Pre-service Teachers’ Envisioning and Enactment of Content-Area Literacy Instruction in Elementary Classrooms

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Abstract: Using visioning protocols is one way to elicit pre-service teachers to provide specific details about their literacy beliefs. Visioning allows for pre-service teachers to imagine what could be. This qualitative study examined six elementary education pre-service teachers’ visions of content-area literacy instruction over the course of two semesters of coursework in their senior year of an Elementary Education program at a large, state university in southeastern United States. The findings suggest that pre-service teachers’ visions can be influenced by both their coursework as well as their experiences in their practicum and student teaching classrooms. Findings also suggest that it is easier for pre-service teachers to integrate literacy, social studies, and science content than it is to integrate mathematics content. Implications for teacher educators are discussed.

Keywords: visioning, pre-service teachers, content-area literacy instruction

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A substantial amount of research has shown that beliefs influence teaching practices in the classroom (Chin & Barber, 2010; Chiodo & Brown, 2007; Clark, 1988; Elbaz, 1981; Richards, 1985; Richards, Gipe, & Thompson, 1987). Other researchers have found that beliefs and practice are not always aligned (Phipps & Borg, 2009; Raymond, 1997; Trigwell & Prosser, 1996). Pajares (1992) noted that studying pre-service teacher beliefs may provide insight into educational practice that other research foci cannot.

Studies demonstrate teachers are on a continuum of professional learning (Feinman-Nemser, 2001) and that beliefs about pedagogical practice are impacted by their own personal observations of teaching as students in a K-12 setting (Lortie, 1975). As such, literacy pre-service teachers do not enter the university classroom as blank slates—they have beliefs and experiences that influence their own understandings of literacy and that affect their classroom practice (National Research Council, 2000). These beliefs can be robust and engrained in pre-service teachers (Wideen, Mayer-Smith, & Moon, 1998). Likewise, Joram and Gabriele (1998) noted that previously established beliefs held by pre-service teachers do have a large impact on their beliefs about teaching and learning. Thus, pre-service teachers are viewed as “insiders” in the college of education as their teacher preparation courses may not be very different from what they have experienced in their K-12 education (Pajares, 1992). From a social cognitive perspective, the students have been apprenticed into a method of teaching and learning from their years in K-12 schooling (Bandura, 1986; Lave & Wenger, 1991; Vygotsky, 1978; Wenger, 1998).

Literacy teacher educators who do not address pre-service teachers’ underlying beliefs may have limited impact on changing their pedagogical practices. Darling-Hammond and Bransford (2005) wrote, “If their initial understanding is not engaged, [teachers] may fail to grasp the new concepts and information” (p. 366) presented to them in their university literacy methods classes. Such concepts and information include incorporating disciplinary literacy instruction into the elementary classroom (Brock, Goatley, Raphael, Trost-Shahata, & Weber, 2014; Shanahan & Shanahan, 2014) and the 50%-50% split of informational text and literary text in the fourth-grade classroom per the National Assessment of Educational Progress (2008) and the Common Core State Standards Initiative (2010).

Continuous pedagogical change is brought about when pre-service teachers see connections between their belief system and new ways of thinking about literacy instruction; beliefs are not stagnant—they develop over time as individuals continue to learn, teach, and reflect on their own practice (Buehl & Fives, 2009; Olafson & Schraw, 2006; Olson & Singer, 1994; White, 2000). Yet, engaging in conversations about pre-service teacher beliefs can be a challenging task for teacher educators because talking about beliefs may elicit discomfort, especially if pre-service teacher beliefs clash with best practice. However, examining pre-service teachers’ beliefs or visions—their “images of their ideal classroom practices” (Hammerness, 2004)—is necessary as it allows insight into what pre-service teachers think about pedagogy and content and what experiences in their teacher education preparatory program make them reflect on their beliefs (Bryan, 2003).
In my work with elementary education pre-service teachers as an assistant professor of content-area literacy and disciplinary literacy, I’ve always been intrigued with my pre-service teachers’ visions of literacy instruction and how those visions are enacted (or not enacted) in the field. I have talked to my pre-service teachers before at length about their own K-12 experiences, what they envision good teaching to look like, and how their ideas about teaching change as they move through the teacher education program. However, I’ve never had the opportunity to study this topic until now.

At my institution, education faculty members are encouraged to serve as university supervisors during pre-service teachers’ student teaching experiences. Because of this placement, I crafted this study to examine a subset of my elementary education pre-service teachers’ visions of content-area literacy instruction, which were written in my senior methods content-area literacy course and how those visions were enacted in their student teaching experience the following semester. Thus, the intent of this study was threefold: 1) to examine six elementary education pre-service teachers’ content-area literacy visions, 2) to examine how those visions changed over the course of a senior methods content-area literacy course, and 3) to examine how their established visions were aligned with and enacted during their student teaching semester.

**Theoretical Framework**

This research was informed by literature on visioning, (Duffy, 2002; Feiman-Nemser, 2001; Gambrell, Malloy, & Mazzoni, 2011; Hammerness, 2006; Rattigan-Rohr, 2005; Scales, Shulman, & Shulman, 2004) which is one way to delve into pre-service teacher beliefs. In visioning, “teachers imagine what they could be doing in their classroom, how they could be interacting with their students, and what they and their students could be achieving” (Hammerness, 2006, p. 1). As such, the pre-service teacher asks, “What is my ideal classroom?” (Duffy, 2002). Visioning can be seen as a complex work (Hammerness, 2006) composed of multiple aspects. For example, visions may have emotional and personal undertones; they may solicit images of past and present experiences that impact our views of what should occur in the future (Hammerness, 2006).

This process allows one to include a multitude of perspectives in conversations about literacy instruction, as well as document such beliefs in the various spaces, such as university classrooms, where literacies are constructed. As Damico and Rust (2010) posited, teacher educators are “invested in preparing them [pre-service teachers] for what could be”; our job is to push our students “beyond […..] (what is) to envision, experience, and critically evaluate ways of working with their future students” (p. 104). Duffy (2005) noted “the focus is teachers’ conscious sense of personal stance and values about teaching generally and about literacy in particular” (p. 302). As explained by Hammerness, et al. (2005), “Teachers need to have a sense of where they are going and how they are going to get there” (p. 385).

