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**Using Inquiry to Develop Art and Music Preservice Teachers' Disciplinary Literacy
Pedagogy**

© Stephanie M. Lemley

Mississippi State University

© Steven M. Hart

California State University Fresno

Correspondence concerning this article should be directed to Stephanie M. Lemley, Mississippi State University, Curriculum, Instruction, and Special Education, 310 Allen Hall Box 9705 Mississippi State, MS 39762.

Contact: smb748@mssate.edu

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Abstract

In this study, we examined using a Disciplinary Literacy Project (DLP) to develop secondary art and music preservice teachers' disciplinary literacy perspectives and practices. Our findings revealed that the two preservice teachers exemplified the consistent message of "practicing to participate" in lifespan with their music and art students. Implications include that disciplinary literacy inquiry projects can strengthen teachers' understanding of discipline-specific literacy practices and habits of thinking and encourage teachers to scaffold their students in authentic disciplinary practices.

Keywords: Disciplinary literacy, art, music, inquiry, professional learning

Using Inquiry to Develop Art and Music Preservice Teachers' Disciplinary Literacy Pedagogy

In recent years, calls have been made from educational leaders to foster disciplinary literacy instruction. Researchers have examined expert-novice literacy practices and have suggested that more instruction on disciplinary literacy would support student learning (Draper, Broomhead, Jensen, Nokes, & Siebert, 2010; Moje, 2008; Shanahan & Shanahan, 2008). Educational organizations have recently revised learning outcomes-standards with expectations for students to be more adept with discipline-specific literacy practices (e.g., the Next Generation Science Standards [NGSS Lead States, 2013]; the College, Career, Civic Life Social Studies Standards [National Council for the Social Studies, 2013]; the Common Core State Standards in English/Language Arts and Literacy and the Common Core State Standards in Mathematics and the Standards for Mathematical Practice [National Governors Association Center for Best Practices & Council of Chief State School Officers, 2010]). As teacher educators, we are expected to support our students to meet these shifting expectations, yet there is little research on how teacher educators are supporting their students through this transition (Conley, 2012; Draper, Broomhead, Jensen, & Nokes, 2012; Masuda, 2014; Moje, 2008).

Specifically, there is a lack of research on what disciplinary literacy looks like in the fine arts (Buehl, 2011; Draper, Broomhead, Nokes, & Siebert, 2010; Frambaugh-Kritzer, Buelow, & Steele, 2015); this literature base is not nearly as developed as the more traditional disciplines of history, science, and mathematics (Hynd, Holschuh, & Hubbard, 2004; Massey & Riley, 2013; Shanahan, 2012; Shanahan & Shanahan, 2012, 2008; Wineburg, 1991). Thus, the intent of this study was to provide fine arts teacher educators with a better understanding of the development of fine art secondary preservice teachers' disciplinary literacy pedagogy and beliefs.

Theoretical Framework and Review of the Literature

This study was guided by Moje's (2015) 4 E's Heuristic of Disciplinary Literacy Instruction (engage, elicit/engineer, examine and evaluate) as well as literature on the structures of embedded professional development, where teacher learning occurs through lived experiences such as teacher inquiry in the classroom (Desimone, 2009). Moje (2015) proposes that there are four dimensions required to teach disciplinary literacy in the classroom: engage, where classroom practices mirror those of the discipline; elicit/engineer, where disciplinary literacy skills are scaffolded by the teacher; examine, where discipline-specific vocabulary is closely examined; and evaluate, where the students consider when disciplinary literacy practices are appropriate to engage in or not. Moje notes that disciplinary literacy learning is a social and cultural experience. This heuristic emphasizes that disciplinary literacy instruction is an apprenticeship model where the teacher scaffolds the students through disciplinary experiences. However, Moje (2015) posits that this apprenticeship model can be difficult for both teachers and students since many teachers may be refining their understanding of discipline-specific practices as they work with students.

One way to alleviate that difficulty is through embedded professional development (Desimone, 2009). Desimone (2009) proposes that high quality professional learning is made up of five factors: focused on content; coherent with teachers' practice; active learning; duration; and collaboration. In a longitudinal study, Desimone, Porter, Garet, Yoon, and Birman (2002) found that professional learning is enhanced when teachers work on improving their classroom instruction in a specific content area and are immersed in structured, ongoing analysis of their own teaching and learning. Guskey (2002) noted that one of the major goals of professional development is to change classroom practice through the incorporation of a new classroom

strategy, a new instructional approach, trying a new curriculum, or a modification of current practice.

