teaching disciplinary literacy in the content areas continue to get louder and louder, teachers need to use the technology in their schools – whether they work in a 1:1 school where all students are provided technology, only have access to computer carts, or are limited to a projector and laptop – in ways that develops students' reading and communicating abilities. As they plan these activities, teachers need to be dually aware that the skills they are teaching need not only be specific to their content area but also transferable. It is this "transfer of skills" that teachers must consider and emphasize in their instruction as they work towards preparing all students for academic and career success.

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Infographics: More than Digitized Posters

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Abstract — Teachers in grades K-12 can utilize infographics to integrate content and literacy. In fact, with infographics, students can create real-world digital projects and can share their learning with authentic audiences. With the use of digital tools, students can collaborate with peers within and beyond the classroom. Student-friendly infographic sites include Easel.ly, Infogram, Piktochart, and Smore. Infographics can be used as interactive presentation tools, inclusive records of student thinking, and authentic assessments.

Ms. Billings (all names are pseudonyms) was fairly content with her literacy instruction. In fact, any visitor to Ms. Billings' classroom during her literacy block would note students deeply engaged in a variety of tasks. Students might be reading in the library corner, working on composing a reading response in their journals, or even engaged in a book discussion about a previously read text. While she felt certain that her students were learning and their comprehension was deepening, Ms. Billings wanted to provide her students with additional opportunities to collaborate with one another during this time as well as a chance to utilize digital tools.

Since Ms. Billings wanted to integrate technology, she analyzed the structure of her book clubs and decided that the culminating project would be a good place to begin. At the time, students were preparing to begin historical fiction book clubs. After they had made their selections and been placed in groups, Ms. Billings told the students about their book club project. Instead of the usual poster or oral presentation, the students were going to create infographics. They were going to be able to share their infographics with parents, classmates, and even students in other schools. With the integration of technology, Ms. Billings' book clubs became even more robust and exciting. Students continued to read and hold great discussions and now they could also be seen clustered around laptops, making decisions about the layout, graphics, and links as they worked on designing infographics for their culminating products. DaShawn and Hannah, students in Mrs. Billings' class, created their infographic on the historical fiction novel, *War Horse* (see Figure 1).

DaShawn and Hannah were able to compose a real-world digital product to share their thinking and learning with a multitude of interested parties. Additionally, the finished product served as authentic evidence of their learning and Ms. Billings was able to assess their understanding of the novel, *War Horse*.

The above vignette provides a sense of how "literacy practices shape our world" (Wilber, 2012, p. 406). With new digital tools becoming available on a regular basis, it is important to focus on more than an exciting new tool (Wilber, 2012). In fact, teachers can use digital tools to provide students with varied opportunities to make their thinking visible and communicate with others (Yearta & Stover, 2015). Students now have the opportunity to use digital tools to create infographics and can share their thinking and learning with wide, varied, authentic audiences. In this article, we provide a brief literature review, discuss ways to use infographics in the classroom, list popular student-friendly infographic sites, and offer hints to help readers get started with infographics today.

Figure 1: Screenshot of DaShawn and Hannah's *War Horse* Infographic

Preparing Students with New Tools

According to the International Literacy Association, formerly the International Reading Association, students need access to and experience with the new literacies of 21st century technologies (2009). Teachers are certainly using technology in the classroom, yet there continues to be much room for growth in the area of technology and literacy instruction (Karchmer-Klein, 2013). Students should have multiple, varied opportunities to engage in and become familiar with new literacies. These new literacies are different from traditional literacies in two significant dimensions, in terms of technology and ethos (Knobel & Lankshear, 2014).

Technology, the first dimension, refers to tools such as Skype, GoogleDocs, Voki, Mixed Ink, VoiceThread and apps such as Educreations, Popplet, and Puppet Pals. It is important to note that there is a constant deluge of new technologies, and the sites and apps that are used today may be outdated tomorrow (Leu, Zawilinski, Forzani, & Timbrell, 2015). Therefore, the focus should not only be on understanding the specific technologies, but also on learning the skills and thinking processes of new literacies (Leu et al., 2015).

The second dimension is ethos. Ethos is a way of thinking about a topic, or the guiding

principles. New literacies allow for ample revision, communication, collaboration, feedback, and encourage a "sharing of resources" (Knobel & Lankshear, 2014, p. 98). Specifically, digital tools can better enable teachers to provide students with authentic literacy practices (Mills & Levido, 2011). Therefore, when thinking about new literacies, it is important to consider how the tools can be used to enhance communication and collaboration.

Clearly, it is imperative that classroom teachers become fully versed in these technologies so that the new tools can be integrated into the curriculum. One digital platform that teachers can utilize in the classroom is infographics. Infographics, or information graphics, are fairly new in the world of education but have been used by newspapers and magazines for some time (Toth, 2013). Fowler (2015) found that "asking students to create infographics provides a vehicle for teaching them how to filter information, communicate through visual aids, and develop creative presentations using technology" (p. 44). While Abilock and Williams (2014) found that many classroom infographics are simply digital posters, below we suggest several ways to utilize infographics to promote creativity, collaboration, and comprehension.

Infographics in the Classroom

Building opportunities for students to be creative, collaborate with one another, and increase comprehension is important and is highlighted in the new English Language Arts standards, recently published by the state of South Carolina. Specifically, students in South Carolina are expected to be able to "interact with others to explore ideas and concepts, communicate meaning, and develop logical interpretations through collaborative conversations; build upon the ideas of others to clearly express one's own views while respecting diverse perspectives" (South Carolina Department of Education, 2015, p. 32). Students should also be able to "construct knowledge, applying disciplinary concepts and tools, to build deeper understanding of the world through exploration, collaboration, and analysis" (South Carolina Department of Education, 2015, p. 37). Before students create their own infographics, we suggest they review examples of previously created infographics. Then, lead students in a discussion as to what makes an infographic effective (Fowler, 2015). Effective infographics most likely include visuals, accurate information, and sources. They will be simple to read and navigate. The purpose of having students discuss and practice reading infographics, or electronic texts, is that electronic texts are different than traditional texts and often require that students utilize more than one processing mode in order to comprehend the information (Anstey & Bull, 2006). Electronic texts can be continuously revised, shared with an authentic audience, multimodal, and do not follow a linear, step-by-step progression (Karchmer-Klein, 2013). Once students are familiar with the layout and purpose of infographics, the uses in the classroom are seemingly endless. Read below for ideas on integrating this digital tool with the curriculum.

Infographics can be used as a teaching tool or a presentation tool, an authentic alternative to Powerpoints or flipcharts. For example, when learning about World War II,

specifically D-Day, teachers could discuss an infographic such as this one, http://www.history.com/topics/world-war-ii/d-day/infographics/d-day-by-the-numbers, done by The History Channel. When learning about persuasive writing, teachers could have students analyze the "Plant the Plate" infographic, http://www.ucsusa.org/sites/default/files/legacy/assets/images/fa/plant-the-plate/Plant-the-Plate-Infographic-full.jpg. This could help develop students' critical literacy skills as they learn to recognize some of the techniques that authors use to persuade readers.

Many teachers encourage their students to become experts in a variety of topical areas in which individual students express an interest. This interest can take the form of an "expert project." With the expert project, students can conduct research and present their learning to their classmates. Historically, these presentations have taken the form of Powerpoints, colorful posters, and reports. Having students present their expert projects with an infographic means that they can still share their information with classmates, using a smart board, but can also present their learning to a much wider audience. Furthermore, students can imbed links to videos and informational websites, increasing their classmates' access to information.

Many students are visual learners and as more students gain access to technology in the classroom, infographics can be used as a place to keep a record of learning as the unit progresses. Unlike notes taken with traditional paper and pencil, notes taken on an infographic can include links to other sources of information, images that represent knowledge, and space for comments from other learners. Learning is social in nature (Vygotsky, 1978) and when students use this digital tool, note-taking can become less of an isolated activity.

Infographics can also be a genre study in which students focus on infographics as real-world, authentic written products. First, students can study the specifics of the genre such as text features, the layout, and the conciseness of the craft. Then, after getting in collaborative groups, students could create their own infographics on self-selected or content-related topics.

Finally, infographics can be used as assessments. They are authentic ways to determine what the students have learned in a given unit of study. After completing the infographic, the student could email the link to the teacher. Then, students could easily share their learning with a wider audience by posting the link to a blog or website. When students know that their work is going to be shared with an authentic audience, their sense of responsibility for learning is greater (Stover, Yearta, & Sease, 2014).

Teachers, when they are ready to begin using infographics in the classroom, have a variety of sites to choose from. The following section offers a review of several student-friendly infographic websites. While the list is by no means exhaustive, it provides a place for teachers to begin.

