To Win the Game, Know the Rules and Legitimize the Players: Disciplinary Literacy and Multilingual Learners

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ABSTRACT
Effective disciplinary literacy instruction is an essential element in the education of multilingual learners. In this article, we provide an overview of disciplinary literacy as well as instructional approaches that support meaningful pedagogy for these students. We recognize that multilingual learners are already skilled at negotiating language use for different purposes in different contexts. This article describes opportunities to build on these strengths. Essential elements of teacher knowledge and practice are presented. Multiple resources for classroom practice are included.

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In our work as teacher educators, we often see our teacher candidates grappling with the tension of providing a rich and rigorous curriculum for their students, while simultaneously creating appropriate differentiation and scaffolding to set learners up for success. We have noticed a worrisome trend: when planning disciplinary literacy tasks for multilingual learners, our candidates often substitute a disciplinary text with a lower-level text, or they simply provide alternate tasks because they feel uneasy about the level of challenge their students will experience.

While we appreciate these future teachers’ commitment to providing a positive learning experience for their students, we recognize that our candidates, as well as practicing teachers and literacy specialists, can benefit from a discussion of issues involved with appropriate instruction in disciplinary literacy (DL) for multilingual learners. As Scarcella (2003) argues, “Morally, it is right to provide ELs (English learners) with rigorous English instruction” (p. 11). Scarcella cautions that many times students do not receive the level of academic instruction to which they have a right for two reasons: their teachers underestimate their capacity to successfully engage in demanding academic activities and/or their teachers simply do not provide explicit and
transparent instruction for them. We believe that, provisioned with their own deep understanding of DL, teachers can implement strong, scaffolded teaching with high expectations, creating a space in which multilingual learners are legitimate players in the DL game, with opportunities to learn and to excel.

In the opening section of this article, we unpack the “rules” of DL. We explain the confusions that sometimes conflate DL with Content Area Literacy, and we explore academic language and its relevance to DL. In the second half of this article, we focus on the “players”—the multilingual learners themselves—by addressing the elements of teacher knowledge that are essential in providing effective DL instruction for them. First, we discuss disciplinary linguistic demands and teacher understanding of these demands. Then, we focus on multilingual students and the processes of second language acquisition. We conclude with explicit examples of DL scaffolds, as well as a list of resources for teachers and literacy specialists to use in implementing DL instruction.

As literacy researchers and teacher educators, we work to locate and describe pedagogical practices that serve multilingual learners from a place of strength. As such, it is essential to begin at the beginning – with the very terms we are using to name them. We use the term multilingual learners (Mitchell, 2012) to refer to those students currently acquiring English at school who speak another language (L1) at home. While these students are more typically referred to as English Language Learners (ELLs) or English Learners (ELs), we use multilingual learners to recognize their developing bilingualism. As García (2009) points out, any term that positions students into a binary English/not-English construction “misleads educators and…robs emergent bilinguals of languaging and educational possibilities” (p. 323). As we will explore, the very fact that multilingual students’ “daily lived reality necessitates the negotiation of two or more languages” (Mitchell, 2012, p.1) positions them to effectively navigate the demands of disciplinary literacy.

**Unpacking Disciplinary Literacy**

Given that the terms disciplinary literacy and content area literacy may frequently be confused or substituted for each other, it is necessary to begin with a clear definition of what we mean by disciplinary literacy. We concur with the explanation put forth by Shanahan (2012) which states that, “disciplinary knowledge is knowledge of the breadth and depth of a field of study, including knowledge of the way information is created, shared, and evaluated” (p. 71). Thus, DL involves very particular ways of producing and consuming knowledge; it is the discourse of a subject area and a way of being, thinking, reading, and writing that is unique to that discipline (Moje; 2007, Shanahan, 2012; Shanahan & Shanahan, 2008). For example, historians engage in identifying bias in primary sources. So, when high school social studies teachers decide to use a shared “Bias and Point of View” graphic organizer with their students across grade levels, they are engaging in a DL approach. A graphic organizer like this helps students to ask questions that historians would ask, such as: Who created this text? Why was this text created? What biases are present? Who benefits as a result of the perspective stated in this text? This “Bias and Point of View” organizer would be equally useful for students when examining a newspaper advertisement for a slave auction from the 1800s, a letter written by Franklin Delano Roosevelt during World War II, or a recent op-ed column in the *New York Times*. Since this teaching tool facilitates students to think and read like historians, it is a clear example of DL.
In contrast, content area literacy focuses on a generic set of reading and writing protocols that can be employed across all subject areas and are not discipline-specific (Shanahan & Shanahan, 2012). For instance, when members of a sixth-grade teaching team who want to support their students with comprehension of informational text written in a compare-contrast text structure use a Venn diagram across all of the subject areas, they are employing a content-area literacy practice. It does not represent a specific kind of thinking or particular disciplinary approach. The Venn diagram as a scaffold is transferable and equally applicable in science, social studies, and English. In contrast, when we are instructing students in DL, we are supporting their development as thinkers, writers, and “experts” within a particular subject area — we are helping students to develop as “historians,” “scientists,” or “mathematicians.”

