



JOURNAL OF LITERACY INNOVATION

RETHINKING LITERACY INSTRUCTION



VOLUME ONE, ISSUE ONE

SPRING 2016

SEAN RUDAY, EDITOR

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EDITOR'S INTRODUCTION
SEAN RUDAY, *JLI* FOUNDER AND EDITOR
LONGWOOD UNIVERSITY

In his inspirational song "The Show Goes On," rapper Lupe Fiasco praises teachers who send the message to their students "that the world is theirs." I strongly believe that, if Mr. Fiasco takes a look at this inaugural issue of the *Journal of Literacy Innovation*, he will find a similar message of ambition and student empowerment.

These themes are reflected in the origin of this journal itself, which grew from my interest in providing teachers and teacher-educators with a resource that describes innovative, practical ideas that add to the current knowledge base of literacy instruction and have clear applicability to the literacy classroom. As a former classroom teacher and current teacher educator, I have long appreciated manuscripts with strong theoretical foundations that also provide innovative, classroom-ready ideas. I am proud to say that the works in this inaugural issue contain both well-developed rationales and user-friendly ideas, while also championing Lupe Fiasco's call for educational practices that engender change and opportunity.

The first piece you'll first encounter, Cynthia Dawn Martelli's "Choice Readings in Higher Education: Encouraging Recreational and Professional Reading to Effect Reading Habits and Attitudes of Preservice Teachers" discusses preservice reading teachers who do not identify as readers. Martelli's findings, informed by multiple data sources, illustrate the positive impact of choice readings of professional and recreational texts on the reading habits and attitudes of preservice reading teachers. I am already incorporating Martelli's ideas with the future teachers I teach!

The next manuscript in this issue, Marsha Buerger's "Examining Science News Writing through the Lens of Writer's Craft, Writer's Meaning, and Writer's Engagement," provides an outstanding model of how to meaningfully and authentically incorporate writing in the content areas. Buerger's piece merges research on content-area literacy with her insights as a reflective practitioner and her students' thoughts about their experiences engaging with the learning activities she constructed. Buerger explains, "In this article, I want to share with you my journey into understanding the role of writing in my students' lives and in my science classroom." I believe the description that Buerger provides of this journey is a must-read for all interested in content-area literacy.

Next, you'll come to Spencer Salas' remarkable piece, "Making Spaces for the Dashes in Between: What Linda Di Palena Can Teach us about 'Becoming' a Highly Qualified Teacher." This article paints a nuanced and insightful picture of what an effective teacher looks like, illustrating how this reality compares to data-focused analysis of teachers. Salas explains the value of examining a specific teacher's experiences in the age of value judgments based on data and analytics: "Linda Di Palena's story, I argue, matters especially in a day and time when the

value of teachers and teaching has been increasingly reduced to points on a data spread—and the ‘value’ such points are deemed to (not) represent.”

JLI’s inaugural issue concludes with Christina Kennison’s excellent article, “Students’ Writing Can Be Better: Encouragement and Time to Pursue Self Leads to Engagement and Better Writing, Resulting in Possible Increased Writing Levels Nationally.” This piece skillfully combines “big-picture” data insights about American students’ writing development (as well as the long-term implications of their writing struggles) with specific activities teachers can use to help students enhance their writing skills in authentic ways.

I hope that you find these authors’ ideas as exciting and empowering as I do and that you consider joining them by submitting your work for consideration for publication in future issues of the *Journal of Literacy Innovation*. I am thrilled by the enthusiasm with which this journal has been met and I look forward to *JLI*’s continued success. For more information on the journal, please visit www.journalofliteracyinnovation.weebly.com.

See you in October 2016 for *JLI*’s second issue!

Sean

Sean Ruday, Ph.D.

Editor, *Journal of Literacy Innovation*

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CHOICE READINGS IN HIGHER EDUCATION: ENCOURAGING RECREATIONAL
AND PROFESSIONAL READING TO EFFECT READING HABITS AND ATTITUDES
OF PRESERVICE TEACHERS
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Abstract

Reading experts agree that, to teach reading effectively, teachers must be readers themselves. This study examines the habits and attitudes related to reading in preservice teachers in the author's reading education courses. The author was alarmed that her preservice teachers, future reading teachers, did not show a love for reading or identify themselves as readers. To address the issues, the author incorporated choice readings of professional and recreation text into her reading education courses at both graduate and undergraduate levels. Through self-selected texts, preservice teachers responded to their text in reading response journals and participated in book club discussions with their peers. Data from surveys, reading response journals, reflection assignments, and face-to-face interviews stipulates choice in professional and recreational readings has potential to be an effective instructional technique for promoting positive reading habits and attitudes at both the graduate and undergraduate levels.

**Choice Readings in Higher Education: Encouraging Recreational and Professional Reading to
Effect Reading Habits and Attitudes of Preservice Teachers**

It was my first semester in my first year as an assistant professor. I entered my reading method classes on the first day with high expectations of discussions over popular children's books and young adult novels they have read, and I desired to know their favorite professional texts and authors. My mind still revolved around my fourteen years of teaching elementary and secondary language arts where my students devoured books during reading workshop. I reminisced about the good old days where my students and I introduced new books and old favorites, discussed genres and authors, authors' crafts, and talked about reading rituals and future reading plans. My students chose their books they were interested in reading from our ever-growing and overflowing classroom library and learned how to identify the narrative voice or tone of a novel and why it matters, how there are different purposes for reading, how to tell if a book is too hard, too easy, or just right, and why the only way to become a strong, fluent reader is to read often and a lot. My students enjoyed reading and were developing into life-long readers. Reading was cool. Therefore, as I started my first year of teaching higher education and inquired what my undergraduate and graduate students in my reading methods courses were reading, I was quite alarmed at their responses. Voices filled my ears with responses like, "Read? I am too busy for that". "Reading is boring". "I don't even read my

course texts". I was not ready to accept the given statements and asked if anyone knew who won the first Global Teacher Prize and if they read her book, *In the Middle*? Less than five students raised their hands. I decided to turn the attention to young adult literature and asked who read *I'll Give You The Sun*, *The Fault in Our Stars*, *Brown Girl Dreaming* and received answers such as, "I saw the movie" or "I never heard of that book". Dobler (2009) stressed the idea that teachers need to have a strong knowledge of reading in order to teach reading effectively. "Many preservice teachers are not avid readers themselves, and this lack of engagement may be passed on to their students" (Applegate & Applegate, 2004, p. 554). My concerned mind pondered over two essential questions: How can I motivate my students to see the value in professional and recreational reading? And how can a teacher instill a love of reading in their own students and help develop life-long readers when they themselves do not see themselves as readers?

Teachers as Models

Teachers must first be readers to teach reading effectively (Mueller, 1973; Scott, 1996; Searls, 1985). Daisey and Shroyer (1993) stated that their preservice teachers "never learned to read books...They just had to skim until they found the key word and then get it into the worksheet" (p. 627). A startling amount of preservice teachers, studied by Frager (1986) shared that they did not enjoy reading, did not see themselves as good readers, and did not read a book within the last six weeks. This implies aliteracy among some preservice teachers (Draper, 1997). Aliteracy differs from illiteracy in that aliterates are competent readers and comprehend text but lack the engagement or intrinsic motivation to read (Applegate & Applegate, 2004; Asselin, 2004; Scott, 1996). Studies indicate that literacy rates among Americans have increased over the past decade; however, aliteracy is a growing problem in our nation including education professionals and teachers of literacy (Beers, 1996; Nathanson *et al.*, 2008; Voorhees *et al.*, 2007).

Recent studies into the reading habits and attitudes among preservice teachers obtained results similar to findings of Mour (1997) and Mangieri and Corby (1981), where undergraduate and graduate education majors consistently ranked reading low among choices for leisure activities. Over 400 graduate education majors employed in educational careers were interviewed in Mour's (1997) study. Over half of the participants stated they did no professional reading and read fewer than two books per year. Mangieri and Corby's (1981) survey was administered to 571 elementary teachers to determine their knowledge of current children's literature and activities that they could use to promote students' recreational reading. 399 (70%) teachers could not name a children's book and 508 (89%) teachers could not name three or more activities to promote recreational reading. Powell-Brown's (2003) results were similar to the findings of Nathanson *et al.*, (2008), where 747 graduate education majors were surveyed. Results were distressing; 127 (85%) participants expressed little or no pleasure in reading, 87 (17%) participants disclosed they had read two or more books during the summer and 187 (48%) reported they had read one book in the summer. Children often learn by

imitating the behavior of models. It is crucial that teachers model good reading behaviors and positive attitudes about reading (Briggs, 1987; Gray & Troy, 1986).

Attitude associates with behavior and can have a considerable impact on individuals' reading activities and teachers recognize that their values and behaviors can conduct a powerful influence on students' habits and attitudes (Ruddell, 1995). To ensure teachers embrace reading, they need support in developing positive attitudes toward reading. A few studies have reported success at enhancing the reading attitudes of preservice teachers by implementing specific activities in reading education courses. Dillingofski and Dulin (1980) had 48 undergraduate secondary education majors discuss books they read during the summer. This simple activity increased the number of books that they read and resulted in some positive growth in reading attitude as well. Draper *et al.* (2000) ensures professors that there are many opportunities in reading courses to model their love of reading. Suggestions involve sharing personal readers, allowing preservice teachers choice of books within the context of courses, and modeling the use of literature response groups through self-selecting books, literature response meetings, and celebrations of books read. Powell-Brown (2003) suggested teachers who are passionate for reading act as "role models and literacy sparks for students" (p. 288).

However, teachers who are passionate and value reading are not the only factor in motivating students to read; there exists a broad range of studies which support the idea that the opportunity to self-select one's reading material is directly related to motivation to read (Malloy *et al.*, 2010). Worthy and McKool (1996) established that teachers who enable students to make their own choices about their reading material will increase the possibility that their students will engage more in reading. In addition, Guthrie and Wigfield (2000) advocated that providing student choice in reading material increases effort and commitment to reading. Allington (2001) disclosed "Students of all ages read more, understand more and are more likely to continue reading when they have the opportunity to choose what they read" (p.11). Choice offers higher opportunity that a reader will select a text they can read well and matches their reading ability; Krashen (2004) presented compelling evidence that choice improved reading achievement.

Current research of motivation recognizes that learning is facilitated by social interactions with others (McCombs, 1989; Oldfather, 1993). Reading is not just a physical, solitary act. Reading is what the reader brings to the book and what the reader takes away. There is a natural desire to share what was read and discuss, because reading is social. Reading is a catapult for conversation. Engaged readers need opportunities for social interaction to share perspectives and ideas and to make connections. Guthrie (2010) stated "Teachers can motivate students in the classroom by giving them chances to be social in their reading...by helping kids collaborate...[and] make connections in their reading" (p. 2). Opportunities to socially interact with books include writing in journals, participating in book clubs or small groups, and simply talking about books. Both the Guthrie *et al.* study and the 1992 National Assessment of

Educational Progress results indicate that social interactions with others about books foster wide, frequent reading.

There is a need to be concerned about the pervasiveness of aliteracy among our preservice teachers. Research supports that teachers who read widely use a variety of best practice strategies for literacy instruction (McKool & Gespass, 2009; Dalhouse et al., 2011). My concern led to initiate this study to identify existence of aliteracy among my students and alleviate its impact on their lives, their literacy instruction, and the lives of their future students.

Materials and Methodology

Qualitative methods were utilized for this study and designed within the context of a collective case study (Stake, 2000). Structure of courses, assignments, book club experiences, and other relevant information was examined using this framework. Tenets of reflective ethnographies (Ellis & Bochner, 2000) were utilized to provide an underlining systematic method for analyzing the data with comparative methods consisting of reiterative readings of participants' authentic texts and informant feedback. All courses were under similar certification requirements but were distinguished according to the level (undergraduate, graduate) and course content (struggling readers, literature and the learner, language arts methods). Student reflective assignments, comments on discussion forums, book club discussions, class sessions, and reading response journals were attentively examined over 4 consecutive semesters. This case study followed Stake's (2000) suggestions for credibility; the case was used to understand a research issue, multiple data sources were collected and triangulated, researcher role and perspective was apparent, a clear identification of the case was presented, and themes are identified and discussed. The overarching research question was: How does choice reading in higher education affect reading habits and attitudes of preservice teachers?