Infographic Sites

Easel.ly, www.easel.ly, is a site that offers ready-made templates and a host of editing tools. There is a short,

easy video tutorial that helps those new to the site easily acclimate to the options within each template. Three popular templates with teachers are: (1) the *Nerds vs. Geeks* for comparing and contrasting, (2) the *Walkway* as a way to show a progression and/or the outline of events, and (3) the *USA Map* to provide information regarding specific location. Any of the templates are customizable, allowing the user to change the graphics, the icons, and the text. Easel. ly also allows the user to upload personal images to use in existing templates. Once the infographic is saved, it can be downloaded as a pdf or shared through a link or a group share.

Infogram, https://infogr.am/education, is a great tool for creating any kind of infographic, but teachers especially like it for the eye catching data displays. The displays include a variety of templates for charts and graphs. This makes it a great tool to use in math and science as it allows teachers to integrate reading, writing, and 21st century digital literacy skills into their content curriculum. This site is especially useful for displaying statistics, collecting and presenting data, and showing growth over time.

Piktochart, http://piktochart.com/ is another excellent infographic tool and one that is very user friendly for students. Piktochart provides users with four different design options, infographic, report, banner, and presentation. The assortment of formatting options allows students to clearly align the layout with the purpose. The banner option has been used as a thinking map or graphic organizer for students to create content-specific notes. It can also be a way of outlining a presentation. The presentation possibility allows students to embed videos and is a great tool to integrate multiple genres such as commercials, public service announcements, oral reports, skits, and songs into the project. The report format has been utilized for research projects that provide options for including data in the form of charts and graphs. The report option now allows users to link surveys through the Survey Monkey site, encouraging students to collect and share data. Of course the infographic option is a go-to format because it provides users with fairly simple templates that include both text and graphics. Piktochart also allows the user to upload personal images, videos, charts, and maps. Teachers can save the infographic as a jpg, png, or pdf. Additionally, teachers can create a copy of the infographic and can upload the image onto another web 2.0 site such as a class blog or wiki.

Smore, www.smore.com, is an easy-to-use site that provides the necessary components for a user to build an infographic. Images, text, and links to other sites can be embedded into the infographic. In order to add an image, the user scrolls to the bottom of the page, clicks on the "picture" tile and drags it to wherever the image will go. Students can share the links to their Smore infographics through email, Twitter, or class websites. Once the infographic is shared, viewers can leave comments. In addition to the variety of tools that students can use, Smore offers analytics. After publishing the flyer, the user has access to information such as the number of views the infographic has received, the locations of those views, how many outgoing links were visited, and the average time people spent viewing the infographic.

Helpful Tips

In order to help students become familiar and comfortable with infographics, teachers can assign an *All about Us* task. An *All about Us* assignment gives students a chance to learn the technology of the infographic while learning about one another and building a sense of community. Teachers can put students in pairs or small groups of three. Students can interview one another and can then create an infographic with the information. Interview questions might include:

>*Where were you born?*
>*How many people are in your family?*
>*What do you want to be when you grow up? Why?*
>*What do you like to read? Why?*

While working on this assignment, students will gain an understanding of how to use the various design elements. For example, they will learn how to change the background, add text, and insert images and photographs. When students have completed the infographics, the teacher can display one at a time on the smartboard and can allow group members to introduce one another. The teacher can also have a *Student of the Week* and can include the link to that student's infographic in the class newsletter or on the class website. Once students feel comfortable with the technology, the assignments can focus more on content.

Several of the infographic websites give educators a free option that allows them to create a limited number of infographics for each account. Google allows users to take an existing gmail account and add +1, +2, and +3 in order to create unlimited accounts for students to use for web 2.0 sites. It is helpful to create a list, inclusive of email addresses, usernames, and passwords to keep track of the login information. This helps alleviate the issue of only being allowed to create a limited number of infographics for free.

Final Thoughts

Infographics can be used as an instructional tool in early childhood all the way through post-secondary classrooms. Utilizing vivid graphics to both attract the reader's attention and to serve as an additional meaning-making tool, infographics are a powerful instructional strategy to quickly and efficiently provide information to students.

With primary students in grades kindergarten through second, infographics can be used in several ways. The infographic can serve as an activating strategy to pique interest and tap into students' existing funds of knowledge on a specific topic. It can also be used as a visual aid to enhance understanding of a topic of study. The infographic can be a developmentally appropriate way to provide content in a blended learning environment so that students can "read" both the graphics and the text.

In grades three through twelve, infographics can be instructional tools for content delivery. However, they are much more powerful when used as an authentic tool to help students create meaning. Students can construct infographics as visual

notes to hold their thinking, as summarizing strategies, as ways to connect and extend their learning from multiple sources, as a solitary or collaborative presentation tool to share what they have learned and what they are continuing to wonder about with an audience wider than their classroom walls. Including catchy titles and accurate, concise captions, descriptions, and other text features a well-designed infographic does precisely what its name suggests: it combines information in a powerful graphic mode, blending media to reach learners.

With multiple platforms such as Easel.ly and Picktochart, how-to videos and instructions if the user needs assistance, and a variety of uses in the classroom, infographics can be quite useful for classroom teachers in grades kindergarten through twelve. In fact, infographics allow opportunities for students to demonstrate understanding (Abilock & Williams, 2014; Fowler, 2015), engage in evaluation (Toth, 2013; Fowler, 2015), and gain experience with the ever-important 21st century skills.

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The Right Book:
A Review of Children's Literature for Teachers

Jonda C. McNair & Clemson University Students

One of my favorite books in this column is titled *The Right Word: Roget and His Thesaurus*, and it is an award-winning biography of Peter Mark Roget (pronounced "ROH-ZHAY") and his love of books and (especially) words. Roget recognized the power of words and "believed that everyone should have this power—everyone should be able to find the right word whenever they needed it."

This column features a selection of books across many genres and sub-genres (e.g., biography, informational text, contemporary realistic fiction, free verse, and wordless) about a range of topics such as animal vision, rocks, desegregation, the world of Islam, and drawing. In addition, I made sure to include books that are diverse in numerous ways (e.g., race, disability, religion, etc.) in the hopes of making readers of this journal familiar with children's literature that is representative of the culturally diverse world in which we all live.

I am pleased to have written this column with several Clemson University students who participated in a Creative Inquiry project with me. Creative Inquiry is a program sponsored by the university that allows students and faculty to engage in activities and discovery across a range of disciplines. I welcome any feedback from readers about this column: jmcnair@clemson.edu. I hope that after browsing this column, you will find the "right book" for you *and* your students.
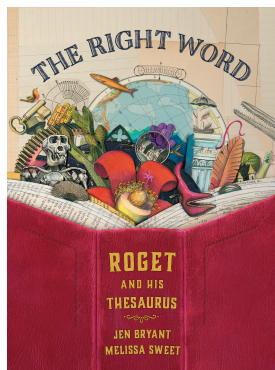
The Right Word: Roget and His Thesaurus

Bryant, Jen. (2014). Illus. by Melissa Sweet. Unpaged. Eerdmans. 978-0-8028-5385-1 $17.50 (Primary/Intermediate)

--by Katie Hoffman & Sarah Lawson
"*If only all the ideas in the world could be found in one place, then everyone would have one book where they could find the best word, the one that really fit.* Peter carried this idea with him like a secret treasure." During the late 1700s in Europe, there was a shy, young boy named Peter Roget who found friendships with books and loved to write lists. He started writing lists using all of the Latin words he knew and eventually, created a book that was made up of the lists he had created. As he got older, he continued to add to his book, and in 1852, he finally published his book called *Thesaurus*. Author Jen Bryant and illustrator Melissa Sweet worked together to produce a wonderfully unique biography that draws readers in through both the text and illustrations. *The Right Word: Roget and His Thesaurus* is written in a lyrical way and the illustrations are created using watercolor, collage, and mixed media that make this book extremely appealing. With a scrapbook-feel to the illustrations and carefully crafted word art throughout the

pages, readers will be able to delve into the mind of Roget and visualize words through his eyes. Readers of all ages will enjoy flipping through the pages of this Robert F. Sibert Medal winner and Caldecott Honor book while celebrating the power of words.
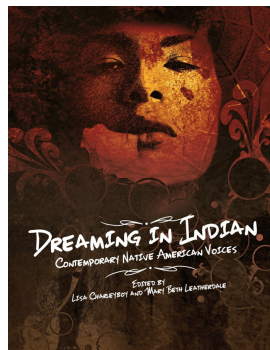
Dreaming In Indian: Contemporary Native American Voices

Charleyboy, Lisa & Leatherdale, Mary Beth (Eds.). (2014). 128 pp. Annick. 978-1-55451-687-2 $19.95 (Young Adult)

--by Brette Carey
This moving compilation provides insights into the lives of modern Native Americans. The short stories, poems, and art highlight the hopes, talents, and successes of an eclectic mix of young Native Americans. Their actions and feelings can serve to inspire other Native Americans (as well as cultural outsiders) to act on their talents and dreams. Lee Maracle writes in the Foreword: "the works [in this collection] . . . are part of an amazing struggle to go forward, into modernity, onto the global stage, without leaving our ancient selves behind" (p. 10). The photography and art, also created by young Native Americans, add to the emotions of the collection. Each word and every photograph draws the reader closer to these contemporary people from all walks of life (e.g., model, comedian, artist, musician, actress, etc.) This collection of works by young Indigenous people examines the complexities of what it means to be a Native American in modern society and would be appealing to high school students. With its stories of tragedy, conflict, and success, this collection will draw readers in from start to finish.
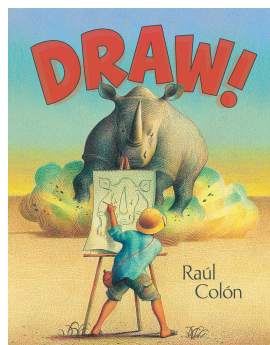
Draw

Colón, Raúl. (2014). Unpaged. Simon & Schuster/Paula Wiseman. 978-1-4424-9492-3 $17.99 (Primary)

--by Amanda Overholt
Have you ever wanted to take a trip to a faraway land? Well, it is easier than anyone could ever imagine! This wordless picturebook is about a boy who takes the reader on a journey, and it begins in his bedroom when he reads about the continent of Africa. The boy then begins to use his imagination by drawing pictures of the different animals that he saw in his book on easel paper. While on his safari adventure, he meets many animals such a gorilla who appears to be eating the sandwich that was sitting on the boy's bed at the beginning of the story. There are zebras who appear to pose for him. He even meets a heard of stampeding giraffes.

