

Redefining Content-Area Literacy Teacher Education: Finding My Voice through Collaboration

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In this essay, Roni Jo Draper reflects upon her professional journey as a content-area literacy teacher educator, describing how she first became a literacy teacher educator and how she later came to collaborate with a group of teacher educators who specialize in disciplines such as music, theater, and mathematics. Drawing upon ethnographic data from the group's participatory action research project, she explains how their collaboration shaped her understanding of her own professional role and expanded her definitions of texts, content-area literacy, and literacy itself. Informed by insights she gained through the project, Draper argues that content-area literacy instruction should promote mastery of the intellectual discourse within a particular discipline. She also suggests ways to increase collaboration between literacy and content-area specialists working in the field of teacher education.

I am a content-area literacy teacher educator. My vocation is to help content-area teachers infuse their content instruction with literacy instruction (O'Brien, Stewart, & Moje, 1995). While some have argued that content-area literacy teacher educators ought to rename their work in this area as work in adolescent literacy in order to keep adolescents in focus when discussing literacy instruction (see Moje, Young, Readence, & Moore, 2000), I have chosen to keep the focus on content-area literacy. I do this not because I value content over students, but because content-area literacy should not be directed toward one particular age group — in this case, adolescents. Rather, content-area literacy should be addressed throughout the education of all children and youth. This is particularly crucial now, when content-area teachers must educate increasing numbers of students with linguistic differences, and thus teachers must face the dual task of teaching content and literacy. Despite this declaration, my remarks in this article are clearly focused on the preparation

of secondary teachers and their future work with adolescent students because that represents the focus of my professional role at the university.

Literacy educators have not settled on a singular aim of content-area literacy instruction. Some descriptions suggest that content-area literacy should be a *goal* of instruction, whereas others suggest that it should be a *tool* to enhance or enable learning. For example, when Simpson (1954) admonished that “no matter how poorly or how well high school students can now read, every high school teacher can help them to read with better understanding the textbook and the other materials that are required in his course” (p. 3), he was clearly advocating literacy as a goal. However, McKenna and Robinson (1990) have described it more as a tool, explaining that “the notion of content literacy . . . suggests that students’ understanding of the content presented in all subjects could be substantially enhanced through appropriate writing assignments or through supplemental reading,” and thus that “content literacy does not require content-area teachers to instruct students in the mechanics of writing” (p. 185). Similarly, Vacca and Vacca (2005) have argued that the “term *content literacy* refers to the ability to use reading, writing, talking, listening, and viewing to learn subject matter in a given discipline” (p. 7). Fisher and Ivey (2005), writing for literacy teacher educators, have stated clearly that “every teacher a teacher of reading’ is not working” (p. 6). They have suggested that literacy teacher educators instead move the discussion of content-area literacy away from a focus on teaching reading and writing — literacy as a goal — to a focus on reading and writing as tools for learning by “*capitalizing* on reading and writing versus *teaching* reading and writing” (emphasis in original, p. 6). However, such a focus on content-area literacy as a tool suggests that any reading and writing done by students, as long as it is in the service of learning, is legitimate. In contrast, a focus on content-area literacy as a goal suggests that instruction around texts in content-area classrooms must focus on texts appropriate for learning, communicating, and participating.

My job as a content-area literacy teacher educator entails promoting literacy and literacy instruction across the curriculum. I have increasingly acted to support content-area literacy as a goal of instruction because I believe that one who has content knowledge must have the skills related to using content-area texts to communicate and participate, as well as to learn. I have found myself working with preservice teachers from a variety of disciplines or, in some cases, an entire middle or high school faculty, trying to help them reconsider their role in promoting literacy and providing literacy instruction. I have explained, in words similar to Gray’s (1925), that “each teacher who makes reading assignments [in their content area] is responsible for the direction and supervision of the reading and study activities that are involved” (p. 71). Like other content-area literacy teacher educators, I have faced teachers, both preservice and in-service, who question the efficacy of literacy instruction for their classrooms; who question their ability to promote literacy; and who question whether doing so will take time away from content instruction (Ratekin,

Simpson, Alvermann, & Dishner, 1985; Stewart & O'Brien, 1989). These questions have prompted me to seek more convincing arguments for content-area literacy than the traditional tool-versus-goal dichotomy.

My search for a clear aim for content-area literacy instruction and ways to promote content-area literacy with secondary teachers has been aided by collaborations with content-area teacher educators from a variety of disciplines (e.g., music, theater, and mathematics). We have conceptualized our work together as a form of participatory action research (Kremmis & McTaggart, 2000; Reason, 1994). One of the basic tenets of participatory action research is that participants serve simultaneously as coresearchers and correspondents. As such, we have established co-ownership of our research and have opened ourselves to interrogation as we have simultaneously interrogated each other. Participatory action research is preferred when individuals seek ways to do research *with* others rather than *on* others, with the goal of understanding and improving practice. In this case, our goal was to investigate content-area literacy and to improve our work with preservice teachers.

Through my collaborations with other teacher educators from areas outside of literacy, I have come to question universal claims made by some content-area literacy educators, such as:

- literacy instruction should happen in all classrooms regardless of content;
- literacy instructional methods can be modified for instruction in all content areas; and
- all content-area teachers would benefit by taking a course in content-area literacy methods.

While these are not all the claims, they capture the essence of those commonly made by content-area literacy teacher educators. These claims imply that literacy methodologies, with slight adjustments, can be used in “any reading-based lesson in any subject at any level” (Manzo, Manzo, & Estes, 2001, p. 45). Indeed, through my collaborations I have come to question anew the purpose of content-area literacy instruction, the promises made about the potential of content-area literacy instruction, and the universality of instructional practices recommended to teachers in order to enact content-area literacy instruction across all content areas.

