

PART III

**ADOLESCENT LITERACIES
AND MULTIPLE TEXTS**



CHAPTER 14

Missing in Action

Learning from Texts in Subject-Matter Classrooms

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For the last several decades, researchers, classroom educators, and policymakers have targeted strategies for improving adolescent literacy achievement. Nevertheless, across the nation, few students reach literacy levels that enable them to develop interpretations, think critically about texts, make evidence-based arguments, or assemble information from multiple texts into a coherent understanding of a topic. While this set of circumstances may not be news, it should continue to concern us all. Despite new awareness of the literacy-learning needs of adolescents, new policies aimed at advancing literacy skills for middle and high school students, new understandings of the unique demands of discipline-specific texts and literacy practices, and new standards focused on literacy instruction across the grade levels and subject-matter classes, we've made little progress over the past several decades. We believe that one fundamental reason students are not making progress in gaining advanced levels of literacy is that they have very little opportunity and support to use texts for purposeful learning in the subject areas, and thereby to gain needed dispositions, strategies, and skills.

Our purpose in this chapter is to contribute to the existing literature about this state of affairs. We are not naive. We recognize that many factors contribute to the persistent problem of engaging middle and high school students in learning from and with text, including widely varied engagement and reading proficiencies, lack of appropriate instructional resources, limited know-how among subject-area teachers, and competing commitments that undermine a sustained focus on reading to support learning and increasing independence. Ultimately, we know that solving the problem of learning from text will require simultaneous attention to all of these. And we recognize that doing so will unsettle the normative ways of teaching in middle and high schools. But we argue that doing so is foundational to improving outcomes for all students.

In this chapter, we draw on our distinct experiences over two decades to fill some of the gaps in research about how texts are actually used in disciplinary teaching and

learning (Moje, Stockdill, Kim, & Kim, 2011), giving what Pearson and Gallagher (1983) have called an “existential description” of reading in the secondary subject areas. We target the perennial problem of learning with and from text in subject-area classrooms, share successful strategies we’ve undertaken, and make several recommendations that we feel are sensible and workable in the context of today’s schools.

DISCOVERING THE MIA TEXT

Over two decades ago, one of us (Greenleaf, 1995) worked with a high school faculty serving a high-poverty, culturally and linguistically diverse population of students to collaboratively develop and study interdisciplinary project-based curricula. A ninth-grade unit, for instance, positioned students as various members of a community struggling to decide the best method of producing energy. Inspired by research on deeper, engaged learning, the curricula included discussion-based pedagogies, small-group work, and frequent opportunities for speaking and writing on curricular topics.

We found that although students were eager to participate in the projects (they attended class!), took up ways of talking that embodied their roles, and parroted information from class lectures or oral presentations given by visiting experts, their knowledge about the actual content of the units remained embarrassingly thin. We realized that students weren’t reading, or weren’t comprehending, the texts we had so carefully collected and provided to them. Texts, and the information, concepts, and points of view they provided on the topics linked through the carefully designed interdisciplinary units, were conspicuously MIA, that is, missing in the action of students’ learning.

Investigating this problem, we soon found that many subject-area teachers had abandoned texts, teaching around them in many inventive ways. Classroom observations, interviews, and individual reading assessments of ninth graders revealed that students did not have texts assigned in many of their classes. Instead, they received lecture notes, or copied them from the board. When texts were used, teachers often read aloud to the class, or worse, had students read aloud round-robin to make sure all students “had access.” Even in literature classes, students often listened to audiotaped renditions of a work, and just as often, viewed the film version of a book or play to keep pace with assigned reading. In situations in which course readings were assigned, and when they were circumvented through in-class oral renditions, teachers summarized the content for students with great regularity, allowing students to “pass” as readers by latching onto the work teachers did for them and the contributions of other students in class “discussions.”

These same students demonstrated considerable variability in their reading abilities and familiarity with different types of reading materials inside and outside the school context. On the one hand, they read familiar types of out-of-school materials containing complex ideas, sentence structures, and arcane information (about video games, cosmetics, style, music, etc.) with considerable ease. On the other hand, their reading and comprehension of academic texts was unexpectedly and dramatically varied. Julio, for example, read Nicaraguan poetry at home, and in his English as a second language (ESL) class had many teacher-supported opportunities to make sense of literature. Yet in history, he copied notes from the board to learn content. Faced with an informational text about trade, he stumbled over sentences and text structures, his former fluency and interpretive prowess giving way to struggle. We began to see patterns in the reading we explored with case study students.

Open-ended surveys about reading behaviors and attitudes of 155 ninth-grade students told us how they defined reading. Good readers, they said, read fluently aloud. They read quickly. Good readers knew all the words they would encounter in a text beforehand. “They have to know more vocabulary words first. They have to know how to pronounce words well.” Good readers just (magically) understood the text. Few students mentioned the kinds of strategic problem solving readers do to make sense of texts (Greenleaf, Schoenbach, Cziko, & Mueller, 2001). One day in class we saw a student drop her textbook noisily onto the desktop at the beginning of the period. Her assigned reading included a section on the Armenian genocide. “Is there anyone here from Armenia?” she demanded. Another student complained about a text the class was reading, “It seems like they write this way to keep people like me out.” Frequent experiences like these told us that these high school students did not expect to be challenged to read and understand worlds outside of their own experiences (Schoenbach, Greenleaf, Cziko, & Hurwitz, 1999). Echoing the responses we had seen on the survey, students seemed to have learned that what counted in school was having the correct answers (knowing already), not learning, or knowing how to learn, something new.

In these studies, we found that the vast majority of high school students in the diverse, urban settings where we worked had problems with comprehension, not decoding, of the texts they might encounter in school. They brought life experiences to bear on the interpretation of texts that were familiar to them, some of which they might encounter in school. Unexpected funds of knowledge came into view, like Julio’s reading of poetry, when we listened to students making sense of a variety of texts. Yet students were profoundly inexperienced with many academic materials and text types. They became passive in the face of these materials, showing us that they did not expect to comprehend these sorts of things. Most importantly, we began to see that their reading facility with any given text was a direct measure of their experience with similar sorts of material, rather than their ability, and that their experience with such texts was a clear gauge of their opportunities to read, and learn from reading, in school.