Feiman-Nemser (2001) argued, “Teacher candidates must [...] form visions of what is possible and desirable in teaching to inspire and guide their professional learning practices” (p. 1017). Such visions, as described by Feinman-Nemser (2001), allow pre-service teachers to see how their beliefs and practices
intersect and can be used as an evaluative tool in reflecting on their classroom practice. Visioning can be seen as a moral compass (Rattigan-Rohr, 2005), and it can be viewed as a guide for classroom instruction (Duffy, 2002; Gambrell, Malloy, & Mazzoni, 2011; Feiman-Nemser, 2001; Shulman & Shulman, 2004). Further, visioning can also be seen as a means of teacher empowerment (Vaughn & Faircloth, 2013) and can also be seen as a fluid space where teachers create and recreate their visions for instruction (Damino & Rust, 2010).

**Review of the Literature**

Teacher visioning has been examined in a variety of ways in teacher education literature. Some researchers (Hammerness, 2004, 2006, 2008; Squires & Bliss, 2004; Vaughn, 2014; Vaughn & Parsons, 2012) studied in-service teachers’ visions while others (Parsons & La Croix, 2013; Rattigan-Rohr, 2005; Scales, 2013; Turner, 2006) examined at pre-service teachers’ visions of instructional practice. Hammerness (2001) investigated current pre-service and in-service teachers’ visions. She found that teachers’ visions can serve as a tool for directing instructional practice. Specifically, crafting a vision helped teachers think deeply about themselves (e.g., why someone went into teaching, beliefs about students and instructional practice), which are not often challenged once a teacher is in a classroom context (Hammerness, 2008). Thus, visioning is different than planning.

According to the Merriam-Webster Dictionary (2016), planning is defined as “the act or process of making a plan to achieve or do something” (n.p.). In contrast, visions are the embodiment of a teacher’s dream in the classroom (Hammerness, 2006). Visions are informed by beliefs, experiences, and background knowledge. These are “vivid and concrete images of practice” (Hammerness, 2006, p. 1) that can come to fruition in classrooms. Plans, on the other hand, are the goals and procedures for a given subject or day in a classroom.

Hammerness (2006) uses a vision statement protocol with her 80 plus teachers in her study. She found that the vision statement allowed her teachers to imagine the possibilities and examine their own assumptions about classroom instruction. Utilizing a modified vision statement protocol (Hammerness, 2006) Hathaway (2013) found that her pre-service teachers’ visions became “more specific about the types of literacy supports they saw in their future classrooms” (p. 3) over time. They also reflected changes in their own role in the classroom moving from a more traditional provider of knowledge to one of facilitator (Hathaway, 2013). Likewise, Turner’s (2006) pre-service teachers crafted culturally responsive instruction visions; these visions described specific instructional moves the pre-service teachers planned to take in their classroom practice. Parson and La Croix (2013) looked at one teacher’s visions from teacher preparation through her first year of teaching. They found that the novice teacher “relied on her vision to guide her in identifying practices that aligned with the literacy goals she embraced” (p. 69).

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1 I acknowledge that there is a gender spectrum and that myriad pronouns exist that I can use when referring to individuals in my writing. Throughout this article I will use “her” and “she” to refer to individuals who identify as female. I have selected these pronouns because I believe they are more familiar for a diverse audience of readers and because my participants self-identified as female.
Others investigated their own teacher educator visions through self-study (Vaughn & Faircloth, 2011; Vaughn, Parsons, Scales, & Wall, 2016). Vaughn and Faircloth (2011) analyzed Vaughn’s vision of literacy instruction. They found that she “wanted [her] students to develop confidence so that they could be successful and had the agency to navigate the literacy experience” (n.p.). She emphasized the importance of authentic learning and engaging in meaningful literacy activities in the classroom. Further, Vaughn, et al. (2016) studied their personal visions as teacher educators. They reiterated the importance of crafting authentic instructional actions in teaching to help their pre-service teachers establish their own visions of classroom practice. These findings show that crafting visions can be a helpful tool for pre-service teachers enrolled in a teacher education preparation program (Parsons, Malloy, Vaughn, & La Croix, 2014). As such, creating a vision statement can help pre-service teachers metacognitively think about ‘what is’ and ‘what could be’ (Damino & Rust, 2010; Parsons, Malloy, Vaughn, & La Croix, 2014).

Hammerness et al. (2005) noted, “Developing a vision for teaching is the first step toward addressing the apprenticeship model of observation and the process of enactment.” (p. 386). Specifically, Vaughn and Parsons (2012) found the two novice teachers in their study were able to enact their vision of literacy instruction while successfully navigating constraints such as scripted curriculum and restrictive mandates. Scales (2013) found dissonance between her pre-service teachers’ visions and what ultimately occurred in classroom practice when they became first year teachers.

In the literature, visioning is often discussed as “developing a set of beliefs; a disposition for teaching; or a recognition of personal histories, subjectivities, and perceptions of their ideal teacher self” (Vaughn & Parsons, 2012, p. 18). Beliefs can encompass more than just self; they can include beliefs about content knowledge, specific pedagogical practices and approaches to teaching, students, and instructional contexts (Fives & Buehl, 2012). Beliefs (and visions) can change over time as one’s beliefs are challenged through engaging in new experiences (Greene, 1991). Damino and Rust (2010) posited that there are two spaces that can come into conflict with each other—the ‘what is’ (what occurs in K-12 schools) and the ‘what could be’ (pre-service teachers’ and in-service teachers’ visions of their future classrooms and students). Damino and Rust (2010) noted, “The spaces between what is and what could be are dynamic, fluid, and emergent, always reflective of what is most important to us as teachers and what is most important to our students” (p. 109).

In the current study, I build upon the foundational literature on visioning. First, I document my pre-service teachers’ initial visions and how those visions change over time in an elementary education senior methods content-area literacy course and language arts field experience. I then follow the pre-service teachers into their student teaching experience to see how their visions are enacted while student teaching.
Method

Research Questions

This was an exploratory, qualitative study that aimed to add to the knowledge base on how to facilitate elementary education pre-service teachers’ development of content-area literacy pedagogy and how they enacted content-area literacy pedagogy in their student teaching. This investigation was guided by the following questions:

1) What are the elementary education pre-service teachers' initial visions of an ideal elementary content-area literacy classroom?