Participants

Participants were a sample of preservice undergraduate and graduate students enrolled in reading education courses attending a state university in the United States. There were 64 undergraduate education majors taking 3 reading education courses required in their teacher preparation program of study. Undergraduate students consisted of Early Childhood, Special Education, Elementary and Secondary education majors. Graduate students totaled 16 in 1 literacy course. Each class was diverse in terms of age and gender. The overarching research question was: How does choice reading in higher education affect reading habits and attitudes of preservice teachers?

Data

Participants in this study completed electronic survey responses to open-ended questions about reading habits, reading attitudes, reading strategies, and literacy role models. Reading response journals reflected all undergraduate and graduate students' reactions to the readings. They also participated in written assignments reflecting upon their choice readings and

evaluating its value to their teaching and professional growth. Other data sources were journal entries from all participants, researcher's notes from book club discussions, and 8 individual audiotaped interviews with undergraduate students and 2 with graduate students.

Researcher Narrative: Undergraduate and Graduate Reading Courses

Reading was and will always be a part of my life, from when I was young child discovering the Trixie Belden series all the way through fourteen years of teaching language arts classes, reading and booktalking the latest children's books and young adult novels to my elementary and middle school students. And now I find myself in my first year as an assistant professor of reading ferociously reading and booktalking beloved children's books and young adult novels to university students, as well as pouring over professional articles and texts to share and analyze in my courses. Recreational reading with children's books and young adult novels keeps me abreast of what children and teens are reading and where their interests lie. I often converse with other teachers, librarians, and students over beloved titles, what book will soon be a movie, and new titles coming out from our favorite authors. Throughout my fourteen years of teaching, I had a wonderful principal who encouraged us to read professional texts related to our content area as a part of our professional development, and I carry this habit into my university teaching where I share and discuss a variety of perspectives in articles and texts with my colleagues and students. I want my preservice teachers who will be future reading teachers to love reading and value reading for both a recreational and informational purpose. I want them to develop reading habits where they will share and converse with their own colleagues and students and build a community of readers. But most of all, I want my students to be passionate readers and to pass on their love of reading to their own students.

Through many class discussions about reading histories with my energetic preservice teachers enthusiastic over their future profession of teaching, I observed that many have a disconnect between their own reading habits and their unwavering belief that they can be effective teachers of reading even though they do not see themselves as readers. I wondered how they could share a love of reading with their students if they do not practice habits of daily reading. And without viewing reading as a worthwhile and enriching endeavor, I puzzled over how they would motivate children to think of themselves as readers. I knew I had to kick start my students into reading and integrate joyful and purposeful reading through a variety of texts into my courses. During my fourteen years of public school teaching, my students always had the opportunity to self-select their own reading materials from the multiple genres sitting upon numerous bookshelves that was my classroom library. I pondered the idea of giving a similar opportunity to my preservice teachers. Providing choice in professional readings related to our course content and recreational readings over choice children's books and young adult novels could promote engagement and relevant reading for my students to support their autonomy in reading. My goal was to keep my students reading and I viewed choice as a foundation for success.

On the first day of classes in reading education courses, I do not introduce myself or go over the syllabi in the beginning of the class. Instead, I booktalk. I booktalk children's books and young adult novels that children and teens are currently reading. I want my students to know I am passionate about reading and I want to set the tone of my expectations of reading early in my classes. My students take notes over popular authors, titles, selected parts I read from the text, and booktrailers often made by students that they view. Book clubs are common in my classes where students choose a book to read with others through the semester. Each class devotes time for book clubs to meet. Small groups are formed to share reading response journals and discuss the reading selection for that week, and students are soon engaged as rich discussions center on insights and connections in their readings celebrating new perspectives and changes of thinking. New groups are formed for professional readings over selected texts that I review, allowing students to choose a text most relevant and interesting to them. Students also divide the professional texts in selected readings for each week and keep reading response journals. Response journals include two quotes to analyze for each reading selection: one quote represents an "a-ha!" moment or where the students will affirm it and the second quote is either confusing to the student or they wish to challenge it (Brookfield, 2006). I often provide time throughout the semester for groups to share their reading response journals with other groups, thus informally booktalking and revealing a variety of ideas, perspectives, and thinking. Near the end of classes, students create their own book trailers for their choice novels to share with the class, and they are asked to reflect upon their choice readings and evaluate its value to their teaching and professional growth.

Reflecting on my past students' reading response journals and book club discussions, I have uncovered students' growth in reading perceptions and habits. Some students read more than their selected readings in their text, sometimes finishing the whole book in a week's time. Many started a "wish list" of books to purchase for future reading. Most would tie their choice professional readings to what we were covering in class, adding to the depth of learning and understanding. Most were able to apply the ideas and theories from their professional texts to their professional lives. In addition, students enjoyed the exposure to current authors of children's books and young adult novels. All students found how sharing their love of reading formed a community of readers. My students grew into readers, but most importantly they now identify themselves as readers. Most inspiring were insights by Katie on her choice novels, "reading what teens are currently reading gives me a glimpse into their world and their thinking" and by Geoffrey on his choice professional readings, "analyzing different perspectives from a variety of texts helps form my own professional beliefs and voice."

Results

Common themes were revealed upon reviewing feedback reflections from the end of three semesters. The five themes were choice of reading, motivational reading, making connections, shared thinking, and classroom application. Choosing novels and professional texts was a continual theme and both undergraduates and graduates agreed that they felt more invested

and accountable to read their chosen texts due to the freedom to choose based on their interests. One graduate student mid-way through her semester opted to switch professional texts as she listened in on another group's sharing and found their text to be more relevant and meaningful to her than what she was currently reading. She caught up on the reading of her new chosen text and joined the discussion group for the rest of the semester confident with her new choice.

Choice is widely acknowledged as an approach for enhancing motivation. Choice increases learning and boosts interest (Cordova & Lepper, 1996; Iyengar & Lepper, 1999). Allowing students to make choices about their reading increases engagement and a commitment to reading (Worthy & McKool, 1996; Guthrie & Wigfield, 2000). In addition to the book they were reading, some students found themselves buying children's books and young adult novels that others were reading for their book clubs or that they shared in class, thus creating the beginnings of a classroom library. Undergraduate and graduate students were motivated to explore different perspectives and new ideas when exposed to a variety of texts to help feel empowered in their own opinions, beliefs, and professional voices.

Students gain a deeper understanding of a text when they make authentic connections. Both undergraduate and graduate students monitored their own thinking and made connections between texts and their own experiences engaging in the reading experience. Most graduates were able to connect readings to their teaching experiences while undergraduates connected readings to their own educational experience and college courses. Jim, a graduate working on his master's degree while teaching eighth grade, discovered his own experience with connecting two professional texts he was reading, the required text and his chosen text. He appreciated comparing theories acquired within multiple texts on similar concepts and also evaluating authors' contrasting claims on the same topic. This deepened his learning and understanding of the texts, broadening his own thinking. Jim concluded that his own eighth grade students needed to experience multiple texts to make their own connections for learning.

Shared thinking, or "meeting of the minds", occurs when two or more individuals work together to clarify a concept, evaluate an activity, and/or extend a text through sharing perspectives. Through shared thinking, reading communities formed where students ardently discussed their readings, shared opinions and experiences, and recommended new texts to read. Listening to peers' responses helped clarify any confusing points and enabled students to be exposed to a variety of diversity in ideas and perspectives challenging beliefs and opinions and, in some instances, changing thinking. Students were fully engaged in conversation over their readings to find out more.

My classes had deep discussions over how to apply the choice reading experience to their classroom teaching. Both graduate and undergraduate students understood that reading is much more than just reading. They discovered that in order to have an authentic experience, reading is having the freedom of choice, making connections, and responding to reading

through writing. But most importantly, they realized that reading is a social activity. Graduate students incorporated choice in reading in their classrooms through independent reading, literacy circles, and through providing additional texts to support learning and extend thinking. Undergraduate students integrated choice reading during the field experience component of their reading courses by arranging students in small groups to read, think, write, and converse about a concept they were learning using multiple texts. Both graduates and undergraduates stressed the importance of availability of a variety of genres for student access and placed importance on having a classroom library.

Conclusion/Discussion

Studies by the National Endowment for the Arts (2007) revealed that even though there is a decline in reading among American adults and teenagers, “Most alarming, both reading ability and the habit of regular reading have greatly declined among college graduates,” and found that 65% of college freshmen read for pleasure for less than an hour per week or not at all and only one in three college seniors do not read at all for pleasure. Even attending college does not guarantee active reading habits (The National Endowment for the Arts, 2004). As a first year assistant professor of reading in a teacher preparation institution, I was astonished that my students, future reading teachers, did not show a love for reading or identify themselves as readers. I knew I had to change my reading methods courses to expose my students to texts that offered diverse perspectives related to the course text and a variety of genres in children’s and young adult literature that children and teens were currently reading. Data from surveys, reading response journals, reflection assignments, and face-to-face interviews stipulates choice in professional and recreational readings has potential to be an effective instructional technique for promoting positive reading habits and attitudes at both the graduate and undergraduate levels.

Literature on evidenced based literacy methods supports the five themes to emerge from the data: choice of reading, motivational reading, making connections, shared thinking, and classroom application. Analysis of survey responses indicated choice in professional and recreational readings sparked a desire in students to continue reading beyond the course. Data from book club discussions, reflections, and reading response journals revealed that students engaged in critical thinking about course concepts and expressed an appreciation for diverse viewpoints in the variety of readings read throughout the semester. Students advocated that engagement in reading occurred by deciding what to read created stamina and commitment to the volume of reading.

“Faculty in teacher preparation programs should not assume that all of their students, even the most academically prepared, are enthusiastic readers” (Applegate & Applegate, 2004, p. 561). Implementing choice reading in course instruction encourages engagement and positive reading habits for preservice teachers to pass on to their students. It provides students opportunities for diverse perspectives on course content through choice in a variety of texts. It is imperative to include student choice among a wide variety of genres and to provide time in

class for shared thinking in book clubs, or groups. It is also meaningful to arrange opportunities for students to make connections to classroom application. The voices of the participants of the study and their authentic literacy experiences emphasize the importance of probing preservice teachers' reading habits and attitudes and closely examine teacher preparation programs.

Future Research

The results from this particular study indicated the implementation of choice readings to encourage recreational and professional reading to effect reading habits and attitudes of preservice teachers was valuable and addressed the needs of these course participants. However, further research is needed to address the following questions: Do students develop a more accurate and persistent understanding of course concepts? Do students apply course concepts more effectively in their own teaching practice? Do students continue with their plans to engage in recreational and professional reading beyond the course? Future research should also examine students in a greater assortment of courses.

Limitations

Results are generalizable only to students enrolled in courses similar to those included in this study. Although the number of participants was small, it is worth observing the number is within the sampling range for case study research (Stake, 2000). The lack of multiple coders was also a limitation of the study.

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Young Adult Literature Mentioned

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Nelson, J. (2014). *I'll Give You The Sun*. New York, NY: Penguin Group USA.

Woodson, J. (2014). *Brown Girl Dreaming*. New York, NY: Penguin Young Readers Group.