THE ENDURING PROBLEM OF THE MIA TEXT

As we move to the present, the photocopied lecture notes teachers used to hand out have given way to glossy PowerPoint slides. Subject-area textbooks embed integrated literacy strategies into learning activities rather than relying only on end-of-chapter questions. Some schools and districts have elected to “go paperless,” and students may have Chromebooks and iPads to access the myriad resources on the Internet. Technology has made it easier than ever for students to access a great variety of text, as well as to bypass reading and thinking by simply cutting and pasting text from elsewhere. New reading interventions and design-based implementation research have targeted disciplinary literacy practices, critical thinking, and deep comprehension. Yet in our ongoing work with teachers and students, and in our observations of subject-area classrooms across the middle and high school grades, we find text to be missing, still, in the action of learning.

The MIA Text in Project-Based Learning

In 2010, Valencia joined a multidisciplinary team of educational researchers and high school content teachers on an iterative design-based implementation research (DBIR)

project (Penuel, Fishman, Cheng, & Sabelli, 2011) to develop, implement, and study a rigorous approach to project-based learning (PBL) in the Advanced Placement (AP) U.S. Government and Politics course.¹ The main objective was deep, transferable conceptual learning, rather than the broad content coverage and fast pace of many advanced courses (Parker et al., 2013). Also we aimed for engagement and success for the wide range of students now being encouraged to take AP courses under the banner of “AP for all”—not simply equity of access but equity of outcomes as well. After 2 years of pilot work and impending implementation in high-poverty urban schools, literacy issues surfaced and loomed large. Teachers and researchers wondered how literacy issues were interacting with their goal of deep content learning.

We set out to study the literacy contexts in these classrooms with the aim of designing, with our teacher collaborators, strategies to help students learn from texts. From 2010 to 2012, we used a combination of classroom observations, videotaped lessons, and interviews to study teachers in six schools across two states. Shockingly, we found that the majority of students, more than 70%, rarely read the course textbook, although teachers frequently assigned it for homework. They didn’t need to read it to get a good grade, because teachers delivered the same information in class. As one student told us, “The information we get from all the PowerPoint [lectures] that he gives us is pretty much what we would read in the book. . . . We sort of read the textbook through him.” Similar to Greenleaf, we observed teachers using a variety of work-arounds, including lectures, videos, Internet sources, and short handouts, to avoid relying on students to read the textbook.

We rarely observed in-class activities that involved extended reading—either supported by the teachers or student directed. The exception was the rare instance in which teachers arranged for students to use computers in the school library, because most classrooms had only one or two available, and many students didn’t have access to the Internet at home. Few, if any, supplemental resources were available to teachers or students other than the occasional teacher-constructed or downloaded handout.

Much of the course reading was cast as homework. Assignments were expected to be completed individually and were framed as tasks to be completed for accountability rather than resources to be understood and used. Concerned about content coverage, teachers typically assigned entire textbook chapters (often more than 30 pages each), telling students, for example, “Read Chapters 16 and 17 in the textbook to prepare for a quiz,” or they assigned reading from handouts with directions such as “Read the court case and write a one-third page summary.” Directions like these were procedural rather than substantive—students were told the tasks they needed to complete, but they weren’t oriented to the important ideas they needed to learn or how the knowledge would be useful to them. We soon realized that teachers rarely did more than skim the readings before they assigned them. Consequently, they were largely unaware of the content, the structure, or the challenges these textbook chapters presented for their students, nor did they devote class time to discussing the readings or the challenges students may have encountered.

We also observed that because students often lacked academic content knowledge about government and politics, and because related topics were common in everyday discourse, many students used their life experiences and simple logic to engage in discussion and project tasks when they should have been using knowledge they learned in the course (e.g., federalism, politics, interest groups, Constitutional reasoning, case law). Teachers

¹We added AP Environmental Science in the following year, and AP Physics is next up.

were “encouraged” when students participated in debates and discussions, regardless of the depth of their understanding.

Like Greenleaf and colleagues (2001), we found that most students enrolled in the “open” AP Government (APGOV) classes had strong decoding skills but had difficulty with comprehension and with general and subject-specific vocabulary. Yet very few students recognized or reported that reading was difficult. They didn’t connect understanding with reading. Students were compliant note takers, copying verbatim from slides, but they were confused about what to note from lectures or videos. One student told us, “I just pretty much write down what I thought was important . . . which was kind of difficult . . . because what I think is important may not be what [the teacher] thinks is important.” All-in-all, we found that text played a limited role in students’ learning.

The MIA Text in Classroom Observations

At about the same time, Valencia and Parker (2015) was studying the AP PBL classes, Greenleaf and colleagues (Litman, Marple, Greenleaf, Charney-Sirott, Bolz, et al., in press) approached highly regarded middle and high school teachers of literature, history/social studies, and science, asking to see lessons in which reading played a central role. They observed and videotaped 71 lessons taught by 34 teachers from 22 urban and suburban schools in two states, analyzing the lessons with an eye toward how much instructional time was devoted to working with texts versus teacher lecture, close reading to build disciplinary knowledge versus fact acquisition, and high-level tasks such as cross-text synthesis and argumentation (Litman et al., submitted).

Findings from this study paint a brighter picture of reading and text use than does Greenleaf’s earlier work and more recent studies (e.g., Valencia & Parker, 2015; Vaughn et al., 2013). Teachers allocated three times as much class time to working with texts as to lecture. Belying secondary teachers’ often held beliefs that literacy tasks impinge on subject-matter learning, literacy tasks in the observed lessons generally had a disciplinary, knowledge-building focus. Half of all close reading involved disciplinary knowledge building (50% of the time), and argumentation and cross-textual analysis frequently involved disciplinary knowledge building (67 and 86% of the time, respectively). However, fact acquisition dominated when content was delivered by teachers.

These findings were clearly a result of targeting lessons in which reading played a central role, taught by highly regarded subject-area teachers. Thus, they offer what could be a best-case scenario of literacy opportunity to learn in middle and high school subject areas. It is therefore all the more noteworthy that working with text was no guarantee of a literacy focus: The majority of time allocated to working with text focused on disciplinary knowledge-building activities that did not actively engage students in making sense of the texts. While half of all lessons included some close reading, only 28% of class time was allocated to students actively thinking about and working with texts. And while analysis of these lessons documented more frequent use of texts than previous studies of content-area instruction, the *centrality* of texts to the authentic intellectual work of learning was quite limited, and teachers continued, in subtle ways, to deliver the content and even do the thinking.

