

AccELerate!

The quarterly newsletter of the National Clearinghouse for English Language Acquisition

In this issue of *AccELerate!*

Anstrom & DiCerbo: Identifying the Academic Language Demands of Secondary Science and Mathematics Standards for English Language Learners (page 5)

Collins: Developing ELLs' Reading Skills in the Content Area (page 8)

Hamilton: Literacy and Academic Success: Content Reading Strategies in the Secondary ESOL Classroom (page 17)

Lewis-Moreno: Spread the Word: Vocabulary Strategies for the Inclusive Mainstream Classroom (page 19)

Pandey: Using Visual Maps to Enhance Writing Fluency in the Middle School (page 11)

Roman, Wientjes, Thompson, & Hakuta: WordSift: An Interactive Web-based Vocabulary Tool Designed to Enhance Academic Literacy (page 14)

Romanova: Linguistic Literacy and English Language Learners: A Conceptual Framework (page 2)

Wilde: NAEP, the "Nation's Report Card," and ELL Students (page 21)

Also in this issue:

- **NEW: Teachers' Gems of Wisdom** by Twomey, Droesch, & Cervone (page 4), and St. John-Ramsey (page 18);
- Information about **upcoming conferences** (page 10) and **NCELA webinars** (page 13); and
- **askNCELA's Inbox** (page 24).

Literacy and English Language Learners

Welcome to this issue of *AccELerate!* This issue brings together articles exploring literacy acquisition by English language learners as part of developing language proficiency, and is organized to reflect both theoretical and practical perspectives on teaching literacy skills to this group of students. In the first contribution, Natalia Romanova describes three interacting components of literacy – linguistic variation, language awareness, and written language. Following this conceptual framework for literacy development, Kristin Anstrom and Patricia DiCerbo focus on identifying the academic language demands that are critical to students' proficiency in academic content areas. New approaches to instructional techniques for teaching reading skills (Tim Collins) and developing writing fluency (Anjali Pandey) are provided, each of which includes tips on enhancing students' understanding and use of academic language. Kenji Hakuta and his students introduce a web-based (and free) means for exploring new dimensions in vocabulary development, and both Jennifer Hamilton and Betsy Lewis-Moreno share their professional experiences and strategies for effective reading and vocabulary building. Finally, Judith Wilde's analysis of reading trends among ELL students on the National Assessment of Educational Progress (NAEP) shows that ELL students' reading skills are increasing and that former ELL students can out-perform their monolingual English-speaking peers. New to this issue are *Teachers' Gems of Wisdom* featuring teachers' professional insights and successful instructional approaches.

We hope that you will find this focus on literacy to be helpful. Have a wonderful summer—our next newsletter will be published in the early fall.

The National Clearinghouse for English Language Acquisition and Language Instruction Educational Programs (NCELA) is funded by the U.S. Department of Education's Office of English Language Acquisition, Language Enhancement and Academic Achievement for Limited English Proficient Students (OELA) and is operated under contract No. ED-04-CO-0094 by The George Washington University, Graduate School of Education and Human Development. The contents of this publication do not necessarily reflect the views or policies of the U.S. Department of Education, nor does the mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government. This material is located in the public domain and is freely reproducible. NCELA requests that proper credit be given in the event of reproduction.

National Clearinghouse for English Language Acquisition
2011 Eye St., NW, Suite 300, Washington, DC 20006
Ph: 202 467 0867 or 1 800 321 6223
Fax: 202 467 4283 or 1 800 531 9347
email: askncela@gwu.edu
www.ncela.gwu.edu

Linguistic Literacy and ELLs: A Conceptual Framework

Natalia Romanova

Introduction

The term “literacy” has taken on a wide range of meanings and implications and now not only is used in reference to *linguistic literacy* but also to knowledge in a particular field, such as *computer literacy*, *media literacy*, or *financial literacy*. This article focuses specifically on linguistic literacy, a constituent of language knowledge that typically refers to writing and reading skills, and can be viewed on a continuum from emergent to advanced. Advanced literacy typically is associated with later language development and is characterized by rhetorical flexibility, or control over a larger linguistic repertoire (*linguistic variation*), is accompanied by awareness of one’s own spoken and written language systems (*metalinguistic awareness*), and is conditioned by mastering *written language*. This comprehensive model of literacy, proposed by Ravid and Tolchinsky (2002), is a useful conceptual framework for thinking about the processes and conditions of literacy development of English language learners (ELLs).

Language variation

When we speak, we assume social and cultural roles, and our language (pronunciation, grammar, vocabulary, and style) reflects a particular social context (as well as our social, ethnic, and regional background, and often a particular gender and age group). When we write, we obey the conven-

tions of writing and the norms of a particular genre. When we read or listen, we must comprehend the meanings expressed for communication to be successful.

Even preliterate children begin to be familiar with the different styles and codes of their native language through interaction with their environment. They learn to notice those features that constitute the difference between their own and other linguistic systems and may make different linguistic choices to express the same message to different people. As literacy skills develop, so do their recognition and control of *language variation* (Bialystock, 1993). However, mastery of rhetorical flexibility emerges late, during adolescence or college-years, relies on language, cognitive development, and familiarity with a variety of text types, and interacts with formal schooling (Berman, 2001).

Developing the ability to function in different contexts that are defined by social, cultural, and communicative factors constitutes a major educational goal, for both English-speaking and English-learning children. However, there is an important caveat. While native English-speaking children continue to develop literacy skills that they began to acquire before school, ELL children have a double task: they must catch up with their English-speaking peers in oral proficiency and also must de-

velop the same literacy skills that their peers are developing (Short & Fitzsimmons, 2007). Research shows that oral proficiency correlates with text-level skills (reading comprehension and writing, in which ELLs often lag behind their English-speaking peers) and not with word-level skills (such as decoding, word recognition, and spelling, in which ELLs often attain native-like levels of performance) (August & Shanahan, 2006). Thus, literacy instruction for ELLs must be aligned with intensive and extensive instruction in oral proficiency, including provision of additional practice, direct guidance, and focused feedback as they learn new grammar structures, vocabulary, rhetorical patterns, cultural references, social meanings, and inferences.

Language awareness

Language knowledge is implicit. The most natural use for language is conversation. The purpose of communication usually is informative; language users focus on the content to achieve their communicative goals. Therefore, language is used as a tool rather than an object of analysis, and linguistic knowledge is applied holistically. However, as a result of cognitive development, language experience, and school instruction, language users develop explicit *metalinguistic awareness* (Karmiloff-Smith et al., 1996), i.e., the ability to represent, access, reflect on, analyze, and discuss

various linguistic dimensions—phonological, morphological, lexical, syntactic, pragmatic, or textual.

Specific aspects of language awareness, especially phonological and morphological awareness, both promote and are promoted by learning to read and write through establishing links between the mental representation of phonemes, syllables, and morphemes and their written representations (Fowler & Liberman, 1995). Written representations, in turn, modify these same mental linguistic representations (Tolchinsky & Teberosky, 1998). For example, knowledge of how to form new words using prefixes and suffixes has been shown to play a significant role in developing reading ability in elementary and secondary school students, as well as among college students (Ravid & Tolchinsky, 2002).

In the case of ELLs, language awareness is enhanced by the opportunity to compare and contrast two language systems to discover commonalities as well as differences. Furthermore, there is a positive transfer between L1 (first or home language) and L2 (second language or English) in several areas: phonemic awareness and phonological processes (Cicero & Royer, 1995), decoding and word recognition strategies (Koda, 1997; Mora, 2001), use of cognates (Nagy, Garcia, Durgunoglu & Hancin-Blatt, 1993), reading strategies (Koda, 2008), and overall comprehension strategies (Padron, 1992). For lit-

eracy instruction to be effective, learners must be encouraged to use and develop their metalinguistic skills.

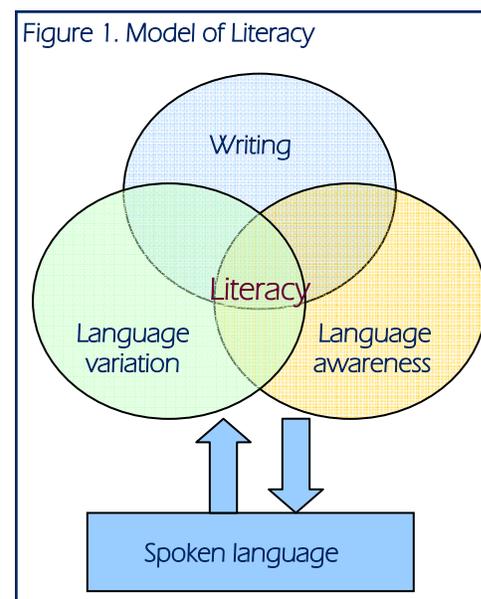
Written language

Written language involves mastering written language as discourse style and as a notational system (Ravid & Tolchinsky, 2002). Even little children are able to recognize that the kind of language used for writing is essentially different from that used for speech, and, when they start school, they begin to learn to manipulate the written modality as a distinct discourse style. They also learn the notational system used in the written modality: learning orthographic conventions helps them learn about the structure of spoken language and acquire new linguistic concepts¹, and learning the rules of punctuation helps manage written texts in comprehension and production. Experience with written texts is a necessary condition for literacy acquisition, and both English-speaking and English-learning children must be given frequent opportunities to read and write.