As the book continues, many more animals will be encountered such as a rhino that chases the boy. The images drawn in this book are filled with vibrant color and extensive detail. Colón's story is a testament to the power of creativity and imagination.
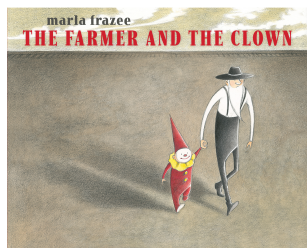
The Farmer and the Clown

Frazee, Marla. (2014). Unpaged. Beach Lane. 978-1-4424-9744-3, $17.99 (Primary)

--by Amelia Feisal & Laurel Burst

Have you ever been lost and alone? Away from home? A baby clown finds himself in a strange new place, but with a smile on his face. It doesn't take him long to find a friend as he meets a lonely farmer who lives just off the train tracks. This engaging story shows readers how a baby clown and an old farmer build an unexpected friendship when the clown somehow falls off of a circus train. As this unlikely duo embarks on a journey together, Frazee uses the artwork masterfully to convey the varying emotions of the characters via their body language. For example, pay close attention to the outstretched arm of the farmer at the end of the story. The clown lightens up the farmer's previously dull and mundane existence on the farm. He brings color and excitement into the farmer's life and teaches him a thing or two about life in the circus (e.g., the baby clown juggles eggs). In return, the farmer teaches the clown a few things about working on a farm. One favorite image depicts the baby clown milking a cow under the warm guidance of the farmer. How will the clown be able to return to the circus with part of his heart now on the farm? Read and find out. Readers young and old will find joy and satisfaction in this distinguished and memorable picturebook.
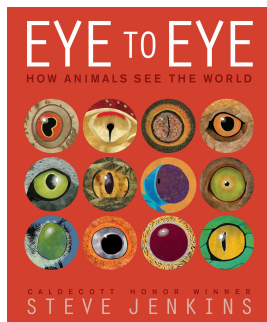
Eye to Eye: How Animals See the World

Jenkins, Steve. (2014). Unpaged. Houghton Mifflin Harcourt. 978-0-547-95907-8, $17.99 (Primary/Intermediate)

--by Katherine Hoffman

"Most animals rely on their vision, more than any other sense, to find out what is going on around them. For these creatures, the eyes are the most important link to the world." In this book, Steve Jenkins does an incredible job of illustrating various types of animals' eyes and describes their main use. Readers will learn about the four types of eyes (eyespot, pinhole eyes, compound eyes, and the camera eye) and examples of animals with each type. For example, worms have eyespots, while octopuses have camera eyes. Jenkins also introduces the reader to animals that have two rows of blue eyes, eyes that are the size of basketballs, eyes that can "see" body heat, and many more. This book concludes with an explanation of the evolution of the eye that is supplemented with images. Readers of all ages will enjoy this book whether they are just looking at the collage illustrations or are interested in the scientific facts about the purposes and functions of these animals' eyes. To find more of Steve Jenkins's fascinating science books read *Actual Size* (Houghton Mifflin, 2004) and *Animals Upside Down* (Houghton Mifflin, 2013).
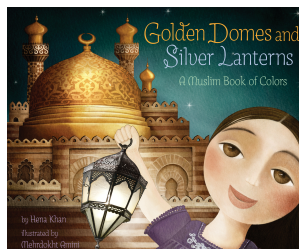
Golden Domes and Silver Lanterns: A Muslim Book of Colors

Khan, Hena. (2012). Illus. by Mehrdokht Amini. Unpaged. Chronicle. 978-0-8118-7905-7, $17.99 (Primary/Intermediate)

--by Jaclyn Bruton

In this informative picturebook, Khan uses the concept of color, something many children can easily relate to, as a tool for introducing the world of Islam. This story is told from the viewpoint of a young girl. The text on one page reads, "Red is the rug/Dad kneels on to pray,/facing toward Mecca,/five times a day." Another page reads, "Green is the Quran/I read with pride./Grandma explains/the lessons inside." Khan wrote this story in a way that makes learning about Islam appealing. The use of color in the illustrations as well as the font accentuates the object related to Islam that is highlighted in the text. For instance, on the page that focuses on the Quran, the sacred book is depicted as green and gets a full page while the font too is green. There is a glossary (with a pronunciation guide) for terms that may be unfamiliar (e.g., Allah, mosque, Quran, Ramadan, etc.) mentioned throughout. This book would be enjoyable and educational in a classroom.

The Port Chicago 50: Disaster, Mutiny, and the Fight for Civil Rights

Sheinkin, Steve. (2014). 200 pp. Roaring Brook. 978-1-59643-796-8, $19.99 (Young Adult)

--by Tori Young

In the 1940s, segregation was the order of the day in the United States. Political figures, such as President Franklin D. Roosevelt, were beginning to consider the need for integration. In the case of the U.S. Navy, segregation meant separate housing and dining as well as unfair or inept training for wartime tasks. The account provided by Steve Sheinkin in *The Port Chicago 50* follows the journey of a group of unsung African American heroes after a cargo explosion reveals the mistreatment and danger they faced on a daily basis. It also reveals their courage to say "no" to the U.S. Navy in the face of unfair treatment.

The men had been ordered to load ammunition onto ships although they had received minimal training in how to do so and lived in constant fear of disaster. As "The Fifty" are taken to trial for their perceived mutinous actions (refusing to continue loading ammunition after the disaster), the truth of how the explosion occurs is revealed. The trial gains the attention of famed civil rights lawyer Thurgood Marshall. As an award-winning author of nonfiction for young adult readers, Sheinkin includes numerous artifacts throughout this intriguing book such as photographs, copies of actual letters, and newspaper articles. Source notes and an intricate List of Works Cited will allow readers to read more deeply about the history of naval civil rights.
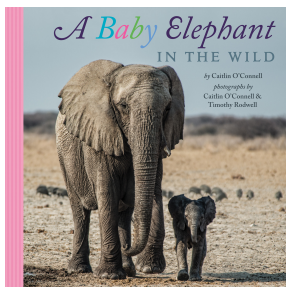
A Baby Elephant in the Wild

O'Connell, Caitlin. (2014). Photo-illus. by Caitlin O'Connell and Timothy Rodwell. Unpaged. Houghton Mifflin Harcourt. 978-0-544-14944-1, $16.99 (Primary)

--By Makenzie Mikesell & Sydney Childs

Born weighing 250 pounds, the size of a grown black bear, is a baby elephant named Liza. Liza lives in Namibia and learns how to walk on the day she is born. When she is only a few days old, she is able to travel 10-20 miles with her family to a watering hole for food. Her family shows her what foods are safe to eat, how to control the 40,000 muscles in her trunk, and how to keep cool by taking a mud bath. From getting stuck in the mud or falling into deep water, Liza's sisters, cousins, mother, grandparents, and even aunts stay close by to rescue her. O'Connell's book has a large font size and simple vocabulary for emergent readers to learn all about elephant babies and the communities in which they live. O'Connell and Rodwell document the growth of baby elephant Liza in her natural habitat through vivid photographs. The photographs are up-close and capture the bond between mother and baby elephant. At the end of the book the author provides readers with "Did You Know" facts to expand their knowledge about elephants even more.
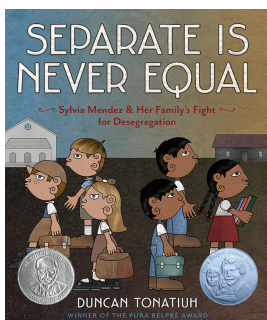
## Separate Is Never Equal: Sylvia Mendez & Her Family's Fight for Desegregation

Tonatiuh, Duncan. (2014). 40 pp. Abrams. 978-1-4197-1054-4, $18.95 (Primary/Intermediate)

--by Shannon Frydenlund & Sarah Dickenson

Many of you have heard of *Brown vs. Board of Education*, but have you heard of *Mendez vs. Westminster School District*? *Separate Is Never Equal* tells the story of Sylvia Mendez and her Hispanic family's fight for the desegregation of Mexican schools in the 1940s. This lesser-known case follows the Mendez family through its struggles in the California school district seven years before the legendary *Brown vs. Board of Education* decision. This authentic book would be a great resource to use in highlighting the fight for desegregation focusing on racial groups other than African Americans.