Ultimately, these questions have led me to rethink what it means to be a content-area literacy teacher educator. My rethinking has been aided by my collaboration with teacher educators in other fields. These collaborations eventually caused me to doubt the value of advice I could offer to *all* teachers, regardless of the content. For example, after several weeks of observing my colleague Dan as he taught a mathematics course for preservice elementary teachers, I said to him:

I know a lot of methods for teaching people how to read and comprehend. . . . I'm not in a position right now of knowing if that would help. . . . I'm not getting a sense [that] maybe it would help if [you taught with] a different kind of activ-

ity to help students get [the mathematics]. . . . So that makes me question, well, maybe the reading [instructional] strategies that I have — not that they won't apply, or they don't apply, but maybe there are other ways to [teach students how to read and write mathematics] that are just as effective. (personal communication, March 8, 2001)

Dan's mathematics instruction was based on his understanding of both mathematics and social constructivist pedagogies, as advocated by school mathematics reforms and standards documents (National Council of Teachers of Mathematics [NCTM], 1989, 2000). As I watched his instruction each week, I was struck by how masterful he was in helping students develop rich images for fractions, make sense of the various operations with fractions, and comprehend other mathematical concepts. I also watched as he helped his students learn how to describe and justify their thinking with drawings and other writing. I could not imagine that Dan would be able to improve the instruction with any guidance I might offer him as a literacy educator. The realization that I seemingly had nothing to offer a mathematics instructor caused me to rethink my position as a content-area literacy educator. I began to "be critical of my own biases," namely, my belief that appealing to content-area literacy instructional methods can improve mathematics instruction. I went even further, questioning my purpose as a content-area literacy teacher educator. If Dan's students were engaging in deep mathematics discussions, learning mathematics by developing images, and describing and justifying their thinking with manipulatives, pictures, and written explanations — activities that I considered literacy — *and* he did this all without considering literacy explicitly or tapping into literacy instructional practices, what could I offer to improve the mathematics learning and literacy of his students?

My doubt has led to inquiry about the nature of content-area literacy and my role as a content-area literacy teacher educator. In the process, I have realized that my inquiry would require me "to be at all times ready to dump [my] whole cartload of beliefs" (Peirce, 1955, pp. 46–47). In this article, I describe how I have come to rethink content-area literacy instruction and lay out the two broad positions I have taken as a result of my work with my teacher-education colleagues. I will contextualize these positions within my work with my collaborators and against my past writing about content-area literacy — both of these a focus of my personal and private theory-making — and within the greater literature about literacy and literacy instruction, with an emphasis on connecting my private theories to public theories.

My Journey to Content-Area Literacy

I came to content-area literacy by way of mathematics teaching. I find mathematics beautiful. I became a teacher because I believed I could demystify mathematics for young people and help them appreciate the beauty I found in the subject. Since "everyone knows that there is no reading in mathematics

classes,” while a preservice mathematics teacher I sat in my required content-area reading class (like many of my peers) wondering why I was required to take the course. But I enjoyed it. The professor was dynamic and passionate, and I found myself trying to make connections between the ideas presented in class and my burgeoning understanding of mathematics teaching. In the next semester I began student teaching at a local middle school, where my cooperating teacher hoped I could help him and the other mathematics teachers figure out how to help students read their new math textbooks. Not knowing quite what to do, I sought guidance from my former content-area reading professor.

I continued to work with this professor during my first years of teaching. So, while I tried to engage in meaningful instruction as a mathematics teacher at a local high school, I also continued to take graduate courses in literacy, despite being accepted into a mathematics master’s program. I came to view content-area literacy as a way to help my high school students — many of them Latino/a students who were learning English as an additional language — make sense of mathematics and be able to communicate their understanding. Eventually I switched from the graduate program in mathematics to secondary education, with a focus on literacy education. My goal was to become a mathematics teacher educator after completing my master’s degree. However, life (and providence) intervened, and I found myself completing a doctoral program in curriculum and instruction with a focus on literacy studies, ultimately becoming a content-area literacy teacher educator.

After completing my graduate studies, I felt prepared to offer content-area teachers ideas for supporting the literacy development of adolescent students in every content-area classroom. I believed I had useful answers to instructional problems and I was ready to share them freely. Like other literacy teacher educators, because of the privileged status literacy enjoys during this era of No Child Left Behind and high-stakes testing, my opinion has been sought by school administrators. I have been asked to make presentations for middle and high school teachers for entire districts. I am an instructor in a professional development program designed to help secondary teachers (approximately thirty each year) add a reading endorsement to their teaching certification so they will be highly qualified to teach reading classes in middle and high schools. Indeed, this is a great time to be a literacy teacher educator.

Despite my preparation, I have found myself as a content-area literacy teacher educator with no classes to teach at my institution. I was hired into a department (teacher education) that offered support to the various secondary preparation programs distributed throughout the campus in content-area departments, but I did not directly oversee any of the various secondary programs except social studies. Unlike the institution where I had done my undergraduate and graduate studies, a content-area literacy methods course was not usually required for secondary teaching candidates, except preservice English teachers.

I realize that my circumstances are not typical. Over 60 percent of U.S. states do require a content-area literacy course as part of the preparation of secondary teachers (Romine, McKenna, & Robinson, 1996). Despite the fact that my home state, Utah, does not require a content-area literacy course for licensure as a secondary teacher, all other institutions that prepare secondary teachers within the state require the course. I doubt that many universities hire a content-area literacy teacher educator when courses are not required. However, my circumstances have prompted me to rethink what it means to be a content-area literacy teacher educator. Literacy teacher educators must take care to promote literacy in a way that includes content — knowledge about the physical, social, and aesthetic world — or they will find that they are promoting a literacy that is empty and vacuous. The education of all children depends on the collective, collaborative efforts of all educators, not just those who have chosen to make literacy their focus.

Studying Self

In order to make sense of my journey, I have engaged in a form of autobiographical self-study (Bullough & Pinnegar, 2001). Autobiographical self-study research allows the researcher to locate herself in her chosen field by exploring theory through practice. Thus, engaging in self-study provides a means of exploring my own development as a teacher educator and reflects my commitment to that development (Bullough & Pinnegar, 2001; Loughran, 2007). In addition, disciplined and systematic self-study work has the potential to inform other teacher educators by connecting public issues and theories to local struggles and personal theories. In this case, my struggle was to understand the nature of my work or who I am as a content-area literacy teacher educator in light of the shifting definitions of terms like *literacy*, *texts*, *reading*, *writing*, and *content-area literacy*. Ultimately, my aim in engaging in this inquiry has been to reconsider and reconceptualize my work as a teacher educator, thereby improving my own practice and perhaps also providing suggestions for the practice of other teacher educators (Feldman, 2003).