Conclusion

The acquisition of advanced literacy, even in the native language, is a long process, and is even more challenging for ELL children. The defining feature of linguistic literacy is rhetorical flexibility that includes control over linguistic variation, or the ability to recognize and to use appropriately linguistic features across different contexts (Ravid & Tolchinsky, 2002). This ability is

grounded in a well-developed oral proficiency, enhances and is enhanced by metalinguistic awareness of both spoken and written language, and is facilitated by increasing familiarity with written language (Fig. 1).



Instruction aimed at ELLs, therefore, should (1) align literacy instruction with instruction in oral proficiency; (2) include a variety of contexts (both oral and written) to promote phonological, morphological, syntactic and rhetoric awareness (Fillmore & Snow, 2000); (3) develop meta-language and encourage metalinguistic transfer of first language skills; and (4) rely on written text for literacy activities. Applying this conceptual framework to the design of literacy instruction will help teachers shape what Berman and Slobin (1994) called the “proficient speaker”—the rhetorically powerful, precise, and flexible language user who is an effective participant in society.

References

- August, D. & Shanahan, T. (Eds.) (2006). *Developing literacy in second-language learners: Report of the National Literacy Panel on Language-minority Children and Youth*. Mahwah, NJ: Erlbaum Associates.
- Berman, R.A. (2001). Genre and modality in developing discourse abilities. In C. Moder & A. Martinovic-Ziv (eds.), *Discourse across languages and cultures*. Amsterdam: John Benjamins.
- Berman, R.A. & Slobin D.I. (1994). *Relating events in narrative: A cross-linguistic developmental study*. Hillsdale, NJ: Erlbaum.
- Bialystock, E. (1993). Metalinguistic awareness: the development of children's ideas about language. In C. Pratt & A.F. Garton (eds.) *The development and use of representations in children*. New York: Wiley.
- Cisero, C.A., & Royer, J.M. (1995). The development and cross-language transfer of phonological awareness. *Contemporary Educational Psychology*, 20, 275-303.
- Fillmore, L.W., & Snow, C. (2000). *What teachers need to know about language*. McHenry, IL, and Washington, DC: Delta Systems and Center for Applied Linguistics.
- Fowler, A.E. & Liberman, I.Y. (1995). The role of phonology and orthography in morphological awareness. In L.B. Feldman (Ed.) *Morphological aspects of language processing*. Hillsdale, NJ: Erlbaum, 157-188.
- Karmiloff-Smith, A., Grant, J., Sims, K., Jones, M.C., & Cuckle, P. (1996). Rethinking metalinguistic awareness: representing and accessing knowledge about what counts as a word. *Cognition*, 58, 197-219.
- Koda, K. (1997). Orthographic knowledge in L2 lexical processing: A cross-linguistic perspective. In Coady, J. & T. Huckin (Eds.). *Second language vocabulary acquisition* (pp. 35-52). New York: Cambridge University Press.
- Koda, K. (2008). Impact of prior literacy experience on second-language learning to read. In K. Koda & A. Zehler (Eds.) *Learning to read across languages: Cross-linguistic relationships in first- and second-language literacy development*. New York, NY: Cambridge University Press, 68-96.
- Mora, J.K. (2001). Learning to spell in two languages: Orthographic transfer in a transitional Spanish/English bilingual program. In P. Dreyer (Ed.), *Raising Scores, Raising Questions: Claremont Reading Conference 65th Yearbook*, 64-84. Claremont, CA: Claremont Graduate University.
- Nagy, W.E., Garcia, G.E., Durgunoglu, A.Y., & Hancin-Bhatt, B. (1993). Spanish-English bilingual students' use of cognates in English reading. *Journal of Reading Behavior*, 25, 241-259.
- Padron, Y.N. (1992). The effect of strategy instruction on bilingual student's cognitive strategy use in reading. *Bilingual Research Journal*, 16(3 & 4), 35-61.
- Ravid, D. & L. Tolchinsky. (2002). Developing linguistic literacy: a comprehensive model. *Journal of Child Language*, 29, 419-448, 2002.
- Short, D., & Fitzsimmons, S. (2007). Double the work: Challenges and solutions to acquiring language and academic literacy for adolescent English language learners – A report to Carnegie Corporation of New York. Washington, DC: Alliance for Excellent Education. Retrieved from <http://www.carnegie.org/literacy/pdf/DoubletheWork.pdf>
- Tolchinsky, L. & Teberosky. (1998). The Development of word segmentation and writing in two scripts. *Cognitive development*, 13, 1-21.

Notes

¹ For example, in American English “writer” and “rider” can sound the same, yet are spelled differently. The stem forms “write” and “ride” can be used to reconstruct the underlying phonological segment and point to the correct spelling. Also, English “passed” and “past” share a final “t” sound, but have different meanings and functions.

Natalia Romanova is a research scientist with the National Clearinghouse for English Language Acquisition, and a doctoral candidate in second language acquisition at the University of Maryland.



Implementing Scaffolds for English Language Learners in Mainstream Classrooms

Through Project *EXCELL* (Excellence for Connecticut's English Language Learners), a grant funded by the Office of English Language Acquisition's National Professional Development Program, teachers and administrators from four districts participated in training focused on scaffolding content for ELL students in the mainstream classroom. The training introduced a number of instructional strategies, useful across all grades, for encouraging formal and informal peer-to-peer discussion before moving on to the more formal tasks of reading and writing. Eight classroom teachers at the Stanton Elementary School in Norwich, Connecticut, implemented new strategies in their classrooms to determine their effects on individual ELL students.

Third grade teacher Liza Droesch tried several strategies with her class that were designed to support a struggling student, and found great success with *dictogloss*. Says Droesch, “I used the dictogloss method and had [the student] journal about the article as I was reading it. At the end she had to answer multiple choice questions and she got them all correct!” Dictogloss was effective because the student had the chance to listen to the article multiple times, and then had her own notes to refer back to. If she missed something the first time around, she could add to it during the 2nd or 3rd reading.

First grade teacher Karen Twomey strengthened the vocabulary and writing skills of some of her ELL students by having them finish ‘chart sentences’ and compile their answers to make a class book. Before participating in the program, Twomey called on students to read aloud and insert their own answers. This time, however, she had students turn to a partner and gave them a few minutes to talk with one another and form their answers before reading for the group. “I was pleasantly surprised to see that the groups stayed on topic and were much better prepared to get up and read after they had some time to formulate their ideas. In the past, some ELL students would get up to the chart and need a lot of prompting to form their answers,” said Twomey.

The teachers reflected back on their journey at the end of the year: “We think we all expected academic growth for both our ELL students and mainstream students, but we were surprised by the amount of growth in both oral and written language for our ELL students as well as the discovery that the more strategies we used, the more growth we saw—the scaffolds seemed to build on and reinforce one another to support struggling students.”

Submitted by Karen Twomey, Liza Droesch, Lauren Cervone, CT

Identifying the Academic Language Demands of Secondary Science and Mathematics Standards for English Language Learners

Patricia DiCerbo, Ed.D. and Kristina Anstrom, Ed.D.

Introduction

Consider the difference between the following two sentences. In your opinion, which sentence is written in academic English and which is written in a more everyday conversational style? What reasons do you have for your choice?

- The prevailing literary opinion is that Macbeth loses everything because of his misguided choices.
- I think Macbeth is just a big loser. He does stupid things.

The chances are good that you chose the first sentence. Why? Because the vocabulary is more sophisticated, the grammatical structures more complex, and the discourse pattern is one with which you are familiar from your own experiences in English literature classes.

The ability to interpret and produce sentences similar to that first sentence is just one of the demands placed on students in secondary-level classrooms. Developing the academic language required for mathematics, science, social studies, and other disciplines is an important process in becoming part of a community of students, and serves as a foundation for acquiring one or more of the “specialized registers that serve the participants in business,

scientific, political, and research fields” (Zwiers, 2007, p. 94). Studies indicate that developing academic English is often difficult for English language learners (ELLs) in part because of instructional practices that shelter ELLs from the interactions that would support their academic language development (Verplaetse, 2008).

Equally important, the academic language necessary to meet content standards set by states is not explicitly described in standards documents. In the following state science standard for grades 9 to 12, it is unclear how to assess what the student is expected to do, or whether a student has met the standard

Students know the experimental basis for the development of the quantum theory of atomic structure and the historical importance of the Bohr model of the atom.

Will the student be expected to write a summary of the quantum theory of atomic structure, list several ways the Bohr model of the atom has influenced scientific discoveries, or debate the model’s historical importance? Detailed standards would be helpful in guiding schools and districts.

Identifying the Academic Language Demands of Secondary Science and Mathematics Standards for ELLs is a project of The

George Washington University’s Center for Equity and Excellence in Education (GW-CEEE), funded by the Bill & Melinda Gates Foundation, that will document the academic language demands implicit within content standards.

This article provides an overview of the project activities, definitions, and implications. The project currently is concerned with at least intermediate level language proficiency, but may change this later.

Project Activities

The project includes three major activities.

1. To produce academic language frameworks for California (CA) algebra standards and New York (NY) biology standards. A framework is built through the systematic identification of the academic language implicit within the content standards of an individual state. Figure 1 illustrates part of a framework for NY Living Environment standard 4, major understanding 1.1d. The academic language functions, vocabulary, and grammar were derived by examining the content of the standards, as well as biology text book passages and state assessment items.