2) How do these visions change as the elementary education pre-service teachers engage in a senior methods content-area literacy course and language arts field experience?

3) How were their visions enacted during their student teaching semester?

4) In what ways did their visions—written during a senior methods content-area literacy course—coincide with their student teaching semester?

Participants

I conducted the investigation with a subset of elementary education pre-service teachers enrolled at a large, rural, public university in southeastern United States. The study lasted two semesters during the senior methods block of courses and student teaching the following semester. The senior methods block includes a content-area literacy course as well as methods courses in mathematics, social studies, creative arts, and science. Thirty pre-service teachers were enrolled in my senior block content-area literacy course. Six of the thirty pre-service teachers agreed to be focal participants in the current study. I utilized convenience sampling (Merriam, 2009) for the recruitment of my participants. The participants were enrolled in the course and willing to participate in the study. All of the participants were assigned a pseudonym.

All participants were beginning their career, in their early 20’s, and self-identified as White females. As noted by Jiménez (2014), most of the pre-service teachers in the United States are White. While the majority of the teaching force in this state self identifies as White, non-Hispanic, and largely female (United States Department of Education Sciences National Center for Educational Statistics, 2011/2012), almost half of the student population in the state are African American (State Department of Education, 2016). Some areas of the state, such as where the university in the study is located, have a larger African American population of students and other areas have a larger White population of students.

Ruth taught all subjects in a kindergarten placement on the coast—which was about a five-hour drive south from the university—for the entire semester. Her student teaching experience was reflective of her elementary experience. She was from the coast and went to K-12 school in the neighboring school district. She taught in a predominately White school. Like Ruth, Jacqueline also went home to the coast for her student teaching experience. She was placed in a third-grade class and taught all subjects. Her school’s demographics were similar to her elementary experience and her school was predominately White and middle class. Caroline also went home for her student teaching. She taught...
second grade, all subjects in a school that was geographically in the middle of the state. She was placed in a neighboring school district, which closely mirrored her own K-12 school experience. Like Ruth and Jacqueline, her school was predominately White.

Kate was in a fifth-grade science and social studies placement. She was from out-of-state and was placed locally for her student teaching experience. Her school was largely African-American, low socioeconomic status, and not representative of her own elementary experience in a neighboring state. Likewise, Sarah and Ella were placed in majority African-American schools that did not mirror their own school experiences. Sarah was in a kindergarten placement for the first half of the semester and a first-grade placement in the second half. She taught all subjects in both placements. At her school, the majority of the students were on free and reduced lunch. Ella was in an English and social studies third grade classroom for half of her placement and in a second-grade class where she taught all subjects for the second placement. Both Ella and Sarah were placed locally.

Context

The senior methods content-area literacy course is the last of five literacy courses the elementary education majors take in this program. The university requires elementary education teacher candidates to complete 15 credit hours of literacy instruction across three blocks of classes: Early Block (Early Literacy I & II, preK-3 focus) taken with an early childhood course; Middle Block (Middle Level Literacy I & II, grades 4-8 focus) taken with a middle grades course focused on learner development and a foundations of mathematics course; and Senior Block (Integrating the Language Arts into the Content Areas), taken with four other methods courses: teaching elementary and middle school science, teaching elementary and middle school social studies, creative arts in the elementary classroom, and teaching elementary and middle school mathematics methods. The literacy courses were designed to be consistent with the International Literacy Association (formerly International Reading Association) standards for literacy professionals (International Reading Association, 2010) and the joint position statement for developmentally appropriate literacy pedagogy established by the International Reading Association and National Association for the Education of Young Children (1998), as required by the National Council for Accreditation of Teacher Education (NCATE, 2008).

Within the content-area literacy course, the students are introduced to content-area and disciplinary literacy instruction in the K-6 classroom, including the history of content-area literacy and disciplinary literacy and best practices in using informational texts in the content-area classroom such as implementing Ideas Circles (Guthrie & McCann, 1996) and instructional routines. They also created informational text sets. I modeled literacy strategies such as read-alouds, jigsaw (Aronson, 1978), RAFT writing (Santa & Havens, 1995), think alouds (Duffy, Rochler, & Hermann, 1988), personal dictionaries (Gipe, 2010), and exit slips (Fisher, Brozo, Frey, & Ivey, 2011).

In addition, the pre-service teachers spend 20 hours in an elementary (grades 2-6) language arts classroom over the course of the semester. In this placement, they complete
structured observations on assessment practices, content delivery, and questioning, work with small groups and individual students in a tutoring setting, and teach four whole class lessons. The students, in collaboration with the mentor teacher, select a topic that is found in the state’s curriculum frameworks in science or social studies and use the Common Core State Standards in English/Language Arts (Common Core State Standards Initiative, 2010) as well as the state frameworks to plan lessons using their text set and literacy strategies as the basis for instruction. The pre-service teachers are placed into pairs and each partner teaches two integrated literacy and science or social studies lessons in the field placement.

During their student teaching experience, the pre-service teachers were assigned to a variety of elementary placements. In the student teaching semester at this university, pre-service teachers are assigned either to one 16-week placement or two eight-week placements. In their placements, they start by teaching small groups or working one-on-one with a student and then build up to teaching whole class lessons in one subject area to eventually taking the entire school day for multiple weeks. Pre-service teachers also have the opportunity to either complete the student teaching semester locally around the university or go home and work in a school near their home city/county. Three of my participants chose to stay and complete the student teaching locally—in communities no further than 30 miles from the university—and the other three decided to student teach in schools near their homes. Two participants were placed on the Gulf Coast and one participant was in the middle section of the state.

**Positionality of Author in Study**

My literacy specialization is content-area literacy and disciplinary literacy instruction in K-12 classrooms, and I teach the elementary education undergraduate, graduate, and alternative route classes in content-area and disciplinary literacy for my university. My teaching philosophy is one of social constructivism in that knowledge is constructed through interaction with others (Vygotsky, 1962, 1978). In my class, I serve as a guide for my pre-service teachers and we construct our knowledge about content-area literacy together in class. Thus, learning is a social, collaborative activity.