Content-Area Teacher-Education Narratives

Because of the situation in which I have found myself as a teacher educator — without a program or courses to teach — I have engaged in several collaborations with content-area teacher educators. Our mutual goal has been to work jointly to consider the problems related to preparing secondary teachers to simultaneously teach content and support the literacy development of adolescents. While one could argue that these collaborative activities constitute my scholarship as a teacher educator and not my practice, I have come to see my work with other teacher educators as defining my practice as a content-area

literacy teacher educator. Indeed, I have shifted my practice from direct work with preservice teachers to working with other teacher educators.

To this end, a couple of years ago I organized a group of secondary teacher educators from across the campus (biology, physical science, art, music, mathematics, and history) to study content-area literacy. For the past two years, the Content-Area Literacy Study Group (CALSG) has met approximately twice a month in one- to two-hour meetings. During these meetings we have discussed theories related to content-area literacy, read and discussed articles on various topics related to literacy, and considered instructional activities related to content-area literacy instruction and their possible usefulness in various content-area classrooms. The goal of the group was ultimately to make changes to the various programs, either through additional courses or by changing the content of existing courses to help preservice teachers learn theories and instructional strategies related to content-area literacy instruction. Because we conceptualized the work of the CALSG as a form of participatory action research (Kremmis & McTaggart, 2000; Reason, 1999), we collected data on our work together, including audiotapes of meetings. These tapes were then transcribed and distributed to all the members of the group to use in our joint inquiry.

As part of my work with the CALSG and other collaborative efforts on campus, I have been provided access to the enacted curricula of other teacher educators (Eisner, 1979).¹ For this study I have highlighted three curricular examples from my work with three content-area teacher educators: Paul, a music teacher educator; Amy, a theater teacher educator; and Dan, a mathematics teacher educator. In Paul's and Amy's case, these curricula were specifically redesigned to address literacy issues and prepare preservice secondary teachers to support the literacy of their future adolescent students. Through these enacted curricula, I was able to consider ideas described by teacher educators as related to literacy while they discussed literacy in connection with content-area aims and methodologies. In Dan's case, the enacted curriculum was part of a content course (as opposed to a methods course, as with Amy and Paul) for preservice elementary teachers. In this case, I viewed the enacted curricula of a mathematics content-area teacher as he created a classroom based on the most recent theories and instructional practices available to help students understand mathematics. I watched carefully for how literacy was taught and supported, even though I knew that literacy was not an explicit goal of the course. My work with Paul, Amy, and Dan has provided me with opportunities to reconsider my conceptions of literacy and literacy instruction in relation to the conceptions of content-area learning and instruction expressed by my colleagues through their enacted curricula.

Paul: Music Teacher Education

Paul and I became acquainted when he accepted an invitation to participate in the CALSG. Paul initially came to our meetings in order to protect the music program and to ensure that any policies that were adopted relative to

preparing teachers to teach literacy did not distract from the aims of music education. When early discussions of the group were focused around adopting a broadened definition of text, and thus literacy, Paul became interested in continuing the discussion.

During the second semester of our work together in the CALSG, Paul invited me to observe his teaching. He team-taught an introduction to music education class for preservice secondary music teachers (strings, choral, and band) in their first semester in the professional teacher-preparation program. Paul's role on the team of music teacher educators was to provide a philosophical foundation for music education. As a result of our discussions, Paul made changes to his lectures by describing an expanded notion of music literacy beyond simply reading musical scores and music theory, and then arguing that music literacy was the goal for all students in schools. I observed him teaching and recorded field notes of his instruction. Paul and I met briefly after each session to discuss his teaching. These debriefings allowed me to ask questions about Paul's intentions and how he felt the class had gone. I also asked about how the session I observed differed from past sessions or from sessions in which he had taught similar material with a narrower literacy perspective — one that did not embrace an expanded notion of literacy that included the conductor, the ensemble, or the musical performance. I created memos of our debriefings immediately afterward (generally locating a quiet place near Paul's classroom before returning to my office). I e-mailed my observations and memos to Paul in order to get clarifications and to ensure that I had accurately captured his comments.

Amy: Theater Teacher Education

Like Paul, Amy accepted the invitation to participate in the CALSG. Because of Amy's background in theater, film, and media and her commitment to broad notions of text that include digital texts, images, the human body, sets, and other objects associated with film and theater, she initially attended the meetings to argue that other members of the group (particularly me) should embrace similarly broad notions of text. We soon became allies, since I had been calling for similarly broad notions of text to include objects used to communicate, learn, and practice mathematics, including symbols, equations, formulas, drawings, manipulatives, and graphs.

During the second year of our work together, Amy invited me to observe her as she taught the methods of teaching theater course that the preservice theater teachers needed to complete in the semester before student teaching. She had made changes to the content and the assignments for the course in order to help her preservice teachers consider their roles as literacy teachers. I visited the eight class sessions that Amy had redesigned to discuss literacy and literacy instruction for theater classrooms. During these observations, I created field notes of Amy's teaching, which I shared with her. Amy also audiotaped the class sessions and had the tapes transcribed. As I did with Paul, I

held a short debriefing session after each observation in which we questioned each other about the day's class. Generally, I was interested in why Amy chose particular activities, what her instructional goals were for the day, and how she felt the day had gone. Amy was interested in my perception of how she was doing with the literacy aspect of her instruction, whether her explanations were accurate and clear, and whether she had missed any opportunities to discuss literacy with her preservice teachers. These debriefings were audiotaped and transcribed.