2. To develop professional development guidelines for academic language analysis and classroom application. The guidelines

include modules that focus on the identification of academic language and use an academic language framework in curriculum development and instruction.

3. To develop a Web-based analysis tool to facilitate the development of frameworks.

Project Definitions

Academic language in the research literature has been described in multiple ways, beginning with Cummins' seminal work (1979) comparing academic English to conversational or interpersonal language (CALP and BICS) and including Chamot and O'Malley's observation that academic language functions are "tasks that language users must be able to perform in the content areas" (1994, p. 40). Among other definitions, academic language is understood to be "the language of texts, of academic discussion, and of formal writing. Academic-language proficiency requires students to use linguistic skill to interpret and infer meaning from oral and written language, discern precise meaning and information from text, relate ideas and information, recognize the conventions of various genres, and enlist a variety of linguistic strategies" (Dutro & Moran, 2003, pp. 230-231).

The project focuses on three aspects of academic English: academic vocabulary, grammatical structures, and functions.

Academic Vocabulary

Academic vocabulary consists of words students must *compre-*

hend in order to access the concepts associated with a particular discipline, and subsequently *use* in order to display their acquisition of these concepts. The project describes two types of academic vocabulary: (1) specialized or discipline-specific vocabulary unique to a specific content area, e.g., "parallelogram," and (2) general or cross-discipline vocabulary, e.g., "procedure."

Grammatical Structures

Grammar refers to "parts of speech, verb tenses and subject/verb agreement, the use of pronouns and conjunctions, and sentence structure or syntax" (Dutro & Moran, 2003, p. 237). The current project focuses on the characteristics of grammar that are prevalent in academic expository text and are represented in the literature as difficult for many learners (compound and complex sentences, nominalization, long noun phrases, passive voice, long or multiple prepositional phrases, and modals). The project

is identifying examples of these characteristics in the discourse of exams and textbooks. Figure 2 illustrates a passage of text that is difficult because of its use of multiple and complex prepositional phrases.

Academic Language Functions

Academic language functions are part of the discourse structure of language, the language performance associated with academic tasks and purposes. Embedded within the "science as inquiry" national standards for grades 5-8, for example, is the expectation that students can "*interpret, summarize and describe data; report on inquiries by writing, drawing, and graphing, communicate scientific explanations; describe and explain findings*" (Bailey & Butler, 2007, p. 76, italics in the original).

Academic language functions specific to algebra and biology have been selected for the project. They include:

Figure 1. Major Understanding 1.1d

The interdependence of organisms in an established ecosystem often results in approximate stability over hundreds and thousands of years.

Academic Language Functions

Exemplification. Give an example of how interaction between species helps shape the ecosystem in which the species live.

Content-Specific Vocabulary

Ecosystem, Species

Grammatical Structures

Long, complex, or multiple prepositional phrases

In a forest, for example, broad-leaved trees such as oak or hickory may compete for sunlight by growing tall, spreading out their leaves, and blocking the sunlight from shorter trees.

(Prentice Hall Biology, p. 92).

General Academic Vocabulary

Block

Example

Figure 2. Grammatical Structures in Text

In a forest	Prepositional phrase
broad-leaved trees such as oak or hickory	Long noun phrase
may compete	Modal + verb
for sunlight	Prepositional phrase
by	Complex prepositional phrase with several internal noun phrases joined by conjunctions
growing tall	
spreading out their leaves	
and, blocking sunlight	
from shorter trees	and an internal prepositional phrase within one of the conjunctions

1. Divide scientific phenomena or their attributes/properties into groups according to type; and
2. Classify a selected group as herbivores/carnivores.

Project Implications

A key implication of the work on academic language to date is that the language demands critical to proficiency in content area subjects need to be examined more closely and incorporated into state content standards as an “explicit statement of the language demands required and the modalities preferred for demonstrating mastery of the content standards” (Bailey, Butler, & Sato, 2007, p. 75). As Figure 3 shows, if states provide explicit guidance on academic language demands, districts and schools can implement academic language instruction.

References

Bailey, A.L., & Butler, F.A. (2007). A conceptual framework of academic English language for broad application to education. In A.L. Bailey (Ed.), *The language demands of school: Putting academic English to the test* (pp. 103-156). New Haven: Yale University Press.

Bailey, A., Butler, F., & Sato, E. (2007). Standards-to-standards linkage under Title III: Exploring common language demands in ELD and science standards. *Applied Measurement of Education*, 20(1), 53-78. Also available as CSE Tech Report 667. Los Angeles: University of California, National Center for Research on Evaluation, Standards, and Student Testing.

Chamot, A.U., & O' Malley, J.M. (1994). *The CALLA handbook: Implementing the cognitive academic language learning approach*. White Plains, NY: Addison Wesley Longman.

Cummins, J. (1979) Cognitive/academic language proficiency, linguistic interdependence, the optimum age question and some other matters. *Working Papers on Bilingualism*, 19, 121-129.

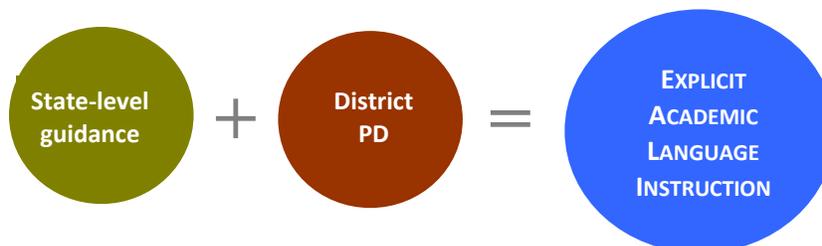
Dutro, S., & Moran, C. (2003). Rethinking English language instruction: An architectural approach. In G.G. García (Ed.), *English learners: Reaching the highest level of English literacy* (pp. 227-258). Newark, DE: International Reading Association.

Verplaetse, L.S. (2008). Developing academic language through an abundance of interaction. In L.S. Verplaetse, & N. Migliacci (Eds.), *Inclusive pedagogy for English language learners: A handbook of research-informed practices* (pp. 167-180). New York: Lawrence Erlbaum Associates.

Zwiers, J. (2007). Teacher practices and perspectives for developing academic language. *International Journal of Applied Linguistics*, 17, 93-116.

Patricia DiCerbo is a research scientist/ELL specialist for The George Washington University Center for Equity & Excellence in Education, and project director for the Academic Language Project. Kristina Anstrom is the Assistant Director of The George Washington University Center for Equity & Excellence in Education, and co-principal investigator for the Academic Language Project.

Figure 3. A Formula For Effective Academic Language Instruction



Developing ELLs' Reading Skills in the Content Areas

Tim Collins, Ph.D.

Introduction

As U.S. schools focus on teaching grade-level content to English language learners, developing ELLs' reading skills in the content areas is critical, both for successful learning while in ESL and bilingual education, and for smooth transition to mainstream classes. These learners, however, struggle when reading in the content areas. To help them develop the necessary skills, teachers need effective instructional models. Models such as Sheltered Instructional Observation Protocol (SIOP)¹ and Cognitive Academic Language Learning Approach (CALLA)² outline research-based methods for teaching content to language learners. Several studies³ offer specific advice to teachers on teaching content matter to language learners. These studies address content matter instruction comprehensively and focus on all four language skills. This article focuses exclusively on the skill of reading by giving clear ideas on

how to organize intensive reading instruction, in which teachers provide skill-based instruction to learners at different levels of proficiency.

Intensive Reading

Various studies⁴ recommend a number of techniques for scaffolding reading, including:

- Building on prior knowledge,
- Using hands-on inquiry activities,
- Introducing key vocabulary in context,
- Developing students' graphic literacy, vocabulary skills, and academic vocabulary, and
- Using a variety of comprehension checks, including verbal and nonverbal tasks.

As seen in Table 1, these scaffolding techniques can be integrated into a lesson format with distinct prereading (preparing to read), reading (reading the text), and postreading phases (follow-on activities).

The following three sections discuss in greater detail each of these phases, using as an illustration a hypothetical reading on the composition of Earth's atmosphere that students might encounter in a textbook.

Prereading

The purpose of prereading is to prepare students to read. These preparations should include activating background knowledge, prior learning, and known vocabulary, as well as preteaching key new vocabulary.

Good readers use background knowledge as they read. Yet readers, especially in a new language, may not recall background knowledge, nor may all learners in a class have the same background knowledge. There are many ways to activate background knowledge. One way is through photos. In the case of a reading on the

Table 1. Phases of a Reading Lesson and Scaffolding Techniques

PHASE	SCAFFOLDING TECHNIQUES
<i>Prereading</i>	Building on students' background knowledge (pictures, discussion, demonstrations, and hands-on inquiry). Preloading academic and content vocabulary. Developing vocabulary skills (prefixes and suffixes, word origins, etc.). Developing reading comprehension skills (e.g., making inferences, drawing conclusions, distinguishing fact and opinion, etc.). Developing students' graphic literacy skills.
<i>Reading</i>	Developing reading fluency. Using read-alongs (questions inserted the text to check comprehension).
<i>Postreading</i>	Checking comprehension (verbal and nonverbal). Extension activities and projects. Independent or guided inquiry and research.

atmosphere, the teacher might show photographs of the sky and ask students to talk about what they see. A more vivid way to activate background knowledge is with a hands-on inquiry-based activity.⁵

In science, carrying out simple experiments can build interest, activate background knowledge, and clarify vocabulary. The teacher might bring in a glass, a saucer, and a candle and have students speculate about what will happen if the empty, overturned glass is placed over the lit candle on the saucer. Students would learn or review key vocabulary, such as *gas*, *oxygen*, *carbon dioxide*, while activating background knowledge about gases in the atmosphere, the properties of the gases, and more. Students also gain experience with related science concepts, such as creating and testing hypotheses, and drawing conclusions from data.