Appendix

Table 1. Summary of Themes

Theme	Supporting Quote
Choice Readings	<p>Having choice in selection gave me an opportunity to select a book that was most interesting to me and relevant to my career (U).</p> <p>The problem with selecting a text is that I wanted to select more than one (G).</p> <p>When I picked my book and read the first two chapters, I realized that a different one would be better and I was able to change to the book that would better suit my needs (U).</p> <p>I was excited to see the variety of genres in front of me to choose from...I felt like a child in a candy store (U).</p>
Motivational Reading	<p>I read my young adult book in one day and actually bought another one of the choices so I could read it (U).</p> <p>I am hooked on young adult literature (U).</p> <p>I was introduced to a variety of books that I started a reading list (U).</p> <p>I could not wait to read all of the young adult book choices and add them to my classroom library for my students (G).</p> <p>I usually rent books because I do not feel they are worth the money but I actually purchased the book I selected because I know I will refer back to it when I am teaching (U).</p> <p>I look forward to giving my students choice in their reading to spark their interests (G).</p>
Making Connections	<p>My selected text had the research to support the course text's teaching strategies (U).</p> <p>I really got to see the world through my students' eyes as I read my young adult novel (G).</p> <p>I read two researchers' contrasting opinions over a teaching strategy I use in my own classroom and it confirmed that the strategy is needed for my students (G).</p>
Shared Thinking	<p>Responding in my journal before our book club discussions prepared me to really think what I believe in (U).</p> <p>I enjoyed hearing what others had to say over our readings. Sometimes they even changed my own thinking (G).</p>

	<p>We had some great debates in our discussions (U).</p> <p>It was meaningful to listen to my peers' perspectives over our readings (U).</p>
Classroom Application	<p>I now know I need to start reading and collecting books for my future classroom library (U).</p> <p>I want to try using multiple texts to learn a concept with my fifth graders. I think it deepen their understanding (G).</p> <p>I will definitely have reading response journals and book club groups with my own students one day (U).</p>

EXAMINING SCIENCE NEWS WRITING THROUGH THE LENS OF WRITER'S CRAFT, WRITER'S MEANING, AND WRITER'S ENGAGEMENT

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Abstract

This narrative describes my journey as a science teacher faced with the task of finding a way to incorporate content literacy into my classroom that was purposeful, engaging, and taught students the skills needed for their future. Science news writing (SciJourn) allows for student choice in topics, supports inclusion of credible research sources, and focuses on creating numerous rough drafts that are submitted to an experienced editor for editing and publication. Watching my students bloom into researchers and writers was the catalyst for examining the way this genre changed their thinking -- that writing in science is not painful and boring, that research and communication are essential to scientific understanding, and that gaining new knowledge did not depend on the teacher. What I learned was that science news writing (which includes a change of audience from the teacher to the world) enhances students' understanding of writing as craft, that writing has meaning in science, and that this type of writing engages students to grow as writers. Combined, they make a powerful statement for the importance of including content area literacy in all classes. Those three themes -- writer's craft, meaning, and engagement -- are explored through my voice as teacher, the voice of my students, and supporting evidence from the research literature.

Examining Science News Writing through the Lens of Writer's Craft, Writer's Meaning, and Writer's Engagement

"I am a science teacher -- I do not teach reading and writing nor do I know how!!" I hate to admit it, but these were the words that came out of my mouth during my first year as a seventh grade teacher. This narrative describes my journey as a science teacher faced with the task of finding a way to incorporate content literacy into my classroom that was purposeful and engaging as well as taught students the skills needed for their future. I needed to change **my** dread of writing and find a way that changed the students' basic premise that writing was dull, boring, and disconnected from science. In fact, science news writing (SciJourn) changed the student mantra from **"Why are we writing in science?"** and **"This isn't Language Arts class!"** to **"When are we doing SciJourn again?"** and **"Are we doing SciJourn today?"** They would literally badger me to continue writing on their science news articles.

As a teacher, I wanted more for my students, and including the SciJourn writing process (science news writing) transformed the way I teach and relate to my students -- there is much less of me and much more of them. SciJourn allows for student choice in topics, researching the topic on their own, and creating numerous rough drafts of a science news article that will

be submitted to an experienced editor for editing and publication. They have written about topics such as: how technology use can lead to “text neck”, how coffee can reduce exercise pains, how dogs understand human emotions, the dangers of bacteria in orchestra instruments, just to name a few. Watching my students bloom into researchers and writers was the catalyst for examining the way this genre changed their thinking -- that writing in science is not painful and boring, that research and communication are essential to scientific understanding, and that gaining new knowledge did not depend on the teacher. What I learned was that science news writing (which includes a change of audience from the teacher to the world) enhances students’ understanding of writing as craft, that writing has meaning in science, and that this type of writing engages students to grow as writers. As one student wrote to me, **“I think SciJournaler is a great opportunity for kids who like to write and for kids to learn to love writing.”**

However, my voice is not the only one that is important in this discussion. Included with mine are the voices of the students from their reflection letters and the voice of research (what the research has to say). Combined, they make a powerful statement for the importance of including content area literacy in all classes. As a reader, you will notice the shifts in voice – when the students are speaking, the text is in **bold**. The research is in *italics*. My voice as the reflective practitioner in the classroom experience is always in plain text. In this article, I want to share with you my journey into understanding the role of writing in my students’ lives and in my science classroom. To do so, I analyzed my students’ writing and noticed three key themes in their comments, their writing, and my observations as their teacher and participant in their learning. Those three themes – writer’s craft, meaning, and engagement – are explored through my voice as teacher, the voice of my students, and supporting evidence from the research literature.

Introduction to my Journey

Writing in the science classroom is a no- no unless, of course, you count lab reports and the occasional Venn diagram or T-chart. Science writing has historically been of passive voice and used to report experimental results in a very dry and formal tone (at least that has been my experience over many years). Except for the occasional kid’s dinosaur book, I had not been exposed to the excellent science books that make science learning interesting and fun and we certainly didn’t write anything like that in class. When I went to school (in the dark ages) we never wrote anything creative in science classes. That would have been a crazy notion as science was not even remotely associated with English or Language Arts – all subjects were taught in isolation and never the twain shall meet. Even in college, there was not one writing piece in my science classes that was required – not even an extended response or essay to explain our scientific reasoning.

In addition, when I went through my teacher prep courses for secondary education, there was no mention that science writing could be used as a tool for learning such as “writing to learn” or “writing to demonstrate learning” (now they have content literacy courses!). However, when I was offered a position at a middle school to teach 7th grade science, not only was I surprised

that I was able to teach that grade level (I was high school certified) but also that they really thought I should be able to teach reading and writing. In Kentucky, the writing portfolio was included in the state's test scores for schools. One requirement for this portfolio was a writing piece from each of the content areas. I was informed that my classes would be writing a feature article. That was my first mystery. What the heck was a feature article? The second mystery was how could I possibly fit this project into my crammed content? To make matters worse, 7th grade was a tested year for science so I also had to review all the 5th and 6th grade science material in addition to the 7th grade curriculum. This was a major conundrum for a first year teacher. I had no idea how to help the students pick a topic, take relevant notes, find credible sources, or teach about plagiarism. I just said, "take notes, have three sources, and don't plagiarize" -- pretty effective teaching. The more I think about it that is just how I was taught.

I wanted to do this better and overcome the moaning and groaning that occurred whenever I mentioned that we were writing in science class – how could I get them more engaged? I went to many PD's that focused on writing and even had my students writing poetry and children's books based on content specific science concepts. The assignments were much improved but I still struggled to find an assignment that had relevance to students' lives and connected them to the larger world and one they were excited about doing. I was fortunate to attend a two-week training in the process of science news writing (SciJourn), funded by a grant by the National Science Foundation and provided by a team led by Dr. Wendy Saul and Dr. Alan Newman from the University of Missouri, St. Louis. This research project was originally designed to investigate whether high school students would increase their science literacy and content knowledge through the authentic assignment of writing a science news article for publication in the SciJourn on-line (SciJourn.org) and hard copy newspaper. The assignment included sense-making, reading, writing, and communicating about contemporary science and how these skills relate to everyday life and policy making. The project had the goal of encouraging interest in the numerous science fields and teaching skills students needed 15 years after graduation, creating truly literate citizens (Saul, et al. 2012). In the third year, I was one of three middle school teachers included to explore if middle school students could also increase their science literacy skills. Even though many in the group felt that middle schools students were too young to complete this process, I believed that this was THE opportunity I had been looking for to challenge and excite my students. For four years now my students have been writing and publishing their science news articles. One of their articles (*Smoking Smarties*) has over 36,000 hits on the SciJourn.org site! This has spurred my students to research, present, write, edit, revise, and to fight me to get back to their articles on a daily basis.

In the following section there is a research-based discussion on the importance of science literacy – why should we as science teachers be bothered with this difficult task of incorporating content literacy in our classes. Following, three different voices (teacher, student, research) will speak to writers craft, writers' meaning, and writing engagement.

What the Research Says: The Connection between Science and Literacy Practices

According to the Committee on Science, Engineering and Public Policy (COSEPUP, 2007), students in the United States are not keeping up with their counterparts in other countries and our lack of preparation will reduce the ability of the U.S. to compete in the 21st Century. As a result, this may be the first generation that does not have the same opportunities for success as the last generation. Because communication in science is essential to the advancement of science, reading and writing becomes the cornerstone for the preparation of our students for the future. The Framework for K-12 Science Education (National Research Council, 2011) states that, "Indeed, the new Common Core State Standards for English Language Arts & Literacy in history/Social Studies, Science and Technical Subjects recognize that reading and writing skills are essential to science; the formal inclusion in this framework of this science practice {writing} reinforces and expands on that view" (p. 75). In addition, given the incredible amount of information available instantly in today's global information highway, it is important for science educators to teach content in order that students can later "evaluate and select reliable sources of scientific information and allow them to continue their development well beyond their K-12 school years." (p. 31).

Researchers describe a need to change the focus of science literacy to reflect how technology has changed the ground rules governing how students receive, interpret, and communicate scientific information (O'Neill & Pohlman, 2004; Brossard & Shanahan, 2006; Sadler & Zeidler, 2009; Ahmed, 2011). More importantly, evolving technologies demand that science education more efficiently prepare students to fill the growing need for technical workers and a scientifically literate populace (O'Neill & Pohlman, 2004; Liu, 2009; Cavagnetto, 2011).

Norris and Phillips (2002) propose there are two important knowledge bases comprising science literacy where the foundational sense of reading and writing is central to the derived sense of knowledgeable, learned, and educated students. A person who cannot read and write is severely limited in their capacity to become a scientifically literate person. The fundamental skill of reading that is general to reading in all contents comprises science literacy along with the knowledge of the substantive content of science. The combined effect of the two senses of scientific literacy allows individuals to find meaning from their search of science topics. Many authors build on both the importance of science content knowledge and the doing of science with language being an integral part of construction that knowledge (Hand, Prain & Wallace, 2002; Cavagnetto, 2011; Osbourne, 2002). Kalantzis and Cope (2000) state that literacy is the promise of education with the foundational skills of reading and writing as a major function of formal education.

In order to be critical consumers of scientific knowledge and to be scientifically literate, students must have the ability to understand and communicate the meaning and significance of science and technology information in order to make personal, social and political decisions (COSEPUP 2007; Framework, 2012, p 54).

The new standards focus on the importance of consistent, measurable educational goals based on content knowledge and the skills needed to be college and career ready. These standards promote an educated and literate populace that benefits from increased career options and quality of life. Science literacy that develops a student's content knowledge and the understanding of how to "do" science is essential along with the ability to communicate, interpret, and transfer these skills to becoming a productive and successful citizen. Research in science literacy has moved us from the writing of traditional lab reports -- knowledge-telling writing -- an explanation of what is already known -- to knowledge-transforming writing -- a dynamic process where students cognitively reorganize their prior learning to include their current understanding of their learning (Bereiter & Scardamalia, 1987). Wallace, Hand, and Prain (2004) propose that writing increases students' awareness of the relationship among ideas due to its constant feedback loop of writing and revision. Inclusion of writing-to-learn strategies in the science classroom provides opportunities for meaningful writing (Glynn & Muth, 1994; Keys, 1999) and encourages critical thinking and the enhancement of conceptual understanding (Yore, 2000; Prain 2002; Holliday et al., 1994).

Writer's Craft (Or What Effective Writers Do)

In the next section, I speak on the struggle of understanding and teaching writer's craft in my science classroom. When I think of writer's craft in science, I am especially concerned with each student understanding the importance of engaging the reader, plagiarism, credibility, research, attribution, and the structure of a science news article.