It portrays the story through the eyes of third grader Sylvia in a fictional manner but with factual events and dialogue that "comes directly from court transcripts" (p. 39). The book includes various textual features commonly found in nonfiction such as a glossary and an index. It concludes with an Author's Note that provides additional detailed information about the account of the Mendez family. Duncan Tonatiuh, winner of the Pura Belpré Award for illustration, uses his signature style yet again to beautifully paint the story behind this lesser-known, but legendary case. Through the easy to follow storyline, and captivating illustrations, *Separate Is Never Equal* portrays the Mendez family's fight for justice and equality and reminds readers of its continued relevance in today's society.
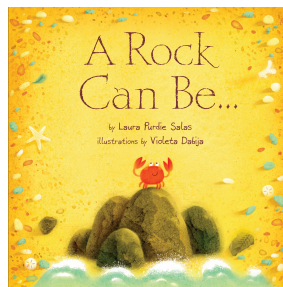
A Rock Can Be

Salas, Laura Purdie (2015). Illus. by Violeta Dabija. Unpaged. Millbrook. 978-1-4677-2110-3, $17.99 (Primary)

--by Makenzie Mikesell

Author of the "Can Be . . ." series, Laura Purdie Salas, takes the reader on a journey around the world exploring the many places rocks are found and what they are used for. Part of the text reads, "A rock is a rock. It's sand, pebble, stone. Each rock tells a story, a tale all its own. A rock can be a . . . Tall mountain Park fountain Dinosaur bone Stepping-stone." Salas uses lyrical rhyming text to turn what some might consider a boring, dull rock into a rock that sparks light or even a rock that glows at night. Readers will not only be engaged while reading, but they will also be captivated by Violeta Dabija's vibrant illustrations. Dadija uses primary colors, as well as, colors that contrast and highlight the rocks mentioned. At the end of the book author, Laura Purdie Salas, offers an informational guide ("More About Rocks") providing additional facts about each of the rocks she presents in her story. In addition, Salas provides readers with a glossary to define terms (e.g., carbon, fossil, gargoyle, and phosphorescent) used throughout the book that may be new or unfamiliar for readers. Still want to know more about rocks? Salas suggests books about rocks for further reading. "A rock is a rock . . . Now go and discover what else it can be!"

Rain Reign

Martin, Ann M. (2014). 226 pages. Feiwel and Friends. 978-0-312-64300-3, $16.99 (Intermediate)

--by Laura Dekle

"I am Rose Howard and my first name has a homonym. To be accurate, it has a *homophone*, which is a word that's pronounced the same as another word but spelled differently. My homophone name is Rows" (p. 3). Rose has a running list of groups of homonyms that she keeps and regularly updates. She says, "I like homonyms a lot. And I like words" (p. 4). In addition to her love of words and rules (and numbers, especially prime), Rose loves her dog, Rain. Rose and Rain wordlessly understand each other and have an established daily routine that they enjoy, until one day a violent storm hits Rose's town and results in Rain's disappearance. Rose's passion to find Rain pushes out of her comfort zone, and her unconditional love for her dog motivates her to search far and wide, over many towns and many months. Her love for Rain later becomes the catalyst for a selfless decision that Rose makes concerning both her and Rain's future. Ann M. Martin masterfully and authentically presents Rose's form of autism and her behavior because of it. From a distance, Rose's idiosyncrasies might seem strange or nonsensical, but Rose's narration of the story explains her thoughts and actions in a way that helps readers to understand the inner workings of her mind. This book is appropriate for upper-elementary-aged students. The story is endearing, true, hard, and real.
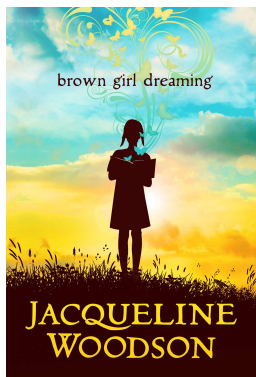
Brown Girl Dreaming

Woodson, Jacqueline. (2014). 337 pp. Nancy Paulsen/Penguin.
978-0-399-25251-8, $16.99 (Intermediate)
--by Sarah Lawson & Rebecca Welch

Through the use of free verse, award-winning author Jacqueline Woodson tells the story of her childhood and the challenges she faced as an African American growing up during the 1960s and 1970s. Moving from place to place and torn between two worlds, Woodson paints an honest picture of what it was like feeling halfway home in the North and the South. Woodson takes readers back in time with her carefully crafted free verse poems and addresses difficult issues, including segregation, religion, and poverty. Woodson even allows readers to see and feel the pain that she and her family members experienced as their lives changed over time. Readers will be captivated by Woodson's stories, as they reveal how she came to find her voice as a writer. Woodson gives readers a better view into her life by providing numerous family photographs at the end of the novel. Middle-grade readers will surely enjoy this memoir, as they, too, are searching for their place in the world. Woodson elegantly states, "When there are many worlds/you can choose the one/you walk into each day" (p. 319). *Brown Girl Dreaming* won the National Book Award, the Coretta Scott King Author Award, and a Newbery Honor.

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Like a Wave —
From the Heart of a Transient Student

by Dustin Ledford
Furman University (Graduate Student), Skyland Elementary

If I could tell you anything, Teacher, I would tell you that I am scared to be at a new school.
It always gets easier after a few days, But like a wave I come and go – its a rule.

If I could tell you anything, I would tell you I'm excited to be in your class.
I really liked my last teacher – But my time there went fast.

If I could tell you anything, I would tell you that I am smarter than you think.
Even though last week's concepts were far too hard for me, I already learned everything that you are teaching this week.

If I could tell you anything, I would tell you that I really would like to do work at home.
But our power will be out for the rest of the week; This always happens right before we are gone.

If I could tell you anything, Teacher, I would tell you that I wish I could stay.
I won't answer "present!" tomorrow, Instead I will be wiping my tears as we drive away.

Guiding Principles for Preservice Teacher Literacy Education in Light of Read to Succeed

Susan Cridland-Hughes, Clemson University
Philip Wilder, Clemson University

Abstract — In this article, the authors explore how the South Carolina Read to Succeed Act can shape the development of pre-service teachers (PSTs). First, they look at how the national landscape of education policy and reform affects the state development of reading policy, specifically exploring the relationship between high stakes testing and reform initiatives. They then describe how the changing definition of literacy, particularly disciplinary literacy, and data-driven reform align and diverge. Finally, the authors offer recommendations for how to use the goals of Read to Succeed and a focus on disciplinary literacy to shape preservice education for the sake of adolescents in South Carolina.

We live in an age of data, and that data drives conversations about success and failure. Many assessments show adolescent literacy in South Carolina lagging behind most states in the union. In a 2011 release, the Education Oversight Committee (EOC) of South Carolina reported that South Carolina ranked 42nd in the country for eighth grade reading scores (Education Oversight Committee [EOC], 2011). According to the 2012 NAEP assessment of reading, South Carolina's eighth graders scored an average of 260, lower than the 262 average of regional counterpart Florida but slightly higher than Alabama's average of 258. All of these are lower than the national average of 264 (EOC, 2012). Although recent publications have critiqued the limits of using literacy achievement data for understanding competency in reading (Au & Tempel, 2012), these snapshots provide an urgent image: over a quarter of South Carolina adolescents struggle to demonstrate academic literacy proficiency. To learn and obtain high levels of academic literacy, adolescents in South Carolina, including those in this image, need access to the ways knowledge is produced—through reading, writing, reasoning, and discourse--in academic disciplines (Moje, 2008, p.103).

At the same time Read to Succeed legislation became law in spring of 2014, Margaret, a preservice teacher in social studies education, completed her final year in our program. To teach well, Margaret, and other PSTs, must develop knowledge of students, knowledge of literacy, knowledge of pedagogy, and disciplinary knowledge comprised of both driving concepts and literacy practices (Manderino, 2012). Given the urgency surrounding adolescent literacy, the requirements of Read to Succeed (R2S) legislation in South Carolina, and her own proclivity to view literacy as discrete, generalizable skills instead of discipline-specific literacy practices used to create knowledge, how can Margaret be prepared for this challenge? We offer guiding principles for preparing PSTs for the daunting task of supporting adolescent literacies within secondary school disciplines.