Dan: Mathematics Teacher Education

Dan and I met during my first year at the university before the formation of the CALSG. That was also Dan's first year on the faculty, and we became acquainted during professional development activities for new faculty sponsored by the university. Dan, as a mathematics teacher educator, taught both content and methods courses. I asked him if I could observe his teaching of a content course for preservice elementary teachers, explaining that I was particularly interested in how he addressed literacy during his teaching of mathematical content. Dan assured me that he did not attend to literacy at all and suggested that his class would not be very interesting; however, either due to my persistence or his goodwill, he eventually agreed to collaborate with me on a research project in which we investigated literacy instruction for mathematics classrooms based on Dan's standards-based mathematics classroom (see Draper & Siebert, 2004, for a detailed description of our collaboration).

I attended all of Dan's course sessions and created field notes of his instruction. I shared the field notes with Dan, and he checked them for accuracy and completeness. All class sessions but one were videotaped, and several were transcribed as a part of the original research study. (For the purpose of this current study, we used transcriptions of the audio recordings of class sessions.) Dan and I met four times during the semester to discuss his teaching. Before our meetings we each read the field notes; then during the meetings we discussed our perceptions of what was occurring in Dan's class. I shared with him how I viewed his teaching relative to literacy instruction, and he explained his teaching based on his understanding of current theories related to mathematics instruction. These meetings were audiotaped and transcribed.

Rethinking Content-Area Literacy

I sought to collaborate with Paul, Amy, and Dan in order to study content-area literacy and to discover ways in which my collaborators and I could better support content-area literacy instruction on campus. These collaborations allowed me to confront content-area literacy theories and instructional practices from the perspectives held by Paul, Amy, and Dan — perspectives outside of content-area literacy — and ultimately caused me to rethink my own position as a content-area literacy teacher educator. This reevaluation has been

made possible by reviewing my own descriptions of content-area literacy found in my past writings, along with the instructional materials I have used with preservice and in-service teachers. I have also returned to the data (i.e., field notes, transcriptions of meetings and classes, and interviews) that I collected with my collaborators to examine my shift in thinking about content-area literacy, and, thus, my role as a content-area literacy teacher educator. Finally, each of them read drafts of this article and offered clarifications to ensure that I have accurately described our work together.

First, I reexamined the data to locate incidents in which I had to rethink content-area literacy theories and instructional practices. These incidents often were marked by my own memos or questions within the field notes that acknowledged the limitations of my views. For example, in field notes that I created during Paul's teaching, I included the following question to myself: "How would you do this without a music background?" This question and others like it mark an acknowledgment of my own limited views. The conversations I had with Paul, Amy, and Dan, particularly those in which I asked them to explain why they had engaged in a particular practice in their classrooms, made it clear to me that they had thoughtful, disciplined reasons for making the instructional decisions that guided their work with preservice teachers — reasons that were rarely part of my consideration as a content-area literacy teacher educator.

In the end, it was the content-area expertise that each of my collaborators brought to our work that forced me to reflect on my own thinking and practices. Paul as a music educator, Amy as a theater educator, and Dan as a mathematics educator came to the collaboration with a clear sense of the aims of their disciplines and, thus, the practices that should be implemented in classrooms to reach those aims with children and youth in public schools. Moreover, each of them, while open to my ideas about content-area literacy, had the wherewithal to challenge my views, particularly those related to instructional practices. As we worked together, each of them was firm without being resistant, gentle without being condescending. In fact, all of them would likely say that they did not offer critique. However, their knowledge, practice, and questions offered me a way to critically reconsider my own position, understanding, and practice. Specifically, this has required me to question the aims of content-area literacy instruction and the efficacy of content-area instructional practices to the extent that they are generic across all disciplines.

Content-Area Literacy Education Must Allow Broad Definitions of Text

Perhaps because I am a former mathematics teacher, I have long embraced broad notions of text and, thus, literacy. For example, very early in my thinking about literacy, I included equations, solutions to equations, and proofs among the texts that must be read and written in a mathematics classroom

(Draper, 2002b). Therefore, in my writing I have advocated a broad notion of text. Citing Neilsen (1998), I stated that texts “include anything that provides readers, writers, listeners, speakers, and thinkers with the potential to create meaning through language” (p. 523). However, in reading this definition now, I find myself less comfortable with my reliance on language. Indeed, my definition of text was broad enough to include objects that one might read, write, hear, or speak. But my focus on language is highly problematic for fields such as music and theater that rely on other forms of meaning in addition to language. Paul helped me see this when he explained to his class that music offers a way to access “the inner life . . . and stuff you can’t talk about very well.” He valued music, and other forms of art, because, as he explained to his class of future music teachers, it “pierces the under layers of consciousness” that are often inaccessible to language (personal communication, October 9, 2006).

Certainly, broad notions of text have been embraced by members of the literacy community. For example, Wade and Moje (2000) have defined texts as “organized networks that people generate or use to make meaning either for themselves or for others” (p. 610). In this definition, texts need not be print, they need not be permanent, and they need not focus solely on language. Similarly, Conley’s (2008) most recent content-area literacy methods textbook contains a list of texts that include “Internet Web pages, trade books, music, movies and other media, magazines, and newspapers” (p. 125). Indeed, several of these texts — music, movies, and even Web pages — rely on print and nonprint objects that are not solely language based (New London Group, 2000). However, not all content-area literacy methods textbooks acknowledge this range (e.g., Vacca & Vacca, 2008), and even those that do frequently drop the point as soon as it is made and use only traditional forms of print- and language-based text as part of descriptions of text, literacy, and literacy instructional practices. Instead, their descriptions and examples remain centered around traditional print texts (e.g., Conley, 2008; Readence, Bean, & Baldwin, 2004). This “privileging” of print- and language-based texts and literacies may be problematic, particularly in a time when literacy educators are calling for teachers to engage students with multiple forms of representation and expression (Kist, 2001; New London Group, 2000).

Broad notions of text have consequences for literacy. Embracing these broad notions necessitates an expanded definition of literacy, moving away from simply reading and writing print material and including a wide variety of activities — viewing, designing, listening, producing, performing, critiquing, evaluating, and improvising — with a variety of texts. However, literacy educators have not agreed on a singular definition of literacy (Harris & Hodges, 1995), and literacy educators consider the multiplicity of definitions of literacy simply inevitable (Harris & Hodges, 1995). Nevertheless, literacy educators must get straight what they mean by literacy in order to be useful to educators who have little background in, and may find limited use for, literacy education.