Two kinds of vocabulary need to be developed when dealing with content-based reading: content-specific vocabulary and academic vocabulary. The difference between these kinds of words is often compared to “bricks” and “mortar.” Bricks, or content words, are specific to the subject matter or topic. In a reading on the atmosphere, the brick words refer to the components of the atmosphere, such as *gas*, *carbon dioxide*, *oxygen*, *trace gases*, and *water vapor*. Mortar words are lexical items that join the content words together in discourse. The mortar words would most likely be words

useful to describing the parts of something, such as *components* or *composition*. In general, content words are specific to a particular topic, while academic vocabulary is used across many topics within a discipline and across several or all disciplines. Learners need instruction in both kinds of vocabulary.

Ideally, when teachers activate prior knowledge, they will determine words the learners already know and address only unfamiliar words when preloading vocabulary. Teachers might present the new words using visual aids. Or they might task students with learning the words themselves using flash cards, picture dictionaries, and electronic dictionaries. In many cases, content words have specific meanings in academic contexts that differ from their meanings in regular speech. For example, in life sciences, the word *kingdom* refers to “a group of living things,” while in non-scientific contexts, this word refers to “a country ruled by a king or queen.” Teachers need to provide clarification of both meanings. Last, teachers should teach students vocabulary skills, such as using word parts (e.g., prefixes and suffixes), using word origins (e.g., Greek and Latin roots), understanding synonyms and antonyms, and so on. Teachers should present one or two of these skills with each reading text. For example, students might learn the word parts that constitute the word *atmosphere* and then identify other words that use these parts, such as *hemisphere*.

In order to build students’ higher-level reading skills, prereading instruction should develop at least one reading comprehension skill related to the reading content (such as skimming for the main idea, comparing and contrasting, analyzing, or relating part to whole). In the case of the atmosphere, teachers might develop the reading skill of analysis.

Finally, because academic text contains numerous graphics, teachers should teach a graphic literacy skill related to the graphics in the text. This way, students can interpret the information in graphics easily and use that information to help them read the entire text. If the reading on the atmosphere contains a pie chart showing the gases in the atmosphere, for instance, the teacher might focus on this type of graphic.

Reading

During this phase, learners apply the knowledge and skills they gained in the preceding phase. The reading phase should encourage reading fluency. For this reason, learners should read silently in class, which lets the teacher supervise directly and ensure that students do not linger excessively, translate, or give up. When students are ready to read, the teacher should set a time limit. When students finish, they are ready for postreading.

Postreading

Postreading contains all of the follow-up activities. The teacher should check comprehension and

skill mastery and provide extension activities. The most usual way to check understanding is through comprehension questions, typically short answer, multiple choice, or true-false items. In addition, teachers should consider non-verbal comprehension checks, particularly for learners at lower levels of proficiency. There are many nonverbal tasks students can complete to demonstrate comprehension, such as ordering pictures or drawing diagrams. Students could draw a picture of the sky near their school, and indicate sources of pollution, as well as locations of plants (such as parks) that provide oxygen. They could add a pie chart showing the gases in the atmosphere. Students with slightly higher productive skills might be more comfortable answering true-false or yes-no questions at first. Another way to check comprehension is through a graphic organizer, such as a Venn diagram, T-chart, or timeline. A graphic organizer is valuable in that it allows students to depict information without a lot of language.

After checking comprehension, teachers should assess mastery of

the target reading skill and graphic literacy skill. They can use simple related readings and additional graphics. For example, a reading on the ozone layer might be used to check the skill of analysis, while more questions could be used to assess understanding of pie charts. Or the teacher could ask questions about a new pie chart concerning sources of air pollution.

Finally, teachers should use extension activities to encourage students to apply their knowledge and skills in new contexts. Students might investigate online, in the library, or in their textbooks. Other possible extension projects include labs. Students might replicate the initial demonstration with the candle and the glass or try a related experiment, such as forming a cloud in a bottle.

Conclusion

Developing reading skills in content matter subjects is not easy, but can be facilitated by appropriate instruction. The activities in this article provide a framework for teachers to build effective intensive reading instruction for all learners.

Notes

¹ Echevarria, Vogt, & Short, 2004.

² Chamot, & O'Malley, 1996.

³ See, for instance, Reiss (2005) and Fathman & Crowther (2006).

⁴ See Echevarria, Vogt, & Short, 2004; Fathman & Crowther, 2006; Carr, Sexton & Lagunoff, 2006; Crowther, Robinson, & Edmondson, in press; and Douglas, Klentschy, Watts, & Binder, 2006.

⁵ See Fathman & Crowther, 2006; Crowther, Robinson, & Edmondson, in press; and Amaral, 2002.

References

- Amaral, O., Garrison, L., & Klentschy, M. (2002). Helping English learners increase achievement through inquiry-based science instruction. *Bilingual Research Journal*, 26, 213-239.
- Carr, J.; Sexton, U.; & Lagunoff, R. (2006). *Making science accessible to English language learners: A guidebook for teachers*. San Francisco: West Ed.
- Crowther, D., Robinson, M., Edmondson, A. & Colburn, A. (in Press). Preparing English language learners in the science classroom, in A. Kerson (Ed.) *Interdisciplinary language arts and science instruction in elementary classrooms: Applying research to practice*. Mahwah, NJ: Lawrence Erlbaum Press.
- Douglas, R.; Klentschy, M.; Worth, K.; & Binder, W. (2006). *Linking science & literacy in the K-8 classroom*. Arlington, VA: NSTA Press.
- Echevarria, J., Vogt, M., & Short, D. (2004). *Making content comprehensible for English learners: The SIOP model*. Boston: Pearson Allyn & Bacon.
- Fathman, A & Crowther, D. T. (2006). *Science for English language learners: K-12 classroom strategies*. Arlington, VA: NSTA Press.
- Reiss, J. (2005). *Teaching content to English language learners*. White Plains, New York: Longman.
- Uhl Chamot, A. & O'Malley, J. (1996). *The CALLA handbook*. White Plains, New York: Longman.

Tim Collins is an associate professor in ESL and Bilingual Education at National-Louis University, Chicago.



Upcoming Conferences

I. Teachers of English as a Second Language in Canada

- Location: Banff, Canada
- Dates: October 1, 2009–October 3, 2009
- Website: <http://www.tesl.ca>
- Theme: Weaving Pathways: Interculturalism and Language

II. Virginia Association of TESOL

- Location: Virginia Beach, Virginia, USA
- Date: October 3, 2009
- Website: <http://www.vatesol.cloverpad.org>
- Theme: ESL Newcomers: Teachers and Students



III. 2nd Language Research Forum

- Location: East Lansing, Michigan, USA, hosted by Michigan State University
- Dates: October 29, 2009–November 1, 2009
- Website: <http://sls.msu.edu/slrf09>
- Theme: Diverse Contributions to SLA: Integrating the Parts of a Greater Whole

Using Visual Maps to Enhance Writing Fluency in the Middle-School

Anjali Pandey, Ph.D.

Introduction

The current article calls for rethinking the process-based approaches to teaching emerging (high-beginning to intermediate level) ESOL writers in the middle-school classroom. Evidence from the case study of a Korean ESOL middle-school student in an American school setting (Pandey, 2007) suggests that classic process-based approaches to ESOL writing pedagogy at this grade level may not be effective.

Operating on the assumption that writing is “creating original text for an authentic audience” (Samway, 2006, p. 22), this article calls for the use of visual templates which reflect a mix of both graphic and acronym-based strategies. Adopting this method of writing instruction can empower emerging ESOL writers with the fluency they need for advanced expository college-based writing. A model of writing instruction is proposed that uses visually rendered writing instruction strategies that are **M**eaningful, **A**uthentic, and **P**urposeful (MAP).

Outlining Theoretical Issues

Contrastive rhetoric research paradigms (Connor, 1996) have demonstrated that for many newcomer populations, a mastery of the western essay entails an overt knowledge of the formal features of the western rhetorical tradition (Leki, 1992). Such knowledge in-

cludes, but is not limited to, a conscious awareness of four primary attributes of western writing: awareness that western writing (1) is *essentially hierarchical*, i.e., the thesis statement is linked to detailed, paragraph-based explanations; (2) uses *directly supported evidence* in an essay, i.e., evidence-based argumentation built via paragraph structure; (3) has an *innovation-based* writing culture that emphasizes originality and creativity; and (4) uses an *argument-centered* writing style consisting of an overt debatable tone consistently maintained throughout the essay (Leki, 1992). The heart of mastery seems to be thesis statement and paragraph construction, and the remainder of this paper is devoted to outlining two strategies from the MAP model which address each of these in turn.