A study conducted by Shanahan and Shanahan (2008) offers examples of different literacy practices by discipline. The year-long investigation of reading behaviors of historians, chemists, and mathematicians provides evidence that each expert approached texts in a different way that was discipline-related. For example, historians read with a constant awareness of bias, always considering how the author’s context influenced this particular telling of what happened. Chemists, on the other hand, used different criteria to evaluate the credibility of the text from their field. They considered if the research was current and produced in a well-resourced laboratory. Finally, mathematicians mainly focused on determining the accuracy of the mathematical proofs in their text. In contrast to the historians and scientists, for the mathematical experts, when and by whom the proof was written was not as important. These examples illustrate how different reading processes and patterns of thinking are employed differently within particular disciplines. Accordingly, from a disciplinary literacy perspective, the goal of instruction is to help students read, write, and think like developing experts in the discipline.

Academic Language

Any discussion of DL must include an explanation of academic language (AL). References to AL are prevalent in teaching and teacher education. We have noticed that people use the term academic language to refer to many different aspects of language. Therefore, it is important to establish what we mean when we discuss AL. Nagy and Townsend (2012) provide a helpful description of AL as “the specialized language, both oral and written, of academic settings that facilitates communication and thinking about disciplinary content” (p. 92). AL differs from typical social or conversational language in several distinct ways, including level of abstraction, information density, grammatical structures, and word complexity (Fang, 2012; Fang & Schleppegrell, 2010; Nagy & Townsend, 2012). We provide the following examples in order to illustrate these differences.

**Everyday English:** It hadn’t rained for months. The farmers used new ways of watering the crops to deal with the lack of rain.

**Academic Language:** Hydration technology was utilized to ameliorate drought.
Table 1

<table>
<thead>
<tr>
<th>Features of Academic Language</th>
<th>Everyday English</th>
<th>Academic Language</th>
</tr>
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<tbody>
<tr>
<td>Abstraction &amp; Information Density</td>
<td>Uses more words to explain</td>
<td>More information in fewer words</td>
</tr>
<tr>
<td>Syntax</td>
<td>Active voice used more frequently</td>
<td>Passive voice used more frequently</td>
</tr>
<tr>
<td>Word Complexity</td>
<td>More common words that are also used in informal oral conversation</td>
<td>More multisyllabic words</td>
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<td>More words that use Greek and Latin roots</td>
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As we show in the examples above and in Table 1, there are distinct differences between everyday English and AL. Written AL packs more information into a smaller amount of text (21 words vs. 7 words), employs syntax that removes the doer from the doing (*The farmers ...watering the crops* vs. *Hydration*), and includes a greater proportion of rare and discipline-specific words (AL: *ameliorate, technology, drought, hydration*).

Each discipline is associated with particular ways of thinking and communicating. Each discipline also uses language in particular ways that are unique to that subject. Thus, we recognize a synergistic relationship between DL and AL. In order to teach DL, one must address the relevant AL of that discipline. When teachers understand the specific expression of AL within the various disciplines, they are positioned to offer explicit instruction and appropriate scaffolding to their students.

Multilingual Learners and Disciplinary Literacy

Given that culturally and linguistically diverse classrooms are the “New Mainstream” (Enright, 2011), it is essential that all teachers are able to provide meaningful and effective instruction for multilingual learners. As Enright notes, today’s students move through and between multiple communities, and therefore are “likely to have a complex repertoire of language and literacy practices as potential resources to support academic development and success” (p. 111). How can teachers identify and build upon these resources that multilingual students bring with them into the classroom? Revisiting the metaphor we offered in our title, the following section offers a “game plan” for teachers who want to position their students for success with disciplinary literacy. This plan involves three distinct components: teacher knowledge of the linguistic demands of the discipline, teacher knowledge of multilingual learners and the language acquisition process, and teacher knowledge of the role of scaffolding in DL instruction. As teachers build their own knowledge base, they become better able to step into the role of the DL “coach” and provide thoughtful, targeted instruction that both supports and challenges their students.
What Do I Need to Know About My Discipline?