Gee's (1989, 1996) notion of Discourse, and, thus, literacy may prove useful in thinking about text use and participation in content-area classrooms. Briefly, Gee (1996) defines Discourses as "ways of being in the world, or forms of life which integrate words, acts, values, beliefs, attitudes, and social identities, as well as gestures, glances, body positions, and clothes" (p. 127). As such, he explains that a Discourse is a "sort of identity kit" (p. 127) — a way of belonging and being recognized as belonging to a particular group. Gee's notion can be useful for content-area teachers who may be striving to help students take on new identities or to think and act like musicians, actors, directors, or mathematicians. As such, content-area classrooms can be seen as helping students master or control a particular Discourse by helping students learn how to appropriately act and interact with the texts used to communicate and participate within disciplinary communities of practice (Wenger, 1998, p. 127).

Indeed, Gee (1989) defines literacy as "control of secondary uses of language" (p. 23) or "mastery of a secondary Discourse" (1996, p. 143), where secondary Discourses are those that are acquired and learned in addition to the primary Discourse made available by one's family. Ignoring for a moment Gee's inclusion of language in his definition, this definition can be useful for thinking about learning and participation in content-area classrooms. In fact, this notion of mastering or successfully appropriating an identity that renders oneself recognizable as a member of a group (e.g., musicians, actors, directors, mathematicians) requires literacy educators to consider how the community of practice itself determines the appropriate texts and the appropriate uses of those texts — not literacy educators who may not be members of that particular community of practice and, thus, not members of that particular Discourse community.

Consider the following two incidents that occurred between my collaborators and me. These incidents illustrate the nature of the experiences that have prompted me to reconsider content-area literacy instruction as they have illuminated the limitations in my thinking. I saw how my lack of facility with the specific texts (both print and nonprint) in use and my lack of understanding of the discipline (or the community of practice or Discourse community) limited the guidance I might be able to offer content-area teachers about how to support the literacies of their students.

Non-Print Literacies

The first incident occurred between Paul and me. I had been discussing invisible forms of literacy instruction (Vacca, 2002) as a part of our biweekly CALSG discussions of literacy. Invisible forms of instruction are considered implicit as opposed to visible forms of instruction, which are considered explicit (see also Krashen & Terrell, 1983). As such, invisible forms of literacy instruction allow students to participate with texts in authentic ways and develop literacy skills through that participation. As part of our discussion, I offered the following music example:

[The teacher] can say, “We’re about to listen to a piece of music that’s similar to the piece that you’ve been practicing. I want you to think about some of the challenges you’ve had trying to perform that.” Then the teacher would play the music. And then the teacher would stop and say, “Okay, take a moment and reflect on what you were feeling and thinking. What kinds of things were happening for you?” So then, in that moment, the teacher would be doing invisible [instruction]. The teacher would be forcing the kids to recall what they did last week . . . and then having them reflect on [the music] afterward. (Meeting transcript, September 28, 2006)

In this example, the teacher prompts students to set a purpose for their reading and to reflect while reading (skills associated with competent readers), allowing the students to experience skilled reading without explicit instruction. I then described various instructional activities that allow teachers to promote invisible literacy instruction, including anticipation guides.² My hope was that the content-area teacher educators around the table, including Paul, would be able to hear my descriptions of the instructional activities and modify them to fit their content areas. I had been describing an anticipation guide and had an example available to share with the group:

The idea behind a lot of these classroom strategies . . . is not to teach kids explicitly how to do the reading, but to provide opportunities for kids to practice the behaviors of competent readers with the idea that if they do that enough, then they will start acquiring those practices for themselves and bring [them] to the [other] texts that they read (Vacca, 2002). (Meeting transcript, September 28, 2006)

Paul’s response gave me pause. He simply said, “I’m going to have to really think about how this would look” (personal communication, September 28, 2006).

A couple of weeks later, during my observation of Paul’s class, I watched him get his class of preservice teachers to create music texts (original adaptations and performances of a song) as a form of invisible literacy instruction. Paul had stressed to students that a musically literate individual can do more than simply perform music according to the directions of the conductor (in middle and high schools, this is generally the music teacher). His goal was to model for the preservice teachers how to support their future students’ ability to create music texts.

First he broke the class into five groups of about seven students each and explained, “You have three minutes to accomplish the following: You are going to create a version of ‘Twinkle, Twinkle, Little Star.’ . . . You have to make it through all the words at least once, and you must have a tonal center” (Field notes, October 18, 2006). He then gave each group a word that they had to use to guide the sound of their song: *urgent*, *exuberant*, *forlorn*, *relaxed*, and *exasperated*. His final instructions indicated that while he did not want the class to completely abandon the melody, they were “free to depart from it.”

Students quickly formed their groups. The group that I was observing closely was talking, humming, and singing. One student said, "Yeah, that could be our bass line." Later one student critiquing another said, "That is not exuberant." After a few minutes, each group performed for the class. The music they created was incredible; I had never had so much fun listening to "Twinkle, Twinkle, Little Star."

In my notes that day I wrote to myself, "How would you do this without a music background?" I recalled my suggestion to Paul regarding invisible literacy instruction in a music classroom. Watching his classroom, I was glad that he had not taken my suggestion and used it in his class; I was particularly pleased that Paul did not try to adapt an anticipation guide for his classroom. What Paul did in supporting his class in creating music texts was far better than what I had suggested, or would have ever suggested. Paul focused on the *production* of text, where I had only focused on the *consumption* of text. Paul ended the session with the music teaching majors by asking them what literacies were necessary for middle and high school students to participate in this activity. They also brainstormed additional activities that would allow adolescents to create their own music texts.

I came to realize through my collaboration with Paul that although I can embrace broad definitions of texts and literacies, I remain limited in the sound pedagogical recommendations I am able to make for helping students learn to read and write those texts in discipline-appropriate ways. In fact, when content-area teacher educators adopt a multiliteracies framework (New London Group, 2000), they likely remain less able than their content-area education colleagues to prepare teachers to support those various literacies. While I can intellectually appreciate that there are a variety of literacies involved with various disciplines, I do not have enough experience with the particular texts to know the specific literacies and how to support the acquisition of those literacies.