Disciplinary Literacies in the Arts

Research on disciplinary literacy in the fine arts is underrepresented in the literature (Frambaugh-Kritzer, Buelow, & Steele, 2015). In a study of elementary education pre-service teachers, Frambaugh-Kritzer et al. (2015) found that embodied literacies, which can be defined as the “visceral response of the body with literacy experiences” (p. 69) was one of the disciplinary literacies of dance and drama. Andrelechick (2015) argued the development of the Common Core State Standards increased the need for art teachers to include more traditional texts in their instruction of both textual literacy as well as visual literacy. Huber, Dinham, and Chalk (2015) proposed that the field of art has a close connection to that of digital/new literacy due to the fact that art has a lot of methods and perspectives that could help others understand how to develop rather than hinder the new/digital literacies. In addition, Barton (2015) noted that in art, many of the literate practices focus on multiple symbolic modes in the interpretation and creation of art. Jensen, Asay, and Gray (2010) posit that meaning-making in the visual arts classroom should occur when students and teachers are viewing, analyzing, reflecting, deconstructing and creating art. Thus, good art teachers engage their students in the talk, tools, techniques, and processes inherent to each art text to help students understand and use various meaning-making practices (Jensen, Asay, & Gray, 2010).

Broomhead (2010) defined musical literacy as the ability to interact (perform, listen, contemplate, and create) appropriately with musical texts, and musical texts may include traditional words as well as other symbols (e.g., notes) that are considered non-traditional texts in other disciplines. Weidner (2013) noted music is processed in the same area of the brain as

reading comprehension. Thus, when students read music, they are reinforcing their reading comprehension skills. Hansen, Bernstorf, and Stuber (2014) posit, “Supporting literacy through music opportunities and musical instruction expands the number of children who enjoy learning and therefore increases their literacy skills” (p. 14).

Jensen (2001a) noted that the arts serve as a brain developer; specifically, “the systems they nourish [...] are the driving forces behind all other learning” (p. 2). For example, learning to play an instrument helps develop the neurological and motor brain systems (Jensen, 2001a). Music also improves listening skills as well as memory skills (Jensen, 2001b). Further, when students critique artwork, they are developing vocabulary and language skills (Jensen, 2001b). Greene (1984) posited that students need in-person experiences with art, and teachers need to facilitate these experiences. The arts celebrate diversity and teach problem solving and critical thinking skills (Eisner, 1998). Through the arts, we learn to view the world through an aesthetic frame of reference (Eisner, 2002). According to Jensen (2014), the arts foster attention to detail, tolerance for differences among each other, grit, and emotional development. Thus, Eisner (2008) posits, “A work of art may represent the highest form of human achievement” (p. 29). Collectively these studies show that engaging in the arts fosters not only skill development, but also individual and community development. However, these studies fail to address how to help teachers develop the unique literacy practices of the disciplines of the arts.

Methodology

This was an exploratory study that aimed to add to the knowledge base on how to facilitate preservice secondary teachers’ development of disciplinary literacy pedagogy. This investigation was guided by the following research questions: 1) How does engagement in a Disciplinary Literacy Project influence preservice secondary teachers’ perspectives on literacy

practices in their disciplines? 2) How does engagement in a Disciplinary Literacy Project influence preservice secondary teachers' perspectives on literacy *instruction* in their disciplines?

Context

The literacy methods course that grounds this research project is a literacy course offered to secondary preservice teachers at a university in the western US. While in the course, the preservice teachers completed a field experience where they taught in the middle or high school classroom for 30 hours per week. During the semester, the students applied course content to their teaching experiences. In particular, they engaged in a Disciplinary Literacy Project (DLP) where they examined what it meant to be literate in their specific discipline. In this project, the preservice secondary teachers conducted an inquiry to explore how particular reading, writing and thinking practices are valued by specific disciplines and how they could incorporate these habits into their own instructional practices.