For example, as they monitored students’ progress in both small-group work and whole-class discussions, teachers would draw students to the needed information and even to their own conclusions or interpretations of texts through leading questions and

selective uptake of students' contributions to discussions. Teachers would knit together and reinterpret, translate, and elaborate on students' contributions, adding new information as they orchestrated these "discussions." Seeking to engage students in discussion, through their talk, teachers nevertheless did the work themselves of reading and interpreting and knowledge building *for* students. As one high school history teacher realized about the way she had orchestrated discussion of a primary source document,

"When I was writing things down on the board, they were coming from my words. I was giving them guiding questions. I'm building the bridge and they are just putting in the stones. They are part of it, but I took away some of their independence. I've come a long way from not lecturing off of power points, but I'm uncomfortable to go to the place where they don't feel successful."

ADDRESSING THE CONDITIONS OF SECONDARY SUBJECT-AREA CLASSROOMS

In our interpretation of this landscape, two scenarios are emerging. One replicates what Greenleaf found decades ago and what Valencia found more recently—that many secondary, subject-area teachers and their students are circumventing texts altogether, even when curricula are carefully designed to be rich and thoughtful. The other is a more subtle version of this problem: Even when texts figure into the classroom, they are not often engaged by teachers and students as sources and resources for learning. By and large, subject-area teachers are doing the bulk of the intellectual work as they deliver information and content to students in a variety of traditional, multimedia-saturated, and technologically supported ways, as well as more indirect interactions around texts. Students themselves are not digging into texts to make sense of them, even when they talk around and about them, and work with them in assigned tasks. Subject-area teachers admit they have great difficulty expecting and supporting students to learn from and with texts. Dependency on lecture, skating on the surface of texts, and information delivery masquerading as classroom discussion, rather than independent learning and deep engagement with texts, is the default.

Although relatively few studies have examined how texts are actually used in subject-area classes (Moje et al., 2011), our current studies confirm and extend what others have found. In a study of instructional time use in high school classrooms, Fisher (2009) found that students spend the majority of class time in listening activities such as lecture and film. Similarly, studies confirm that lecture has been and remains the dominant mode of instruction in both college-preparatory and general-track classes (ACT, Inc., 2006; O'Brien, Stewart, & Moje, 1995; Vaughn et al., 2013), yet teachers assign significant amounts of textbook and trade book reading (ACT, Inc., 2013; Applebee, 1993; Bain, 2006; Reisman, 2012). When students do interact with text, studies paint a picture of perfunctory reading activities that only require students to look up isolated pieces of information to fill in worksheets (Alvermann & Moore, 1991; Bloome, 1994; Fisher, 2009; Hartman & Dyer, 1992) or gain just a broad-based, basic understanding (Kihara, Graham, & Hawken, 2009). And, contributing to this, several studies confirm our finding that secondary teachers provide scant support for reading comprehension (Ness, 2008, 2009; Snow, 2002).

In our view, teachers' work-arounds are understandable reactions to the current state of affairs. They do not believe students will, or can, read the complex materials in their subject-area classes, and there is content that students need to know before moving on in a lesson or unit. They do not know how to break the entrenched habits of high school learning and engage students with academic reading, nor do they have the knowledge or support they need to scaffold student learning or help students develop needed skills. And they have few text sources available. Small wonder that subject-area teachers reach for efficient alternatives to ensure that students are exposed to needed content. Students' work-arounds are equally sensible. They do not know how to make sense of the texts in front of them—small wonder, given their lack of opportunity to learn to use text for learning. And they actually don't need to work with text, since teachers "deliver" the information and the thinking to them. Most concerning is that students are not compelled or inspired to take on meaningful reasons to learn from text.

For many literacy educators, this enduring state of affairs is explained by the fact that the texts (often textbooks) of subject-area classes are dry, unnecessarily complex, and disengaging; that students lack the necessary skills and strategies to engage with academic materials; and that the content literacy strategies offered to subject-area teachers fail to reflect authentic disciplinary practices. We agree that these areas need attention. Yet more puzzling is that despite an abundance of research and professional development efforts focused on improving instructional materials and teaching literacy strategies at the secondary level (both disciplinary and general), there has been only limited take-up on a broad scale, leaving high school practice relatively unchanged for more than three decades. We suggest, then, that the more fundamental problem we have documented—the absence of learning from text in the subject-area classroom—should take precedence in efforts to improve students' abilities to build knowledge, think critically and deeply, develop evidence-based arguments, and assemble information from texts into coherent understandings.

Our evidence suggests three on-the-ground issues that must be addressed to make headway on this problem. First, and most pressing, is shifting the emphasis to *using texts* rather than avoiding them. Both teachers and their students must be committed to reading and learning from texts in their subject-matter classes. If students aren't reading, grappling with text in front of them, and expecting to learn from text, then all the disciplinary literacy strategies in the world—analysis, argumentation, contextualizing, and the like—will not facilitate learning.

Second, both teachers and students need support and practice using texts for learning. This includes helping teachers knowledgeably analyze and select texts (and segments of texts) and plan for their purposeful use, based on the learning opportunities they support. It also includes supporting teachers to implement instructional routines that bring together the content and conceptual learning required for specific courses and the literacy strategies to learn in that class and beyond. Similarly, students need to develop, with teacher support, strategies and dispositions to dig into texts as sources of meaningful learning.