Print Literacies

The lesson I learned with Paul — to avoid making instructional suggestions about texts you know little or nothing about — was reinforced by Amy. In this case the text was a script — traditional print. I had not made suggestions about how to teach theater texts. However, Amy had been present during our discussion of visible and invisible literacy instruction, and about a month later I observed her teaching her preservice theater teachers about the idea of visible and invisible literacy instruction.

Amy began the lesson by explaining to her preservice theater teachers that she was going to model invisible literacy instruction. She then said to the class, "I want you to observe Kami making a peanut butter and jelly sandwich."³ She then turned to Kami: "Pretend you are making it for the man you love."

Kami quipped, "That will take a lot of imagination!"

To which Amy replied, "Imagination is the key to acting."

Kami stepped behind a table that was set up in the acting space. The rest of the class, serving as an audience, remained seated in desks arranged in a semicircle. Kami placed a paper towel on the table and put peanut butter on one piece of bread, using the other piece of bread to wipe her knife clean. She then spread the jelly on the bread that already had the peanut butter and again used the other slice of bread to clean her knife. She completed her sandwich and cut it diagonally. Finally, she cleaned up by replacing the lids on the jars and closing the bag of bread.

After some applause, Amy said to the class, "Let's articulate some of the things we observed."

Trish began, "She cleaned her knife on the other side of the bread."

Interrupting, Kami explained, "So you don't get peanut butter on the sponge."

Pam, returning to her observation, pointed out, "She was careful about mixing the peanut butter and jelly."

Amy accepted these and other observations and then introduced another scene. "Doug, put on your actor hat and here is a scenario. You are working graveyard shift at your construction job and you have to be there in five minutes, but you aren't going to have a break, so your goal is to make this peanut butter sandwich."

Doug stepped behind the table and quickly got to work making his sandwich. He grabbed two slices of bread and spread peanut butter on both slices, wiping the knife clean. He then poured the jelly on each slice. Doug finished by folding each slice of bread in half to make two small sandwiches.

Doug took his bow, and Amy asked the class, "How did that goal change what happened in the scene?"

Kami said, "He didn't clean up."

Trish added, "He poured the jelly."

Amy repeated the scene again with Trish and Pam. For this scene, Trish was late for work and had to make a peanut butter sandwich for her little sister, Pam. Amy added, "Pam is an obstacle because she hates peanut butter and jelly sandwiches."

Once the students finished the scene, Amy explained that actors use tactics to meet objectives. She defined objectives and tactics and explained that "we don't want to create a dead-end tactic." She then asked two more students, Doug and Kami, to act out a final peanut butter and jelly scene. "This time," Amy explained, "Doug wants to go out to eat, but Kami just wants to make a peanut butter sandwich." The other students were instructed to "look for objectives and tactics."

Shortly after Doug and Kami began, Amy froze the scene and the class discussed what objectives and tactics they saw occurring. Amy then said, "Pam, recommend a tactic." Pam suggested, "Flirt." The scene continued with Doug flirting with Kami to get her to drop the knife and go out to eat.

Amy called the class back together. She pointed out that she had modeled invisible literacy instruction, which would prepare students for locating objectives and tactics while reading a play script — an important theater literacy. At this moment in Amy's instruction, I realized fully that if I were given the script and then asked to make recommendations about how to provide instruction that would support adolescents' reading of the script, I would not suggest ideas for helping students locate objectives and tactics. As I expressed in my memo in the field notes, "The purpose of the reading is influenced by understanding the discipline. I would not know to [look] for objectives and/or tactics." While I would have likely helped students establish a purpose for reading, I would not have known to tell students that one purpose an actor might have for reading a script is to locate the objectives and tactics. In this case, it was not my inability to decode and comprehend print text — as was the case with the texts I encountered in Paul's classroom — that would interfere with my instructional practices; it was my lack of understanding of theater Discourses that would cause me to miss important opportunities to help my students read a script like an actor.

Content-Area Literacy Instruction Must Focus on Gaining Facility with Content-Appropriate Texts

Because of my background in mathematics and my experience as a mathematics teacher, I have felt confident in my ability to make suggestions about instructional practices in mathematics classrooms. Indeed, I am aware of and conversant with many mathematical texts, particularly those used in middle and high school classrooms. I have read all of the standards documents (several more than once); I have read closely mathematics methods textbooks, three of them for my dissertation study (see Draper, 2000, 2002a); I have read literature written by mathematics teacher educators about instruction for mathematics classrooms. However, because I have not always articulated content-area literacy as a goal for content learning, I have been guilty of suggesting the use of print texts that have distracted from the aims of mathematics instruction.

For example, I, like other content-area literacy teacher educators, have suggested that mathematics teachers use writing to support student learning in mathematics classrooms — an example of literacy as a tool. In particular, I have suggested that they use learning logs as a way to assess student learning and to create a dialogue between teachers and students, and as a way for students to articulate their thinking about mathematics (McIntosh & Draper, 1997a, 1997b, 2001). While I still support writing in mathematics classrooms, I have come to understand that in order to do the most good, I must support the writing of particular kinds of mathematics texts.

Dan has often expressed this point to me, and the following incident helped me to begin to see it. As a regular part of Dan's mathematics course for pre-

service teachers, he required them to write explanations of the mathematical phenomena and operations they were learning in class. Furthermore, he expected them to create particular concept-oriented explanations. About one month into the mathematics course I was observing, Dan explained to the class that “after reading the exam, some of you are getting really good at making explanations, but I thought some of you need more information on how to write a good explanation” (personal communication, February 7, 2001). Then Dan displayed an overhead transparency titled “Characteristics of a good explanation.” He clarified the points he included on the transparency. The main points of his presentation were as follows:

- Good explanations are based on images or models rather than symbols.
- Every number is carefully linked to some quantity or relationship between quantities in the image or model.
- Every operation is described in terms of actions performed on the image or model.