The first step to providing more effective instruction in DL is to become more aware of specific linguistic conventions of the disciplines we teach. As Kibler (2011) writes, Through their own disciplinary training, content area teachers are often skilled interpreters of these types of writing, even if they have not been taught to articulate how these texts are constructed. Content area teachers often do not see language as their area of specialty. (p. 224)

Other researchers affirm Kibler’s notion that teachers might need support in order to identify their own subject area linguistic knowledge. Turkan, de Oliveira, Lee, and Phelps (2014) use the term “Disciplinary Linguistic Knowledge” (DLK) when referring to teachers’ awareness of their own disciplinary expertise. They explain that DLK is “teachers’ knowledge of the academic discourse of a discipline or content area” (p. 9). Turkan et al. posit that DLK is “the linguistic knowledge base that all teachers of ELLs need to facilitate students’ understanding of oral and written discourse within a discipline and their use of language in ways that allow them to actively participate in the disciplinary discourse” (p. 9). Not only do teachers need to have command of their content knowledge, but they also need to be aware of the discourse -- the way that language is used within their discipline -- so that they are able to unpack that discourse and make it transparent for their students. This knowledge will facilitate teachers to position multilingual learners as both users and generators of subject-area discourse in oral and written language. We have included several texts on our resource page that can support teachers who are interested in learning more about the disciplinary literacy practices of their subject area (Buehl, 2011; Moje, 2013).

What Do I Need to Know About Multilingual Learners?

Heterogeneity. The U.S. multilingual learner population is heterogeneous. This population includes students who are born in the United States and may be English-dominant, students who come into U.S. schools not having had access to educational opportunities in their home countries, as well as students who come into U.S. schools with a high level of L1 literacy. Consequently, it is vital that we be aware of within-group differences among multilingual learners, recognizing the need for differentiation based on the range of English proficiency and literacy levels. Effective teachers of multilingual learners do not make assumptions about their students’ strengths and needs; instead, they gather information from school records, conversations with the student and family, ongoing observation of class performance, as well as evidence of student learning on more formal measures. The following section provides specific information about language development that can be useful when seeking to understand your multilingual students’ needs.

Second language development. As teachers of multilingual learners and teacher educators, we have noticed that sometimes teachers experience confusion about the English language proficiency level of their students. Schleppegrell (2013) notes, “school children often quickly develop informal registers of the new language that serve them well in interaction with peers and teachers about everyday things” (p. 154). These informal registers may be mistaken by educators as markers of highly developed English language proficiency. This misunderstanding can lead teachers to provide instruction that does not address the specific academic English needs of the students (Scarcella, 2003). The literature on second language acquisition commonly refers to a typical acquisition period of about four to seven years in order to reach advanced proficiency (Collier, 1989, 1992; Cummins, 2000; Genesee, Lindholm-Leary, Saunders, & Christian, 2005).
Students may acquire conversational proficiency in as little as a year, while academic proficiency can take seven or more years (Saunders, Goldenberg & Marcelletti, 2013; Scarcella, 2003). Although the multilingual learners we teach may “sound” fully proficient in English based on our informal conversations and class discussions with them, it is important to know that such proficiency does not mean that students do not need ongoing and explicit instruction in the academic registers of English, which is why DL is such a powerful and relevant topic.

Bilingualism as a resource. In addition to acknowledging the specific needs of our individual multilingual students, to be effective teachers, we must simultaneously identify the strengths and resources they bring to the classroom. Contrary to the persistent monolingual bias that pervades K-12 education, research provides evidence that multilingual learners from a range of proficiency levels have a metalinguistic advantage over monolingual students, as they are able to analyze elements of grammar, vocabulary, and pronunciation across languages (Bain & Yu, 1980; Diaz, 1985; Martin-Beltrán, 2009). DL requires attention to language, the ability to analyze and compare linguistic elements, as well as the ability to use language in different ways depending on context and purpose. Hence, multilingual students, who spend their lives negotiating between two or more languages, already have daily practice and expertise in this area. If teachers bring this understanding of learners’ linguistic resources to bear in their instruction, the metalinguistic capacities of multilingual learners can serve as a platform for the development of DL.

How Can I Teach DL to my Multilingual Learners?

As we described in the opening of this article, when teachers attempt to differentiate for their multilingual learners, they often provide watered-down instruction that focuses on low-level skills. Based on their case study research of high school teachers, Athanases and de Oliveira (2014) describe how multilingual learners tend to experience learning “in which curricula grow impoverished, basic skills get foregrounded, and higher academic goals recede” (p. 292). Being aware of teachers’ tendency to “underteach” students to avoid overwhelming them reminds us to always ask the question: How can I scaffold DL instruction while maintaining the integrity of the content and instructional goals?