The idea of the DLP begins with research on effective teacher professional learning and is nuanced based on specific research from disciplinary literacy studies with teachers and preservice teachers. For example, Goldman et al. (2016) found inquiry and collaboration with disciplinary experts to unpack and understand the disciplines to be an effective strategy (Conley, 2012; Draper et al., 2010). We designed the DLP to model that process and to make the experience an active one, by engaging the students in the inquiry process. As another example, collaboration is a key factor for professional learning (Desimone, 2009). Some research has shown that creating separate courses for different disciplines supports preservice teachers' understanding of disciplinary literacy pedagogy (Bain 2012; Moje, 2008); because creating separate courses for each discipline was not feasible for this institution, and perhaps many others, we created separate disciplinary groups within the course. Lastly, the DLP was developed

specifically to avoid the literacy-versus-discipline dichotomy that could be developed through such work (Brozo et al., 2013; Draper et al., 2010). As such, the DLP continually positioned students to find ways to make the two support each other.

The specific components of the DLP were guided by previous disciplinary literacy research (Moje, 2007; Shanahan & Shanahan, 2008). First, students conducted interviews with disciplinary experts and practitioners. Most of the students interviewed professors, but some students also interviewed those in non-academic roles such as local musicians and mural artists. Interviews were analyzed and then synthesized to unpack the disciplinary literacy practices. Next, the students reviewed research to identify convergence and divergence with the interviews. Then they designed and delivered four lessons applying what was learned in the class and through the interviews. Ongoing reflection occurred through a reflective journal and class discussions. The project culminated with a report on the literacy practices and habits of thinking valued by the discipline, descriptions and models of how these practices were integrated into lessons, and a reflective analysis on the learning gained and how this experience would impact future instructional practices.

Participants

The data reported in the broader study were from 21 secondary preservice teachers, who were candidates in the single-subject teaching credential program [secondary education] at the university and represented a variety of disciplines. They had successfully completed Bachelor's degrees in their respective fields and were enrolled in a teaching credential program in order to get teaching licenses. The data for this article come from two self-identified white females named Lucy and Jenny. Lucy taught middle school art and Jenny taught middle school music.

Data Sources and Data Analysis

Data sources included the DLP reports, DLP presentation materials and interview transcripts, the four lesson plans, and the students' ongoing reflective journals. We applied a systematic procedure for our data analysis. Based on our previous research, we first individually coded all data for understandings and beliefs regarding literacy instruction; literacy levels (basic, intermediate, disciplinary) as framed by Shanahan and Shanahan (2008); and content knowledge, identity, and discourse as framed by Moje (2008) to generate a broader understanding of the preservice secondary teachers' evolving perspectives on disciplinary literacy practices and their pedagogies of literacy instruction. We also coded for specific categories from the literature which included application of disciplinary literacy pedagogy (Frambaugh-Kritzer et al, 2015), comprehension instruction for complex texts (Buehl, 2011; Fang, 2014), support for knowledge gaps (Moje, 2011), teaching disciplinary vocabulary (Shanahan & Shanahan, 2014), providing for inquiry processes (questioning) (Buehl, 2011), and literacy strategies unique to discipline (Shanahan & Shanahan, 2008).

Similar to our previous studies (Hart & Bennett, 2013; Bennett & Hart, 2015), the initial analysis found that most developed an ability to articulate and identify discipline-specific practices, but struggled to make this new knowledge a part of their instruction. However, upon cross-case analysis, two cases from Art and Music demonstrated more articulation of disciplinary literacy-embedded practices and the application of these disciplinary literacy practices within their instruction. Compared to other disciplines, these teachers demonstrated consistent messages of "practicing to participate" in lifespan. Therefore, we conducted another deeper level of analysis. This involved reviewing Music and Art literature, the National Coalition for Core Arts Standards, and the literature on literacy in these disciplines and then coding our data to the

National Coalition for Core Arts Standards (e.g., creative personal realization; culture, history, and connections; means to well-being; and community engagement). We also operationalized disciplinary literacy non-textual domains (performing and presenting; deconstructing, analyzing, and evaluating; contemplating, reflecting, and contextualizing; creating and composing), which were based on work by Broomhead (2010).

Findings

In this article, we present two cases (Jenny and Lucy) that illustrate the consistent message of “practicing to participate” in lifespan. These two female teachers fully embraced the idea of teaching with a discipline-specific lens. Therefore, we wanted to feature them as exemplary cases.