Dan also discussed the questions the students should ask themselves while creating an explanation. He pointed out, “Now notice that these questions don’t focus on ‘*How* did I get the answer?’” Rather, the questions focused on justifying *why* each step works and what it means. Dan ended the discussion by contrasting the characteristics of good explanations with those of poor explanations.

After this discussion, Dan divided the class into pairs to read each other’s papers and give feedback about the explanations. He wrote the directions on the board:

1. Everyone read [an addition] and [subtraction] explanation from the homework for everyone in the group.
2. [Discuss] good things (name two and be specific).
3. Restate their ideas.
4. Give suggestions (be kind and be honest).

Many literacy educators will notice, as I did, that Dan engaged his students in writing instruction focused on the writing process — drafting, editing, and revising. He also had his students participate in peer editing. Clearly, his goal for this lesson was that his students gain facility in creating a mathematical explanation. Literacy was the goal. However, it was a particular literacy in that he remained focused on creating a particular kind of mathematics text. He was not satisfied that his students were simply writing; he also insisted that they write explanations that articulated accurate representations of the mathematics by requiring them to base their explanations on images of quantities and operations. Furthermore, Dan insisted that the explanations fit the conventions of mathematical writing — in this case, mathematical proof. Dan was not satisfied when his students’ explanations simply described the algorithm they used to compute the correct answer.

When I review the work I have done in writing in mathematics, it is clear that I have been satisfied with mere descriptions of algorithms. For example, I have suggested learning log prompts such as, “Explain in words how to solve the problem” (McIntosh & Draper, 2001, p. 556). In the discussion that accompanied the prompt and the student example of writing (which was taken from my mathematics classroom), my coauthor and I pointed out that it was unclear “whether [the student] completely understands why she is doing each step” (p. 556). However, the prompt I provided did not require her to make clear *why* each step works. Thus, I missed an opportunity to focus on understanding mathematics (not to mention the issue of my privileging print literacy). Moreover, descriptions of algorithms do not represent mathematical Discourse any more than they characterize poetry writing or other similar literary genres, and, thus, they should be deemphasized in mathematics classrooms.

Trite slogans like “writing across the curriculum” do little to make clear that content-area teachers should focus on helping their students acquire and learn content-area literacies or master content-area Discourses. Furthermore, the slogans may send the message that reading or writing, regardless of the text, should be celebrated in every content-area classroom. Dan has made it clear to me on several occasions that he is not in favor of using precious instructional time to help students write poems, raps, or other kinds of texts that do not resemble the kinds of texts used to participate or communicate mathematically. Instead, mathematics instruction must help students become fluent in the texts consistent with mathematical Discourse and the aims of mathematics education. Similarly, writing that does not focus on making sense of the mathematics or merely requires students to put words to their algorithms should not be recommended for mathematics classrooms just so mathematics teachers can fulfill the “writing-to-learn” mandate.

Lessons Learned through Content-Area Educator Collaboration

Content-area literacy has not been universally embraced by content-area teachers. However, my collaborations with Paul, Amy, and Dan have helped me see that perhaps content-area literacy in a very general or generic sense is not useful for content-area classrooms. Our study had shown me that content-area literacy is more valuable to content-area teachers when it makes space for nonprint/non-language-based texts, and when teachers use print texts in discipline-appropriate ways. The focus should be on helping students gain facility with the texts already present and valued in content-area classrooms. Content-area literacy educators may say that this is precisely the message sent to content-area teachers. However, a close examination of the messages surrounding content-area literacy does not bear this out (Siebert & Draper, *in press*). For example, when literacy instructional activities are described specifically for mathematics classrooms, they generally advocate a kind of mathematics instruction that is deemphasized by mathematics reformers, such as memorizing algorithms.

Paul, Amy, and Dan have found value in considering the issues related to content-area literacy. However, they have done so while maintaining a clear vision of the aims of content instruction. For Paul, a focus on print texts is not compelling for the goals he is trying to accomplish in music education. Amy, on the other hand, knows that print texts are important for theater education. However, the literacies that accompany those texts are quite specific. And for Dan, content-area literacy that does not help him consider ways to help his students access a rich understanding of important mathematical concepts is useless. These subtleties may seem insignificant. However, they must be addressed if content-area literacy theories and instructional practices are going to realize their full potential to help students — regardless of class, culture, or linguistic background — access the knowledge and acquire the skills necessary to participate in various Discourse communities. Paul, Amy, and Dan have each tapped into the theories and practices related to content-area literacy as evidenced by the way in which they have incorporated content-area literacy ideas into the classes they teach to preservice teachers. I have also felt validated by my content-area teacher educator colleagues in that they have found my literacy ideas worthy of their consideration and valuable in their work with preservice teachers.

Conclusions

For my dissertation study, I conducted a qualitative content analysis of methods books written to prepare teachers to teach mathematics, science, and social studies (Draper, 2000, 2002a). I expressed hope that these types of “conversations across disciplines” would help “literacy educators . . . understand recent research, recommendations, and implications of content teaching and learning,” and that “content-area educators . . . [might] consider doing some deep thinking and learning about adolescent literacy issues” (Draper, 2000, pp. 195–196). I believed that part of the reason content-area teachers resisted ideas about literacy and literacy instruction was that they could not see how the ideas fit with what they were learning about content instruction from their methods textbooks and professors. I conceptualized the problem then as one of coherence, or lack thereof. My hope in collaboration was that content-area teacher educators and literacy educators would adopt each other’s language to some degree and then present their disparate ideas in a way that would allow preservice teachers to make the appropriate connections.

My thought was that content-area teacher educators were unwittingly undermining the work of literacy teacher educators, and that if they would just make some minor adjustments (e.g., not using writing as a punishment for students who disrupt the classroom), then preservice teachers would have a better chance of understanding how to infuse their content instruction with relevant literacy instruction. It did not occur to me then, as it does now, that literacy teacher educators may be unwittingly undermining the work of con-

tent-area teacher educators. Experiences with Paul, Amy, and Dan remind me that I have the potential to do harm to content instruction by making recommendations that distract from or distort the content. I have come to realize that because I am not a member of any of the particular Discourse communities that occur in school, I am not familiar with the texts or how those texts are used.