The third issue is one that we believe may account for the slow progress in facilitating learning from text—feasibility at the scale needed to address the problem. Recent approaches of the literacy research community may target reform that is optimal without adequately considering what is feasible for real teachers working in real school contexts—a tension that was acknowledged and seriously deliberated when the National

Council on Education Standards and Testing (NCEST, 1992) was created to advise Congress on the “desirability and feasibility” of national standards and tests. Although we appreciate efforts to demonstrate the promise of innovative ideas, we are concerned that many are not feasible and, as a result, have limited take-up in the contexts of most classrooms. For example, whereas literacy researchers may expend enormous effort designing and implementing a single teaching unit, lasting only a few weeks to a month (e.g., Moje & Speyer, 2014; De La Paz et al., 2014), teachers need strategies that can be used throughout an entire course. Some projects attempt to improve literacy proficiencies such as comprehension strategies and general academic vocabulary through curricula that are not specific to any particular subject area or course (Snow, Lawrence, & White, 2009; Schumaker, Deschler, & McKnight, 2002; University of Kansas Center for Research on Learning, 2004), but subject-matter teachers must attend to the development of concepts and skills specific to their courses. Other projects, including our own, have developed a whole year’s worth of curriculum to replace existing units or courses or yearlong literacy intervention curricula, efforts that are both painstaking and labor intensive (Greenleaf, Hale, Charney-Sirott, & Schoenbach, 2007; Guthrie, Wigfield, & Perencevich, 2004; Monte-Sano, De La Paz, & Felton, 2014; Parker et al., 2013; Vaughn et al., 2013) but not easily scalable. In some cases, these designed interventions depend on researcher-constructed text materials or adapted (i.e., shortened and simplified) primary documents, an approach that we suspect may engage students in the short run but not adequately prepare them for the complexity of materials ahead and around them (De La Paz & Felton, 2010; Moje et al., 2004; Wineburg, Martin, & Monte-Sano, 2011), and equally important, fail to help teachers use textbooks and the limited assortment of text-based resources available in their classrooms.

Some designed interventions justifiably rely on substantial professional development efforts (Greenleaf & Schoenbach, 2004; University of Kansas Center for Research on Learning, 2004). Without question, teachers orchestrate and mediate the learning opportunities of their students, and to demand shifts in instruction through means such as new standards, without a concomitant investment in teacher learning, strikes us as utter folly. Similarly, some of the recent curricular interventions are designed to be educative for teachers, supporting new understandings and instructional practices that can be generalized beyond a specific course (Greenleaf, Hale, Charney-Sirott, & Schoenbach, 2007; Schoenbach & Greenleaf, 2009; Valencia, Adams, & Nachtigal, 2016). Even so, our own efforts in designing professional learning and in design-based implementation research have enabled us to understand more fully what is at stake in shifting the normative practices endemic to high school teaching and learning, and in foregrounding the role of texts and literacy in deep learning. We are therefore sobered by the enormous outlay of resources such design work involves and the necessary spread of the work beyond the few settings where we, and others, have been able to work.

Recognizing these realities, what then can we do to make significant headway on the project of literacy development at the secondary grade levels? Even as curriculum and design work moves forward on various fronts, we believe we must muster the strategies, resources, and will to focus work on the problem of fostering learning from text in everyday subject-area classrooms. We therefore offer a “modest” proposal aimed at what we think are feasible, field-tested strategies for gaining traction on this enduring problem: actually getting text used to learn necessary content, concepts, and ways of thinking in specific high school classes. We recognize even as we write this hopeful sentence that

feasible will not necessarily mean easily done. But we hope our proposal is indeed modest, in that it may be both simpler and more feasible than the many elaborate endeavors under way that may be temporary and impractical fixes in the schools we know, with their limited resources and funding. Below, we draw on our research and multiyear work with teachers to offer first, the conceptual and focus shift we are calling for and second, practical strategies to enhance text-based teaching, student engagement, and learning in middle and high school.

A MODEST PROPOSAL: FOSTERING ENGAGED ACADEMIC LITERACY

We believe that gaining traction on the MIA text will require a sustained focus on fostering students' dispositions and strategies for what we have called *engaged academic literacy* (Schoenbach & Greenleaf, 2009). Engaged academic literacy describes the ability to approach complex texts for purposeful inquiry, with a range of productive learner dispositions and problem-solving strategies at the ready. Engaged academic literacy is in view when students work actively with one another, with teachers, and independently to understand challenging texts and construct new knowledge in ways that have meaning for them and that build on their knowledge, experience, creativity, and questions. In our view, such literacy practice is not merely the exercise of "the basic reading and writing skills taught in a conventional literacy medium during elementary and middle school years" (Holbrook & Koenig, 2000, p. 265) applied to learning information from expository texts. Nor do we mean "generic literacy skills," as they are often described, for example, in Shanahan and Shanahan's (2008) formulation of "intermediate literacy" as the generic comprehension strategies, basic fluency, and vocabulary skills common to many tasks, in contradistinction to "Disciplinary Literacy," in which skills are specialized to specific academic subject areas. Rather, we consider engaged academic literacy to involve an epistemological stance toward using texts to drive one's own learning.

This notion of engaged academic literacy builds on Norris and Phillips's (2003) description of *fundamental* literacy and the work of Greenleaf and colleagues in designing the Reading Apprenticeship instructional framework (Schoenbach, Greenleaf, & Murphy, 2012). We believe the inquiry orientations and negotiation of meaning that Norris and Phillips describe, as well as the dispositions to grapple with complexity and marshal stamina in the face of challenge that Greenleaf and colleagues have integrated into the Reading Apprenticeship framework, will be vital to students' ability to drive their own learning from course texts and from the texts they encounter in school and beyond. Such literacy moves beyond formulations of basic, intermediate, or so-called "generic" literacy skills. Rather, such strategies and dispositions are *generalizable*, and in that way fundamental to many contexts students encounter. Any act of reading is situated by the nature of the texts, tasks, specific reader characteristics, and sociocultural context surrounding it; therefore, situating class texts in subject-area learning tasks and framing such activity as inquiry situates the reading in the subject matter and discipline. From this perspective, no reading can be seen as "generic"—that is, nonspecific to the text, task, reader, subject matter, and context. As soon as such reading is framed as inquiry, as soon as texts are specific to subject matter, as soon as texts are linked to meaningful learning

tasks, engaged academic reading becomes specifically disciplinary in nature.² Engaged academic literacy is inquiry-driven, problem-solving reading, grounded in subject matter/disciplinary learning, with texts that are representative of a range of materials students encounter in their years of study.