Intentional Disciplinary Literacy Practices

In our first finding, we found that the two secondary fine arts preservice teachers were intentional in teaching the disciplinary literacy practices of art and music. Specifically, they provided instructional practices that utilize the customized literacy strategies of the discipline and provided instructional spaces for inquiry. For example, in Jenny’s lesson plans, she had her students engage in two types of musical interaction: performing and composing musical texts (Broomhead, 2010); these disciplinary literacy processes are part of a musical literacy teaching approach. Specifically, in one of her lessons, Jenny had her students create their own simple melodies in small groups. A musician engages in this practice while composing a piece of music. In class, Jenny first composed her own musical composition singing “four quarter, ‘ta ta ta ta’ and ‘titi titi titi titi’” and had her students repeat after her. Once her students became comfortable mimicking her process, she divided them into groups and had them create their own simplistic melodies. While the music compositions were simplistic, the students engaged in an authentic

disciplinary practice in class. Further, in other lessons, she had her students deconstruct and analyze musical compositions by Mozart and Haydn, musicians from the classical period. In both of these examples, Jenny had her students musically interact with text (Broomhead, 2010).

In an art lesson, Lucy modeled, through a physical demonstration, the painting techniques of Jackson Pollock, a major figure in the Abstract Art movement. Her students then engaged in the discipline of art by creating two works that demonstrated at least three of the five techniques she demonstrated. Within this lesson, the students contemplated the creation of Pollock's art techniques as well as composed their own piece of artwork. Lucy explained that the purpose of the lesson was for her students to conduct an inquiry into Pollock and the abstract art movement, specifically breaking the stereotype that art is a skill one is naturally born with. She noted, "This lesson should increase confidence in the students' abilities to produce quality art as they express their feelings and emotions through action/process." Through this experience, Lucy noted, her students engaged in their own personal realization that everyone can be an artist. In her journal she wrote, "The class was full of energy! Paint was flying all over the place as 36 students were flinging and splattering—but I believe it was a special experience that neither they, nor I, will forget."

Disciplinary Literacy Articulation

Both of the participants were able to aptly articulate what it meant to be literate in their discipline, and that articulation came through in their lessons. This articulation was evident at the start of the semester, and over the course of the semester, the participants deepened their understanding of what it meant to be musically or artistically literate. The preservice teachers wanted their students to grow as creative and artistically inventive individuals.

In her instruction, Lucy provided multiple entry points to learning about the medium. For

example, she provided a variety of texts to her students, physical demonstrations of her modeling the technique, as well as ample opportunities to practice. Art creation in her class is over a series of class periods—it was not completed in one shot. One aspect of artistic literacy that Lucy emphasized that was important to her was the ability to “defend and criticize art in a sophisticated manner”; being able to communicate about art was a skill she wanted to impart on her students. This was evident in her first journal entry as well as in her lesson plans. She explained in her first journal entry, “Literacy is a big part of the art world. There is much more than the physical act of drawing and painting. As I was reading through the Common Core standards for reading, I decided to insert the word “artwork” wherever I saw the word “text.” The student will need to be able to provide an in-depth verbal and/or written explanation for their creative choices. They will be expected to develop an insightful and analytical mindset in order to truly understand the world of art and grow as a creative and artistically inventive individual [as noted in specific Common Core Reading Anchor Standards].” As a result of this recognition, much of Lucy’s instruction focused on her students critically analyzing artwork and communicating, both orally and written, about their work and the works of others.

She explained, “[In art] we are interpreting either phrases or images that reside in an artwork constantly—whether it is about a historical work, a contemporary artist, or a student artist in the classroom. We are continually developing meaning and purpose within our pieces. Through artistic literacy we will be stripping the artwork down to its fundamental elements.” Thus, as noted in her reflections, Lucy recognized that art is a social process; and language, which could be oral or written, is used to defend or critique artwork. Lucy wanted her students to engage in the practice of evaluating artwork using the appropriate language in the classroom. She posited that a sophisticated manner is connected with understanding elements/principles of art

(the construction of text; purpose—know valid forms of texts; knowledge of vocabulary). She was aware that artwork is a text and that one aspect of artistic literacy is developing meaning—thus, when an artist engages in the comprehension of text, the artist is able to deconstruct the elements of the text. Therefore, it is important for an artist to be able to use precise language, both oral and written, to explain text construction and deconstruction.

