Using Cognitive Strategies to Develop English Language and Literacy

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Immigrant students of secondary school age face a number of obstacles as they make the transition to schooling in the United States. In addition to adjusting to a new country and school system, they must also learn academic content in a new language. Because these students come from a variety of ethnic, educational, and economic backgrounds, representing a host of cultures, languages, and educational needs, it is often difficult to provide instruction tailored to their specific needs.

Developing the English language proficiency of these students so they can participate effectively in mainstream English classes has long been a major focus of those working with newcomers in secondary school. However, educators are also looking for ways to help them achieve at high academic levels, which involves reading English well, understanding academic discourse, writing coherently, and speaking English at cognitively complex and abstract levels. These students usually have only a few years to master these skills.

This digest describes ways to develop students' English language and literacy skills and to make academic content challenging, interesting, and accessible. They include the following: 1) building conceptual frameworks for new knowledge, 2) teaching learning strategies, 3) focusing on reading in all classes, 4) giving students opportunities to engage in free reading, and 5) helping students move beyond the text. (See Crandall, Jaramillo, Olsen, & Peyton, 2001, for a fuller discussion of these and other strategies.)

Building Conceptual Frameworks

Teachers can employ various methods to help students see how ideas or concepts relate to one another and fit into a larger picture. Understanding the relationships among concepts helps students grasp them more quickly and efficiently and develop well-structured mental pictures about the content they are learning (Goldman & Rakestraw, 2000). Many English language learners are unable to see how the content presented from lesson to lesson is connected. They may be able to retain facts about social studies or science, for example, but have difficulty performing more demanding cognitive tasks such as relating those facts to historical trends or relating the study of the earth's surface to the study of the moon and the solar system (Warren & Rosebery, 1995).

Schemas are interpretive frames that help individuals make sense of information by relating it to previous experiences (Schank & Abelson, 1977). Providing students with a *graphic organizer*—a visual aid that displays the chunks of information to be studied—gives them an interpretive frame from which to approach the information. A story map is one example of a graphic organizer (see Figure 1). A story map breaks down the components of a story—characters, setting, and dialogue in a series of events or conflicts leading to a resolution—into chunks of text that can help students organize and comprehend the events of the story. It also illustrates what the students are responsible for learning. Use of a story map repeatedly for the study of various types of literature provides a schema for the study of literature.

Graphic organizers can help teachers clarify their instructional goals. Teachers can ask themselves what they want their students to learn and how they can display this information graphically to help their students connect ideas. For example, after studying various geometric shapes in a math class, the teacher might ask the students to create a concept map showing the relationships among the different shapes and to write the ways in which they are related, moving from the general (e.g., they are made with straight lines) to the more specific (e.g., they have parallel sides). Discussions might take place as students clarify the connections, clear up misconceptions, and come to consensus on the structure of the map (Crandall, Jaramillo, Olsen, & Peyton, 2001, p. 54).

Figure 1: Story Map
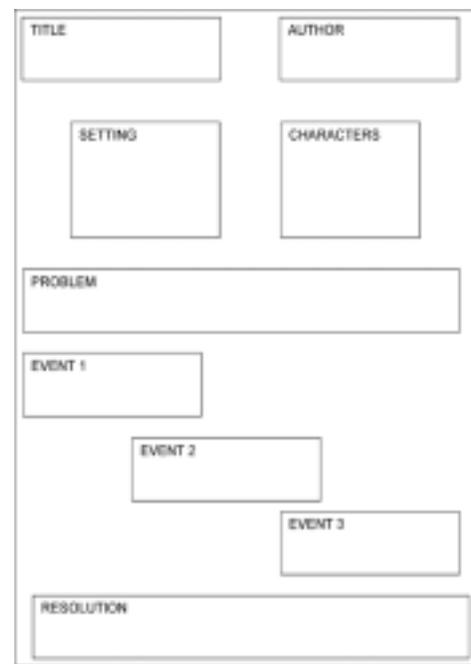
Source: A. Jaramillo & K. Smith, used with permission.

Teaching Learning Strategies

Research has shown that all students can benefit from instruction in learning strategies. Chamot and O'Malley's (1994) work with second language learners reinforces the notion that students who learn to consciously monitor their own learning, and who have a storehouse of strategies to use when learning becomes difficult, fare better than students who do not have such strategies. When teaching a learning strategy, teachers should identify the strategy, explain why it is useful, demonstrate its use, give students practice in applying it to a learning situation, and show them how to evaluate its effectiveness and what to do if it does not work (Duffy et al., 1986).