Our focus on fostering engaged academic literacy calls for a profound epistemological shift—that teachers engage students with reading in order to inquire, to learn, to question, to think, and to grapple, rather than to carry out perfunctory displays of knowledge or information retrieval. Such epistemic commitments are all too often foreign to secondary schooling. We have seen that approaching texts for purposeful inquiry helps students to develop dispositions for learning engagement and problem solving that we believe can empower them to enter academic texts, the subject matter, and ultimately disciplines, as legitimate peripheral participants (Lave & Wenger, 1991) in academic endeavors. Such epistemological framing repositions texts of all types, including school texts (e.g., textbooks, Internet sources, reference books, teacher-developed resources), as well as texts more particular to the content and discipline (e.g., the Constitution, science reports, economic and social accounts of phenomenon, case studies, primary sources) as resources for inquiry and learning. We believe such an inquiry orientation toward reading, coupled with text-based problem-solving strategies and dispositions, allows students to bootstrap their way into learning new things, into deciphering and interpreting new and complex texts, and ultimately, perhaps, into practicing and acquiring the kind of reasoning processes central to their learning in content classrooms and in academic disciplines.

Having called for a focus on engaged academic literacy, entailing what we believe is a profound epistemological shift and purposeful inquiry orientation toward the use of text in subject-area learning, we turn now to strategies to launch and sustain such work. Here, we draw on approaches we have used in our design research and professional development efforts. We present practical ideas to implement engaged academic literacy, offering tools and approaches for (1) planning instruction that purposefully integrates the *use of texts* for subject-area learning, rather than avoiding them, and (2) implementing instructional routines that develop students' learning dispositions and facilitate subject matter and disciplinary learning. While recognizing the everyday contexts of schools, their teachers, and their students, we aim with these suggestions to shift instruction toward engaged academic literacy in the service of subject-area learning. Such an approach will, we believe, recognize and draw on the expertise of teachers who know the core topics and concepts central to the courses they teach, in order to generatively create ongoing opportunities for students to use text for subject-area learning.

PLANNING ROUTINES TO SUPPORT ENGAGED ACADEMIC LITERACY

The approach we have taken to encourage *use* of texts by teachers and students is to assist teachers in helping their students learn *from texts* the content they are trying to teach. This way, the burden of teaching isn't borne solely by teachers' lectures, films,

²We understand the recent focus on providing students more opportunities to engage in literacy practices that more authentically reflect the epistemologies and reasoning processes of specific disciplines. We ourselves have worked to design such opportunities for students. We are making a distinction here between the teaching of specific disciplinary literacy practices and epistemologies, and fostering an epistemic stance of inquiry toward texts and learning of specific subject matter, more globally. We suspect the latter is in fact essential, *fundamental* even, to the former.

and the like, and students are not passive receivers of information. Instead, teachers have resources available to them—texts of various kinds—that can help, and students are supported to actively grapple with ideas presented in those texts. Staying with our commitment to work within everyday constraints—to make the work feasible and scalable—we assume that teachers will depend mainly on the text resources they already have in their classrooms. Generally this includes the textbook, some online sources that can be downloaded and distributed, website sources students can use online when computers are available, and supplemental materials or handouts teachers have accumulated over time. We work to help teachers use these materials selectively, to link them to purposeful subject-area learning goals, and to augment them, as needed, to meet these goals. This entails an important shift in the way subject-area teachers plan for instruction, building the groundwork for engaging texts as resources for inquiry and learning.

Reading with the Learner and the Curriculum in Mind

As we found in our various studies, teachers in the subject area do not read the texts they assign to students, as a matter of course. They may scan the pages of a textbook chapter to see what information it holds in preparation for a lesson. Therefore, to orchestrate and support students in learning from text, teachers must get in the habit of closely reading class texts, whether a textbook chapter, a monograph, something downloaded from the Web, or a newspaper article they think may be relevant. We ask teachers to read with an eye toward potential points of confusion their students may encounter—assumptions about background, vocabulary, complex concepts, disciplinary discourse patterns, and so forth—so they can help students work with these during text-based discussions (see Schoenbach, Greenleaf, & Murphy, 2016). At the same time, teachers also read with an eye toward their curricular priorities, identifying how a text presents important concepts and ideas, as well as unpacking arcane language or complex sentences, and interpreting graphics and visuals essential for students' knowledge building. The inquiry questions we ask teachers to respond to as they read potential course materials include:

- “What did you do to make sense of this text?”
- “What challenges does the text present to learners?”
 - “Vocabulary, word knowledge, topic knowledge, disciplinary understandings?”
- “What opportunities to learn does the text present?”
 - “Content learning opportunities?”
 - “Literacy learning opportunities?”

Aligning Texts and Learning Tasks

In addition to developing habits of reading course texts with student learning in mind, teachers need to align specific lesson and unit goals with texts that are available, an approach we call *text–task alignment* (Valencia, Wixson, & Pearson, 2014). Planning for text–task alignment requires teachers to attend simultaneously to three factors. First, teachers identify specific core content and concepts they want students to learn. Although this sounds fairly straightforward, we have found it to be challenging, requiring deep knowledge of the subject matter and related disciplines (see Parker & Lo, 2016, for a discussion of content selection), as well as decisions about the content and processes that can be treated lightly and those that need more in-depth attention.

Second, teachers carefully read the available text-based resources (e.g., textbook, online sources, handouts, newspaper article) to determine how to use them purposefully and strategically in ways that both guide and challenge students, motivating them to learn from text rather than to work around it. Here, we ask teachers to review potential sources with an eye toward the specific learning goals they have identified. Frequently, teachers find that it's unnecessary for students to read entire textbook chapters or Internet sources—that *portions* (“chunks”) such as segments of textbook chapters, particular graphics, text found at particular Internet sites, specific articles or amendments to the Constitution, and so forth, align with their teaching priorities.

Finally, the selected text(s) or sections of texts and the teachers' objectives are brought together in a meaningful task that requires students to *use* their text-based knowledge in an immediate and relevant way—not simply demonstrate or accumulate facts. The task should require students to *apply* (often in collaboration with peers) their text-based understandings. The point is that reading and writing assignments should be aligned with the information students will need and the tasks they will complete. This way, knowledge and process objectives, text, and task are a coherent whole—they work together to scaffold learning of important course content. If students are asked to read and deeply comprehend any text, they should be clear about what they are expected to learn and how that learning will be used. As one student reminded us, “There has to be a point to the reading.”

Compare the specificity of this text–task alignment example to an assignment in which students are simply told, “Read Chapter 13”:

Teacher Content Objective: Students will understand the issues that were discussed at the Constitutional Convention and the various positions held by the delegates.

Task: Students are assigned to take on the role of a specific delegate to the Constitutional Convention in order to learn about the Federalist and Anti-Federalist perspectives represented. Then they role-play a series of deliberations at the Convention.