Read to Succeed as state policy in a national conversation about literacy

Since the Coleman report (Coleman, Campbell, Hobson, McPartland, Mood & Weinfeld, 1966), discourse and policies related to equality of education have shifted towards an output model with a common, widely accepted premise: improving teachers improves student literacy. The literacy education of teachers has historically been viewed through input and output models where pre-service programs input "highly qualified teachers" into classrooms, and where "effective teaching" is measured and now evaluated by student output. The current climate of high-stakes testing and teacher evaluation models has thrown this into overdrive by narrowly defining both ends. Within this larger historical and political context, literacy achievement gaps and dropout rates provided the impetus for the adoption of the 2014 South Carolina Read to Succeed (R2S) legislation.

Ratified by both the Senate and the House in 2014, the crafters of Read to Succeed see the act as a contract with the youth of South Carolina to guarantee access to effective literacy instruction stating "the true goal of the Read to Succeed Act: ensuring that every South Carolina student has an opportunity to acquire the grade-appropriate ability to read, write, and speak the English language" (South Carolina Department of Education, 2014, p. 2). Key provisions require that secondary school classroom practice include literacy assessments, reading interventions and the use of "evidence-based reading instruction" to provide every student with "targeted, effective, comprehension support from the classroom teacher" and, if needed, supplemental support from a reading interventionist so all students can comprehend grade-level texts (p. 4).

To this end, the law states "classroom teachers receive pre-service and in-service coursework which prepares them to help all students comprehend grade-level texts" (p. 4). The intentions of the act are weighty—yet too narrow—while placing the responsibility on the shoulders of teachers and teacher preparation programs to develop courses and instructional activities that will culminate in meaningful change in classrooms and improved adolescent literacy in disciplines. By 2016-2017, programs licensing teachers at the secondary level must offer a six-credit hour sequence in literacy that includes a course in the foundations of reading and a course in content-area reading and writing. These courses should address the elements and assessing competencies in the appropriate set of South Carolina Literacy Competencies for Middle and High School Content Area Teachers. Through two courses, pre-service teachers must garner a foundational understanding of reading and

writing processes, common curricular and literacy instructional approaches, tools for assessing adolescent literacies, ways of supporting cultural and linguistic diversity, means of sustaining a literate environment, and awareness of life-long professional learning (South Carolina Department of Education, 2014). While the competencies overlap with the International Reading Association's policy statement on adolescent literacy (International Reading Association, 2012), and despite the welcome fiscal and political attention provided to the complexity of adolescent literacy, two key problems arise from R2S legislative policy.

Limitations of Read to Succeed Legislation

First, since conceptions of literacy impact the official curriculum, what counts as learning, and ultimately, the sorting and labeling of students (Alvermann, 2001; Franzak, 2006; Ivey, 1999), R2S, unfortunately, deemphasizes disciplinary literacies and risks depriving adolescents of literate membership in the discipline. Sociocultural notions of literacy, with an emphasis on literacy practices in specific contexts and using situated discourses (Gee, 1996, 2007; Street, 1985) suggest adolescent communication with and across discourse communities is a richer marker of literacy than the discrete ability to pronounce words on a page or infer or summarize or synthesize a text separate from authentic inquiry and the production of knowledge. Making sense of an article on mitosis requires an ability to recognize words in the text, connect concepts to prior knowledge, or deduce the writer's thesis, but true scientific literacy would involve building on the crosscutting concepts in the text as you assess, validate or critique the chemist's implications in light of your own recently collected data.

Seeing this literate complexity within a discipline, literacy researchers have called for a reconceptualization of the content of secondary school disciplines to afford students opportunities to learn and critique the literacy practices used by disciplinary experts to produce knowledge (Jetton & Shanahan, 2012; Lee & Spratley, 2006; Moje, 2008). While a content area literacy approach advocates teaching students generalized processes for reading and writing in order to help students *access* any text, a disciplinary literacy approach views literacy practices (including reading practices) as unique to each discipline and inseparable from disciplinary knowledge (Draper et al., 2005; Shanahan & Shanahan, 2008). In other words, students can develop deep conceptual knowledge in a discipline *only by using the habits* of reading, writing, talking, and thinking valued and used by the specific discipline (McConachie & Petrosky, 2010, p. 8). Teaching for disciplinary literacies is a matter of social justice. As Moje (2007) argued, "Teaching in socially just ways and in ways that produce social justice requires the recognition that learners need access to the knowledge deemed valuable by the content domains, even as the knowledge they bring to their learning must not only be recognized but valued" (p. 1). More than just equitable opportunities to learn, socially just disciplinary literacy teaching provides access to and opportunities to question, challenge, and reconstruct mainstream knowledge and practices (Ladson-Billings & Tate, 1995). When students are apprenticed into the dominant literacy practices in a discipline and provided with opportunities to critically read, write, reason, and participate in the discipline, they gain access and knowledge.

In contradiction, however, we are also in the midst of a rapid national escalation and dependence upon the competency testing of adolescents (and teachers) focused on traditional, narrowed conceptions of literacy. South Carolina is not the first - nor will it be the last- state to adopt more comprehensive literacy preparation coursework for teachers aimed at improving literacy instruction. Yet, the legislation's narrow focus—as witnessed by the required coursework and literacy standards for secondary students—foregrounds content area literacy, thereby treating perceived student literacy deficiencies with strategy instruction with traditional print texts. In fact, teacher resistance to content area literacy instruction is well established (O'Brien & Steward, 1990; O'Brien, Stewart & Moje, 1995). Secondary school teachers, holding pre-conceived notions about teaching and learning in their discipline (Holt & Reynolds, 1992), have often viewed content area literacy instruction—with the cognitivist view of a pre-reading, during reading, and post-reading instructional process—as time consuming and inappropriate for learning in their discipline (O'Brien & Stewart, 1990) while perceiving literacy to be separate from disciplinary content (Livingston-Nourie & Davis-Lenski, 1998). These beliefs and conceptions stem from their own educational and life experiences (Clandinin, 1985 & Knowles, 1992) and influence literacy instructional decision making in the classroom (Sturtevant, 1993). Barriers to literacy instruction in content area classes may be more attitudinal than pedagogical in nature as PSTs may not just lack an understanding of how to scaffold student thinking with text but may altogether fail to see the importance of doing so as a disciplinary teacher or have a limited understanding of their own literate thinking with text (Hall, 2005). By requiring a three hour content area reading course and not prioritizing disciplinary literacy, R2S deprives adolescents of dominant disciplinary literacy knowledge and relegates literacy to a set of content area skills steeped in teacher resistance.

A second problem lies in the legislation's assumption that traditional coursework in literacy creates highly qualified literacy teachers despite research concerning the ways teachers create "theories in practice" (Schon, 1983) altering views of students, subject matter, and pedagogical appropriateness (Whitton, Sinclair, Barker, Nanlohy, & Nosworthy, 2004, p. 219). Since much of what a teacher learns occurs in practice rather than in preparing to practice, PSTs must learn how to learn about disciplinary literacy and literacy pedagogy in practice (Cohen & Ball, 1999, p. 8). Unlike knowledge *for* practice that represents a formal body of knowledge garnered through empirical research or knowledge *in* practice that builds "practical knowledge" through expert teachers, knowledge *of* practice occurs within inquiry communities as teachers "treat their classrooms as sites for intentional investigation" and "theorize and construct their work and connect it to larger social, cultural and political issues" (Cochran-Smith & Lytle, 1999, p. 3). When teacher learning is understood as an apprenticeship where teachers appropriate the language and stances of other teachers' ongoing discourse around literacy, teaching becomes agentive. R2S assumes PSTs will transfer learning from teacher education courses to secondary school classrooms while ignoring how teachers learn to teach in practice.

Transforming pedagogy to support adolescent literacy

Our hope is that this commentary can offer practical advice for helping teachers and schools of education use the Read to Succeed Act to envision and enact responsive disciplinary literacy teaching. Literacy scholars have started teaching disciplinary literacies to PSTs who identify with a particular discipline (Park, 2013; Wilder, 2014). Park noted "even if the pre-service teachers resisted the idea of teaching disciplinary literacy, they accepted that adolescents, on any given day, are being asked to navigate a range of disciplinary discourses, knowledge, and even identities" (p. 381). Those identities, discourses and knowledge extend throughout and beyond the schooling experiences of students, and expanded notions of adolescent literacy link literacy practices with power and the critical literacy movement (Freire, 1986; Shor, 1992). Coburn et al. remind us "when the policy promotes instructional approaches that are ambitious or unfamiliar, teachers are more likely to implement them in superficial ways rather than making fundamental changes in their instructional approach" (2011, p.573). Therefore, in order to facilitate this learning for PSTs (and therefore disciplinary literacies for adolescents), we offer four recommendations for teacher preparation programs:

1. **Provide PSTs with ample opportunities to experience and deconstruct literacies within their teaching discipline.**