MAP Strategy 1: Thesis Statement Construction

Expository essays are what middle-schoolers eventually will encounter in their academic lives. Practice in the rhetoric of expository essay writing will allow ESOL students with different cultural and rhetorical styles to ‘see’ the clear structure and the linear mode of argumentation dominant in western styles of composition. ESOL writers also will benefit from an explicit focus on the anatomy of thesis statement construction.

For beginning writers who need a concrete starting point, an effective strategy is the use of template acronyms which draw students’ attention to and raise their consciousness of the salient elements which make up thesis statements (McLaughlin, 1990). For example, by utilizing a visual of a target, students can get a picture of what targeted western expository writing actually is (Fig. 1). Drawing students’ attention to these key elements can occur either deductively (before they begin the draft), or inductively (after they have generated a draft), and with the teacher deciding whether to use this strategy in the pre-writing or the revision stages. Also useful are examples of essays that do not provide effective thesis statements. By visually aligning thesis statements with the parts outlined in the TARGET acronym, emerging ESOL writers will be equipped with a pre-writing strategy to use as they brainstorm thesis statements for a paper. Additionally, they can use a revision strategy to examine the efficacy of their thesis statements relative to the parts outlined in the TARGET acronym *after* they have produced their first drafts.

A follow-up revision strategy can be used to build conscious awareness of the thesis statement. Students can be given a template strategy, in peer-review sheets, that includes an unfinished

declarative sentence to assure their awareness of the thesis statements. They can complete these worksheets before sharing with their peers in the form of: "I am writing this essay to prove (or show) that: _____."

MAP Strategy 2: Paragraph Structure

ESOL students benefit from a targeted tutorial program that offers individualized instruction in paragraph construction.

Teachers should choose authentic essays that exhibit the different types of paragraph structures. They then can cut the paragraphs into strips and ask students to piece together both the individual paragraphs and the entire essay. Many brief essays are available online or in books.

Teachers should practice the exercise in professional development workshops and only use the essays that they can piece together with complete accuracy. One example of such an essay is the clas-

sic, "100 percent American" by Ralph Linton, which is available online.

Tutorials should focus on the two major paragraph organizational styles: inductive and deductive. Figure 2 may help some ESOL students see the benefits of the two 'spatial positions' for topic sentence placement in paragraphs (Wyrick, 2008). The first position places the topic sentence at the outset of the paragraph (*deductive*), with relevant supportive information following. The second spatial position places the topic sentence at the end of a paragraph after sufficient details have been presented (*inductive*). Again, a visually relevant model helps students at the middle-school level 'see' organizational fluency and coherence rather than being 'told' about it.

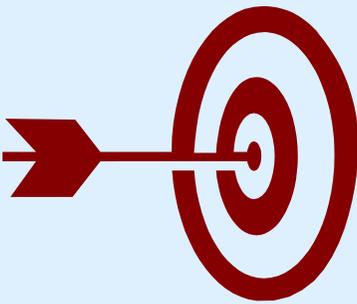
Graphic organizers and flow charts with templates of paragraph structure details are particularly effective in teaching most

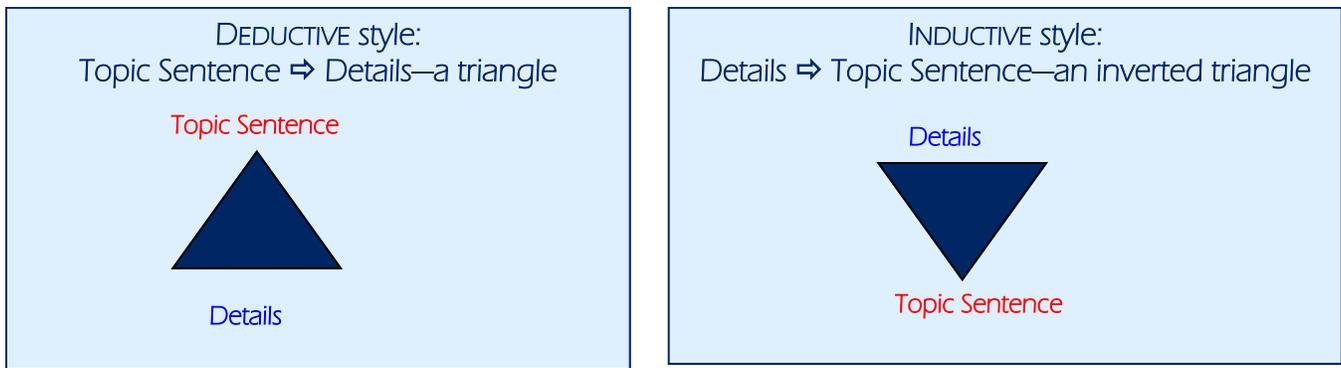
ESOL students about the internal structure of paragraphs in English. Such models are especially useful if culled from content areas like science and social studies. Writing from these disciplinary areas can trigger effective imitation and practice of both inductive and deductive organizational structure.

Conclusions

A detailed focus on paragraph discourse structure and thesis statement construction taught in the ESOL writing classroom will trigger advanced writing fluency in newcomer populations. As the strategies proposed demonstrate, writing instruction needs to provide differential instruction rather than homogeneous instruction for all. Also, high-stakes tests often require "responsive writing" of middle school students. Responsive writing requires "learners to perform at a limited discourse level, connecting sentences into a paragraph and creating logically connected sequences of two

Figure 1. An Example of an Acronym Template: **TARGET**

	<p>Thesis statement or claim that makes a point at the very beginning of the first paragraph</p> <p>Accurate and concise wording</p> <p>Reflects the writer's point of view</p> <p>Grounds to support the claim in later paragraphs</p> <p>Examples used to support the statement or claim</p> <p>Ties between supporting details and thesis statement</p>
---	--



or three paragraphs” (Brown, 2004, p. 220). Once students have mastered this type of writing, they can move on to high-school and college (extensive writing arenas), equipped with the foundational tools with which to *understand* the workings of the text—external variables such as “the discursive and historical forces, linguistic and social considerations” which shape writing (Canagarajah, 2005, p. 7).

Why the saliency of instigating writing reform in middle-school pedagogy? Numeric evidence from a recent survey of 1,059 rural ESOL students in eight school districts spanning over 95 schools in a geographical radius of 103 miles on the Atlantic seaboard of the United States—the site of the current case study—shows the following demographic breakdown. Approximately 71% of

these ESOL students currently are enrolled in elementary schools with 15% in middle schools and 14% in high schools. These figures corroborate national figures (NCELA, 2007). Since over three-quarters of the ESOL population still is situated in elementary grades, we need praxis that will prepare them to enter middle school, and later high school and college. What this article reiterates is that if most of our ESOL students are concentrated in elementary schools, practices have to be developed and implemented to ensure that skills for academic advancement—of which writing is central—are rigorously taught in early grades. This is especially crucial if we intend for our ESOL learners to be fully functioning participants in a highly literate democracy.

References

- Brown, D. H. (2004). *Language Assessment: Principles and Classroom Practices*. White Plains, NY: Pearson Education.
- Canagarajah, S. A. (2005). *Critical Academic Writing and Multilingual Students*. Ann Arbor: University of Michigan Press.
- Connor, U. (1996). *Contrastive Rhetoric: Cross Cultural aspects of Second Language Writing*. Cambridge: Cambridge University Press.
- Leki, I. (1992). *Understanding ESL Writers: A Guide for Teachers*. Portsmouth, NH: Heinemann.
- Lewis, M. & Hill, J. (1992). *Practical Techniques for Language Teaching*. Boston: Thompson and Heinle.
- McLaughlin, B. (1990). “Conscious” versus “Unconscious” Learning. *TESOL Quarterly*, 24, 617-634.
- National Clearinghouse for English Language Acquisition (NCELA). (2007). *Numbers and Statistics*. Retrieved November 12, 2007, from http://www.ncelea.gwu.edu/stats/2_nation.htm
- Pandey, A. (2007). Developing Grammatical Accuracy and Rhetorical Fluency in ESL writing: A Proposal for an Individualized Tutoring Plan for ELL mainstreaming, Salisbury School.
- Samway, K.D. (2006). *When English Language Learners Write: Connecting Research to Practice, K-8*. Portsmouth, NH: Heinemann.
- Wyrick, J. (2008). *Steps to Writing Well*. Boston, MA: Thompson Wadsworth

Anjali Pandey is an associate professor in linguistics in the Department of English at Salisbury University, MD.



Have you had a chance to participate in an NCELA webinar?

NCELA webinars run approximately once a month, and offer teachers and other educators the opportunity to hear from national experts on a range of topics. Webinars are free to attend and require no special equipment apart from your computer. If you miss a webinar on a topic that interests you, you can always view the full webinar archive on NCELA’s website at

<http://www.ncelea.gwu.edu/webinars/>

To be notified of upcoming webinars, be sure that you are subscribed to the NCELAList! To sign up, visit:

<http://www.ncelea.gwu.edu/listserv/>

WordSift: An Interactive Web-based Vocabulary Tool Designed to Enhance Academic Literacy

Diego Roman, Greg Wientjes, Karen Thompson, and Kenji Hakuta, Ph.D.