I teach content-area literacy classes every semester, and I was the professor of the content-area literacy course during the study. I structure my course to be one rooted in reflective practice and my students engage in authentic tasks (e.g., creation of a unit text set and lesson plans, discussions on practitioner texts similar to a faculty professional learning community). In this particular semester, I modified the vision statement protocol from Hammerness (2006) and Hathaway (2013) to focus solely on content-area literacy instruction as opposed to one that focuses on the ideal classroom in general.
The course was held over a 16-week period, and my class met every week for two hours. I served as the university supervisor for the field experience component of the senior block for four of the participants (Kate, Caroline, Ella, and Sarah). I also served as the pre-service teachers’ university supervisor for their student teaching experience. Each week, I graded their lesson plans and other course assignments tied to internship. I also observed the pre-service teachers four times over the course of the student teaching semester. I engaged in a manifest data analysis as the data were collected over the course of the two semesters. However, to avoid researcher/professor bias, I did not start a latent data analysis with coding until after all grades were submitted to the Registrar’s Office at the university each semester.

Data Sources

I collected multiple sources of data from across the two semesters. The data were housed on my password protected, locked computer. I administered the Envisioning a Content-Area Literacy Classroom questionnaire, which was modified from work done by Hammerness (2006) and Hathaway (2013) three times over the course of the senior block semester: the first day of class, the midpoint of the semester, and the final class meeting. In the document, the pre-service teachers described their ideal content-area literacy classroom which included their role as the teacher, the role of the students, the topics discussed in class, the texts used, the strategies taught within the class, and a description of a content-area literacy lesson in either math, science, or social studies with detailed sections on differentiation and assessment.

In the senior methods content-area literacy course, the pre-service teachers also crafted four lesson plans in which they integrated literacy instruction and science or social studies instruction. These lessons were based on an informational text set that they created in tandem with their language arts mentor teacher. They taught these plans in local elementary schools and then reflected on the plans once they finished teaching. I also interviewed each of the participants about their visions of content-area literacy instruction. Each participant was interviewed in a focal group meeting twice—once at the midpoint of the semester and once at the end of the semester. Each focal group meeting lasted about an hour.

During the student teaching semester, I collected 12 weeks of lesson plans from each of the interns. I also conducted two focal group interviews—one at the midpoint of the semester at the end of the eighth week and once at the end of the semester. I also conducted four observations per intern—two in the first eight weeks of their student teaching, and two in the last eight weeks.

Data Analysis

I applied a systematic procedure for data analysis (Strauss & Corbin, 1998), beginning with repeated readings of the data and open coding. The data were broken down into individual units for each participant. I created an excel spreadsheet for each participant where I included interview quotes, specifics from the lesson plans, data from the Envisioning questionnaire, and observation notes. I identified patterns of content-area literacy visions for each of the participants and then used cross-case analysis to compare across the pre-service teachers. These analysis
procedures facilitated my organization of the identified patterns into themes across the cases.

Once the analysis was complete, I organized all the data into another spreadsheet table and initiated cross-case analysis. During this analysis, I broke the data down into four time periods, which corresponded to significant periods of time in the content-area literacy class. Time 1 represents the first day of the senior block class; Time 2 represents the midpoint of the semester in the senior block class, Time 3 represents the end of the semester in the senior block class, and Time 4 represents the student teaching experience.

In Table 1, I included the following: a) data, b) where the data originated (observation, lesson plans, Envisioning questionnaire, or interview), c) participant’s name, d) the time it occurred (times 1-4), e) the code assigned to the data, f) the theme that emerged, and g) notes. For example, in examining the data across time, I saw the pre-service teachers were able to articulate specific skills and strategies, such as questioning, personal dictionaries, and word walls that they implemented in their instruction during the senior block semester. Thus, it became evident that the pre-service teachers’ visions were solidifying across the senior block semester because they were able to articulate specific ideas they had for instruction. In the previous Envisioning protocol, they did not name specific strategies they would implement in their instruction. Thus, one of the codes created was entitled “A Shift Towards a Specific Vision” (please see an example of coding in the Table 1).

Limitations

I was the main instrument in my study, thus the threat of researcher bias exists (Merriam, 2009). As such, I employed a variety of strategies to eliminate such bias. First, I had my participants read over the transcripts of the four focal interviews. After I transcribed each interview, I used member checking. Further, I employed the use of a peer evaluator—one of my colleagues reviewed my data analysis and coded sections of the data to help establish reliability. The discoveries in my study are also limited in their generalizability. For example, similar discoveries may be uncovered in a similar study with a similar student population. It must be noted that the pre-service teachers in my study represent a small slice of the pre-service teacher education population, therefore the discoveries in my study cannot be generalized to the greater pre-service teacher population.

Results

I present the results in chronological order to show how the elementary education pre-service teachers initially envisioned content-area literacy instruction at the start of the semester of their senior methods block to their student teaching experience, how those visions changed over time, and how they enacted content-area literacy instruction in their student teaching classrooms. I also had the pre-service teachers re-examine their finalized visions from senior block at the end of their student teaching experience to reflect on what they envisioned and what they enacted in their student teaching experience.
Initial Visions of Content-Area Literacy

On the first day of the semester, the pre-service teachers were asked to answer the Envisioning protocol in class. The pre-service teachers had about 30 minutes to answer the five questions, which focused on their initial visions of a classroom that supported content-area literacy instruction. There were no distinct differences among the individual students’ visions of content-area literacy integration. Overall, they had a very generic understanding of content-area literacy instruction and did not name specific informational texts or strategies they would implement into their classroom instruction.