Since many PSTs hold limited understanding of the ways reading, writing, speaking and reasoning are used to construct disciplinary knowledge, PSTs need ample opportunities to experience disciplinary literacies and inquiry. Redesigning content area literacy courses to include disciplinary-specific literacy inquiry can deepen a PST's disciplinary literacies and disciplinary literacies pedagogy. Even when multiple disciplines are represented in the same course, PSTs can be guided through a three phase cycle of inquiry into disciplinary literacies. At Clemson, Margaret and her fellow social studies education PSTs enrolled in Phillip's junior year disciplinary literacies course, participated in historical inquiries, doing what they seldom experienced in high school or undergraduate history courses—creating and defending historical arguments. First, PSTs experience disciplinary literacy using reading, writing, and discourse practices to construct arguments about unsettled questions hotly debated by historians. For example, social studies PSTs applied historical reading heuristics (Wineburg, 1991) to their collaborative reading of "Condemning the Errors of Martin Luther" by Pope Leo X, "The Ship of Fools" painting by Jheronimus Bosch, "Against the Robbing and Murdeirng Hordes of Peasants" by Martin Luther, and a PBS secondary source entitled "The Reluctant Revolutionary" to debate whether Martin Luther's reforms lead to a religious revolution in Europe. Then, PSTs used reflective writing prompts to deconstruct their use of historical reading heuristics (sourcing, contextualixing, corroborating, and close reading) while analyzing the complexity of texts, identifying requisite background knowledge, and exposing the limits of their own ability to read, reason, and construct arguments across multiple texts like historians. Finally, in stage three, Phil guided PSTS through a disciplinary-specific pedagogical framework to envision additional scaffolding needs for adolescents and to

design a unit of study extending from the disciplinary inquiry. This process scaffolded PST understanding of how to create historical inquiry questions, build text sets, identify text complexities, and use formative assessment to determine appropriate scaffolds for students. PSTs expanded notions of literacy teaching by routinely experiencing the literacies within their teaching discipline.

2. **Literacy learning needs to occur within a professional learning community in collaboration with practicing teachers-- the preparation of PSTs cannot occur without apprenticeship and engagement with current teachers.**

But, what happens when Margaret encounters the norms of literacy instructional practice by other social studies teachers during her field placement and student teaching? How might the literacy pedagogy of fellow teachers validate or contradict disciplinary literacy teaching? And, in what ways could a re-envisioning of the partnership between teacher education programs and local schools built shared disciplinary literacy teaching frameworks? In *Powerful Teacher Education* (2013), Linda Darling-Hammond catalogues seven preservice preparation programs that are succeeding with innovative practices. One of their common practices includes connecting strongly with the classrooms in which student teachers are placed. It is not enough to expand the academic grounding in literacy-- new teachers need to be supported in placements that blur the boundaries between the development of theoretical knowledge and the application of that knowledge in classrooms. Clemson University, where we work, currently integrates methodology classes with lab settings; however, we need to be more targeted in those placements, particularly if we are asking students to both consider disciplinary literacy practices and to understand literacy practices as complex, situated and fluid. The relationship with mentor teachers is key in ensuring both that students are working with a teacher who shares this ideology and who will help them find spaces to explore literacy, both as practiced in a classroom and in the actual lived experiences of student lives.

To this end, Clemson's faculty-in-residence initiative places a faculty member in a local school for a semester in order to facilitate collaborative inquiry amongst teachers. As Phillip, acting as an instructional coach, meets with social studies teachers to support their disciplinary literacy instruction, Margaret's placement at the same school affords her an opportunity to both participate in the design of responsive disciplinary literacy instruction and build shared beliefs and practices. PSTs need to see practicing teachers enact disciplinary literacy teaching practices, yet due to the relative newness of disciplinary literacy teaching, practicing teachers also need to develop first hand experience teaching for disciplinary literacies. With Phillip guiding the group through the same three stage process of experiencing disciplinary literacies, deconstructing literacy practices, and designing additional scaffolds for adolescent learners, all teachers-both preservice and inservice—can be provided with the professional learning spaces to inquire into the disciplinary literacy needs of students. Therefore, schools of education must harness the potential power of R2S and engender authentic school-university partnerships where practitioners, PSTs, and literacy professors jointly share

in the work of improving adolescent literacy while pursuing questions impacting the literate lives of teachers and adolescents.

3. The push for more engaged literacy learning needs to resist the desire to prescribe literacy activities and programs.

We cannot attempt to teacher-proof a literacy curriculum. Read to Succeed can be interpreted in two ways, either as a collection of ways we want our PSTs to think about and plan disciplinary literacy instruction in a classroom or as a list of prescriptive activities and assignments that limit teacher creativity and responsiveness to the classroom and the individual student. Prescriptive literacy is not something that R2S advocates for, especially in relation to adolescent literacy, but there are prescriptive elements of the bill, including the requirement that struggling readers complete ninety minutes of supplemental instruction per day after they are identified. It is a very real possibility that limited resources will reduce the richness of the legislation to the easiest implementation. For example, teachers are already reporting that there are department and county requirements for grammar instruction and daily oral practice, even though research indicates that grammar is best taught in context within mentor texts (Wilde, 2012). We need to ask ourselves how we integrate what we know about effective literacy engagement and what we know about effective teaching. We use the term engagement deliberately-- particularly in the secondary school setting, student engagement is one of the key aspects to cultivating deep literacy. Regardless of grade, however, motivation is a key aspect of literacy engagement, and prescribing a step-by-step activity guide will do more harm than good. On the contrary, when we pursue disciplinary inquiry with students and focus on the unsettled questions in our discipline, literacy practices become purposeful and essential to adolescent disciplinary learning.

4. Use a yes/and perspective about student competency rather than a deficit perspective of student disciplinary literacy.

It is easy for teachers and students to measure worth with the tests, and to use what they believe the tests reveal to prescribe the potential of students. This is where sociocultural theory helps us understand the range of experiences and ways of engaging with text that fall outside testable competencies. We need to teach PSTs in ways that allow them to see a test score as *one* potentially useful piece of data amongst many other pieces of data. We need to teach PSTs to administer low stakes literacy surveys, to critically observe adolescents out-of-school activities, and to carefully observe what students are doing and saying before they make an assessment of student literacies. Focusing on limitations places a ceiling on student success, but using that information to design instructional responses allows teachers to provide students with the respectful instruction needed to scaffold disciplinary literacies. This is a subtle shift in orientation, but to put it plainly, if we are assessing literacy only to identify student deficits and this assessment of literacy is always formal, we see students as failing from the onset. If we see the assessment of literacy as a way to enhance already existing competencies and tie it to classroom practice, we see students and their interactions with text as places to grow.

Conclusion

These four recommendations offer us a starting place for translating policy into practice; in this case getting that transition right is crucial not only for teachers but also for students. In South Carolina, Read to Succeed represents a new influx of resources as a response to data indicating longstanding reading challenges at the secondary school level. The state has committed money to support the establishment of programs beginning even before schooling to improve performance on literacy indicators. Teachers are an important part of this multi-pronged advocacy that expands far beyond their classrooms into the quality of life of the larger community. However, the way we conceptualize literacy is key to helping students see how different literacies have meaning in their lives. Improving adolescent academic literacy necessitates a broadened understanding of the reading, writing, reasoning and discourses within each discipline as well as the design of disciplinary literacy pedagogies that apprentice students into the practices used to construct knowledge. Unless we resist deficit perspectives of traditional print text, resist the desire to prescribe blanket solutions, and support teachers as they deepen understandings of literacy in their discipline, and create collaborative school communities dedicated to helping each student expand and grow, we run the risk of turning literacy instruction into even more detailed documentation of student failure.

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Moving Beyond a Pedestrian Approach: Rethinking How We Use Social Justice-Themed Children's Literature in Our Classrooms

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Abstract — In this article, we share our experiences and perspectives about the use of social justice-themed children's literature in both early childhood and university classrooms. Specifically, we describe a pedagogical challenge regarding the meaningful use of picture books about poverty and homelessness with young learners. This challenge unearthed issues for both of us to contend with—namely, the need to go beyond a pedestrian approach to read-alouds. A pedestrian approach denotes a lack of depth and engagement with the text and the complex issues that it raises. Thus, there is a need to create authentic learning experiences grounded in children's literature and social action; particularly in regards to the Common Core State Standards. In the implications section, we provide recommendations to early childhood practitioners and teacher educators. In doing so, we contribute to the growing scholarship about how to critically use children's literature as a vehicle to address social justice issues.

> The purpose of education in an unjust society
> is to bring about equality and justice.
> Students must play an active part
> in the learning process.
> Teachers and students are both simultaneously
> learners and producers of knowledge.
> — *Paulo Freire, as cited in Mary Cowhey's*
> *1st Grade Classroom (2006)*

Part of our role as educators is to expose students—both early childhood and university students—to a variety of classroom materials that reflect our increasingly diverse and global society (Nieto, 2013; Silvers & Shorey, 2012; Souto-Manning, 2013). In this collaborative narrative, we share our experiences and perspectives about the use of social-justice themed children's literature, specifically realistic fiction picture books centered on issues of poverty and homelessness. We approach this topic from the perspective of an early childhood classroom teacher

(Jill) and a teacher educator in literacy education (Sandra).