Teacher on Writer's Craft

One of the most difficult ideas to get my head around was that somehow I was to know something about the craft of writing. After all, I was not a writer, had not taken classes in how to teach writing, and could only rely on what I had been taught when I went to school. I didn't have a way into this murky world of Language Arts -- how was I going to teach this to my students?? Having tried many different ways to include science literacy in my content area, the results were either boring assignments such as "research a scientist" (made more interesting by insisting on creativity such as writing a children's book and use of technology -- PowerPoint or Prezi) or feature articles that were often plagiarized and ineffective in teaching writing skills. With SciJourn, there is a specific structure called the inverted triangle which provides a scaffold for writing science news articles that includes many of the six traits that build understanding of what good writing looks like -- ideas, organization, voice, word choice, sentence fluency, convention, and presentation (the often added seventh trait) (Culham, 2006). Wendy Saul, in *Front Page Science: Engaging Teens in Science Literacy* (2012), is very clear that the inverted triangle structure is a guideline and (unlike the five-paragraph essay) not to be a fill-in-the-box strategy. The importance and credibility of the new information is paramount and comes first in the article and then needed background information that helps the reader understand this information comes next. The article could be 300 words or it could be 1,000 words!

The SciJourn process increased the students' understanding of the importance of credibility, title and ledes, plagiarism, citation, communication with professionals, editing, tenacity in reading and writing, interest in current science news, increased knowledge about their topic, ownership of their learning, working with a partner, and embracing the freedom of writing about a topic of their choice and the value this gives to their writing. Writer's craft came naturally as an essential component of writing a good science news article.

Students on Writer's Craft

In analyzing my students' reflective pieces, I was surprised (and proud) that they discussed what they learned from writing a science news article as it pertains to the writing process itself. They appear to have gained an understanding of why craft is so important when they write and applying this to science creates a tremendous real-life connection between Language Arts and the content areas. Below, the students talk about what they learned and how it has impacted the maturity of their writing.

"I learned a lot of things from the SciJourn process. First of all, SciJourn is completely different from any piece in language arts I have ever written. In a science news article, you don't have a conclusion. In this kind of article, you state the facts and the reader has to decide if they agree or disagree. You also have to have credible sources. You have to put the science in the article. You have to write a piece using writing skills. You have to read it when you revise. These SciJourn articles combine all subjects into one. I know this because I did a SciJourn article on 'The Dangers of AXE Products' with (my partner). It took time to write the article with having an interesting lede, to keep the reader interested, to surveying the 7th grade. We even did interviews. We came up with questions to ask and included quotes that we were given from the interviews. We researched our topic thoroughly. With all the knowledge I know now, I can achieve something great."

"What I learned from my SciJourn project is that it isn't easy to be a published author. It takes a lot of time and effort to complete. There is a lot of research, typing, and editing involved. Also, it gave me tenacity, it kept me writing and not giving up."

"I also learned how to find credible sources. To find a credible source, most of the time you look for links, an about us, look for an editor button, and most credible sources will either be a .org, or a .edu. This whole project overall helped me become a better writer; because I know that I'm probably going to have to do this again."

"I learned that finding credible sources involves a lot of research by itself."

"I learned that Sci-Journ really helps you master or keep developing your writing skills. It shows you that writing doesn't have to be a five paragraph essay to be a good piece."

When the students reflect specifically on the writing skills they have gained, it provides assurance that they are not "just" having fun – getting on the computers, working with a partner, etc. They indicate that they are learning the craft of writing which involves using

credible sources, writing ledes, including surveys and interviews, researching, editing and revising, as well as increasing their tenacity to write over time.

Research on Writer's Craft

Students' often think of the nuts and bolts of writing (craft) as boring, disconnected from what they want to do (just write), and having no real purpose other than to irritate them with details. When writing a science news article, students discover that the craft – the structure of the article and the paragraphs and sentences that are included – all have a specific purpose for the writer and more importantly, the reader. The reader becomes "hooked" into further reading, learns new and interesting ideas in science, feels safe in trusting the credibility of the article, and with this information can make an informed decision about how the reader will integrate this knowledge into their new understanding.

Ruth Culham (2006) and Vicki Spandel (2005) are two of the researchers who developed the six traits of writer's craft. These include: ideas, organization, voice, word choice, sentence fluency, and conventions. Later, presentation was added as the seventh trait or "the six traits plus one". These traits indicate the importance of thinking specifically about what the reader needs in order to gain understanding and interest in what the writer is trying to communicate.

According to the Kentucky Department of Education, College and Career Readiness Anchor Standards for Writing (2010), writer's craft includes:

- *Producing clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.*
- *Developing and strengthening writing as needed by planning, revising, editing, rewriting, or trying a new approach.*
- *Using technology, including the internet to produce and publish writing and to interact and collaborate with others.*

According to Kentucky's Common Core State Standards, Appendix A, evidence for writers' craft is defined as:

- *Facts, figures, details, quotations, or other sources of data and information that provide support for claims or an analysis and that can be evaluated by others; should appear in a form and be derived from a source widely accepted as appropriate to a particular discipline, as in details or quotations from a text in the study of literature and experimental results in the study of science.*

Writer's Meaning

When talking about writer's meaning, I interpret this as understanding that not only is there a process when writing but also that there is a purpose and a reason for writing that goes beyond writing one draft, pleasing the teacher, and obtaining a grade. The students wrote articles

about something they were interested in and wanted to inform their audience about. They also began to understand that writing is something that transcends the assignment and reaches beyond to learning a skill they will need in the future.

For example, Autumn wrote about something that was personal and affected her deeply – both her grandfather and step-father suffered from PTSD. It was a struggle for her to share her story and even though both the editor and I wanted to push her more to explore her own feelings and to ask her stepfather for additional details about his condition, we both knew that we needed to tread carefully. Here is the beginning of her story:

“My grandfather had a horrible case of PTSD. He was in a traumatic incident while in Vietnam. His nose was flattened due to an explosion. After his accident, he was extremely quiet. The same story goes for my step-dad. He has PTSD from serving in Iraq. He is somewhat quiet, and he never likes to speak about it. He likes to keep to himself. He drives the same way he did while serving in the military, and he doesn’t sleep very much.”

Teacher on Meaning

The total experience of completing this assignment all the way to the end is an important lesson for students to learn. They can do this and when they turn in that last paper, the pride on their faces reveals that they accomplished something important. They will need to be able to do this (finish) when they are in high school, in college, in business, in any job that they may find themselves in. It is often discussed that our students need to achieve “tenacity” in reading and writing over longer periods. This fits the bill in every way.

Writing over time, including the editing process, was not as hard as it appears. I am ecstatic that my students have found the motivation and expertise to read, write, learn, explore, research, communicate, and gain confidence in their skills and in understanding science content. I also believe this process is unique in pulling the foundation away – the crutch away—from students who rely on the teacher to provide them with direction and focus. This forces/allows them to find the motivation within themselves and confidence that they can do this on their own with support. Many students in the beginning ask me to just “give them a topic” because it is too hard to find their own. Others hesitate when they understand that they cannot just turn in something for a grade, that it is good enough for the teacher, and that it is good enough for them. Pushing their idea of what is “good enough” pushes them to achieve at a higher level and to allow them to use their critical thinking skills.

The students begin to understand that reading and writing are a part of every content area -- every task they are involved in. Communication happens in everything we do in life and doing it well can result in success or failure. Writing over time does not have to be misery – it can be a journey that has a magnificent ending whether published or not. The final piece is something to be proud of, something they show their families, and an experience they will never forget. And when they have to find pieces throughout the year that can go into their L.A. portfolio,

they run to my room to print them out and are excited that they have such an amazing piece of writing in their hands.

This project made research come alive! They could choose their own topics, which were current and new. This was not a mandated subject that came from me, the teacher. It came from their interests and their passions. They emailed professors and got replies. They became full of wonder and connected with the outside world. They learned about the credibility of the internet – something that will serve them well in high school, college and beyond. They learned to take nonfiction information and imbue it with urgency and interest.

In the student reflections that were written after each of the previous two years projects, several suggestions stood out. The first was that they enjoyed researching and learning about a topic that **they** were interested in. I am not sure why I was surprised about this, but I was. After all, they would often come up to me and excitedly tell me about the new information they had found. The second was that they thought the project was fun and that they liked working with a partner. An example of this is when I told the students we needed to complete a short pre-test for the upcoming unit on Force and Motion and could not work on their SciJourn project. Jenna loudly stated, “Nooooo, don’t make us work!” She clearly thought that the SciJourn project was not work. Also, the vast majority of students stated that they would want to do this project again in 8th grade. They said things like, “It would be much easier this time as I know what I am doing.” And, “This is such an opportunity to research what I want to and have the opportunity to get published.”

Students on Meaning

The students’ reflections indicated that they were beginning to understand that there was a reason to write and that with effort they could do it well. They put value in their writing and therefore, felt valued. They were connecting to the outside world and this made science come alive.

“Getting published really made me happy that I did something really big in the science community.”

“The most incredible thing I learned from this is that you can e-mail a professor for help & research. Sometimes they respond back & it’s just awesome.”

“I had a favorable time doing the Scijourn project because I got to look up scientists and figure out more things about my topic. For example, every day when I came home I got on the internet and looked up research on my topic. I had to figure out topics, ideas, and scientists on my SciJourn project..... Also the project took a lot of time and effort, but when I saw our piece of writing I knew it was worth it.”

“Also, I think that it does prove middle school kids are capable of doing some of the same things as high school students. I learned that I can do anything if I try, because this project is

for high school students but we (7th graders) proved that we middle school students can do anything.”

“Yes, I would like to do this again in my 8th grade year because I think that it will help me become a better writer throughout my life if I have a lot of practice.”

The students gained an increased knowledge of their science topic and writing as well as the internal knowledge that the outside world was accessible and was listening to them! When higher academic professionals take the time and effort to respond to student inquiries, the students develop confidence, become thoroughly engaged, and begin to see that they are a part of a larger community. Our goal as educators is to show students that no matter what their age, education level, or supposed “intelligence” range, hard work and persistence will result in accomplishment.

Research on Writer’s Meaning

Gunel, Hand, and McDermott (2008) in their study of writing for different audiences in a high school biology class found that writing to a younger audience (translation) places cognitive demands on the writers and leads to conceptual growth where writing for the teacher (replication) does not. This shift in audience places the writer into a place of authority where they need to understand the concepts before they can explain (translate) them to their audience rather than writing to the authority (the teacher) (Ford, 2008). There is an assumption that a younger audience is uninformed and therefore in need of a clear and concise explanation of the science. The students are not writing for the teacher where explanation of the science and science terms is not deemed necessary. In addition, the writers are familiar with the younger audience as they were recently in their place and may have brothers or sisters of that age group.

There are a few studies showing the effectiveness of changing the audience for science writing assignments, (Rijlaarsdam, Couzijn, Janssen, Braaksma, & Kieft, 2006; Gunel, Hand, McDermott, 2008). These studies provide evidence that having students write for an authentic audience increases cognitive engagement in the process and leads to greater cognitive learning. When students write for a younger or peer audience, they become the voice of authority and their goal for writing becomes transferring their knowledge to non-informed others rather than the already informed teacher (Gunel, Hand & McDermott, 2008). They must translate the understanding of science concepts using the language available to all who may read their work. Shifting the audience for a writing piece is a relatively easy solution for increasing student construction of knowledge and could be incorporated into the science teacher’s curriculum without major disruption. Changing almost any writing piece from writing for the teacher to writing for a younger or peer audience is relatively easy. Including the possibility of publishing their writing piece adds an additional dimension of authenticity and engagement.

Writing Engagement

When envisioning student engagement with writing in science, I picture students “buying in” to the purpose of writing, having the desire to get started, and having the confidence and energy needed to complete the task. When professors or other experts responded to the students in an email, it gave their writing a new urgency and a deeper belief that what they were writing was meaningful and important to the wider world. For example, when Dr. Rashid Bashir, professor of Electrical and Computer Engineering at the University of Illinois wrote back (see below) to Anakin and Cameron concerning the science behind his research on using rat hearts to power a biological machine, you could feel the excitement ripple out through the entire class causing a renewed effort on each and everyone’s article. When their article got published, Dr. Bashir requested pictures of the authors to hang in the hallway at the University of Illinois. Connections like this are priceless.