Text Reading 1: Use the website (XXXX) to find out about your delegate (educational background, political leanings, constituency, family history, etc.) in order to determine his positions on issues that will be debated and discussed at the Constitutional Convention.

Text Reading 2: Read textbook pages 000–000 on issues deliberated at the Constitutional Convention. Then, using the information you learned about your delegate (See Text Reading 1), hypothesize your delegate's position on each of the issues. Be prepared to debate delegates who have a different position, using evidence from your readings.

Engaging and Augmenting the Textbook as a Resource for Learning

Our approach to instructional planning is not intended to suggest that general background information from textbooks and other sources is unimportant, or that available texts are optimal sources. We are well aware of (and share) the many criticisms of textbooks—their density, “inconsiderate” text and structure (Armbruster & Anderson, 1985), encyclopedic breath instead of conceptual depth. We recognize, however, that these resources may be all teachers have. We also understand from our investigations with teachers and adolescents in reading novels, magazines, webpages, electronic manuals, nutrition labels, and tax forms, that most texts in the real world present real challenges to comprehension. They address selective audiences, and they refer to and demand knowledge that readers may or may not hold. They create barriers to understanding by virtue of the mismatch between text and reader. Textbooks, while holding considerable

power and authority in our schools, do not seem fundamentally different from many texts in this respect. Those of us who have made our way through college preparatory courses in high school and go on to college to receive degrees and credentials have done so because we learned to learn from such texts. We are reluctant to deny that capacity to others. We elect, therefore, to focus our work on how texts, including textbooks, can best be used by teachers selectively, to support purposeful learning. Based on our experiences, we know that when teachers plan for instruction by closely reading such texts and aligning texts and tasks, even textbooks can become resources for meaningful student learning.

That said, as our earlier example of text–task alignment for the Constitutional Convention lessons indicated, we think a number of considerations are important for teachers to keep in mind as they plan for instruction that makes intentional use of texts. By closely reading and analyzing their course texts and materials, teachers may be surprised to find that the content they are assuming students will learn from these resources is actually missing. To use text as a resource for learning the valued content, teachers will therefore sometimes need to locate ancillary materials.

Considerations for Building Text Sets

- Provide varied entry points to address diverse learners.
- Begin with visuals from text materials to build concepts and engage interest.
- Select texts to draw on students' languages and experiences.
- Use selections about the same topic written at various levels of complexity.
- Intentionally vary the range of text types to represent the variety students will encounter.

Teachers may, for example, choose to use visual aids, such as maps or historical documents, because these will be important sources of information in the subject area for students. We have assisted teachers to develop topically and thematically related text sets to meet all of these learning goals and instructional needs (see Schoenbach et al., 2012, Chapter 5). When teachers are guided by their instructional purposes and by habits of reading with learners in mind, they become attuned to the learning opportunities and challenges texts offer and are able to select appropriate texts efficiently from readily available resources, such as Internet sources, reference books, or alternative textbooks. At the same time, using texts for learning in the subject area does not mean students will learn necessary content by making one pass through any selected text. Providing students with opportunities to read selections multiple times as they move through learning tasks will also support them in gaining deeper comprehension and facility with texts.

INSTRUCTIONAL ROUTINES TO SUPPORT ENGAGED ACADEMIC LITERACY

These planning routines can be brought to life by using a small set of instructional routines that position texts as resources for collaborative inquiry and learning, and offer students support for engaged academic literacy. Below we describe routines for assigning reading, engaging students in metacognitive conversations to puzzle through texts, and generating text-based discussions for collaborative meaning making and subject-area learning. These routines are designed to build students' strategies and dispositions to deal

with complexity and puzzlement, so that students will be equipped, when they leave the school building, with the tools, the ability, and the will to make their way through the varied and likely inconsiderate texts they encounter throughout their lives. Importantly, these routines bring texts and reading into classroom lessons in which teachers can provide guidance and support as students engage in the intellectual work of learning from text. Because these routines focus on approaching subject-area texts from a stance of inquiry and make use of subject-area texts for meaningful learning tasks, the work students carry out is necessarily situated in disciplinary purposes and text types.

Assigning Reading for Purposeful Learning

Building on the text–task alignment model, we work with teachers to design routines for assigning and using text-based information. Our aim is to address three dilemmas we identified from our data: (1) to ensure that students do the reading—to hold them accountable; (2) to have students use the reading to solve a problem or engage in a meaningful task; and (3) to provide teachers with opportunities to clarify or extend the reading and thinking *without lecturing about the same content*, which, we found, only caused students to not do the reading. Although these problems are more likely to arise with homework assignments, the approach can be used with any assignment—in class or out.

We created a framework for assigning text-based work (reading, research, etc.) that teachers use to *explain* the assignment, not simply give it. Specifically, the framework includes the *purpose* of the reading, how students will *use* it, and how they should go about the doing the work (*procedure*). Behind each category is the type of teacher planning described under text–task analysis—clarity of content priorities, disciplinary thinking, and a focus on application and inquiry. Many teachers post information in the format below in class and on class websites for students to refer to as they are engaged with texts. Overall, this process results in teachers assigning fewer pages (they prioritize depth of understanding over breadth) and students being more likely to complete the assignment successfully and learn from the text.

If the reading is assigned for homework, teachers would follow up the next day with an application activity that requires students to apply what they were asked to read for homework and to discuss points of confusion. For example, the graphic below shows a homework reading assignment about Madison’s model for the U.S. constitutional government. The following class period began with a “Homework Application” in which students first shared questions and confusions they encountered while reading (see “Metacognitive Conversations” below). Then, they discussed what they learned about Madison’s Model and the position they would take, in their delegate role, on the model.

Purpose: Read pp. 48–51 in your textbook to learn about Madison’s suggestions for structuring the new government. Specifically:

- What were the ideas he came up with?
- Why did he choose this type of structure?

Use: Tomorrow in class, in your role of delegate to the Constitutional Convention, you will need to explain each part of the model to the people of your state and to argue *for* or *against* them.

Procedure: Read the text and study the graphics. You will need both to understand the model. Then practice explaining the graphic in your own words, being sure you can explain the advantages and disadvantages of each part of the model.