Ultimately, my experiences with Paul, Amy, and Dan have forced me to reconsider my purpose as a content-area literacy teacher educator. While I initially sought to create these collaborations because I believed in literacy and did not have the opportunity to teach a separate literacy course, I have come to appreciate our work together as my contribution to the preparation of secondary teachers on campus. I continue to believe that all teachers must be prepared to support the literacy development of their students, yet I am no longer convinced that *all* preservice teachers need to take a separate literacy course. Indeed, I cannot imagine that I could do a better job of preparing teachers to support adolescents' music literacies than Paul. I am likewise convinced that for theater, which relies to a large extent on print literacies, Amy is in a much better position to equip future theater teachers with the necessary techniques to engage their students in reading and writing those texts. In fact, Amy is in a much better position to describe to preservice theater teachers how the multiple texts (e.g., script, body language, costume and set design, music, theater production) relate to one another and how to help adolescents learn how this multiplicity of texts works together (and thus must be read and written together) in theater settings. I have appreciated the opportunity to collaborate on the content and methods of several content-area methods courses, and my role as a consultant on these courses works well for me and my colleagues.

Paul, Amy, and Dan have benefited from our collaborations as well. Each of them has gained ideas and ways of talking about content instruction that they can share with future teachers. They each discuss "literacy as a lens" for viewing content instruction and instructional problems within content-area classrooms. Paul and Amy have sought my guidance for changes they have made to their methods courses. They look forward to making a place for content-area literacy within their methods courses because they appreciate the power it gives them to discuss both the aims of content instruction and appropriate instructional practices. In fact, Paul, Amy, and Dan have also made a place for literacy in the scholarship aspect of their professional assignments by coauthoring presentations and publications on the topic.

Changing the location of my practice from teacher education to teacher educator education presents challenges for me and for my institution. The primary challenge that must be addressed is getting widespread participation in the study of literacy from teacher educators who prepare secondary teachers. Indeed, given the traditions of teacher education and the fact that content-area teacher educators are likely not seeking out ways to add to their

curricula for preservice teachers, how might content-area teacher educators welcome collaborations with the content-area literacy teacher educators and consider it worthy of their time and energy? What considerations must be taken to ensure *true* collaboration rather than simply cooperation or instrumental action, where one collaborator seeks to impose his or her views on the other participants? How does the institution “count” the work of the content-area literacy teacher educator when his or her work does not fit into conventional full-time equivalence allocations? Moreover, what do these collaborative efforts look like at institutions that *do* offer a separate content-area literacy methods course?

Perhaps the CALSG offers a model for teacher educators to consider. Under this model, I have a one-course load reduction each semester that enables me to work with content-area teacher educators from all over campus. I facilitate our meetings by locating places to meet, establishing a schedule, and choosing reading material for us to discuss. In order to encourage content-area teacher educators to participate, particularly those who have scholarship responsibilities, I suggested that the group engage in a form of participatory action research (Kremmis & McTaggart, 2000; Reason, 1999). Therefore, from the first meeting of the CALSG we have been engaged in inquiry — audio-taping meetings; collecting artifacts such as course syllabi, descriptions of assignments, meeting agendas, and notes; and observing instruction. I have facilitated the inquiry by visiting courses, creating field notes of the instruction, and having one-on-one conversations with professors about the content of their courses. Our inquiry has led to several national and international research presentations and to the preparation of manuscripts for publication. We are currently working on a book proposal together.

I have also strived to build our collaboration in the CALSG on the precepts of democratic participation, which are consistent with collaborative forms of research like participatory action research (Draper, Hall, & Smith, 2006). This form of participation is in line with Dewey’s (1916) description that “a democracy is more than a form of government; it is primarily a mode of associated living, a conjoint communicated experience” (p. 87). Dewey (1927) also explained that when the conjoint activity has consequences that are “appreciated as good by all” and when the realization of those good consequences is a desire that all are willing to work toward, a democratic community is formed (p. 149). Thus, a democratic community is formed when individuals work together on a common problem to find a solution that is beneficial to all. As Bernstein (1998) has explained, “the virtues of openness, fallibility, experimentation, ongoing criticism, and imagination are what Dewey took to be characteristic virtues of a community of inquirers” (p. 149). These characteristic virtues, which Dewey maintained are requisite for a democratic community, are those that we sought to appropriate in our work together in the CALSG.

Our common problem has been the preparation of secondary teachers. Moreover, we are all concerned about the education of adolescents and want

to prepare teachers who can create safe and educative opportunities for adolescents. As such we have worked together in the CALSG to build trust with one another by listening to each other's concerns and expertise; we have been open to alternative opinions; individuals have made changes to their practice and reported those changes to the group; and individuals have continued to focus on changing their own work and not the work of others. This has been particularly challenging for me. I have had to remain patient and open to allowing each participant to make his or her own sense of the ideas and to implement the ideas in his or her own way. However, I believe it is my commitment to the process — rather than the product — that allows the group to work so well together. In fact, this year (our third year) we welcomed five new members to the group.

We will continue to work to overcome the challenges associated with collaboration and teacher education. These challenges and others must be addressed in order to make the collaborative efforts between teacher educators effective. Indeed, both content-area and literacy teacher educators must not abandon the possibility of collaborative work simply because the challenges loom large. Instead, we must gather up our courage and humility and seek ways to overcome those challenges if we hope to transform the preparation of middle and high school teachers and, thus, the lives of the adolescents with whom they will eventually work.

Notes

1. The enacted curricula, as described by Eisner (1979), are the curricula as implemented by a teacher during the practice of teaching. This is in contrast to the curricula described in textbooks or curricular outlines, or as represented in unit and lesson plans created by the teacher.
2. Anticipation guides consist of four to five true/false questions based on a passage students are going to read. Students answer the questions prior to reading the passage and discuss their answers with their peers. Students then read the passage with the express goal of verifying or refuting their answers. After reading, students discuss any changes that they must make to their answers. Anticipation guides require students to reflect on their background knowledge and read with a purpose.
3. All student names are pseudonyms.

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