Teacher on Writing Engagement

The students’ level of engagement and insistence (demand!) that they be allowed to work on their articles raises my level of teaching and their level of science literacy.

Talk about “shock and awe”! This has been an exceptionally fascinating and important part in bringing the real world into the students’ realm of what is possible and an increase in their excitement and belief in doing this project. I am so grateful to these educated and obviously accomplished people who have taken the time to respond to 7th graders to either answer their questions, explain the science so that we all can understand their research, and/or to suggest further places for them to look for background information. It has been truly remarkable. I can’t think of anything more authentic to encourage students to participate in their world, to convey that they are important, to show that science is an accessible field, and that they are a part of this world. I know we in the science education world are working to increase interest in STEM fields and I believe this is one substantial way to do this.

One example of a professor’s reply came from Dr. Rashid Bashir, a professor of Electrical and Computer Engineering & Bioengineering at the University of Illinois who wrote back to Anakin and Cameron concerning the science behind the biology machine – “biobot”. He wrote: “Thank you for your interest in our research on the bio-bots. I will try to explain how the bio-bots move. Our bio-bot moves by actuating the legs via contraction of the cardiac [rat heart] cells that are plated on the legs. The cardiac cells beat and move the legs and the one long leg in the picture touches the surface such that the adhesion changes between the front leg and the back leg. This results in the movement of the bio-bot.” Needless to say, Anakin and Cameron were still somewhat confused but were so thrilled to have received his email that they worked even harder to understand the science involved.

An added bonus is the students’ increased engagement in reading: The students are motivated to read the SciJourney articles because they are written by their peers. These are not written by someone who **thinks** they know what they want to read but by someone their own age who

knows about what they want to read. They then read the articles for structure and information helping less accomplished readers to want to work through the terminology in the article and to find out what other students are interested in. The more accomplished readers have a place to read high-interest articles that they can access whenever they want to.

Students on Writing Engagement

At first, I was concerned about whether or not the students found this rather tough assignment one that they valued and one that they wanted to do again. That, for me, was the real test – would they want to do this again in 8th grade.

“Yes, my favorable experience of this project was that you had a feeling inside when you get published. It’s like a bonus point towards everything, because being published is a dream, a success, an accomplishment, an achievement that everyone can experience. Because being published lets you know that you have completed every task to the best of your ability to the teacher’s needs; editor needs; & importantly, your partner’s needs.”

“Instead of coming to class and doing worksheets, we got to do research on a topic WE picked.”

“Yes, I would want to do this again in the 8th grade because I had a fun time doing it and it was a lot of work and time, but in the end it was worth it.”

“Yes, because it was more fun working on this rather than doing regular class work like all the other 7th grade classes.”

“I got to interview with Ms. Wolf, a professor from U of L. Also I got to work with my friend; got to pick our own partner, and we had a chance to write about what we wanted to write about. We had the experience to work on computers.”

“I would want do it again in the 8th grade because I really want to get published.”

“It was really fun and challenging and I got to get published.”

My goal is to have all my assignments receive this level of enthusiasm. SciJourn has shown me that when students are given choice, high expectations, and freedom to work on their own they can achieve great things and are excited to do so. Writing in science doesn’t have to be avoided or done as a despised add-on but can be embraced and incorporated into an active and alive study of the deeper essence of science.

Research on Engagement

Science news writing (SciJourn) provides a unique opportunity to create a positive and engaging learning environment that is framed in a sociocultural framework. This approach recognizes that literacy learning is an endeavor that is cognitively complex and is situated in the social character of human understanding and where social co-participation as situated in a learning

community (Fang, 2014; Lave & Wagner, 1991). Science journalism is directly related to this sociocultural approach as a way to connect students to a larger community of scientists by involving them in finding current science research from credible sources on an interesting topic, learning how scientists construct knowledge (in many cases connecting these students through email to these scientists), and providing them the opportunity to publish for an authentic audience. This science journalism assignment results in the fuller, richer engagement of students in their learning that includes “purpose, interest, motivation, and identity” (Fang, 2012).

SciJourn allows students to choose and research their own topic, construct their own knowledge, have the opportunity to publish in an on-line science newspaper (Scijournal.org), and in so doing, take ownership of their learning while obtaining skills needed for their future. When students are given authority over the way they create, present, and learn science concepts in a meaningful context, their learning and retention increases and they “like” science much better because they actually understand and enjoy learning it (Barber, Catz & Arya, 2006; Fang, Lamme & Pringle, 2010). In a study by Ainley & Ainley (2011), enjoyment was found to be a central predictor for students’ current participation with and continued interest in science. They found that when students experience personal relevance and meaning they are “more likely to experience enjoyment and interest from engaging with science content.” Extending writing-to-learn assignments by switching the audience from the teacher to an authentic audience of their peers (Gunel, Hand & McDermott, 2008; Ford, 2008) and including the possibility of publication for their writing, appears to significantly increase student engagement and retention of content knowledge.

I contend that the SciJourn literacy process provides a unique opportunity allowing students to become a part of the larger community of science through an authentic writing assignment with an authentic audience resulting in an increase in student engagement with science and science literacy.

The new Common Core State Standards (CCSS, 2010) for literacy and the Framework for K-12 Science Education (2012) emphasize the need for students to obtain science literacy skills that will support them well into the 21st Century. These skills involve questioning, meaning-making, connecting, communicating and becoming deeply involved in their own learning along with gaining science content knowledge. These skills will also provide citizens a means to navigate the increased influx of information from many sources and to make informed decisions about their health, their family, and political and environmental agendas (National Research Council, 1996). The standards focus on learning, literacy and communication which is a socio-cultural endeavor that promotes a community of learners versus an individualistic notion of learning where one “sits and gets” in isolation from any discourse, interaction, synthesis or engagement. Therefore, educators need tools and strategies that will lay the foundation for these skills starting in elementary grades and continuing through high school.

Content area literacy is an essential component of moving students from an empty bucket to be filled with knowledge to students who actively engage in knowledge creation, challenge ideas, think critically and become informed citizens. Writing-to-learn is one strategy that has demonstrated the potential to increase these literacy skills (Yore, 2000; Hand, Prain & Lawrence, & Yore, 1999). It is thought that this effect is promoted by involving a student's long-term working memory and sensory motor activity (Bereiter & Scardamalia, 1987). Connolly (1989) states that writing-to-learn is more than making spelling count and correct grammar; rather its value is in the ability of writing to enable the discovery of knowledge. Writing-to-learn can take many forms such as: extended response, journaling, research reports, as well as other forms of writing. However, extending these assignments by switching the audience from the teacher to an authentic audience of younger students and/or to their peers (Gunel, Hand & McDermott, 2009; Ford, 2008) and including the possibility of publication for their writing, appears to significantly increase student engagement and retention of content knowledge.

When students are given authority over the way they create, present, and learn science concepts in a meaningful context, their learning and retention increases and they "like" science much better because they actually understand and enjoy learning it (Barber, Catz & Arya, 2006; Fang, Lamme & Pringle, 2010).

The Journey Continues

Incorporating science news writing into my classroom was a frightening endeavor. I believed that it was the perfect way to teach students the craft of writing as well as the meaning and reason to write in science, and a way to raise their level of engagement with an authentic assignment -- but I was not sure I could pull it off. What I learned is that it is not about me. I never taught this process the same way each year -- in fact, I would say that other teachers can and have provided better instruction. After three years of reading student articles and student reflections on the SciJourn project, I am convinced that the students achieved this on their own. Give them a real audience, a reason to write, and allow them the freedom to explore -- they will rise to the occasion and accomplish more than imagined. Having students increase their knowledge of how to write (craft) and why they write (meaning), and in addition, to enjoy and/or want to write (engagement) all in one package is priceless.

I have been asked if I will continue to teach students the SciJourn process of science news writing if or when the SciJourn Editor (Dr. Alan Newman) is no longer available to edit the articles or the website goes away. This is disconcerting to me as having his edits and expertise is an important component for student interest as is the ability to publish. However, there is nothing that will prevent me from giving my students this experience. The experience of watching my students grow over the year, listening to their voices, and digging into their topic has been what I believe all teachers would like to see happening in their classes. The research is clear. Having students write authentically in science class (and other classes) demonstrates to students that writing is for communication purposes in every content, it can teach new skills needed for 15 years down the road, it can be fun and engaging, and does not waste precious

content time! As one student stated in their reflection letter, **“Would I do this again...? The answer would be yes, now, yes then, and yes 500 years from now because this is the chance to be a published writer, and chances like that don’t come every day.”**

In examining my journey to science literacy, additional research questions have emerged. What is it about this particular writing process that triggers a teacher’s acceptance (or rejection) of including content literacy into their classroom? What should be included in pre-service teaching and/or professional development that would increase the likelihood that content teachers would embrace content literacy? Does this process provide a foundation for increased literacy skills in high school? I hope (plan) to research this further.

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Appendix

Description of the SciJourn process

SOURCES FOR HANDOUTS AND LESSONS ON THE SCIJOURN PROCESS

There are several additional resources on science news writing that provide examples, handouts, lesson plans, and videos. *Front Page Science: Engaging Teens in Science Literacy* (Saul, et al. 2012) was written as a result of information and experiences gained by the researchers and teachers implementing SciJourn during first three years of an NSF grant. This book includes background information, frequently asked questions, SciJourn Standards, as well as chapters that provide step-by-step instructions on how to teach the science news writing process. The researchers also developed a website based on the book called Teach4SciJourn.org. This site explicitly follows the book chapters and provides teacher-created lesson plans and handouts that are easily accessible. In addition, the SciJourn.org site is the place where students can read other middle and high school students published pieces and where teachers (and students!) can submit articles for revision and publication by the editor.

READ ALOUD/THINK ALOUD (RATA) FOR CREDIBILITY

One of the most effective and easiest ways to teach credibility is to do a RATA with your students. Start with either the DHMO.org or Zapatopi.net/tree octopus. Both are fake websites that are used to get students' attention and engage them in the activity. The DHMO.org site lists the many ways that dihydrogen monoxide is dangerous and students get irate that there exists a chemical that is found everywhere, can cause so many health problems, and is not yet regulated. Go along with the hoax! Ask the students where you should click to see if you can find an "about us" and if the links actually go anywhere and are relevant. When checking the "last date updated" it cleverly will show today's date every time. Of course, DHMO is water (H₂O) and when you share that with the students -- the look on their faces is priceless!

With the tree octopus (zapatopi.net/treeoctopus), students want to save this endangered species and get very concerned for this animal. Again, look for an "about us", click around the site, and eventually share with them that octopi really can't live out of water, the news links are current but are about "regular" octopi, and as your scroll down, the "sightings" become sillier and sillier -- octopus in a Christmas tree, under the snow, and solid blue just like a stuffed animal. Remind students that this is a .net and not to take websites on face value.

If you do a google search for "fake websites", you will find many more to use. Also pull up a legitimate site -- usually Discovery News for Kids or some other site that has interesting articles -- and show them what a credible site should look like. By this time they are very good at pointing out where to go on the site and what to look for.

LOOKING AT SCIENCE ARTICLES WITH A CRITICAL EYE

At this point, I want the students to deeply look at and read a science news article that has high interest and is written by someone their age. SciJourney.org has editor reviewed articles written by middle and high school students and any can be used for this activity. This provides the students with models, shows them that students their age can and have gotten published, and uses a close reading strategy to include reading informative texts. To start, I first assign the “Text Neck” article that one of my students wrote. I have attached the questions that are used to focus them on looking specifically at the features that they will need to include in their article. Later, I let them chose an article and use the “Observation Tool” (attached) to again look and to deeply read a science news article. I usually let them do this with a partner. Going over these questions as a class helps the students understand how a journalism article is different than writing a regular research paper or say, a narrative piece.