When readings culminate in worthwhile learning tasks and demonstrations, reading tasks can be readily framed for purposeful inquiry. Not all reading and learning can wind up with an extensive demonstration project. However, inquiry framing is nonetheless an important aspect of instructional planning. Teachers must ask themselves, while planning, what purpose the reading will serve for students. And rather than simply assigning reading to acquire specific information, they must press for a larger purpose. Reading the Constitution becomes a very different enterprise when students are asked to make a decision about the constitutionality of a particular court decision, for example, compared to when they are simply preparing to take a test on the Articles. Similarly, students' experiences in a science lab can lead to questions they can be invited to resolve through assigned sections of a science textbook.³

The specificity of assignments such as these and, especially, the explicit recommended procedures are intended to serve as a model and scaffold for both teachers and students. Over time, and with experience, teachers should become more attuned to providing students with purposeful assignments matched to texts. Similarly, over time, and with both experience and teacher support, the need for explicit direction about procedures should fade as students develop a repertoire of strategies for engaging their assignments and learning from texts. And although the norm in high schools is to relegate a good deal of reading to out-of-class homework and research, our experiences suggest that the job of comprehending and building knowledge should happen in the classroom. We have witnessed positive shifts in the use of texts as teachers “flip” their classrooms to make reading a central in-class event in which students collaborate to learn with and from texts, with teachers at the ready to scaffold. But even when reading takes place away from classroom, the job of making meaning must be valued and explored in the classroom.

Building Dispositions for Engaged Academic Literacy through Metacognitive Conversations

This approach to assigning reading helps students see how the reading is related to learning tasks. However, to gather and focus the effort required for academic reading, we have seen that most adolescents will need support to develop new dispositions for approaching and engaging in the challenging sense-making involved in reading unfamiliar academic materials.

As we have argued elsewhere, these dispositions include characteristics such as curiosity, tolerance for ambiguity, and the expectation that one should be constructing understanding rather than passively carrying out prescribed procedures (Schoenbach & Greenleaf, 2009). Key student dispositions also include maintaining confidence in their own abilities and in the value of persistence, even while struggling through challenging text—for example, learning to approach unfamiliar text with what we have called a *code-breaking* stance. “This text may not have been written with your particular background knowledge and experiences in mind,” we suggest, “but what can you make of it?” We therefore start the response to reading assignments, as we suggested earlier, by inviting students' own questions and confusions to drive small-group and class discussion. We have found that this simple approach supports students in developing dispositions to engage in reading in order to learn something new by turning the tables on what counts

³See www.readingapprenticeship.org for brief classroom videos illustrating this inquiry focus.

in class. Rather than having the right answers to teachers' questions, we make students' confusions and their own questions the starting point for learning.

Metacognitive Conversations: Turning the Tables on What Counts

Conversation Prompts

- “What was confusing in the assigned reading?”
- “Who else had that same confusion?”
- “Did anyone solve that problem?”
- “How did you figure that out?”

For example, before being able to understand the Bill of Rights that was ultimately ratified as part of the Constitution structuring the new government, students may need to clear up fundamental confusions: Does the Bill of Rights grant rights to citizens or prohibit the new government from encroaching on what were seen as the inalienable rights of citizens? To do so, they must grapple with the complex and arcane language expressions of the text itself. Consider, for example, the Establishment Clause: “Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof.” What might the word *respecting* mean in this context? Why does a document begin with the phrase “Congress shall make no law?” If students feel they cannot voice confusions and solve comprehension problems, they will quickly disengage from reading and wait for others to tell them what the passages say and mean. Teachers play a vital part in this metacognitive conversation, encouraging students to solve the problems they have identified and drawing out issues they know students will need to grapple with but have not yet acknowledged.

Metacognitive conversation routines make the invisible processes of puzzlement and sense-making visible to all learners in the classroom (download lesson resources at www.readingapprenticeship.org). Importantly, these routines are social, *conversations* within the class around texts, in which students share their questions, confusions, and problem solving in a community of other learners similarly engaged and sharing their reading, thinking, and inquiry processes. Such conversations invite the resources students bring in the form of language practices, experiences, knowledge, curiosities, disaffections, and difficulties to enlarge the conversation and inform the problem solving in the classroom. Students learn to engage in thinking alongside text, working collaboratively to figure things out. Engaging in inquiry around reading puzzlements and problem solving can therefore help students figure how to read unfamiliar and complex texts. At the same time, engaging in this work in class can help teachers understand unexpected sources of challenge in subject-area texts for particular students, including struggles teachers need to know about, misconceptions that need to be cleared up, and inventive new solutions that they hadn't considered.

Over time, as the class gains experience sharing stumbling blocks to comprehension and problem solving through them, the teacher can focus on these prompts to deepen students' learning:

- “Who had trouble with the language in that piece? Me, too. What did you struggle with?”
- “What do you make of those two maps?”
- “Did anyone figure out how *citizen* was being defined here?”

Supporting Collaborative Meaning Making through Text-Based Discussion

Metacognitive conversations about questions, confusions, and problem solving spill naturally into meaning-making discussions focused on linking readings to learning goals and application tasks. There are a number of text discussion routines, adaptations of the Socratic Seminar, for instance, that can be productive. Our focus has been to ensure that discussions are designed to *make use* of texts, as the “Aligning Texts and Tasks” and “Assigning Reading” routines suggest. Framing text-based discussion as inquiry in relation to subject-area learning goals is essential. In addition, in our experience, there are three common pitfalls that get in the way of the robust learning that can occur through such discussion.

First, students have very little experience engaging in academic discussion given the teacher-centered instruction that is most commonly offered in secondary-level subject areas. They need support to learn to talk to each other rather than orient toward the teacher. By the same token, teachers need new tools and habits to avoid taking on the lion’s share of the intellectual work *for* students. Second, students need discussion tasks that require them to ground their discussion in the text itself. Students need to learn to cite the text, orienting discussion members to specific locations in the text, so that all are able to refer to the relevant passage as they consider a group member’s commentary, reasoning, and thinking. Third, although it may seem unnecessary to mention, this means that the text must be present and in the hands of students when text-based discussions occur. Surprisingly often, we have seen students be asked to discuss a text, without requiring that the text be present as part of the discussion. When there is no text to consult, students understandably stay on the surface level in their discussions, offer vague generalities, and are unable to adjudicate different possible interpretations.

