Preparing secondary teacher candidates (STCs) to teach in multiple content areas and in diverse classroom settings is a challenging task. Who has not heard the often repeated refrain, “But what does teaching literacy have to do with (insert content)? It’s not my job to teach middle (high) school students to read!” It is definitely a hard sell to promote the knowledge, sometimes in only one course, that middle and high school students need support from their teachers to understand textbooks in mathematics, social studies, science, and English. These are the “big four” content areas and all have some stake in students’ reading textbooks in their content, but what about other content areas such as physical education, world languages, art, and music majors? What role does literacy play in those fields?

In teaching secondary content literacy classes in teacher preparation programs, I have found a resource that resonates with virtually all STCs in all of these subjects. Jeff Zwiers has taken the work of well-respected researchers on the topic of academic language (Coxhead, 2000; Schleppegrell, 2004; Zamel & Spack, 1998) and furnished teachers and teacher educators with its practical essence distilled into understandable language. Perhaps more importantly, he has provided educators with strategies for teaching academic language in engaging and productive ways to secondary students.

The book is organized to first explore the theoretical arguments for...
academic language (Chapters 1-3), then how academic language is used in the text structures of various disciplines (Chapters 4-6). The next set of chapters address specific strategies for balancing content lectures with specific strategies that are teacher and student friendly (Chapters 7-9). The final chapter pulls it all together reinforcing the crucial argument that secondary teachers need to expand their repertoires to consider not just providing content, but also ways they can provide their students with opportunities to apply the content. Below, the content of the book is discussed in more detail.

What is academic language and why is it important? “In the U.S., the narrow range of accents, vocabulary, and grammar typically valued by those in power (politicians, business leaders, media, and so on) is often called standard English” (p. 2). In chapter 1, Zwiers argues that language is essential for all human endeavors—particularly for school, which requires the use of Standard English. He traces the role of home and community in language development and explains what that can mean for students when trying to learn the capitals, registers, and expectations of school language, providing examples that anchor the ideas in respect for the student’s reality. As Zwiers notes, “Brilliant students have been marginalized and unrecognized...because of their diverse languages, learning styles, and ways of thinking” (p. 17). In the past year, as I have used Zwiers’ book in my content literacy courses, STCs have told me how they were “struck” by this seemingly simple idea.

One of the most useful ideas for my STCs was the terminology used to describe vocabulary. Zwiers uses the terms “bricks” and “mortar” to describe academic vocabulary, linking to Beck, McKeown, & Kucan’s (2002) “tiers” of vocabulary. Tier 1 words are everyday words—what Cummins (1979) would call BICS. Academic vocabulary can be divided into Tier 2 (mortar) words that cross contents (for a list see http://www.victoria.ac.nz/lals/staff/Averil-Coxhead/awl) and Tier 3 (brick) words that are content-specific. Following are examples of brick and mortar terms in four content areas:

<table>
<thead>
<tr>
<th>Content Area</th>
<th>Bricks</th>
<th>Mortar</th>
</tr>
</thead>
<tbody>
<tr>
<td>English/Language Arts</td>
<td>Imagery, alliteration, theme</td>
<td>That is, implied, contains, leads us to believe</td>
</tr>
<tr>
<td>History/Social Science</td>
<td>Revolution, monarchy, emancipation</td>
<td>Therefore, as a result, consequently, consist of</td>
</tr>
<tr>
<td>Math</td>
<td>Reciprocal, hypotenuse, matrix, obtuse</td>
<td>If...then, end up with, derive, take care of</td>
</tr>
<tr>
<td>Science</td>
<td>Mitosis, gravity, sublimation</td>
<td>Hypothesis, variable, infer</td>
</tr>
</tbody>
</table>
There are important rationales for learning academic language, which he describes as being used to “describe complexity” as clearly as possible, to describe complex thinking processes and abstract thought, particularly for “distant audiences.”

Zwiers explains how teachers need to model, teach, and assess academic language. As we might expect, he recommends teacher think-alouds and scaffolding. There is a useful chart in Chapter 3 that outlines academic language skills, necessary vocabulary, and the audiences to which the outputs are directed. As Zwiers notes, educators must build from what students already know and can do, connecting new learning to students’ background knowledge.

The focus in chapter 4 is on content area variations in academic language—the focus on disciplinary ways of seeing the world. Zwiers talks about interpretation, persuasion, and cause and effect in language arts, providing teacher/student dialogue to illustrate his points. In science, he addresses description in scientific inquiry (with a great table of language, see p. 87). As always, Zwiers emphasizes the thinking and problem-solving process in all disciplines, noting that “information” changes and expands so rapidly, that memorizing “facts” is not productive. In terms of educational practice at the high school level, this is a real sea change.