PICKING A TOPIC

The students want to get started in a hurry and begin thinking about their topic. This is the hardest part of this assignment but the one they want to rush through. I have them brainstorm ideas that come from their interests or health issues in their personal lives. I then have them look at sites such as Science News for Students, Discovery News for Kids, etc. to read and find recent research they may be interested in. They need to do preliminary research on at least three topics to ensure that there is enough information to write an article. They must find the original research involved in the article by either clicking on links or copying and pasting the researcher’s name and affiliation into a search engine. They are required to have at least three sources for their article. When they believe they have decided on the topic they want to write about, they will then put together a “pitch” to present to the class.

THE PITCH

The pitch is described to students as something that real journalists do when they are trying to convince the editor that their story idea should be approved. Students should talk about their connection to the idea (personal or something they are interested in), the research behind it, why it would be interesting to teenagers, and what they will do to make it their own (survey,

interview, or email the researcher). First, model the questions you might ask the “pitchers” if they forget to include details such as:

What’s your connection?

Is your research current?

Why would teenagers be interested in this idea?

What are your three resources?

Are you going to send an email, create a survey, etc.?

Then, on any subsequent pitches, have your class take over the questioning. When done, ask the class for a thumbs up (good to go), thumbs sideways (approved with stipulations such as “need more research” or “come back and convince us that you understand the science”, etc.) thumbs down (really need to get another topic). This presentation can consist of a short PowerPoint or the students writing their notes on paper or index cards.

THE RESEARCH

Once their topic is approved, students should dig deeper into the research and become experts on their topic. They can start creating their survey, email a professional, and/or interview an expert that is involved with their topic. Experts can range from their parents, coaches, doctors, or the local mechanic if they have some expertise and insight into their topic.

THE INVERTED TRIANGLE

The inverted triangle (as described in the book *Front Page Science* provides a visual on the construction of the science news article. In any newspaper (or web) article, interest is peaked, the news is discussed, background information is added, and no conclusion is written. Discuss with students that most people read the titles or articles in newspapers, if interested, they read the lede. If that captures their attention, they will then continue reading. I mention that I don’t read every word of every article in the newspaper – I pick and choose. Therefore, the most important information needs to go first. See below.

WRITE THE LEDE

The lede (spelled correctly in journalism!) should connect the reader, the writer, and the topic. Here is where the audience’s attention is captured and they are brought into the article. Often, the students will pitch their idea with a great connection and then neglect to include this in the article.

NUTGRAF (for “nutshell” -- I know, funny word!)

What is new? What is so amazing about this news? Remember, it is a news article. Even if they are writing about a health issue (and many do) they need to explain the health issue in detail using easily understandable science. Follow this with anything that is new about the issue which may include new treatments or new research.

Contextualization/Background Information (discuss how they did their research)

Tell the readers who this research affects and how the research was done in order for them to have the information needed to decide if this is a viable research methodology. In other words, would the reader believe the researchers did a credible job of doing their research?

The Science

Explain the science in understandable terms that show the editor that THEY (the writer) understand the science involved.

Attribution

I tell my students that “according to...” is their best friend. If they use information that is not commonly known, they need to attribute their information to the source. You can use other terms than “according to...” but they can change those later if they use this term too much. With middle schools students, if I can get them to understand the importance and the function of attribution, I am not overly concerned with how many times they use “according to...”!!!

Emails

I have found that giving the students a template (attached) for their emails saves tons of time. Rather than editing and re-writing each and every email, they follow the template -- they get results and less stress is involved.

Surveys

Survey results should aim at as many respondents as possible just like any other research endeavor. Fifty percent of two respondents is not the same as fifty percent of 100 respondents!! Use scientific data reporting!

Not all topics will be conducive to a survey. If the survey does not provide any additional, relevant information for their topic, they can send an email or conduct an interview.

PEER EDITING

Peer editing allows the students to read other student articles, provide them with support, and give them experience in providing feedback to others' work. It also saves teacher editing and revision time. Have them exchange papers and complete the sheet (attached). Explain that this process is not a "gotcha" exercise – this is an effort to help others improve their writing. When this is complete, everyone take this new information and revises their piece.

REVISED ROUGH DRAFT

At this point, students are completing their drafts at varying times. Sit at the front of the room, have students come up and show their draft. Look quickly for lede, research, citation, explained science, organization, and obvious grammar errors. It really becomes obvious is there are areas that are weak or left out. Give it back and have them revise again! When the article appears to be near a finishing point, I will then closely read for any areas of improvement. Only when I feel confident that the piece is as strong as it can be will I send it to the editor. Do I miss things? Yes! But every time I get an edited article back, I learn more about what a good article looks like and so do my students.

RE-VISE, RE-VISE, RE-VISE! SUBMIT

MAKING SPACES FOR THE DASHES IN BETWEEN: WHAT LINDA DI PALENA CAN TEACH US ABOUT “BECOMING” A HIGHLY QUALIFIED TEACHER

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Abstract

Linda Di Palena was not the typical "giving-tree" middle grades educator who, even at the end, would offer her stump for children to sit on (Johnson et al., 2005; Silverstein, 1964). Rather, she described herself jokingly as "an equal opportunity bitch" who did not discriminate in terms of whom she would give all hell to (without actually cursing) should she feel it was necessary or deserved. Yet, during the semesters that I came to know her, she was twice awarded "Most Inspiring Teacher" by the student body of Raystown Middle School, North Carolina. This article is about the authenticity that Linda Di Palena brought to her 8th grade ELA classroom and its intersection with motivation, learning, and life—in the form of a narrative that she shared with me over a three-year qualitative inquiry. Here, I capture three of the "themes" that emerged from our conversations about what life had taught Linda Di Palena about herself and her teaching. I share these as potential insights to understandings about ELA educators' potential for "becoming something different" (Fairbanks, Mason Crooks, & Araiah, 2011) even in an era of all things data-driven.

Making Spaces for the Dashes in Between: What Linda Di Palena Can Teach Us about “Becoming” a Highly Qualified Teacher

Gliding behind me and into her 8th grade Language Arts 3rd period classroom as the late bell rang, Mrs. Linda Di Palena asked me, chuckling, if I had heard her “bitching” in the hallway. The 8th grade shredder had been moved from the team’s work lounge to a colleague’s room. Furious, Linda had informed the custodian that if he didn’t move it back she would. On top of that, a home-roomer had been fresh with her that morning and Linda had gone “Italian” on her, i.e., loud and gesticulating. As her 21 8th graders returned to the multi-genre research papers they had begun earlier that week, her gaze fell to a growing pile of stray paper cuttings on the polished concrete classroom floor. To no one in particular and everyone in general, Linda Di Palena declared, “I ain’t your momma and I ain’t cleaning up after you! Sorry if you don’t need to hear this, but I’ll say it again—and that way I can offend everybody equally.”

Contemporary, No Child Left Behind/Race to the Top lexicons describe highly qualified teachers as individuals fully certified and/or licensed by the state; holding at least a bachelor's degree from a four-year institution; and demonstrating competence in each core academic subject area in which the teacher teaches (NC Public Schools Department of Public Instruction, 2014). For many, however, the federal definition falls short of bringing sense to how it is that some

teachers are able to leverage “mindfulness” (Hamel, Shaw, & Smith Taylor, 2013) to motivate, and even, inspire their students in a new English education committed to perpetuating, fostering, and sustaining “linguistic, literate, and cultural pluralism as part of the democratic project of schooling” (Paris, 2012, p. 95)

Linda Di Palena was not the typical “giving-tree” middle grades Language Arts educator who, even at the end, would offer her stump for children to sit on (Johnson et al., 2005; Silverstein, 1964). Rather, she described herself jokingly as “an equal opportunity bitch” who did not discriminate in terms of whom she would give all hell to (without actually cursing) should she feel it was necessary or deserved. Yet, during the semesters that I came to know her, she was twice awarded “Most Inspiring Teacher” by the student body of Raystown Middle School, North Carolina. There was a quality about who she was as a teacher that students recognized and embraced—however rough around the edges Linda could be.

When I first met Linda in fall 2009, my goal was to tease out how a middle grades language arts educator understood and enacted with diversity in a small town middle school in metro Charlotte. As our three-year conversation became increasingly personal, my questions shifted to eliciting what informed a particular interaction with a particular student—or group of students—on a particular day—such as the interaction recounted in the vignette that opened this paper. Where did a statement such as “I’ll offend everybody equally” come from? What could it also mean?

Here, I capture three of the “themes” that emerged from our conversations about what life had taught Linda Di Palena about herself and her teaching. I share these as potential insights to understandings about ELA educators’ potential for “becoming something different” (Fairbanks, Mason Crooks, & Araiah, 2011) even in an era of all things data-driven. Linda Di Palena’s story, I argue, matters especially in a day and time when the value of teachers and teaching has been increasingly reduced to points on a data spread—and the “value” such points are deemed to (not) represent.

Becoming Linda Di Palena

My entrée into Raystown Middle School followed from my asking a colleague if she knew of a Language Arts teacher whom I might observe. By January 2009, I had made my first visit to the middle school and continued through spring 2013 to Linda Di Palena’s retirement. The stated mission of Raystown Middle School was, “To provide a safe, inviting and nurturing environment where students become responsible life-long learners and productive citizens through a challenging curriculum that promotes social, emotional and academic growth and is enhanced by communication with parents and the community.”

Nestled between a farmhouse and a small interstate connector, the Raystown Middle School, formerly located in the center of historic Raystown, had been rebuilt in the late 1990’s on a parcel of land gifted to the county. Set in Raystown NC, Raystown Middle School was considered “urban” in that it was located within the city’s limits and a significant number of

African Americans and Latinos attended the school. In 2009/2010, the school enrollment was just shy of 1,000 with approximately 56% of the population self-identifying as White, 25% as African American, 17% Latino, and the remainder a mix of Asians and Native Americans. 51% percent of the student body also qualified that school year for free and/or reduced lunch. It was in this small town urban context that Linda di Palena was voted most inspiring teacher for two of the three years I knew her.

Becoming a Reader

Linda Di Palena became a teacher in spite of her husband who, Linda explained in one of our first meetings, when hearing that his wife wanted to finish the undergraduate degree she had abandoned in 1969, agreed—on the condition that she not go into education. In Fall 1988, Linda Di Palena promptly enrolled in the Department of Middle Grades Education in the historically black college near their Winston-Salem home. Linda, however, was not African American. Rather, she was the European-American daughter of working-class Italian immigrants who had settled outside of Pittsburgh after the Second World War in a small town of 4,000—“basically churches and bars.” After her freshmen college year, Linda Di Palena decided she was simply wasting her father’s hard-earned money: “I basically flunked out.” Marrying a sweetheart from her same Pennsylvania hometown, Linda started a family that followed her husband from Pittsburgh to Davidson, GA to Winston-Salem, to Kernersville, to Raystown, NC. Linda initially explained to me—and to her students every first week of class—that she had dropped out not because she was lazy but because, as she understood it, she could not read.

She had been a “bad” reader from the beginning—since her parochial school days with the nuns—at the proverbial bottom of the class. When her oldest son entered middle school, she began reading again, and this, she explained, because her son was reading better than she was. Nightly, Linda read aloud—re-teaching herself:

I opened the Bible and I started reading starting with Genesis and I READ OUT LOUD. You can’t pass up words you can’t start over a word when you are reading aloud. When you hear the words and you pronounce the words or attempt to pronounce them . . . and you go ‘Oh I recognize that word now! That’s what it looks like! This is what it sounds like.’ And you put those two together.

When Linda did decide to enroll in a postsecondary degree in education, she opted for the middle grades explaining that she had always felt close to middle graders.

Becoming a Teacher

She had substitute taught in Atlanta, Georgia in elementary and middle schools. Of the two, she felt closest to the middle grade kids—“I felt like I wasn’t very far away from them even though I was 40 years old but you know mentally I don’t think I ever got out of adolescence mentally. So it was kind of wonderful to find other kids who were just like me and I could teach them.”