One reading strategy that can enhance students' understanding of texts is for them to think about "under-the-surface" questions. This type of question begins with words such as *why*, *how*, *should*, and *could* and cannot be answered by pointing to an obvious fact on a page. For example, students in a literature class who have read a chapter from John Reynolds Gardiner's novel, *Stone Fox*, might be asked first to respond to questions whose answers can be found easily in

the story, such as, What kind of farm do the main characters live on? Then the teacher might move to questions that do not have an easy answer (e.g., Why is Willie's grandfather not speaking? How do you think Willie could help his grandfather?). After modeling several under-the-surface questions, the teacher can ask the students to construct some of these questions themselves.

When teachers help students learn how to learn, students may examine how they think about a particular problem, think about what they know about the problem before they learn about it, think about how they are going to go about accomplishing a task, make predictions about how a lesson studied yesterday is connected to a lesson being studied today, and summarize what they have read when they have finished a particular section in a text.

Focusing on Reading in All Classes

Because academic and cognitive demands increase with every grade level, the need for continual improvement in students' reading ability becomes especially urgent for students struggling to achieve at the same levels as their native-English-speaking peers.

Teachers can use a variety of strategies to ensure that students are actively engaged in reading. They can explicitly teach what good readers do and give students opportunities to interact with both teacher-selected and self-selected texts. For example, in *reciprocal teaching* (Palinscar & Brown, 1984) teachers instruct students in four distinct reading strategies: questioning, predicting, clarifying, and summarizing. A well-designed unit might include practice in all four reciprocal teaching strategies. For example, students might practice predicting by creating questions about a text based on reading the first paragraph. They can learn how to summarize by looking at a series of statements and deciding which are necessary for the summary and which can be omitted. The teacher can model how to create questions about what is happening in the text, how to hypothesize what might happen next, how to ask for clarification, and how to state the most important ideas in what has just been read. When students gain sufficient skill, they can work in groups on selected portions of text and take turns using the four strategies.

Teachers can also give students opportunities to respond to reading texts using a number of teacher-designed tasks. These may include reading logs, in which students copy quotes from the text and then write their own response; "first-response writes," in which students read and then quickly write about the ideas that came to them as they were reading; or graphic logs, in which students write quotes from the text and respond with a drawing or symbol that corresponds to the quote.

Giving Students Opportunities for Free Reading

Free voluntary reading and sustained silent reading can build students' vocabulary and develop reading habits that extend beyond the classroom (Cho & Krashen, 1994; Coady, 1997). In a voluntary reading program, English language learners have something they may not have at home: access to books.

Teachers who want to implement a voluntary reading program can use a variety of methods to heighten students' interest. They can conduct research on what their students would like to read by asking other teachers, seeing what kinds of books students check out on their own, or asking students themselves. The idea is to get students to read so they will want to read more.

It is best to make reading time extended and consistent. For example, reading may take place at the beginning of class every day for 15 minutes. Students may need to be taught how to select an appropriate book. When teachers see students struggling to maintain focus on their reading, they should help them select a book more appropriate to their reading level or interest.

Helping Students Move Beyond the Text

At the end of a unit, lesson, or theme, teachers can plan tasks that move students back to the text or content to reexamine, reconnect, and rethink the major ideas or concepts. Students have the chance to gain deeper understanding of the content by representing the text in new and different ways. At this point, the classroom may be filled with posters, drawings, and writings that students have created after studying a particular piece of literature, historical era or figure, scientific concept, or thematic unit incorporating several subject areas. A good end-of-the-study task builds on students' strengths by giving them the chance to express themselves in a variety of formats.

"Beyond-the-text" tasks force students to go back to the text, reflect on its meaning, clarify and question, and reread with a different purpose in mind. One type of beyond-the-text task has students transform a piece of writing from one genre to another (e.g., rewrite a short story as a poem or play). Another is an "open-mind" activity to help students understand what a character is thinking or feeling. In this activity, students draw or are given a picture of an empty head. Inside the head, they can draw pictures of what the character sees, write questions the character might be wondering about, or write key words that show the character's feelings or ideas.

Conclusion

In the recent past, the focus of education for newcomers to U.S. schools was primarily the mastery of English. By extending this focus to include the development of literacy and higher order skills and the belief that these students can achieve at high levels in school, we come closer to ensuring that no child is left behind. The strategies described in this digest are designed with this new focus in mind.

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