Another useful aspect of the book is the emphasis placed on academic classroom discussions. We all “know” that talk is important for thinking and academic development, but we also know that little real discussion takes place in secondary classrooms. Zwiers describes the cultivation of rich classroom talk as a “tool for working with information such that it becomes knowledge and understanding” (p. 101). He works through what he calls teacher “display” questions—asked far more frequently than open-ended questions. Open-ended questions (personalizing, justifying, clarifying, and elaborating) are the types of questions that generate more thoughtful responses from students, providing the reader with a Prompt Poster (p. 108) for use in the middle or high school classroom. Zwiers carefully distinguishes between IRF (Sinclair & Coulthard, 1975) and true discussion:

I Teacher initiates a display question  
R Student responds  
F Teacher supplies feedback (negative or positive)

This pattern is not discussion, but it is highly teacher-centered, a reason for its pervasiveness. Zwiers is not a starry-eyed optimist about the difficulty for teachers in crafting whole class discussions, but he does provide suggestions and guidelines for teachers to try in their classrooms.
and backs up his suggestions with his own and other teachers’ actual classroom experiences. For example, his “Interview Grids and Mixers” involve the whole class moving around and talking to each other, but students are busy taking notes, interviewing each other, and comparing answers, the structure of the activity assisting with keeping students on task and designed to promote meaningful discussion and use of academic language that helps students learn content.

Instead of the ubiquitous lecture, Zwiers urges teachers to try group work without downplaying the challenges involved. In seminars, groups discuss in order to come to a deeper understanding of a topic—exemplified by literature discussion circles and book clubs—which can easily occur in content areas other than English class focused on literature. In deliberations, students are not looking for understanding or learning—but are addressing a problem and trying to decide on a course of action to take. Zwiers goes on to provide models for how to structure such group work, including generating appropriate student language for working in groups—respect, connect, build, support (p. 142)—and includes other resources for teachers who are encouraged to try group work with their secondary students. My STCs had widely varying responses to this section of the Zwiers book, mostly devolving to “I know I should, but….” Despite this, many reported to me that they tried group work and discussion in their student teaching and intern positions with a moderate degree of success.

One element of Zwiers that I really appreciated was the Comprehend-Aloud Categories and Sample Sentence Starters (pp. 170-171) for responding to academic reading. In this strategy, for example, the comprehension process might be noticing academic language and thinking. The examples of what to say might include, “Here the author is comparing…” or “Ramifications means effects. Why would it cause that to happen?” In fact, chapter 5 of the book is filled with useful strategies for making academic text more accessible for students, building vocabulary, and building students’ academic reading stamina.

I also loved Zwiers’ “take” on academic writing. By noting that writing on a topic after reading helps students clarify and deepen thinking, he supports the truth that academic writing is not just words written down. In fact, students must learn to write in varying genres and forms that are discipline specific and to do so they must utilize the thinking skills of analysis, causal reasoning, and evaluation. Zwiers supplies the reader with wonderful writing ideas and graphic organizers that build academic language and scaffold academic writing. Of particular use to my STCs (and to teachers everywhere) are the informal writing tasks that are suggested—all first draft writing-to-think strategies that ease
the time-related pain of “assessment” and yet require thinking and writing in response to content learning and provide evidence based data for planning further lessons.

What to criticize? Every book has its strengths and limitations. For me, Zwiers’ book has far more strengths than weaknesses. But, one weakness is a lack of attention to the specific needs of English Learners. However, the book is designed to draw students and teachers together for collaboration and thinking about disciplinary learning. The idea that ALL students must learn the language of schooling should be of inestimable help to English Learners, who must learn academic language as a third language. Another weakness is that Zwiers addresses the “Big 4” (English, Social Science, Math, Science) fully, but does less with music, fine arts, world languages, and physical education. I have partially addressed this need through STC generated podcasts on strategies from Zwiers (and another text I use) to differentiate instruction for all my STCs. However, Zwiers himself might address this more directly in his early chapters. He does use some examples later in the book, but PE and World Language teachers do struggle a bit with the application of academic language to their disciplines before they finally “get it.”

In summary, if my secondary teacher candidates come away with the message that they don’t, as teachers, always have to be the expert lecturer at the front of the room, we have come a long way toward regarding literacy as a tool for disciplinary learning. STCs are always frank about what they like (and don’t like) in my secondary content literacy courses. There are far more of them who appreciate this book than don’t and they provide its highest recommendation: “This is one book I won’t sell back to the bookstore.”

References
Many students, ranging from native English speakers to recent immigrants, need extra support in understanding and using the language of school. Language plays a major role in learning, particularly in upper grades as content areas begin to specialize and emphasize different thinking skills, abstract concepts, and complex relationships. Building Academic Language shows what teachers can do to help all students develop the language needed to reach high levels of academic achievement.