For the purposes of this paper, we describe a pedagogical challenge posed to us during the 2014 Barbara A. Sizemore Urban Education Conference at Duquesne University. This pedagogical challenge pointed to an area of development for both of us to contend with—namely, the need to go beyond what we call *a pedestrian approach* to social justice-themed realistic fiction picture books. A pedestrian approach is one that merely raises awareness about biases and inequities, but does little to interrogate and respond to biases and inequities. In other words, a pedestrian approach denotes a lack of depth and engagement with the text and the complex issues that the text raises.

We ground our conceptual thinking in Nieto's (2013) definition of social justice in education. Nieto defines social justice as having four components, two of which inform our thinking. Teaching within a social justice framework "challenges, confronts, and disrupts misconceptions, untruths, and stereotypes that lead to or exacerbate structural inequality and discrimination" (p. 21). Moreover, "social justice in education is about creating a learning environment that promotes critical thinking and supports agency for social change, in effect providing students with an apprenticeship in their role in a democratic society" (p. 21). This lens complements the use of realistic fiction picture books about poverty and homelessness as tools for critical thinking that spurs action at the individual, community and systemic levels.

In this article, we emphasize the need to go beyond a *pedestrian approach* to social justice-themed children's picture books in our classrooms. In so doing, our work contributes to the literature in two ways. First, we pursue this challenge from the perspective of a classroom teacher and a literacy teacher educator. Second, we provide the reader with a discussion of the relevant literature and

offer suggestions for both early childhood educators and their teacher educators. Addressing this issue from both perspectives, and providing the reader with recommendations for practice, allows us to contend with theory and practice in dynamic ways.

The Pedagogical Challenge: Going Beyond the Read-Aloud

As participants of the Barbara A. Sizemore Urban Education Conference, we collaborated on a poster presentation that highlighted children's literature where the main characters negotiated issues of poverty or homelessness. Our presentation focused on three realistic fiction picture books: *Gettin' through Thursday* by Melrose Cooper, *Those Shoes* by Maribeth Boelts, and *The Lunch Thief* by Anne Bromley. *Gettin' through Thursday* by Melrose Cooper is about a young boy named André whose family finds creative ways to make ends meet until payday (Friday). *Those Shoes* by Maribeth Boelts features a little boy named Jeremy who desperately wants a pair of sneakers that almost all of his classmates have; he saves his money and buys a pair at the second-hand store but they are too small. Jeremy decides to anonymously give the too small shoes to a classmate who needs them more. *The Lunch Thief* by Anne Bromley is the story of a boy named Rafael who has his lunch stolen repeatedly. He discovers that the new boy, Kevin, has been stealing his lunch. Kevin recently lost his home in a wildfire and is living out of a hotel. By the end of the story, Rafael decides to share his plentiful lunch with Kevin.

Additionally, our presentation included a handout aimed at early childhood classroom practitioners. The handout offered teaching strategies and ideas for using multicultural children's literature in urban schools. We supported the strategies and ideas highlighted in the handout with scholarship addressing the use of social justice-themed children's literature to meet standards-based goals in early childhood classrooms (i.e. Common Core, see Enriquez & Shulman-Kumin, 2014).

A Pedagogical Challenge for Both Classroom Teachers and University Professors

The discussion following our poster presentation at the conference led us to further reflect and interrogate our own practices. We agree that "teachers [and teacher educators] can use read-alouds to develop children's background knowledge, stimulate their interest in high-quality literature, increase their comprehension skills, and foster critical thinking" (Meller, Richardson, & Amos Hatch, 2015, p. 102). For instance, a classroom teacher can facilitate discussion with young learners about a character who couldn't afford to buy "those shoes," a character whose family had a hard time "gettin' through Thursdays," or a character who stole someone else's lunch because he was hungry and homeless. However, we argue that doing so—as merely an academic exercise in the classroom—does little to critically engage students (at both levels) with the issues at hand. Thus, there is a need to go beyond the read-aloud; a need to "do more" as part of socially-just practices in education (Wade, 2000; Dever, Sorenson, & Broderick, 2005).

The pedagogical challenge of going beyond a read-aloud—that is, digging deeper and doing more—is important for two main reasons. First, it is critical that both early childhood and university students gain a more nuanced understanding of poverty and homelessness as a relevant and significant local and global issue. As noted by Kelley and Darragh (2011), poverty and homelessness are often misrepresented in realistic fiction children's picture books:

> …These often inaccurate and unrealistic portrayals may give children false perceptions of the world…Children reading these books may gain the misunderstanding that middle- and upper-class families are the norm, and that all people who are poor do not know how to manage their money…Moreover, many picture books that have such characters who are poor fail to identify the various causes of poverty, such as job loss and low minimum wage. (p. 266)

Second, it is crucial that we, as teachers and teacher educators, do not "reinforce the notion that people can pull themselves up by their bootstraps, and that poverty is an individual problem that can be solved with some effort by individuals, rather than poverty is a national, structural, and systemic problem" (Kelley & Darragh, 2011, p. 277). For these two reasons, it is important to extend realistic fiction picture books about poverty and homelessness in a critical and strategic manner that is not diluted or oblivious to deeper nuances around the topic. So then, what else, besides a read-aloud and a class discussion, can a teacher and a teacher educator do with social justice-themed picture books?

Pedagogical Challenge: Going Beyond a Pedestrian Approach to Picture Books

A longstanding and growing body of critical literacy scholarship provides insights for how to create authentic learning experiences where children are able to walk in the shoes of the characters from the book. In order to do more and allow students to walk in the shoes of the characters that they encounter in picture books, critical literacy scholars remind us that it is important to model and promote the interrogation about why these social justice issues occur in both early childhood and teacher education classrooms. Such interrogation examines how characters and issues are depicted in realistic fiction picture books. That is, students can ask questions to challenge stereotypical depictions, and move toward critical civic engagement. In the following passage, Short (2011) discusses how to approach issues such as poverty, via children's literature in our classrooms:

> Instead of a "give the helpless a handout" approach, civic engagement involves challenging stereotypes of those who live in poverty, developing an understanding of those who live in poverty, developing an understanding of the complex causes of poverty, introducing activists who work at these causes, and removing the stigma of poverty. (p. 57)

In both elementary and university classrooms, it is important

to promote a deeper understanding of why poverty and homelessness occur, and allow students to explore "what if" possibilities that challenge the status quo. However, to do so we need to facilitate authentic learning experiences that provide students with opportunities to take action in relation to the issue.

Doing More: Creating Authentic Learning Experiences Grounded in Children's Literature

Critical literacy scholars discuss many ways to create authentic experiences that move toward action in relation to picture book read-alouds that explicitly address social justice issues such as poverty and homelessness. Authenticity is an important element so that students are able to reflect on what they have learned and how their views or opinions may have changed after their experience. For instance, Short (2011) highlights one way to engage children in authentic action in response to social justice themed children's literature: "Authentic action is based in children having responsibility throughout the process, including witnessing the outcome of their action when possible. A continuous cycle of action and reflection spirals throughout the process" (p. 54). A poignant example in Short's article is when the students decided to clean up their school's playground. After the initial clean up the students investigated where the trash came from and were shocked to learn it was from them. The students then took action to move the trashcan to a different part of the playground to help alleviate the trash problem and put the receptacle in a more usable location.

In another insightful discussion of children's literature addressing low socioeconomic status or "tight times," Kathy Short (2011) compared three books –Monica Gunning's (2004) *A Shelter in Our Car*, *Those Shoes* by Maribeth Boelts (2007), and Vera B. Williams' (1982) *A Chair for My Mother*. Short describes how a class discussed all the books in terms of wants and needs and created a continuum of where the books fit in those terms. This continuum "provided a way for children to access difficult issues in their community and provided a bridge for connecting to these issues on a global level" (p. 53). Utilizing the books in this way allowed the students to make connections to their own lives when maybe times were tough or with some experience they might have had. This also helped the students to understand that there are varying and changing levels of poverty. The children in this particular classroom were negotiating a more nuanced understanding of socioeconomic status; one that was not static and simple, but rather fluid and complex (i.e. shaped by larger social structures).

Chafel, Seely Flint, Hammel, and Harpole Pomeroy (2007) also share stories of both teachers and researchers who utilized critical literacy in their elementary classrooms to engage children in topics that included poverty and other social issues. Harpole Pomeroy describes her experience as a teacher in an emergency shelter school and some of the discussions she had with her students about their personal experiences living in poverty. By building on students' lived experiences through literature, Harpole Pomeroy goes beyond a pedestrian approach to social justice-themed children's literature (O'Neil, 2010). In

other words, to move beyond talk about global issues into authentic and meaningful action for social change…children and adolescents need perspective, not protection as they consider who they are in the process of becoming and how they can make a difference" (Short, Giorgi & Lowery, 2013, p. 35).