Many of their responses reflected the best practices they had learned in junior year literacy coursework, specifically in regards to classroom set-up, the role of the teacher, and the integration of children’s literature into the classroom. All six of the pre-service teachers described a classroom where children’s literature books that span the content areas are the central focus. Their classrooms included appropriate materials such as a rich supply of informational texts at various reading levels in their classroom libraries program to support content-area literacy instruction (Allington, 2002). Allington (2002) in his study of exemplary elementary literacy teachers found that such teachers provided their students access to “multilevel, multisourced curricula that met the needs of the diverse range of students in their classrooms” (p. 743). Jacqueline said, “In my classroom there is a steady stream of learning and teaching occurring in my classroom. Reading and writing occurs on a daily basis across the subject areas in my classroom.” Ruth described her classroom as a “community of learners” where students feel like “they are in a safe environment to share in.” However, while they described classes that reflected best practice, they did not identify specific informational texts or strategies that they would implement in their instruction.

Additionally, they depicted classrooms where the students and the teacher would co-construct knowledge. In order to do this, they envisioned that their students would work in small groups at tables or desks in the room, instead of row seating. Further, they noted that upon entering their classrooms, an individual would hear “intelligent” and “educational” conversations occurring at their tables. It was important to them that their students used precise vocabulary when constructing knowledge.

“All of the pre-service teachers saw themselves as the facilitator or guide of the content, as opposed to enacting ‘a pedagogy of telling’.”

All of the pre-service teachers saw themselves as the facilitator or guide of the content, as opposed to enacting “a pedagogy of telling”. Kate said, “I will guide the students through literacy [instruction]. You will see the students engaged in hands-on literacy experiences.” Caroline noted, “My role in the classroom will be to help my students gain a desire to learn, as well as find multiple ways to meet all of their needs.” Ruth explained, “My role is to guide students to enjoy incorporating literacy into every subject because in the real world, literacy will be used in every aspect.”
They all envisioned their students to be engaged readers of multiple texts and creators of their own knowledge. Kate described her students as “constructivists” who “use conversation to construct their own content-area knowledge” and “can be teachers to each other as well.” Ruth wanted her students “to play an eager scholar role and enjoy reading and writing no matter the shape it may take because the rest of their lives will consist widely of literacy.” In addition, three of the pre-service teachers emphasized the importance of teaching students how to read children’s literature texts. Jacqueline noted, “Students in my classroom are reading and responding to appropriate literature in the selected content-area.”

A Shift Towards a Specific Vision

After about a month and a half in the course, the pre-service teachers completed the same Envisioning protocol as a midpoint check. I also met with them in a focal group interview. The data I collected in this segment of the course demonstrated that the pre-service teachers’ understandings of content-area literacy and their visions of content-area literacy in classroom practice were shifting more towards a particular focus. Specifically, many of the pre-service teachers discussed the importance of teaching comprehension strategies such as questioning, connections, and inference to help students make sense of classroom content. For example, Jacqueline said, “Questioning is important for students to partake in, answering questions [as a way for me to gauge comprehension of the material].” Kate highlighted another aspect of teaching questioning as a way to monitor comprehension. In particular, she recognized the importance of modeling the strategy to her students. She added, “I would like my teaching role to shift from generating questions to coaching the students to generate and respond to their own questions.” Caroline also saw the importance of using questioning in the classroom. She noted,

> When students are not understanding, the question can be adjusted to hurdle concept barriers. When the students are not being challenged enough, the question can become more complex so students can synthesize the information into new ways. These questions will guide the students into expressing what they know about a subject.

In addition, the pre-service teachers saw themselves, and their students, as having a specific role in the classroom. Jacqueline explained,

> My role is the facilitator of information to the students. I would like to think that I would take a constructivist approach with the students and their learning. I would provide the necessary tools the students need to excel in the discipline of literacy, let the students create and construct their own knowledge.

Sarah noted, “I am to guide my students to have a better understanding of different genres, styles, and types of books they are to read.” Ruth further explained this role of facilitator: “I want to scaffold students through the learning process to make sure there are not disconnects between my delivery and my students’ reception of any content-area information.” Ella said, “My role would be to facilitate the students’ learning and guide them through the curriculum and activities.”
While the teachers saw themselves as facilitators of the content, they viewed their students as active and engaged learners, who take on various roles such as mentors, researchers, and reflective thinkers of the content. All six of the pre-service teachers, two more than at the start of the semester, wanted their classrooms to emulate that of a constructivist environment. Caroline specifically referenced Vygotsky in her focal group interview. She said,

> We have learned from Vygotsky, students should be constructing their own understanding of the content, strategies, and skills they are expected to learn by the end of the year. Though many subjects and skills will need to be taught directly, students still need to explore subjects and realize for themselves the way things work.

Kate agreed with Caroline and noted, “I hope to give my students a chance to learn in a constructivist environment where they are active in their own learning.” Ruth said, “I want to model my classroom around the constructivist theory, which means students should develop their own knowledge, from their own experiences, connections, and previous knowledge.” In particular, Jacqueline described how her students would be put into learning communities in the class where they would work together to construct their knowledge. Ruth also posited,

> I want my students to think about the roles they hold and their responsibility in enhancing their own learning experience. For instance, I first want my students to think of themselves as scholars, scientists, historians, mathematicians, etc. when addressing the different content areas. If students assume the role of these important figures in conjunction with the content area we are studying, I think it will improve their literacy skills as they read and discover new learning. While taking on this particular role in learning, students will read for deeper understanding and comprehension while developing their own strategies for learning.

During this time, the pre-service teachers also submitted their text sets and lesson plans. In analyzing the text sets and lesson plans, many of the strategies used in their lesson plans reflected the course readings and the demonstrated lessons I modeled during the first month and a half of the course. For example, Ruth and Jacqueline had their students create a word wall on terms found in the texts *When Washington Crossed the Delaware* (Cheney, 2004) and *Liberty! How the Revolutionary War Began* (Penner, 2002). Kate and Caroline also introduced their students to word walls. Their mentor teacher wanted them to integrate science and literacy, specifically the solar system, into her classroom instruction.

Like Kate and Caroline, Sarah and Ella wrote integrated science and literacy lessons, also focused on space. They introduced space vocabulary such as *stars, planets, axis, shadows, rotate, and revolve* from the text *On Earth* (Karas, 2005) to their second-grade students. Their class engaged in the strategy vocabulary cards to help them learn the space terminology. Both word walls and vocabulary cards were modeled and practiced in class.
Additionally, towards the latter part of the mid-point of the semester, the pre-service teachers started teaching their four language arts lessons in their field experience classroom. During their focal group interview, the pre-service teachers discussed the implementation of the plans and how their students responded to the strategies. Ella noted that many of her students had never done vocabulary cards before. However, they enjoyed creating them, and they helped the students learn space-related vocabulary. Sarah observed the students continuing to use some of the terminology, such as revolve, in later lessons even if the word was not referenced in that specific text. Jacqueline and Ruth observed their students referencing the word wall throughout the rest of their unit on the U.S. Revolutionary War and the Constitution.