In their 2007 Practice Guide “Effective Literacy and English Language Instruction for English Learners in the Elementary Grades,” the Institute for Education Sciences (IES) indicates that one major theme in their recommendations for developing effective literacy is “the importance of intensive and interactive English language development instruction for all English language learners (ELLs)” (Gersten et al., 2007, p. 5). The IES Practice Guide also explicitly suggests that there is strong evidence that supports “extensive and varied vocabulary instruction” (p. 19) for ELLs. Short and Fitzsimmons (2007), however, point out that research reports show very little specific guidance and provide only a few proven strategies that could help educators on how to address adequately the challenging literacy needs of the EL student population; moreover, these authors state that this situation is highly problem-

atic as English learners need to perform “*double the work* of native English speakers in the country’s middle and high schools” (p. 1, emphasis original) to acquire academic literacy.

Goldenberg (2008), after performing an exhaustive analysis to determine what research says—and does not say—in regards to effective practices when teaching ELLs, found that teaching words directly and explicitly to ELLs is one vocabulary development strategy that has been shown to be effective in different studies. Goldenberg also points out that this strategy is effective when direct vocabulary instruction is combined with providing ELLs with a variety of opportunities to use and practice new vocabulary in numerous contexts (e.g. discussing words, posting target words), rather than asking students to learn new words just by using dictionaries. Likewise, Decarrico

posits that one of the most accepted approaches to develop vocabulary is by “integrating new words with old, providing a number of encounters with a word, promoting a deep level processing, facilitating imaging, and encouraging independent learning strategies” (2001, p. 287).

Thus, in order to provide educators with a tool that supports the kinds of vocabulary instruction recommended by researchers, we have created WordSift, a free, web-based vocabulary development tool designed primarily for teachers (<http://www.WordSift.com>)¹. It offers educators the ability to instantly capture and display the vocabulary structure of texts, helping teachers to create an interactive linguistic playground in which general and academic words can be tossed around and analyzed simultaneously. Figures 1-3 are from WordSift; explanations follow.

Figure 1. A WordSift Tag Cloud

Fifty most common words in Abraham Lincoln’s “Gettysburg Address;” size = frequency; orange = Academic Word List

add advanced birth cause civil conceived dead dedicate
 dedicated detract devotion died earth forget fought freedom full
 gave god government great hallow high honor increased little live living
 long measure men nation new nob note people
 perish power remain remember resolve say take task test unfinished vain war work world

While we believe that this tool can have a positive impact on the vocabulary development of all students, we believe that WordSift can especially aid literacy development for ELLs, who commonly struggle to comprehend new vocabulary.

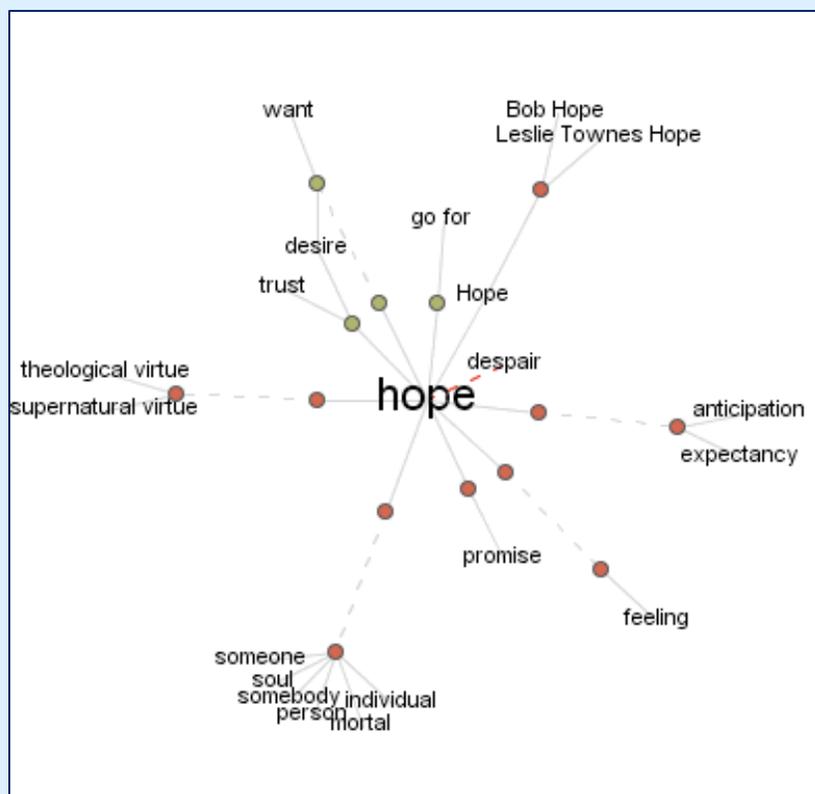
WordSift allows teachers to evaluate written materials they are using in their classrooms by easily sifting through texts; teachers simply need to cut and paste any text into WordSift to engage in an interactive verbal quick-capture. WordSift has a series of interactive displays, including a list of the 50 most frequent words in a particular text (see Figure 1), Google im-

age results for any combination of those words, Visual Thesaurus® definitions and synonyms for particular words from the text (see Figure 2), and a list of sentences from the text in which particular words appear (see Figure 3). The program identifies important academic words that appear in the text by highlighting the ones on the Academic Word List (see Figure 1), a set of 570 words that have been identified by research as appearing quite commonly in academic texts (Coxhead, 2000). By emphasizing general academic words, WordSift aids teachers by ensuring that these important words become part of their lessons. Other more specific aca-

ademic word lists (in mathematics, science, English Language Art, and social studies) will be available shortly in WordSift to allow subject-matter teachers the flexibility to highlight words important for specific lessons and content areas.

Although the function of identifying frequent words is widely available in various Tag Cloud programs on the Web, WordSift integrates this feature with a few other functions, such as visualization of word relationships and Google searches of images and videos. With just a click on any word in the Tag Cloud, the program displays instances of sentences in which that word is used in the original text (Figure 3). This variety of features allows teachers to use WordSift either as a lesson-planning tool or as an engaging whole-classroom interactive instrument that addresses their students' different learning styles (e.g., visual learners, auditory learners) and helps them activate their students' prior knowledge regarding the words that are displayed. Past research on reading comprehension has suggested that students' prior knowledge plays a major role in determining how well students understand text. As Rumelhart (1981) explains, our "schema," or frames for understanding information, shape how we take in new information. There is now general agreement among vocabulary specialists that lexical competence is at the center of communicative and language competence (Decarrico, 2001).

Figure 2. An example of a Visual Thesaurus® Web



Vocabulary instruction in schools, however, has been marred often by a focus on memorizing definitions (Anderson & Nagy, 1992). WordSift tries to expand teachers' options for promoting academic vocabulary acquisition in a fun and creative way. Although we believe that the optimal use of WordSift is to allow students to explore words on their own—either individually or in small groups—using individual computers, we are cognizant of the lack of sufficient technology infra-

structure at many schools. Thus, in the WordSift Website we have included videos that show how Wordsift can be used in lessons designed for whole-class discussions as well as for individual student activities.

Finally, we are convinced that WordSift can be used to design effective and comprehensive assessments that go beyond the limited multiple-choice options offered by standardized tests. Soon, WordSift will present teach-

ers with the possibility of creating their own interactive assessments that evaluate students' understanding of new words in a variety of ways: visually (using Google images), via concept-maps (using the Visual Thesaurus® word-webs), and in writing (using the contexts and definitions). We hope that WordSift allows educators and students to enjoy exploring a new dimension of vocabulary development.

Figure 3. Example of Words used in Context

In order to promote a contextual understanding of the words that appear in the Tag Cloud, WordSift also allows users to see how the words were used in the original text.

Examples from Source

'Nation'

Four score and seven years ago our fathers brought forth on this continent, a new nation, conceived in Liberty, and dedicated to the proposition that all men are created equal.

Now we are engaged in a great civil war, testing whether that nation, or any nation so conceived and so dedicated, can long endure.

We have come to dedicate a portion of that field, as a final resting place for those who here gave their lives that that nation might live.

References

- Anderson, R. & Nagy, W. (1992). The vocabulary conundrum. *American Educator*, 16, 14–18, 44–47.
- Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, 34(2), 213–238.
- Decarrico, J. (2001). Vocabulary learning and teaching. In M. Celce-Mucia (Ed.), *Teaching English as a Second or Foreign Language*. Boston, MA: Heinle & Heinle.
- Gersten, R., Baker, S.K., Shanahan, T., Linan-Thompson, S., Collins, P., & Scarcella, R. (2007). *Effective Literacy and English Language Instruction for English Learners in the Elementary Grades: A Practice Guide* (NCEE 2007-4011). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from: <http://ies.ed.gov/ncee/www/publications/practiceguides.2007>
- Goldenberg, C. (2008). Teaching English language learners: What the research does—and does not say. *American Educator*, Summer 2008. Retrieved from: www.aft.org/pubsreports/american_educator/issues/summer08/goldenberg.pdf

goldenberg.pdf

- Rumelhart, D. (1981). Schemata: The building blocks of cognition. In J. T. Guthrie (Ed.), *Comprehension and Teaching: Research Reviews*, 3–26. Newark, DE: International Reading Association.
- Short, D., & Fitzsimmons, S. (2007). *Double the work: Challenges and solutions to acquiring language and academic literacy for adolescent English language learners—A report to Carnegie Corporation of New York*. Washington, DC: Alliance for Excellent Education.

Notes

- ¹ WordSift was developed under a grant from the Council of Great City Schools to Kenji Hakuta. Web site production was done by Greg Wientjes, a doctoral student at Stanford. Functionality design assistance was done by Diego Roman and Karen Thompson, both doctoral students at Stanford, and both former teachers.