Indeed, a study by Wilcox and Jeffery (2015) found that adolescent multilingual learners experienced challenging disciplinary writing tasks in ways that highlight complex interactions between the difficulty of the task, the source text, and the students’ perceptions of their writing abilities. Of particular interest to us is the finding that multilingual learners often felt most positive about writing tasks that were challenging yet engaging. This finding led Wilcox and Jeffery to argue that teachers should not automatically reduce the complexity of a task, but rather enable students to “engage in writing that is both appropriate for their language proficiency level and stretches them to engage deeply in expressing their understandings of content in a variety of genres and using multiple modes of communicating their ideas” (pp. 54-55). This significant discovery -- that multilingual learners regarded challenging disciplinary writing tasks positively - offers a variety of implications for instruction. Not only does providing low-level instruction bar multilingual learners from achieving at their highest level, but it also has the potential to disengage them from the learning process. With appropriate scaffolding and knowledge of our students, we can create immense possibilities for how our instruction of DL for multilingual learners can be meaningful and effective.

Scaffolding and explicit instruction. Scaffolding is an important consideration for all learners in our classrooms. However, appropriate scaffolds for multilingual learners also provide
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explicit instruction and meaningful opportunities to understand and use the discipline-specific language. According to Hammond and Gibbons (2005), appropriate scaffolds offer “task-specific support” that facilitates the students’ movement toward independence with the targeted content (p. 8). Scaffolds include teacher explanations and demonstrations, visual, aural, and tactile supports such as posters or charts, audio media, and hands-on activities (Hammond & Gibbons, 2005). In terms of DL, the challenge is two-fold: not only do teachers need to have a deep understanding of the discipline-specific ways in which language is used in their subject area, they also need to be able to identify appropriate scaffolds that will help students learn and use discipline-specific ways of thinking and communicating. Below are two examples of scaffolding we have used with success in our own DL instruction.

**Contrastive Analysis** (Taylor, 1989). This technique is used to draw attention to linguistic differences. While it is commonly used to demonstrate phonological differences, we have used contrastive analysis to facilitate explicit discussions of how academic registers differ in word choice, syntax, voice, and other dimensions.

**Example.** After reading and discussing Irish immigration in the 19th century, students receive a two-column chart with the left column labeled “How we say it” while the right column is labeled “How a historian says it.” The social studies teacher asks the students to record their understandings about the causes of this immigration on the left side of the chart. Then the class works together to construct statements about causation on the right side of the chart, using sentence frames like “We believe that ____ played a key role in Irish immigration because ____” or “The primary cause seemed to be ____” (Zwiers & Crawford, 2011, p. 148). This scaffold provides an entry point into historical thinking (asking what causes historical events) and communicating (using academic syntax as it would be found in historical texts).

**Functional Language Analysis** (**FLA**) (Fang & Schleppegrell, 2008; Fang & Schleppegrell, 2010). By bringing students’ awareness to the specific language used in disciplinary texts, we can provide a model for how to ask questions about text like an expert in that discipline. Teachers employ metalanguage, that is, language about language, to guide learners to consider authorial choices.

**Example.** The teacher leads the class in systematically comparing two texts, a narrative fictional text and a scientific biology text, highlighting differences in vocabulary, clause usage, and sentence structure particular to each (Fang & Schleppegrell, 2010).

As these examples demonstrate, effective scaffolding of DL requires teachers to create opportunities for multilingual students to identify and employ linguistic elements and usage particular to subject-area texts, helping them to puzzle out the pieces and patterns of disciplinary discourse. To further support instructional scaffolding of DL, we provide a list of resources and links to those resources in the Appendix.

**Conclusion**

Multilingual learners bring linguistic and cultural strengths to the table that may give them particular advantages over their monolingual English Only peers. Successful disciplinary reading, writing, and thinking rely upon understanding the ways language is used based on the disciplinary purpose and audience. Such linguistic negotiations are engaged in by multilingual learners every day as they draw upon their multiple resources to navigate both in- and out-of-school environments. By strengthening our understanding of DL, we can develop instructional contexts and create classroom cultures in which multilingual learners are positioned as capable and successful users and generators of disciplinary literacy.
Appendix

Resources

Suggested for teachers and literacy specialists seeking information for classroom practices:


Suggested for teacher educators, reading specialists, and teachers seeking additional information on the concepts and theories outlined in this article. These resources would be valuable as part of a study group or “book club” that examines more complex aspects of DL:


Suggested for literacy coaches or professional development professionals who need to lead sessions on the basic tenets of a disciplinary literacy approach:

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Available at [http://standards.dpi.wi.gov/stn_dl-suitcase](http://standards.dpi.wi.gov/stn_dl-suitcase)
References


CA: Regents of the University of California.