Doing More In Relation to the Common Core State Standards

Given the emphasis on close reading and deep understanding in the Common Core State Standards, scholars remind us of the "bigger task" at hand. Cunningham and Enriquez (2013) assert:

> The CCSS ask teachers to think deeply about what it means to be truly literate in the twenty-first century: that we comprehend *as well as* critique, value citing evidence from the text, and come to understand other perspectives and cultures (p.28).

Indeed teachers, and their educators, need to be aware of how effectively children's literature can be incorporated into the classroom, not only as an exercise in close reading, but also as an exercise in civic engagement (Wolk, 2013). There is so much to be gained from use of this type of literature including involving students in social action projects that they help to create themselves.

For example, in a discussion of critical literacy practices in a first-grade classroom, Mary Cowhey (2006) examines how to reimagine the traditional school food drive:

> Food drives can be a developmentally appropriate activity for young children when used as a vehicle to do the following: Challenge stereotypes; Teach understanding of the complexity of the causes of poverty; Introduce local activists and organizers as role models addressing needs and working for long-term solutions; Empower children to take responsibility in their community; Remove the stigma of poverty. (p. 29)

A traditional food drive is one in which no stereotypes of poverty are either addressed or challenged, no critical questions are asked of the students as to why poverty and homelessness occur, no activists are introduced, and students are not empowered to take the lead in creating social action in the community. This traditional approach does not encourage students to dig deeper into the root causes of the issue, it only allows the students to provide a superficial solution to a more widespread issue.

Cowhey moves beyond a pedestrian approach to issues of hunger in relation to poverty and homelessness; she is employing thoughtful critical literacy practices that aid in the facilitation of social change. Her re-imagination of the traditional food drive promotes multiple levels of understanding (i.e. individual, community, systemic) and allows students to achieve a greater level of understanding than a pedestrian approach would. Indeed, there is a growing body of critical literacy scholarship about how to create authentic learning experiences that incorporate

social action around social justice issues as evidenced by Cowhey in the above discussion of her routine classroom practices.

Table 1. Taking Authentic Action: Going Beyond a Pedestrian Approach

- Framing issue along a dynamic continuum
- Investigating root causes and circumstances
- Inviting activists or community members into the school to discuss current needs and action taking place around identified needs
- Becoming familiar with community sites by interviewing individuals connected with community spaces (i.e. food banks, shelters, etc.)
- Co-constructing (with community members) inquiry-based action projects with the aim of challenging stereotypes and removing stigma
- Anticipating possible consequences of action
- Engaging in reflection on what occurs and accepting responsibility for the consequences (or lack thereof)
- Consider strategies for sustaining or revising action taken

Adapted from Cowhey (2006); Short (2011); Silvers & Shorey (2012);Winograd (2015)

Implications for Practice: Thinking Toward the Future

It is important for students to understand more than the area they live in; that there is a much bigger world awaiting them that they should take the time to understand. Living in the technologically immersed society that we live in today means that as teachers we need to prepare our students to be global citizens able to function and thrive in their future lives. The pedagogical challenge we described provoked both of us to revisit critical literacy and children's literature scholarship as a way of preparing ourselves to move beyond read-alouds with picture books centered around social justice issues. In addition to revisiting children's literature scholarship in this focus area, the pedagogical challenge provoked both of us to consider implications for our future practices. In the next section, we provide recommendations for practice in early childhood classrooms and university classrooms.

Jill: An Early Childhood Classroom Teacher's Perspective

After reflecting on the pedagogical challenge and revisiting the scholarship, I (Jill) uncovered several strategies for moving beyond a pedestrian approach to picture book read-alouds, specifically those highlighting social justice centered issues. Here I offer some ideas for teachers to consider implementing, using children's literature in early childhood classrooms.

Given the goal of engaging students in taking meaningful action around social justice issues, I recommend the following strategies. First, begin by reading several similarly themed social justice picture books aloud to the students without showing the illustrations. The intention behind this is to allow the students to construct their own illustrations of the story, share their own personal experiences, and provide you with a window into their thinking on the social justice issue being highlighted in the literature (Botelho & Rudman, 2009). After having read the books, ask students to create their own illustrations for each book. Following a "picture walk" sharing session of student-created picture book illustrations, the class can discuss each book using a critical lens and asking a

series of important questions. In Table 2, Silvers and Shorey (2012) provide excellent questions to consider (p.15).

Table 2. Critical questions

- Whose voices are heard? Whose voices are absent?
- What does the author/illustrator want the reader to think/understand?
- What is an alternative to the author/illustrator's message?
- How will a critical reading of this text help me change my views or actions in relation to other people?

How does this text confirm or challenge a personal experience you have had related to this issue? As Winogard (2015) reminds us "when the teacher asks just the right questions to get students to consider multiple perspectives, the bias of the author, and the larger political context of the events, this moves the discussion and analysis into the realm of the 'critical'. The quality of the teacher's questions are crucial when doing critical literacy, as it is in all teaching" (p. 109). After a "deep" discussion of the texts, I recommend creating a continuum of where the texts fall in relation to one another--similar to Short's (2011) activity around poverty with children in a primary level classroom. Depending on the reading level of the students, a classroom teacher can add other texts as well to deepen the discussion and broaden the continuum (see Short et al, 2013). You can also invite the students to create either a play or poem depicting the social justice issue in an effort to access multiple modalities in the interpretive process. For more in-depth suggestions for developing a critical literacy curriculum with young children see Winograd, (2015).

To enrich the discussion and provide the students with an understanding as to why social justice issues occur, it is important to provide students with nonfiction books or other sources to aid their understanding. Through discussion, creation, and reflection of multiple texts and resources (print, digital, artistic) facilitated by teachers, early childhood students can brainstorm actions that could be taken by the class to create some level of local change. Such activities would help students to understand the root causes and circumstances behind social justice issues and give them opportunities to create meaningful change—in their own way—through authentic learning experiences that reflect multiliteracies (Silvers & Shorey, 2012) and literacy as a social practice (Vazquez, Egaway, Harste, & Thompson, 2004).

Sandra: A Literacy Teacher Educator's Perspective

The pedagogical challenge of going beyond a pedestrian approach provoked me (Sandra), as a teacher educator, to make changes in how I approach courses addressing content and pedagogy in literacy development. I asked myself: How do I model and facilitate authentic university-level classroom activities that go beyond a pedestrian approach to social justice-themed children's literature? How do I integrate theory and practice about social justice children's literature more strategically and explicitly? For me, the answers to these questions are still in process. However, in what follows I share four recommendations for literacy teacher educators.

First, I recommend using course texts centered on critical literacy with young learners. For instance, I am now using Silvers and Shorey's (2002) *"Many Texts, Many Voices: Teaching Literacy and Social Justice to Young Learners in the Digital Age"* as a core text in my university classroom. This text has been instrumental for my students' expanded view of literacy learning. I particularly appreciate how Silvers and Shorey expand Luke and Freebody's (1999) *Four Resources Model* in relation to an expanded critical curriculum (p.18). Silvers and Shorey also describe and explain, in a highly readable and clear manner, how classroom teachers can facilitate "learning to live responsibly in a critical community of practice" (p. 9). Overall, this text is a wonderful resource for what critical literacy may look like and sounds like in a first grade standards-based classroom.

Second, I recommend including pertinent journal articles to the course readings. For example, consider Stribling's (2014)'s insightful research about creating a critical literacy milieu in a kindergarten classroom. Her scholarship is helpful for discussing ways the early childhood teachers can "support students to respectfully consider multiple viewpoints, to engage in thoughtful problem solving, and to openly discuss difficult issues revolving around difference" (p. 45). Other important articles to consider are (1) Enriquez and Shulman-Kumin's (2014) article on using children's nonfiction for social justice and common core goals; (2) Hughes and Hunt-Barron's (2011) article on fostering stronger classroom communities through literature focused on disabilities; and (3) Fox and Caloia's (2011) article about the representation of the father figure in children's picture books.

Third, I recommend incorporating digital *social justice book talks*, as explained by Hughes and Robertson (2011). These scholars discuss pre-service teachers' shifting views of critical literacy and the place of critical literacy in the language arts classroom. They also assess the usefulness of digital book talks for engaging pre-service teachers with social justice issues.

Fourth, I recommend engaging students in an inquiry-based project about extending a read-aloud as part of the course requirements. This can be done as a small-scale action research project where students select a book and conduct a critical read-aloud (see Meller et al, 2015). I also suggest assigning a reflective paper where students explore what it means to go beyond a pedestrian approach to picture books centered on social justice issues.

Concluding Thoughts

As we conclude, we reiterate that a pedagogical challenge served as a catalyst for rethinking how to "do more" and "dig deeper" in relation to critical literacy, social justice, and children's literature. This collaborative narrative represents just one manifestation of the inquiry and reflection process we engaged in after the conference. Both early childhood and university students can be given the opportunity to understand the world around them through the diverse body of children's literature that is available; to understand that there is more to the world than just the small corner that they

themselves inhabit. In closing, we welcome feedback from readers and invite you to share their own experiences and perspectives around the use of social justice-themed children's literature in early childhood and university classrooms.

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