**An Established Vision**

In the final segment of the course, the students continued to implement their content-area literacy lesson plans, reflected on their plans, and answered the Envisioning protocol again. I continued to model additional content-area literacy strategies tied to my text set on space. It became clear, at this point in the semester, that the pre-service teachers had established visions for their integrated instruction. For example, they all noted content-area literacy instruction helps provide students with a more profound understanding of content. Jacqueline explained,

> Content-area literacy is very important in all subjects because the integration allows for a deeper study into a subject that cannot be approached through any other direction other than literacy. Students begin to understand the greater picture through primary sources, informational texts, newspapers, etc. Therefore, teachers need to grow to begin adapting their curriculum to integrate language arts in as many ways possible to help their students’ comprehension and understanding grow as the students progress through the learning process. I really truly believe that literacy integration is the most integral and beneficial solution to truly giving students the full experience in school. There are so many varying levels of ways to incorporate literacy aspects into the classroom; a teacher who chooses not to is doing a disservice to her students and their educational progression.

This established vision was also echoed in their lesson plan reflections. Ruth said, "My students seemed to grasp more information that we read about in our lessons when we used graphic organizers. The students also retained more vocabulary knowledge from the word wall we created.”

Caroline found that her students seemed more engaged in the classroom when they used content-area literacy strategies in their classroom instruction. She noted,

> This semester my partner and I tried to incorporate as many of the practices we were learning in block into our lessons to help motivate our students to become active participants in their learning experience. We used strategies like personal dictionaries, cloze activities, manipulative note cards, Professor Know-It-All activities, personal word walls, and other
activities to help students practice what they were learning. Ultimately, we saw that the students were excited to participate in our lessons because of the strategies we implemented.

All of the pre-service teachers’ final reflections mirrored what Caroline said in her interview. Each pair discussed the importance of using a variety of strategies in the classroom to meet the needs of their students, to help keep the students engaged in their learning, and as a way to ensure that all the students were able to access the informational texts used in classroom instruction. They also expressed excitement in implementing their visions into their student teaching classroom. For example, Caroline and Kate both talked about how they could not wait to implement literacy instruction when they teach science. Specifically, Kate explained,

One of my big takeaways from this semester is how I can use literacy strategies in my science classroom to help my students make sense of the text. Because I’m in a fifth-grade science and social studies classroom, I’m excited to try my hand at bringing in literacy integration with the fifth grade science frameworks.

Enactment of Vision in the Student Teaching Classroom: Successes and Failures

The pre-service teachers all experienced successes when they integrated literacy into their content-area classes. In particular, they were able to easily incorporate literacy strategies into social studies and science instruction. Ella noted, “I was able to bring in different texts into my social studies instruction and use strategies such as the KWL (know, want to know, learned) and anticipation guides to activate prior knowledge.” Her students, as evident in her reflections, were more engaged with the content when she used texts in the classroom as well as a variety of strategies. Sarah found that her first graders comprehended more content when she utilized a variety of texts in her social studies and science instruction. She noted, “Social studies and science are the easiest to integrate because there are many books and articles we can use in our instruction.” She remarked that her students expressed excitement when she read informational texts on their science and social studies content in her instruction.

Ruth found that her kindergarten students enjoyed big books—which have an enlarged text that all the students can see clearly (Reading Rockets, n.d.)—on social studies and science topics. She designed integrated units around topics such as plant and animal life and community and family. Because she worked with kindergartners, her students engaged in whole-class strategies. For example, during a unit on mammals, Ruth and her class created a KWL on what they already knew about mammals, questions they had about mammals, and what they learned after she read big books on the topic. Sarah also found her kindergarten and first graders loved big books, particularly ones on animals. She was successful in implementing whole class anticipation guides with her students; this strategy was one she used frequently because it activated their prior knowledge about a topic and then served as an informal assessment after reading and discussing the story.

Kate explained that her students became more engaged with the content “when she moved away from having the students read aloud in
class and actually do something with the information.” She discovered that it was easy to teach text structure in her fifth-grade social studies classroom because so many of the readings were “cause and effect or sequence and those are easier concepts to teach.”

Caroline echoed many of the same comments. She found her second graders vocabulary acquisition increased as well as their comprehension of the texts when she introduced instructional strategies into her teaching.

While the pre-service teachers were successful with integrating literacy instruction into science and social studies, they struggled with adding reading and writing into their math instruction. For example, Jacqueline talked about the struggle with implementing reading into the third-grade mathematics curriculum. While she had no problem having the students read and discuss word problems in class, she had a hard time bringing in texts to complement the lesson or topic she was teaching. She noted,

Math has been a continuous struggle to integrate literacy. If I find a text, it may have to do with the real-world context I’m putting the lesson into, but it really doesn’t cover anything with math. A lot of the children’s books that pertain to math have to be altered to the lesson or modified for their level. My success has been limited with math integration.

Caroline echoed Jacqueline’s struggles. In particular, she had trouble introducing traditional vocabulary and comprehension strategies into her math lessons because “many of them such as the KWL had to be modified to fit the mathematics curriculum.” In addition, she was anxious for her students “to learn and use precise mathematical terminology but struggled teaching it to her students.” While she was introduced to precise mathematical vocabulary in her two mathematical methods classes at the university, she noted many of the terms were discipline-specific and her students did not use them outside of the mathematics class, which made it difficult for them to learn the terminology. However, she was successful in having her students write in her mathematics class. Her second-grade students wrote out simple statements describing their problem-solving method in class.

Sarah also grew frustrated while trying to incorporate more literacy instruction in her mathematics lessons. Like Jacqueline, she wanted to introduce mathematical content through stories; however, she had trouble finding quality texts that both aligned with the first-grade standards and taught mathematical content.