Sentence Frames to Support Student-to-Student Text-Based Discussion

ASKING QUESTIONS

- “When I read . . . on page 000, I wondered . . .”
- “After I read . . . on page 000, I got confused about . . . , because . . .”
- “On page 000, I could not understand . . .”
- “Do you think it makes sense on page 000 that . . .”
- “I wonder what . . . means on page 000?”

OFFERING EVIDENCE

- “I think one reason is on page 000, where it says . . .”
- “I don’t think . . . could be true, because on page 000 it says . . .”
- “If . . . is true, then that is a good reason to believe that . . . may be true.”
- “Even though . . . may be true, on page 000, . . . provides evidence for the opposite.”

BUILDING ON IDEAS

- “I agree with your idea that . . . and I would like to add . . .”
- “I like your idea that . . . Do you think that means . . .”

- “I have a different idea. To me, the evidence of . . . on page 000 means . . .”
- “Do you agree that there is a connection between . . . and . . . ?”

Teacher Talk to Elicit and Support Student Thinking

INVITE THINKING

- Ask questions that do not presume everyone has the same ideas.
 - “What do you think?”
 - “What did you make of . . . ?”
 - “What was especially interesting for you?”

PROBE FOR ELABORATION

- Help students share or uncover why they may have offered a particular idea.
 - “Help us understand your thinking on that.”
 - “Can you tell us a little more?”
 - “What in the text makes you say that?”
 - “Can you give us an example?”

EXTEND THE DISCUSSION

- Ask questions that explicitly focus students on responding to others’ ideas.
 - “Does everyone agree?”
 - “Did anyone else have a similar problem?”
 - “What might be another way to look at that?”

LINK

- Help students connect to previous learning.
 - “How might this relate to . . . we read about earlier?”
 - “What connections to previous lessons/units come to mind?”
 - “How does this help us understand . . . ?”

Inviting students to share their questions about texts opens the way for authentic inquiry framing. By documenting the questions that students raise, teachers can link class discussions of text back to these questions: “What evidence did you find in this passage about whether the Bill of Rights is meant to grant rights to citizens or limit the power of the new government? Can you point us to that in the text?” and “What do others think? Does anyone have additional or contrasting evidence to add?” Over time, text-based discussion becomes internalized, with the teacher only asserting norms of student-to-student discussion if things go awry. What’s more vital is for teachers to keep a watch on their own tendencies to answer questions and resolve problems for students, because these are well practiced and automatic. We find that teachers benefit from these discursive tools, learning how better to support and hold students accountable for course readings and to orchestrate true text-based discussions. They increasingly turn students back to the texts to answer their own questions, expect students to support their assertions with textual evidence, and support students’ interpretations and thinking about the implications of the texts they read as they carry out learning tasks. Students, for their part, come to engage reading and discussion of readings as part of a learning process and gain experience grappling with the kinds of texts they will continue to encounter in and out of school.

CONCLUSIONS

In this chapter we make a case for a shift in focus for literacy educators toward, first and foremost, engaging teachers and students in *using text for learning* in the subject-area classroom. We offer strategies for aligning texts and learning tasks, purposefully assigning reading and tasks aligned to meaningful content learning, and fostering metacognitive conversations and text-based discussions that we believe will go a long way toward building students' dispositions and competence as readers of complex materials. We promote a view of engaged academic literacy as an epistemic stance that can support students in bootstrapping (taking a code breaking stance to puzzle) their way into new territories bounded by unfamiliar text types, literacy practices, disciplines, and discourses. We acknowledge, honor, and support teachers' commitments to their subject areas in these suggestions. We also acknowledge the real conditions of often underresourced schools in which teachers and students carry out the work of teaching and learning, recognizing the limitations these conditions place on what is both possible and likely. At the same time, we recognize the real need to break with tradition in school culture, disrupting the normative practices and lecture modalities that place students in passive roles, while teachers deliver a steady stream of information. Supporting real reading to learn will demand real intellectual activity on the part of students.

Our experiences designing and implementing curricula and interventions draw us to this set of ideas and strategies as practical, scalable, feasible, and responsive to teachers' needs. We admit that getting these modest shifts in practice to occur is not a small endeavor. If our work in schools has taught us anything, it is that the collaboration and partnership of subject-area teachers will be vital to this enterprise. Working together with subject-area teachers has allowed us to draw on their expertise, foregrounding their understandings of what is important in the subject area and about particular topics to inform the selection of texts and the design of learning tasks. Working together in partnership has also supported teachers' generative capacity to align texts and learning tasks, to select and augment texts, to identify challenges and opportunities that texts present, and to support student engagement in learning. Perhaps the most important strategy to launch and sustain an effort to put texts to work in the service of students' learning, then, is this: to develop long-term partnerships with subject-area teachers, in which the investigation of course texts and their relationship to students' subject-area learning can be taken up collaboratively.

Ultimately, we are convinced by students themselves to continue to press for engaged academic literacy in subject-area classrooms. We have seen that reading of course materials, including textbooks, becomes an altogether different experience for students when we are able to support teachers to read potential course texts with learning in mind, to align texts and learning goals, to select parts of texts that are most germane to learning tasks, and to supplement existing resources as needed to accomplish learning goals. Furthermore, when students are supported to puzzle through unfamiliar texts through metacognitive conversations and collaborative meaning-making discussions, they tell us that formerly obtuse texts come alive for them. LaKeisha explained to us, "When you read, there should be a little voice in your head like a storyteller is saying it. If it's not there, then you're just lookin' at the words." Even the history textbook, a chronological compendium of historical events, can become something new in such a changed classroom learning environment. As Jason told us, wide-eyed, "I understand the book more

now. I read differently—I basically get into the story, into the heart of it. . . . The stuff you read in the history book? These things really happened to people!”

We are persuaded of the urgency of this work by the many students who have described their experiences learning to read complex subject-area texts as life-changing events. As Jeraldo wrote to his teacher, “When I first came to this class I was scared. I have discovered that I have the courage to read stuff that I couldn’t read. . . . I feel like a smart young man who can do anything I set my mind to. Nothing anyone says can hurt me because I have the knowledge to school them.” We think, as a field, we have the knowledge to solve the problem of the MIA text, bringing texts and reading into the heart of student learning.

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