At the start of the semester, Jenny said her goal was for “her students to be musically literate” and she guided them through that process. Specifically, throughout the semester, Jenny’s understanding of “music as language” evolved; she believed that her students needed to understand that music had its own language and it was crucial for her students to “read the notes on the page, and the different rhythms and dynamics presented [because they] were all a part of being musically literate.” In Jenny’s final report, she wrote, “When I came into this class, I assumed music literacy was practically non-existent because we hardly communicate using the English language. At that time I was thinking that we read notes on a page, which have some Latin words, and symbols that tell you how loud/soft to play. I did not even consider those symbols as part of music literacy. After a few weeks in the class ... I was able to think about the process of learning music as a language, where notes were letters and melodies and longer rhythmic passages were sentences.”

Jenny also acknowledged that her understanding of text also expanded during the semester. She posited that text in music includes notes on a page, rhythms, and dynamics as well. This was evident in her lesson planning as she introduced her students to a variety of different texts across the semester including recording, sheet music such as “The Sally Gardens,” (Britten, 1943) and informational text on composers.

Mindset-Scaffolding for Future Participation

Our final finding was that the preservice teachers exhibited a mindset of scaffolding their students for future participation in their discipline. Specifically, Lucy wanted her students to realize that everyone can be an artist. She wrote in her journal, “Many students seem to hold this notion, that if a person is not born with a natural skill for realistic drawing off the top of their head—then they are simply not and cannot be an artist. For the entire semester, it seems, I have been trying to erase that stereotype from their minds. There are many different types of art—one does not have to be a realistic artist to be successful.” Therefore, she provided her students with multiple opportunities to engage in a variety of different art mediums while reiterating that the students do not have to be proficient in all art mediums to be an artist. In doing this, her students realized, “Art no longer had to be about something but rather about the process [of creating art].” As noted in her reflections, her students became excited to learn about and engage in different art mediums. Different students excelled in the different mediums, showing them that even they all were artists. Lucy reflected, “I love seeing my students excited to come to class and excited about their projects, many of them are asking if they can come after school to work as well. It is a very rewarding feeling.”

Jenny’s instruction followed the gradual release of responsibility; she recognized the importance of modeling what she wanted the students to be able to do. Each of her lesson plans followed that pattern and she emphasized that students need to learn the “language of music” even if they are not going to be an expert musician later in life.

Discussion

In this study, we examined how to facilitate preservice teachers’ development of disciplinary literacy pedagogy through structured disciplinary inquiry. The two fine arts teachers

we featured in this article exhibited awareness of disciplinary literacy practices at the onset of the course. This awareness deepened into identification and articulation of specific instructional decisions throughout the inquiry process. Both of these preservice teachers regularly engaged in their respective fine arts in their everyday, personal lives outside of the classroom. Thus, Jenny and Lucy had established identities within these disciplines, and these identifications as musician and artist may have influenced their pedagogical expectations that their students must practice the discipline in order to become proficient. Previous research has found that teacher-artists draw on their experiences to develop pedagogy and instruction that align with the practices and dispositions of their artistic fields (Graham & Goetz Zwirn, 2010; Pringle, 2008). Thus, it appears that the mindsets these teachers held toward their disciplines supported their application of disciplinary literacy instruction (Monte-Sano, De La Paz & Felton, 2014).

As the results demonstrate, both Jenny and Lucy provided their students multiple opportunities to engage with the tools of the discipline in ways that scaffolded students' increasing competence with disciplinary practices. This scaffolding aligns with what Moje (2015) identifies as the eliciting/engineering component of disciplinary literacy instruction. These instructional structures also align with the Studio Thinking Framework, specifically developed from the visual arts disciplines (Winner, Hetland, Veenema, & Sheridan, 2007). In this framework, teachers employ demonstration-lectures, student work time, and critique/feedback sessions to develop students' artistic practices and habits of mind. The ways the teachers in this study intentionally designed lessons utilizing the Studio Thinking Framework may offer a more defined structure for teachers across disciplines to develop their students' disciplinary literacies through modeling, structured application of practices, and guided examination/evaluation of disciplinary texts.