Reflections on Visions

At the end of the student teaching experience semester, I had the pre-service teachers re-read their visions from the senior block content-area literacy class and reflect on what they envisioned and what occurred during their student teaching experience. I was curious to see how the two coincided with
each other. As with most pre-service teachers, the participants went into their student teaching experience ready to take on the world; they realized that implementing some of their vision statements was harder than they expected it would be. For example, Kate, per her vision statement, thought it was important to bring a variety of informational texts into her science and social studies classroom. She found that her students loved the different texts she brought into her science instruction. However, they were not as interested in many of the primary sources she tried to incorporate into her social studies instruction, “because they were not as interested in the topics.” Further, while Caroline was a strong believer in constructivist teaching and not a proponent of workbook pages, she found that her mentor teacher wanted her to include workbook pages in most lessons particularly when teaching mathematics. While she incorporated some workbook pages into her teaching, Caroline was also successful in introducing the students to key components of her vision, such as writing in mathematics instruction and not relying on workbook pages on a daily basis.

Other aspects of the pre-service teachers’ visions were successful as well. Jacqueline noted that one of her goals as a teacher is to encourage her students to learn from each other in a social environment. She found that her third graders were able to work together to construct knowledge whether it be a mathematics, science, or social studies topic. Even though Caroline’s use of workbook pages was not in alignment with her vision of instruction, she reflected on the fact that she was successful in incorporating manipulatives into her lessons, having her students write out their problem-solving process, and letting the students learn many concepts through exploration.

Overall, the pre-service teachers acknowledged that crafting and refining a vision statement and then reflecting on their implementation of their own vision in the classroom deemed useful to them. Caroline said, “The creation of the vision statement and subsequent refinement over the course of the senior block semester required me to really sit and think about what I thought about content-area literacy instruction.” Jacqueline added, “I enjoyed writing my vision statement in senior block. It was the first time I put to paper my own teaching philosophy and caused me to reflect deeply on what I believed that philosophy to be.” It allowed them to engage in reflective practice as well as consider ways in which they can change their instruction to align more closely to their vision of ideal content-area literacy instruction.

**Discussion**

Four research questions were considered for this study: First, what are the elementary education pre-service teachers’ initial visions of an ideal elementary content-area literacy classroom? Second, how do these visions change as the elementary education pre-service teachers engage in a senior methods content-area literacy course and language arts field experience? Third, how were their visions enacted during their student teaching semester? Fourth, in what ways did their visions written in a senior methods content-area literacy course coincide with their student teaching semester? The results of this study—the answers to those questions—will be considered in light of research on teacher
beliefs and practice, visioning, as well as literature on integrating literacy across the content areas.

Specifically, I found that all the pre-service teachers developed more concrete beliefs about content-area literacy instruction over the course of the two semesters. Prior to the senior block semester, the pre-service teachers had generalized beliefs about content-area literacy instruction; however, they did not name specific strategies to implement informational text into the classroom; this changed as the pre-service teachers acquired more content knowledge and pedagogical knowledge over the course of the senior block and student teaching semesters. Similar studies on literacy beliefs (Freedman & Carver, 2007; Sturtevant & Linek, 2003) found that secondary educators had a strong desire to meet the needs of their students and maintain active learning environments in the classroom. Nettle (1998) found that student teachers’ beliefs about instructional practice both remained stable and changed after a semester of student teaching. This was evident in my findings as well. Some of the beliefs the pre-service teachers held at the start of the senior block semester remained the same as they moved through the senior block class and student teaching. However, other beliefs changed over time as they gained more experience and tried out additional pedagogical practices.

As with previous findings from other researchers, the pre-service teachers were successful in implementing many facets of their visions of literacy instruction (Vaughn & Parsons, 2012) while facing challenges with other aspects of their visions (Scales, 2013). For example, Caroline’s vision did not include workbook pages in her mathematics instruction. She recognized that exemplary elementary teachers rarely relied on workbook pages as an instructional practice (Allington, 2002). Even though she incorporated workbook pages into her instruction as requested by her mentor teacher, Caroline was still able to use her “vision as a guide” (Vaughn & Parsons, 2012, p. 18) and include best practices that aligned with her vision into her third-grade classroom. She was able to implement what the literature deemed as effective literacy instruction while successfully navigating requirements from her mentor teacher.

In addition, the pre-service teachers found value in crafting a vision statement because it allowed them to reflect on what they considered ideal content-area literacy instruction to be. According to their visions, the pre-service teachers all wanted their students to engage in meaningful, authentic literacy activities (Vaughn & Faircloth, 2013; Vaughn, Parsons, Scales, & Wall, 2016). It is also important to note that the pre-service teachers’ visions changed and solidified over time as found in previous research (McElhone, Herbarb, Scott, & Juel, 2009; Scales, 2013). At the start of their senior block experience, their visions were more generic and the pre-service teachers had trouble articulating specifics. However, by the end of the semester they were much more specific in their visions of an ideal content-area literacy classroom.

The pre-service teachers were successful in integrating literacy into the social studies and science content areas. This is consistent with the literature (Norton-Meier, Hand, & Ardasheva, 2013; Strachan, 2015; Swain & Coleman, 2014; Vieira & Tenreiro-Vieira, 2014). Norton-Meier, Hand, and Ardasheva...
(2013) found that combining science with literacy skills can increase students’ learning and achievement. By creating a classroom around the exploration of science concepts, students are involved in refining their reading, speaking, writing, and listening skills (Norton-Meier, Hand, & Ardasheva, 2013). This environment was evident in the pre-service teachers’ reflections and senior block and student teaching class assignments. They found their students were engaged and excited to learn about the science and social studies content, particularly when engaging with different informational texts. As Kerkhoff and Spires (2015) found, the pre-service teachers in this study “valued creating a positive environment around literacy so that students were motivated to read and enjoyed reading” (p. 51). In addition, they incorporated a variety of strategies into the instruction to help their students make sense of science and social studies content.