With her husband's relocation from Georgia to North Carolina, her husband told her that she needed to get a job, which was fine with Linda. They had three kids and money was there but tight. However, she explained to him that what she really wanted was to go back to school. In a June 2009 interview, Linda explained,

The first time I went to school—to college—they'll take your money for two years. And I basically flunked out. I was on the Dean's list but the one that said 'don't come back.' So I didn't go back because I didn't want to flunk any more classes. Educationally on my part, I wasn't ready . . . I tell my students all the time.

Her experience at Winston Salem State was different, she explained, because, finally, she could read. In a June 2009 interview she explained, "That's when I thought, Wow, I have wasted so many years." Thinking about herself as a reader, she hypothesized that part of the problem was that she had never been read to as a child: "My dad read worse than I did. And, I remember one time I insulted him terribly by saying, 'Oh, give me that book; I can read better than that!' And the look on his face—and he just says, 'Well, read it then.'"

Becoming the Book

Remembering her father, and remembering her own experiences in schools and with schooling, much of what Linda did in her Raystown MS ELA classroom, was to read aloud to her students: directions, fiction and non-fiction, standardized tests—she read them aloud from a rocking chair at the head of the horseshoe of desk/chairs to the 8th grade students she taught. Linda read aloud, and so too did her students.

After each paragraph or so, Linda would paraphrase or comment or invite comments or even, at times, complaints, such as "That doesn't make any sense." Or, "I hate when they put words that I can't pronounce." Or, even, "Let's just skip this part." Connections were invited to be made. In fall 2009, one class actually spent two days talking about something—Linda leading the way—sort of, but not exactly, related to the Roberto Clemente memoir they had yet to begin. They would, eventually and pretty much always as I witnessed it, return to the text—somehow. That was reading: sometimes a struggle, sometimes a tangent, always together—just like life. They read aloud and they would talk about what they read, and how they were reading, and what it felt like and meant to them—and other things that came to mind along the way. Linda's read-alouds were deeply personal text-to-self to text-to-world connections. Linda, to paraphrase Wilhelm (2008), "became the book"—and so did they all.

Auto-bio-graphy and Highly Qualified Teaching

Rather than disqualifying Linda Di Palena from the sort of giving-tree-teaching embedded in the professional folklore, the totality of Linda's successes, failures, and incompleteness enabled her to be the teacher who Raystown Middle School students might consecutively elect as their most inspiring. During the semesters I visited Linda, so too did her former students. About a

handful came around Christmas and another handful at the end of the school year—to tell her that they remembered her, that she had helped them tremendously, that she they still appreciated her for being “real.”

With her visitors gone, I asked Linda what she understood they meant when they said she had been a “real” teacher. Linda explained, “I don’t treat them like my shit is any better than theirs. I don’t talk down to them.” It was her lived experience as a struggling reader and child of immigration that Linda brought to her teaching—and to which her students responded. Or, she explained,

There is a kindred spirit I think if you allow it. When you come from a bilingual home you understand tradition you understand culture in a different way than if you were born and raised in this county and never experienced it . . . Knowing that I’ll stand behind them in that diversity. . . these kids know that I won’t tolerate the intolerance that sometimes they bring from their homes.

As faculty at a large teacher education institution in the New South, I have worked for the last two years with my colleagues to document in ways that I have found somewhat excruciating the preparedness with which our teachers exit our initial and advanced teacher licensure programs—and to design and implement the evidences whereby they might demonstrate they are highly qualified to engage students in literacy. An unlikely role model of an English Language Arts teacher working with urban, albeit small town, learners, Linda was, to begin with, pure South Western Pennsylvanian. She spoke with her outdoor voice all the time and was not, among other things, “Her students’ Momma; didn’t clean up after them; and wouldn’t give into them even if they came crying—and, sure, they could bring their Mommas to see her too!” (an audio taped quote). All this because, as she explained, she “Didn’t give a rat’s ass.”

Pondering what the complexity of adolescent literacy, Moje, Overby, Tysvaer, and Morris (2008) argued that the crisis of “motivated literacy” might stem from the classroom texts that teachers impose on adolescent readers, the distinct academic literacy skills that such texts require, the difficulty of transferring everyday literacy skills from one context to another, or perhaps simply because that the literate demands of schooling “are not relevant to the world adolescents have come to value” (p. 113). On the one hand, it almost seems that if adolescents develop a sense of their literate selves, such development seems to happen in spite of teachers. At the other end of the professional spectrum, rhetorical declarations have committed to the development of teachers who value working with adolescents and are prepared to do so. Yet, indeed, across the Middle Grades literatures, representations of what such an educator might look or sound like are, remarkably, few, beyond the anonymous gatekeepers (see, e.g., Valdés, 2001), or, mythological “giving trees” who, even at the very end, offer their stumps for children to sit on.

Even if reducing herself to a stump for the children to sit on was not even a vague possibility for Linda Di Palena, she confided that she did care. She cared deeply. It was perhaps for this reason

that she not only reflected on her own story as a learner, and daughter, and wife, and mother but also articulated that unfinished story to the class those first weeks of school and again and again with the idea being that an autobiography was a story written by one's self. The dashes, as she explained to her students, between one's auto and bio and graphy were yet unfinished. What had happened and what might happen in between was, in large part, for them to write just as Linda's auto-bio-graphy was yet to be written. Auto meant self. Bio meant life. And graphy meant writing. Auto-bio-graphy. We write our own stories. As teacher educators, we need to think and re-think the stories we have written or need to write more of and to what extent the credos to which we adhere allow for the sort of diversity and by consequence motivation that someone such as Linda Di Palena might bring to the our understandings of literacy and adolescence. Life had taught her a lesson or two—and she, at least, was committed to sharing what she had learned about becoming Linda Di Palena, about reading herself, and about reading the wor(l)d—no matter how hard it was sometimes to make sense of it all.

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STUDENTS' WRITING CAN BE BETTER: ENCOURAGEMENT AND TIME TO PURSUE SELF LEADS TO ENGAGEMENT AND BETTER WRITING, RESULTING IN POSSIBLE INCREASED WRITING LEVELS NATIONALLY

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Abstract

This paper focuses on an overview of data on students' performance in writing from the Nation's Report Card and discusses research that identifies factors contributing to below-standard writing. I concentrate on the teacher/student relationship, which includes a friendly, positive classroom with time to pursue self and modeling of writing in progress (shared writing), teachers needing better writing training, and standardized tests. There are key reasons to raise students' writing quality; I list three as employability, the tie of freedom with literacy, and problem-solving through invention. Studies on different approaches shown to raise student interest and performance point to encouragement to find self, which is similar to play. Public and "privileged identity" are taught differently. All students need encouragement to evaluate, analyze, and synthesize. My recommendations come from research that shows students' engagement improves their writing and comes from initiating self-discovery. My review concludes with three activities I created and use in classrooms that meet NAEP's newest focus on communicative purposes: to convince, inform, and share.

Students' Writing Can Be Better: Encouragement and Time to Pursue Self Leads to Engagement and Better Writing, Resulting in Possible Increased Writing Levels Nationally

Various studies support the idea that writing is not where it could be nationally at the 8th and 12th grade levels. Time spent in classrooms, research, and data reveal why. I believe one reason is that students are prompted to provide the "right" formula and answers instead of following individual voice, which then leads to students viewing writing as boring and frustrating. I believe students who are prompted to evaluate, analyze, and synthesize enjoy writing more. They become engaged, creative, and inventive. I've taught and tutored writing from children to adults and watched as they "shut down" from restrictive writing assignments but were creative otherwise. I started to pay attention to this difference and reflected on my own writing assignments. I realized students know writing assignments are often not about their ideas. They know they're asked to provide the accepted "correct" answer in the "correct" format.

Besides trying different approaches with students in an effort to raise their enthusiasm, I poured over research, sifted through statistics, paid attention to other writing teachers' successes, spoke with students outside of classrooms, and studied students from elementary to

college level. One of the largest obstructions to students' becoming engaged with their writing that I found is how students view the act. I found this view to be "another tyrannical exercise to complete for a grade" (Brimi, 2012, p.74). Students often say they find writing boring and frustrating, indicating their writing could be better otherwise. When asked about writing outside the classroom, many students said they didn't do so, but those who did described writing as being different from that inside a classroom. "I get to be me. I don't have to worry about doing it the wrong way, or getting it in on time," some students say. Translated, they're saying restrictive boxes and limited exploration time doesn't allow them pursuit of self, which results in lower quality writing.

Creative writing does happen inside classrooms, but not often enough for assignments. A study by Brooke (1987) examined the "underlife" in classrooms and found students' writing creative when writing between themselves instead of for their teacher. In regard to his report, it can be hypothesized students' interest raises writing quality and intrinsic motivation. The results of Brooke's study also found students avoided assigned work and instead wrote what they wanted (notes to one another between their teacher's instructions and assigned work). Brooke adds this writing seemed to "distance (them) from the demands of the classroom while hopefully remaining successful within it" (p. 148). Brimi and Brooke's studies together indicate when students are bored with writing, and teachers require them to contort into a prescribed voice, writing quality drops.

Another reason students' writing is not where it could be is suggested by Brimi (2012); he reports that teachers often feel compelled to teach to standardized tests, depleting time for student intrapersonal exploration. This has significance when combined with additional results in the same study report that teachers are not satisfied with their own writing training. The results of this report suggest not having enough time for student exploration combined with teachers' lack of writing knowledge contributes to students' lower writing levels. A similar study by Parrand and Limbrick (2009) identified teachers' variance of writing understanding as "the single source of influence" that "contributes to variance in student achievement," indicating enhancing teachers' writing knowledge enhances students' writing (p. 585). Still another study by Gallagher (2011), reports support and encouragement come from teachers, ones who "come out from behind the curtain" (p. 225) and model instead of showing good writing as well. Gallagher's report indicates students need examples of writing pieces in the making: of their teacher modeling the creative process.

This article focuses on how encouragement and time to pursue self through writing leads to student engagement and better writing. With engagement, creativity and invention may then materialize. Many teachers say there isn't enough time for this kind of writing, only enough to teach standardized test writing. Without time to pursue self, however, many students don't like writing and struggle to learn an academic form of discourse that isn't used in or after college. This article finds higher student writing success with examples of writing in the making such as with shared writing activities.

To understand why it is important for students to write better, I examine three reasons: to be employable, for improved literacy rates comparable or higher to other countries (the U.S. is ranked 14), and to increase the possibilities of solving world problems through students' unique visions. Next, I share my concern with where students' writing level is nationally. Before I provide three lessons to make a difference in students' enthusiasm, creativity, and understanding, they first need encouragement to find and explore "self." Without this explanation, their enthusiasm, creativity, and understanding will have a difficult time occurring.

Encouragement, time to pursue self, and examples of writing in progress work better, I've found, when the atmosphere of a classroom is friendly, positive, and safe. From working with a large number of teachers and students, I've seen how the relationship between teachers and students affects a lesson. Students perform better with friendly, fun, and available teachers. They then become more optimistic about assignments, even the challenging ones. I often ask them to be brave about sharing their ideas and self. They aren't able to do this, however, in an environment where they feel unsafe. This is why I tell students my only rule is consideration of others and themselves. "Even mistakes are okay," I say, "and are encouraged because mistakes are how we learn." So if someone is brave and makes a mistake when answering a question, I frown on anyone making fun of them. Instead, everyone is seen as a learner. In time, students really begin trying to explore their ideas. It always surprises me that eventually how more hands go up when I ask a question, after this, and how students' submissions become more thoughtful too.

Why Students Should Write Better

Students should become better writers for a few reasons. One is to be employable. In their study, Simkin, Crews, and Groves (2012) state "good writing skills as essential for both existing employers and new hires" (p. 81) and the National Assessment of Education Progress (2011) also believes good writing skills are important to obtaining and keeping jobs. The NAEP states 80% or more of employees have writing responsibility, an amount expected to grow. Additionally, Addison, McGee, and James (2010) cite inadequate writing skill "as a barrier to promotion" and estimate "\$3 billion is spent each year training employees to write" (p. 170). These reports indicate businesses are more likely to hire those who write and communicate clearly over those who cannot and that businesses will keep and promote only those who can.