Previous research has shown that many secondary educators have been resistant to including deeper literacy instruction into their classrooms (Conley, Kerner, & Reynolds, 2005; Hall, 2005). In contrast, these preservice teachers demonstrated an expectation that students should understand the literacies and habits of thinking of their disciplines, and designed instruction accordingly. We believe that this discrepancy may in part be due to the unique literate habits and practices of disciplines such as music and art. In comparison to other disciplines, art and music do not rely heavily on traditional, printed text for meaning making. Rather, they use different linguistic and semiotic systems such as gestures, movement, textures, colors, shapes, and so on (Barton, 2015; Huber et al., 2015; Jensen et al., 2010). However, attributing these differences to the unique textual practices alone is insufficient. For as previous research has shown, disciplines such as mathematics, science, and history also engage with and produce multisemiotic texts and require active application of disciplinary tools (Fang & Schleppegrell, 2010; Shanahan, 2012). We believe that this discrepancy may also be due to how these disciplines are taught in schools. Art and music are taught in ways that more align with an apprenticeship model (Graham & Goetz Zwirn, 2010; Pringle, 2008), where students are provided ongoing practice, actually engaging with the “tools of the trade” and the practices of the discipline—they do art and music. Conversely, most of the core content area courses (i.e., science, math, history) are taught primarily through the use of print-based text materials, with very little time to engage *with* the disciplinary practices.

Implications

As this study focuses on one small sample of secondary preservice teachers enrolled in a particular teacher education program, caution must be exercised in overgeneralizing the findings to other art and music teachers or those in different programs. However, as much of the work in

secondary disciplinary literacy pedagogy has focused on the traditional, text-based subjects (e.g., science, mathematics, social studies), this study adds to a small, but emerging body of literature on disciplinary literacy pedagogy in the non-traditional subject areas (Barton, 2015; Frambaugh-Kritzer et al., 2015; Huber et al., 2015; Jensen et al., 2010; Wickens, Manderino, Parker, & Jung, 2015).

The findings of this study hold interesting implications for teacher educators working with secondary teachers. The two teachers in this study consciously applied disciplinary literacy instruction in their classes. If their instructional practices were influenced by their personal affinities and identifications with their respective disciplines, then teacher educators and professional development coordinators should seek to provide teachers opportunities to develop a stronger disciplinary identity. The Disciplinary Literacy Project described in this study or the Reading, Evidence, and Argumentation in Disciplinary Instruction (READI) model (Goldman et al., 2016) provide examples of different modes of inquiry that can strengthen teachers' understanding of discipline-specific literacy practices and habits of thinking (Bennett & Hart, 2015; Hart & Bennett, 2013; Goldman et al., 2016). Such inquiry may foster teachers' adjustments in beliefs about literacy instruction in their content area classrooms and promote their use of disciplinary literacy instruction (Monte-Sano et al., 2014). However, because our study examined their practice over the course of a semester, we believe the field would benefit from a longitudinal study examining how such inquiry projects like the DLP influence instruction over an extended period of time.

Further, as Moje (2015) posits, disciplinary literacy instruction should be grounded in engaging students in disciplinary practices. In line with previous research on non-core content areas (Barton, 2015; Frambaugh-Kritzer et al., 2015; Graham & Goetz Zwirn, 2010; Huber et al.,

2015; Jensen et al., 2010; Wickens, Manderino, Parker, & Jung, 2015; Winner, et al., 2007), the teachers in this study demonstrated a conscious desire to scaffold their students into the authentic practices associated with their disciplines. Perhaps this intentionality to design authentic experiences for students in art and music may provide examples for other teachers across disciplines. How would a scientist gain information about climate change? How would a mathematician model the potential for droughts? We are not promoting the notion that the aim of disciplinary literacy instruction is to develop our students as experts in any discipline. However, we are suggesting, as these teachers taught us, that engaging in authentic disciplinary experiences will allow students to “develop an insightful and analytical mindset in order to truly understand the world of art [or any discipline] and grow as a creative and inventive individual.” For future research, we encourage other researchers to take up Moje’s (2015) 4E model and examine what strategies teachers use to successfully intersect the various dimensions of the model.

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Author Bio: Stephanie M. Lemley is Assistant Professor in Literacy Education at Mississippi State University. Her research agenda focuses on content-area literacy and disciplinary literacy pedagogy in the K-12 classroom.

Author Bio: Steven M. Hart is Professor of Literacy Education at California State University, Fresno. His research agenda focuses on the convergence of critical literacy, disciplinary literacy, and service-learning.