Diego Roman and Karen Thompson are doctoral students in the Educational Linguistics program at the Stanford University School of Education. Greg Wientjes is a doctoral student in the Center for Innovations in Learning at the Stanford University School of Education. Kenji Hakuta is the Lee L. Jacks Professor of Education at the Stanford University School of Education. His areas of teaching and research are in the education of English Language Learners, education policy and practice, and statistics.

Literacy and Academic Success: Content Reading Strategies in the Secondary ESOL Classroom

Jennifer A. Hamilton

Reading ability is a critical factor in student success for all students, and reading in English can be particularly challenging for English language learners. Given that ELLs are still in the process of acquiring academic language skills in English, they often struggle to master content that is vital to their success. In the high school setting especially, beginning level ELLs need support and direct instruction in content area vocabulary acquisition and reading strategies, so that they are able to develop their academic literacy, meet the requirements necessary to obtain a high school diploma, and prepare themselves for a post-secondary education.

As a teacher of beginning ELLs, I instruct a diverse group of students with mixed levels of prior education and first language (L1) literacy. While some students have grade-level knowledge of the content area, which in this case is social studies, others have only completed a sixth grade education. In addition, the complexity of language and vocabulary they encounter even in modified texts often can impede their understanding, regardless of prior learning on the topic. Therefore, in my classroom, students must learn to become strategic readers who make use of their background knowledge, read with a purpose, and monitor their own comprehension

(Walter, 2004). To accomplish this goal I have developed a variety of activities and routines for beginning ELLs, which enable them to gain greater comprehension of academic texts and content.

Vocabulary

First and foremost, employing a consistent vocabulary routine has helped students to become familiar with and utilize content area vocabulary words. According to research, students must be given the opportunity to preview new vocabulary in a text to read and understand it successfully (Peregoy & Boyle, 2001). In my classroom, to introduce a new unit, I always include a preview of key vocabulary words, which helps students develop background knowledge and prepares them for their readings. Students receive pictures taken from the text to accompany each new vocabulary word, which the teacher discusses and describes, paste the photos into their notebooks, and write sentences as a class to clarify the meaning of the words. Finally, students complete a cloze activity reviewing all of the new words and continue to use the new words throughout the unit in other brief classroom activities, such as warm-ups. In this process, students have the opportunity to associate non-linguistic representations with the target words and use them in context multiple times, both of which in-

crease comprehension and retention of new vocabulary.

Reading strategies

In addition to vocabulary development, utilizing shared or guided reading strategies allows students to read with a purpose, tease out the most crucial information from an academic text, and gain confidence in their ability as readers (Walter, 2004). One technique I use is to provide students with a short list of critical questions related to the reading, which they read and discuss as a preview to the text. The students use a photocopy on which they write during class discussion, and to which they can refer when responding to oral prompts and think-alouds from the teacher. If the class finds the answer to a question, they stop, highlight the answer, and write the number of the question next to the text that was highlighted. Later, they go back to the questions and use the highlighted information to write their answers. In this process the students learn important reading strategies, such as distinguishing main ideas from details, gaining comfort with a routine that easily lends itself to developing note-taking and summarization techniques. In addition, as students begin to transition to general education classes they will have basic skills in place to assist them with reading and synthesizing academic texts.

Making connections

Finally, giving students the opportunity to interact with a reading, in a variety of forms, enables them to develop a greater understanding of the text and content (Marzano, Pickering, & Pollock, 2001). One way in which I accomplish this in my classroom is through the use of interactive notebooks. In addition, students use the information in the notebook to accomplish other tasks, such as writing a summary, creating a concept web, writing a journal entry in their first language, or illustrating an important event from the readings.

Research shows that students who are able to analyze and make real-life connections to a text are more likely to retain the information studied and apply it in future situations, such as testing

(Marzano, Pickering, & Pollock, 2001). The interactive notebook is an effective routine for developing these connections, and students enjoy maintaining them because they often provide a hands-on, creative break from the typical class routine, allowing them to express their knowledge without being limited by their English-language proficiency.

As literacy becomes an increasingly key factor in student success, few students are affected more deeply than ELLs. Teachers must continue to teach explicit reading strategies and skills so that students have access to the content they must master. In addition, giving students the opportunity to acquire and use new vocabulary will help them interact with content in a more meaningful way. If

teachers wish their students to be successful, they must teach them how to be successful. Incorporating these techniques into classroom instruction will most definitely help our students develop the skills and strategies they need to enjoy rich academic achievement, regardless of their linguistic background.

References

- Marzano, R., Pickering, D. & Pollock J. (2001). *Classroom Instruction That Works: Research-Based Strategies for Increasing Student Achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Peregoy, S.F. & Boyle, O.F. (2001). (3rd Ed.) *Reading, writing, and learning in ESL: A resource book for K-12 teachers*. New York: Addison Wesley Longman.
- Walter, T. (2004). *Teaching English Language Learners*. New York: Pearson Education, Inc.

Jennifer A. Hamilton is an ESOL teacher at Freedom High School, Prince William County Schools, VA.



Lessons Learned: A Reflection on the Experience of Teaching Newcomers

I have worked with one group of young Spanish-speaking students for the past three years. In my 17 years of teaching, I've come to know these students better than any others. Here are some lessons I've learned from this extraordinary group.

- Country of origin counts! Not all Spanish-speakers speak the same Spanish, there are several dialects.
- Parents frequently come to the US before their children; it can be several years before the family is reunited. Fathers may speak "street English," which doesn't help children in school, and mothers may speak very little English.
- "White people" can seem strange—cultural customs, mannerisms, ways of dressing, blonde hair.
- The children seem to have particular problems understanding sarcasm, anger, and southern accents.
- They often are confused by letters that look the same but sound different. For example, the English "e" is often written as "i" since the Spanish "i" sounds like the English long "e."
- Spanish does not have sounds expressed by the digraph "th," and the children have problems differentiating words that start with a voiced "th" and "d" ("this place" vs. "displace"), or words that end with a voiceless "th" and "s" ("tens" vs. "tenths") both in comprehension and production.
- Also problematic is hearing the difference between words like "fifty" and "fifteen," or saying words that begin with an "s" without adding an "e" sound at the beginning ("state" vs. "estate").
- Reading *fluency* is not necessarily reading *comprehension*.
- Spanish cognates can help ("carne"="meat", so a "carnivore" is a "meat eater").
- A semantic scale can help students understand and learn the meaning of words. When working with a new word, brainstorm words that might be synonyms, then put them on a scale from weakest to strongest.

Submitted by Debra St. John-Ramsey, Stafford County Public School, VA

Spread the Word: Vocabulary Strategies for the Inclusive Mainstream Classroom

Betsy Lewis-Moreno

In recent years, research has shown the most effective instruction for second language learners is that which is most effective for *all* students: student-centered, highly engaging, with ample opportunities to practice new skills and language while receiving timely and supportive feedback (Marzano, Pickering, & Pollock, 2001; Echevarria, Vogt, & Short, 2004). The importance of English language learners having regular interaction with their English-speaking peers in a variety of settings cannot be underestimated; the latter serve as language models and an important source of feedback. Teachers new to the idea of inclusion of English language learners in their classes may have concerns about meeting the widely varying needs of a diverse group of students. Regularly integrating cooperative learning strategies as a part of instruction can make the challenge less daunting and may foster language acquisition in a way that whole class instruction cannot, as individual students have more opportunity to speak, must negotiate meaning to be sure they are understood, and rely on classmates for feedback (Hill & Flynn, 2006). Students, particularly ELLs, are generally less anxious and participate more readily in small groups or with partners. By using targeted vocabulary in conversation, virtual experiences are created that result in the acquisition of oral profi-

ciency and background knowledge (Marzano, 2004).

Find Someone Who

Find Someone Who (Kagan, 1997) is an example of a cooperative strategy that works effectively for linguistically mixed classrooms. Often used as an icebreaker at the beginning of the school year, it can be given new life as a pre-assessment or review tool for academic subjects. The teacher compiles statements related to a unit to be introduced or reviewed. The statements should include all levels of knowledge so that each student in the class will be challenged and able to participate. It may be helpful to reference verbs in Bloom's Taxonomy to create statements. Once students are given the handouts, they circulate, asking others to respond to statements and sign their names beside the answer given. A student is only allowed to respond to a single statement on each classmate's paper, which results in students interacting with as many different students as there are statements.

A middle school science teacher with whom I worked was thrilled with how engaged his students were when he used the Find Someone Who strategy as a review tool for a test on genetics. He included statements that required basic knowledge such as *find someone who can draw a strand of DNA* and *describe a genetic*

trait you have in common. More demanding tasks were: *explain the difference between a genotype and phenotype* and *draw and explain a Punnett Square*. Because he had a number of Spanish speakers with very limited English proficiency, he included several questions that asked students to translate terms that were cognates in English and Spanish: *find someone who can translate 'código genético' into English*. By doing this, he reinforced the value of using cognates as a learning strategy and the knowledge students bring in their native language.

An 8th grade social studies teacher at the same school used the strategy to review the Civil War. She included statements such as *Find someone who can: identify generals from the North and the South, tell you where Robert E. Lee surrendered, explain why the South wanted to secede from the Union, and describe three differences between the North and South in the Antebellum period*. She was pleased to see students who were typically hesitant to participate willing to take part. She noted that the students' confidence increased as they shared knowledge. Both teachers reported better results on tests than when they used more traditional methods to review.