Brown (2012) revealed that the United States was ranked #14 in literacy levels for 2011, another motivation for educators to teach students to write better than basic level. Writing and reading are tied together when defining literacy because writing and reading "involve development of meaning, both conceptualized as comparing activities in the sense that both involve planning, generating and revising meaning" (Langer and Filhan, 2000). Reading is related to freedom in the same way that illiteracy has been a way for "society to control its citizens" (National Council of Teachers of English, 2009, p.2), yet writing allows "citizens [to]

exercise their own control” (p. 2). Furthermore, Walker’s book, *The Color Purple* (1992), Finn’s *Literacy With an Attitude*, Stetson’s *Freedom of Voice* (1986), and Lyons’ (2000) work profiling American Indians and how they lost their way of expressing (*What Do American Indians Want From Writing?*) enforce this same idea because freedom and individualism can be lost through losing literacy, or in never developing literacy in the first place. Not knowing how to read and write means vulnerability and being easier to manipulate. Walker’s story of Celie in *The Color Purple* is an illustration of how courage and dreams may not materialize unless literacy is developed. The main character, Celie, changes dramatically from accepting oppression, being beaten, and living unaware to daring to be herself and to follow her dreams. Finding a voice provides a say about her life and how she is treated. When Celie finds her voice and articulates that voice through both writing and speaking, her life changes for the better. Her writing reflects how Celie’s thoughts, needs, frustrations, and desires act as a spring-board to eventual reality. These reports and examples conclude writing is important, but awareness of self is first needed to do that and awareness comes through support and from encouragement as it did for Celie. Writing well is even more important because higher clarity allows for higher connection between ideas, information, and self.

Another reason for students to write better is to know themselves and to express individuality, which in turn allows for invention (Glenn, 2003). The question arises, however, of how to inspire invention. Glenn found her students passionless until she released them from “the constraint of a prescribed pattern” (p. 61). It can then be assumed that in order to engage students, they must first be allowed to be themselves before individuality is released, which in turn allows a fertile area for invention.

Play is associated with invention. Another instructor found improvement with students’ writing. In Blake’s (2004) classroom, he provided students more say and relinquished control leading to students beginning to play, and as they “played,” their “imagination flourished” (37). The hypothesis can be made with Glenn and Blake’s reports that play leads to invention, which in turn may eventually also lead to better writing and possibly even solving world problems.

Writing Ability Nationally

The report from the 2011 National Assessment of Educational Progress writing assessment measured 8th and 12th grade students’ ability to convince others (to persuade), to inform others (to explain), and to share human experiences (to convey experience). The data indicates about a 25% of the country’s 8th and 12th grades have good writing skills (Lawrence, 2012); students’ essays at both 8th and 12th grade indicate only 27% “were considered well-developed and organized” (p. 1). Additionally, results suggest each grade made Basic level and not Proficient or Advanced (NAEP, 2011). The NAEP defines Proficient as the ability to “represent solid academic performance.” As a result of 2007 writing tests, The Council of Writing Program Administrators (2010), along with *The National Survey Engagement* wanted students to have more instruction on how to write and with various types of writing formats (Addison, McGee,

and James, p. 153). The 2011 NAEP writing assessment focused on, among other areas, communicative purposes as mentioned previously: to convince, to inform, and to share experience. The 2011 writing assessment was also the first to be completed on a computer. Since the invention of the computer, writing has transformed quickly, as did as education and the amount of writing by most everyone (*National Council of Teachers of English*, 2009, p.4). After the last paper and pencil test in 2007, results revealed writing was not where it could be. The Common Core State Standards for English Language Arts then attempted to prepare students, yet the Nations' latest *Report Card*, along with reports, feedback from schools, teachers, parents, and students suggest something more or different is needed. That difference is encouragement to find self, which is similar to "play." Students' are then stimulated, and stimulation equals engagement. Also encourage evaluation, analysis, and synthesis as the "privileged" identity enjoy. For example, I provide three lessons to address standard requirements of the ability to convince, inform, and share.

Three Activities I Use Leading to Better Writing and Enhance Student Enjoyment

Activity One: Reflective Essay Prompt

(Ability to Share) This lesson encourages students to begin thinking about themselves and to release evaluation, analysis, and synthesis. I've found success with this lesson because students get to use their own ways of searching their ideas and self. They are freed from formula writing, which seems to allow for content. In addition, they consider their reasons to succeed, something they don't always think about. Suddenly, writing isn't only just another assignment to satisfy their teacher.

Actual assignment prompt for students: I supply a traditional structure example, but if the students are told that if they have a different one, maybe based on some of the authors' work and models we've examined, or one you've created, you may use that instead.

The purpose of this assignment is to learn something about yourself. What drives you? In other words, what inspires you to reach for the goals you've set for yourself? After you decide on what drives you, think about why. My drive is my children and making a difference in their lives. For some people, their drive is another person. For others, their drive is to go farther in life than their parents did. Some people's drive is to make enough money to care for a family. Further examples: A college student eventually wants to play professional football. He needs to keep his grades up in order to play on the college team. His ambition to become a professional football player drives him to do his best in classes and in college football. Another example is of a young woman who works hard for good grades because she wants her parents to be proud of her. Still another example might be to build the most amazing race car ever seen. My ambition is to set good examples for my daughters. I want them to attain their dreams, but realize they must learn this means getting back up after life knocks them down for the gazillionth time. I also want them to know that getting knocked down doesn't mean they're not good enough. It only means they must dig deeper inside themselves for strength, the kind

they won't know they have until they've struggled back up again. To further the validity of this lesson, they must see me get back up after life has knocked me down and kicked me around hard.

For the body of your paper, provide examples of how this drive helps you, how it hinders you, and how it has made your life easier or more difficult. Connect these examples to how your perspective has changed through time because of your drive. Has this drive, these experiences, and perspective provided you with an insight? What is the insight? Some techniques to use may include comparison, interpretations, analysis, or description. What does thinking about your drive teach you about yourself?

For the conclusion part of your paper, relate back to your thesis. Explain why your drive matters. Also, can you leave your readers with something to really think about?

Activity Two: Shared Writing, "Your Dad Just Bought an Awesome Boat"

(Ability to Convince) This lesson encourages self (introspection of oneself), evaluation, analysis, synthesis, and raises enthusiasm. It also encourages understanding of how to write an informational and persuasive essay. Finally, this lesson provides an example of writing in the making. This is where I "come out from behind the curtain" as Gallagher (2011) suggests I do (p. 224-225). I've found success using this lesson with both beginning essayists and confused older students who may never have grasped the idea, even some at the high-school level. Adaption of this lesson should then be made age-appropriate. The lesson puts the idea of essay into something they understand, and evokes participation in the creation step of an essay.

About the lesson: Students form a circle with their desks. As part of this circle, I use a dry-erase board on an easel visible to all. They help me create an essay because especially beginning writers need an example. I begin by explaining how we're going to learn about writing an informational/persuasive essay, saying:

Let's imagine our dad just bought this really awesome boat. Not only are we curious about it, but we're definitely going to tell our friends too. Before we can tell them, we need to learn about the boat. This is called research. After getting permission, we explore the boat inside and out until we've formed an opinion over-all and about various parts and features, which we will share with our friends.

Next, I ask students if they like the boat they just imagined. Most say they do and want to tell about it (enthusiasm). "Are there parts more awesome than others?" I ask them, and "parts that are just okay or boring?" They usually nod in agreement. I go on to add:

When writing an informative/persuasive essay, we share our opinion of whatever we're writing about in the first paragraph. In this case, we're writing about...say a white boat called a *Cabin Voyager* with a big engine. There is a cabin below with a bathroom, a bed, and a small refrigerator. We may tell a little about the boat in this first paragraph along with giving our

opinion. The things we talk about along with our opinion, is what we're going to talk about in other paragraphs.

Then, I write with a black marker on the dry-erase board: "A *C & C 30 (Sail, 2015)* is loaded with go-fast goodies and" and "draws much inspiration from much bigger and far more expensive class of racers" (34). I add, "Though this boat doesn't have everything, there are plenty of fun things to do on a *C & C 30*." I make sure to list these things and some of the downsides of the boat and provide places and examples of documentation using the author's name, year of issue, and page number.

I continue with how and why we must document information we find in places like books, magazines, newspapers, and on the Internet, but mainly I work at getting the idea of how to write an informational/persuasive essay across without restricting them. As the lesson progresses, I add how we sometimes change our minds about what we write and then cross it out. I do this on the words we wrote with another color. To continue displaying editing in action and how messy this may look, I write on the side of the paper in the margin; my new idea with an arrow going to where I want new ideas inserted. I explain how this first paper is usually sloppy because it's our invention copy.

Next, I ask students to help me write paragraphs using details from the first, introductory paragraph. For example, one paragraph may be on how fast the boat is. Another feature is the cabin below. We may also add what we wish the boat had. Finally, we work on the conclusion paragraph together. I ask for ideas and input from students throughout the whole lesson, and add how some essays want only three middle paragraphs. "Today," I say, "you get to use as many as you'd like. Think of this essay as you telling the rest of us about the boat you imagined and all you know about it. Don't forget to tell us your opinion and explain why you think and feel the way you do. Maybe add how you'd drive and use the boat when you're all grown up because your dad will give it to you. Use your imagination (encouraging self and invention). Will you use the boat to help others? Be in a race? Maybe you'll change some things about this boat. What will those be and why? What kind of fuel will your boat use? Will this fuel be a new fuel that doesn't harm the environment? Explain. Will you use the boat to have fun, such as to go fishing, or water skiing?"

Activity Three: In Place of the Five-Paragraph Essay Formula

(Ability to Inform) This activity encourages creativity and collaboration by providing examples of real-world writing and raising student enthusiasm. This activity also teaches flexible formatting. I've found success with this lesson because many students seem to enjoy the social collaboration, exchange of ideas, and the change of routine. The lesson helps students to understand expository writing in the professional world (application and purpose). They also begin to realize how "real-world" work doesn't adhere to the rigid 5-paragraph format. Instead, creativity and the ability to relay information and ideas are.

About the lesson: I bring in a copy of *Orion* or another magazine when our class begins studying “expository writing” and we examine introductions, them and/or thesis, argument and persuasive techniques, and the distribution of information, and finally the conclusion. I then ask students to find and bring in for our next class an article from either a magazine or newspaper. The whole thing can be printed out if from the Internet, or cut out if from a hard-copy. The day they bring their articles in; I ask them to cross out with a pen or gently tear off the introduction part of the article. Next, I separate the class into small groups of 3-4. I explain that, as a group, they are to choose one of the articles from the ones everyone in their group brought in. Together, they then are to work and come up with a new introduction for this article. They discuss afterwards how it is different from the original and how the whole article changed as a result of this new introduction. I ask students whether these articles had more than five paragraphs, not just the one they all chose to change the introduction to, but from all of the articles in their group. Though the articles may use more than five paragraphs, are they well-organized? Well developed? The introductions and conclusions too? Were the articles well-scaffolded? Were the articles interesting? Did they hold your attention? Were they easy to follow?

In Conclusion

At a time when teachers and students are led to follow a script of standards, we often go into a mode where creativity, individuality, and curiosity go by the way-side in order to check one more item off on a long to-do list. Unfortunately, when we do this, learning isn’t as effective as it could be because our heart and interest isn’t there. Deep learning occurs when we are engaged, not when we’re speeding through, disengaged, and bored.

Each of these three writing activities I use in classes involves an element of fun and creativity because students get to utilize their ideas, opinions, and desires. When students incorporate themselves and realize their input is wanted, their passion increases. They feel empowerment and then commit to the activity. As a result, they find courage to maybe be a deliberate change agent and creator. They work to make a difference for themselves, for others, and sometimes for the world. These activities ask students for their ideas, thoughts, and respect them. Students don’t regurgitate someone else’s standard “right” answer. At the same time they learn to respect themselves and others, that being completely alike doesn’t always mean strength, and that writing is a powerful, variable, and useful tool.

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