On the other hand, many of the pre-service teachers had difficulty implementing reading and writing into the mathematics classroom. Douville, Pugalee, and Wallace (2003) found that integration of science and literacy and mathematics and literacy instruction is more resource driven (e.g., availability of trade books, appropriate writing strategies) than conceptually driven. Adams and Pegg (2012) discovered some secondary teachers struggle implementing content-area literacy strategies into mathematics classrooms. Likewise, Spitler’s (2011/2012) study found that while the teacher they were following was successful in infusing mathematics and literacy instruction, there were struggles along the way that are common to many teachers attempting to integrate math and literacy for the first time. It is important to note however that the pre-service teachers tried to bring in more traditional texts into their mathematics instruction, which might not always be the best option for mathematics and literacy integration. Siebert and Hendrickson (2010) noted

Students cannot engage in authentic mathematical activities unless they are able to read and write the many different types of texts that are used in such activities [...] equations, graphs, diagrams, proofs, justifications, displays of manipulatives, calculator readouts, verbal mathematical discussions, and written descriptions of problems (p. 41).

Further, Siebert and Hendrickson (2010) posited that strategies such as the KWL should be modified (e.g., KWL-know, want to know, learned to a KWS-know, want or need to know, strategies I can use to solve) for literacy integration in the mathematics classroom. In addition, Phillips, Bardsley, Bach, and Gibb-Brown (2009) stated that learning not only the language and symbols of mathematics is important, but learning the disciplinary vocabulary as well as the structures of mathematical texts are also important.

Conclusions

The purpose of this article is to share my experience investigating elementary education pre-service teachers’ visions of content-area literacy instruction in the K-6 classroom and how those visions were enacted in their student teaching experience. As this study focuses on one small sample of elementary education pre-service teachers, caution must
be exercised in overgeneralizing the discoveries to elementary education pre-service teachers as a whole. Therefore, the limitations in this study suggest continued investigations into pre-service teachers' beliefs and pedagogical practices, particularly eliciting beliefs through visioning protocols.

Further studies should expand the number of pre-service teachers and such studies should continue over longer time periods by, for example, following participants from their teacher education program into the classroom. In addition, it would be interesting to capture the pre-service teachers' visions at the start of their teacher education program and at intervals throughout the program to see how those visions change over time. However, this study does provide further insight into pre-service teachers’ visions about content-area literacy instruction. Specifically, examining the refinement of pre-service teachers’ visions and their enactment in the classroom sheds additional light on the ‘what could be’—the vision a pre-service teacher has about instructional practice and the ‘what is’—the realities of trying to enact their vision in a classroom setting (Damino & Rust, 2010; Vaughn & Parsons, 2012).

It also reiterates the importance of how teacher education courses mold pedagogical visions and how those visions can become more complex and solidified over time. The pre-service teachers, through the teacher education program, were apprenticed into a community of practice that helped shape their pedagogical practices (Lave & Wenger, 1991; Parsons, Mallory, Vaughn, & La Croix, 2016; Stürmer, Könings, & Seidel, 2012; Wenger, 1998). This study reaffirms that field experiences, as in the senior methods block, can shape a pre-service teacher's vision of classroom instruction (Rattigan-Rohr, 2005).
References


### Table 1

**Data Analysis Chart**

<table>
<thead>
<tr>
<th>Data</th>
<th>Where Data Originated</th>
<th>Participant(s)</th>
<th>Time</th>
<th>Code</th>
<th>Theme</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word wall with content-specific vocabulary found in <em>When Washington Crossed the Delaware and How the Revolutionary War Began</em></td>
<td>Senior block lesson plan</td>
<td>Ruth and Jacqueline</td>
<td>2</td>
<td>specific reading</td>
<td>A Shift Towards a Specific Vision</td>
<td>vocabulary focus</td>
</tr>
<tr>
<td>On <em>Earth</em> informational text, content-specific vocabulary and vocabulary cards</td>
<td>Senior block lesson plan</td>
<td>Ella and Sarah</td>
<td>2</td>
<td>specific reading</td>
<td>A Shift Towards a Specific Vision</td>
<td>vocabulary focus</td>
</tr>
<tr>
<td>Questioning is important for students to partake in, answering questions [as a way for me to gauge comprehension of the material]</td>
<td>Interview</td>
<td>Jacqueline</td>
<td>2</td>
<td>specific reading</td>
<td>A Shift Towards a Specific Vision</td>
<td>comprehension focus</td>
</tr>
<tr>
<td>I would like my teaching role to shift from generating questions to coaching the students to generate and respond to their own questions.</td>
<td>Interview</td>
<td>Kate</td>
<td>2</td>
<td>specific reading</td>
<td>A Shift Towards a Specific Vision</td>
<td>similar to a GRR model</td>
</tr>
<tr>
<td>When students are not understanding, the question can</td>
<td>Interview</td>
<td>Caroline</td>
<td>2</td>
<td>specific reading</td>
<td>A Shift Towards a Specific Vision</td>
<td>comprehension</td>
</tr>
</tbody>
</table>
be adjusted to hurdle concept barriers. When the students are not being challenged enough, the question can become more complex so students can synthesize the information into new ways. These questions will guide the students into expressing what they know about a subject.

<table>
<thead>
<tr>
<th>Workbook pages in mathematics</th>
<th>Internship lesson plans &amp; Internship</th>
<th>Caroline</th>
<th>4</th>
<th>Instructional methods</th>
<th>Reflections on Visions</th>
<th>not in line with her vision statement</th>
</tr>
</thead>
</table>

We have learned from Piaget and Vygotsky, students should be constructing their own understanding of the content, strategies, and skills they are expected to learn by the end of the school year. Through many subjects and skills will need to be taught directly, students still need to explore subjects and realize for themselves the way things work.

<table>
<thead>
<tr>
<th>Vision statement-senior block</th>
<th>Caroline</th>
<th>1</th>
<th>Constructivist teaching</th>
<th>Reflections on Visions</th>
<th>inquiry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview</td>
<td>Kate</td>
<td>4</td>
<td>Informational Texts</td>
<td>Reflections on Visions</td>
<td>wanted to include informational texts into science and social studies instruction. Thinks it’s important to do so.</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------</td>
<td>---</td>
<td>---------------------</td>
<td>------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Not as interested in the [social studies] topics” (primary sources in the classroom)</td>
<td>Internship Interview</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>