Open Word Sort

Another cooperative strategy that focuses on vocabulary is the Open Word Sort (Gillett & Kita, 1979). Pairs of students receive 12 to 15 words associated with a new unit of study and are asked to sort them in a logical way. An 11th grade Social Studies unit on the 1920's might include terms such as: *jazz, flappers, consumer goods, prosperity, traditional roles, credit, Prohibition, women's right to vote, speakeasies, stock market, suburbs*. I include both familiar and unfamiliar terms so that students are challenged, but not frustrated. Students should not use a dictionary or be given categories; learning occurs as they negotiate with each other and find relationships between the words. I emphasize this is a preview activity to expose them to terms they'll see later in the texts and to use whatever knowledge they have of the concepts. After sorting, students are asked to explain their thinking while others listen. In this way, students are exposed to multiple interpretations of concepts that extend their understanding of the terms. Researchers have found that it is more likely that students will remember vocabulary long-term if they construct their own explanations of words and have opportunities to discuss the terms with one another (Marzano, 2004). Students may be given the same set of words several times during the course of the unit, and asked to reflect on how their thinking changed as they gained knowledge. The strategy affords an effective way to review for short answer or essay tests since it provides practice for students to

use target vocabulary while articulating and connecting ideas.

Semantic Gradient Sort

Another effective strategy for Language Arts classes is a variation of a word sort: the Semantic Gradient Sort (Blachowicz & Fisher, 1996). The purpose is to have students consider subtle meanings of words. Experienced readers and writers intuitively understand that words may have shades of meaning, but students less proficient in these skills need explicit instruction. Students are given small cards with words that are similar in meaning and asked to organize them according to level of intensity. An example might include words for expressing oneself: *scream, whisper, chatter, whimper, declare, propose, question, exclaim, shriek, murmur*. After sorting, students may be asked to think of situations when each word would be used. *Would a person in pain murmur or whimper? Would a person who scored a winning goal exclaim or scream?* Another example could be words that describe happiness: *ecstatic, content, blissful, joyful, peaceful, cheerful, overjoyed, pleased, upbeat, grateful*. *If you like your dinner, are you pleased or ecstatic? If you win a million dollars, would you be cheerful or overjoyed?* Students may be asked to select a number of words they will commit to using in their writing. Word choice is an important trait of effective writing and an excellent strategy to expose students to the subtleties of language and to practice substituting 'tired' words with more vivid ones.

Conclusion

There is no reason to continue to view ESL as a world to itself when so much research points to the mainstream classroom as a highly effective place for students to acquire the vocabulary they need to be successful in the school setting. The value of using cooperative learning strategies in linguistically mixed classrooms is clear. Students have opportunities to use new vocabulary in meaningful ways in an inclusive setting. The social interaction that is required benefits ELLs who are adjusting to a new school setting. Responsive mainstream teachers will find that cooperative learning is a powerful tool to enhance vocabulary instruction while fostering appreciation for the unique experiences and knowledge that individual students bring to the classroom.

References

- Blachowicz, C. & Fisher, P. (1995). *Teaching Vocabulary in All Classrooms*. Englewood Cliffs, NJ: Prentice Hall.
- Echevarria, J., Vogt, M. & Short, D.J. (2004). *Making Content Comprehensible for English Language Learners: the SIOP Model*. Boston, MA: Pearson Education.
- Gillett, J. & M.J. Kita (1979). Words, Kids, and Categories. *The Reading Teacher*, 32, 538-542.
- Hill, J.D. & Flynn, K.M. (2006). *Classroom Instruction that Works with English Language Learners*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Kagan, S. (1997). *Cooperative Learning*. Kagan Cooperative Learning.
- Marzano, R. (2004). *Building Background Knowledge for Academic Achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Marzano, R. J., Pickering, D.J. & Pollock, J.E. (2001). *Classroom Instruction that Works: Research-based Strategies for Increasing Student Success*. Alexandria, VA: Association for Supervision and Curriculum Development.

Betsy Lewis-Moreno is a National Board Certified teacher and high school ESOL / literacy specialist at Hong Kong International School.

NAEP, the “Nation’s Report Card,” and ELL Students

Judith Wilde, Ph.D.

The Nation’s Report Card™ informs the public about the academic achievement of elementary and secondary students in the United States. Report cards communicate the findings of the National Assessment of Educational Progress (NAEP), a continuing and nationally representative measure of achievement in various subjects over time.

Since 1969, NAEP assessments have been conducted periodically in reading, mathematics, science, writing, U.S. history, civics, geography, and other subjects. NAEP collects and reports information on student performance at the national, state, and local levels, making the assessment an integral part of our nation’s evaluation of the condition and progress of education. Only academic achievement data and related background information are collected. The privacy of individual students and their families is protected.

NAEP is a congressionally authorized project of the National Center for Education Statistics (NCES) within the Institute of Education Sciences of the U.S. Department of Education. The Commissioner of Education Statistics is responsible for carrying out the NAEP project. The National Assessment Governing Board oversees and sets policy for NAEP.¹

Introduction

NAEP has assessed 9-, 13-, and 17-year-olds in reading since 1971 and in mathematics since 1973. While there have been periodic changes in the assessment, they generally have not invalidated comparisons across administrations. Perhaps the greatest change was in 2004, when accommodations were first provided for English language learners (ELLs) and students with disabilities who could not otherwise be assessed in a meaningful manner. Even with these accommodations, students still may be excluded for various reasons and the exclusion and accommodation rates may vary due to state-specific policies. The accommodations do make it difficult to compare the results from 2004 forward with those from earlier years.

In 2004, the Institute of Education Sciences (IES) began a long-term trend assessment for which students’ test scores are analyzed every four years. The results from the 2008 NAEP long-term trend

assessment were released by IES in April 2009. This article focuses on reading trends among ELL students—we will look at mathematics in a future newsletter.

Progress in reading

National reading scale scores, which have a possible range from 0 to 500, are available for groups of 9-, 13-, and 17-year-old students, roughly students in grades 4, 8, and 12, who were tested in 2004 and 2008. In 2008, for the first time, the ELL subgroup was divided further into ELL, nonELL², and former ELL. While we cannot look at progress for this particular subgroup, we can provide a “snapshot” of how the students were performing in 2008.

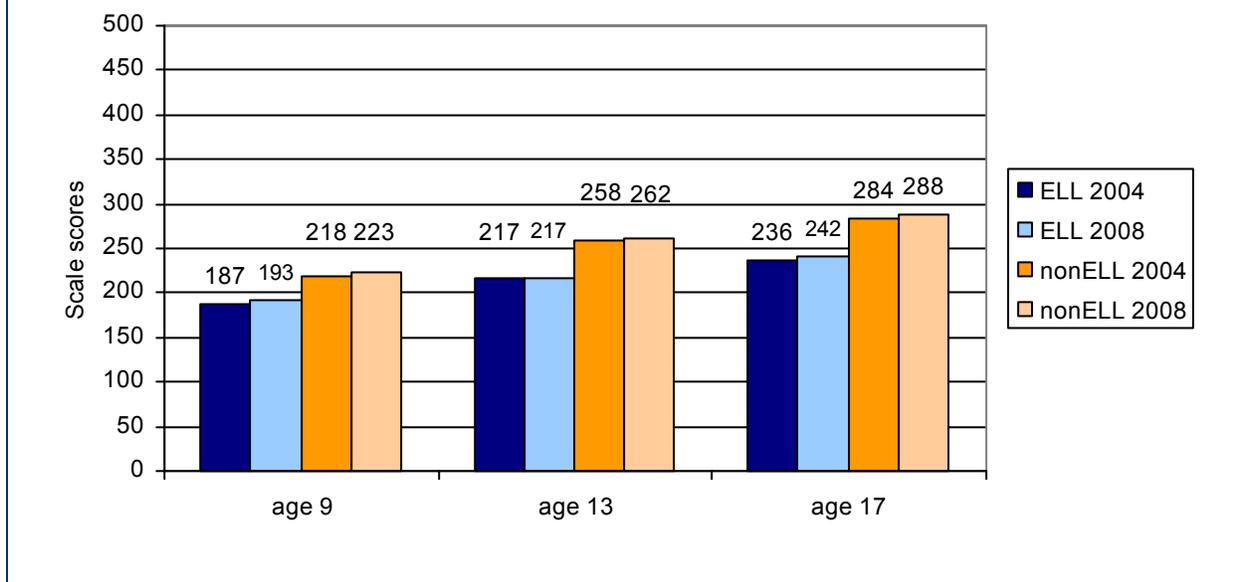
NAEP has developed a useful way of characterizing the scores that students receive on the reading assessment: students, regardless of their background, who score at Level 200 (scoring about 200 scale-score points) “demonstrate partially developed skills and understanding”—they can locate and

identify facts in fairly simple reading material. Students who score at Level 250 “interrelate ideas and make generalizations”—they use intermediate skills and strategies to search for, locate, and organize information they find in relatively lengthy passages. Students who score at Level 300 “understand complicated information”—they can understand complicated literary and informational passages, including material about topics they study at school.

ELL and NonELL students

Figure 1 provides three pieces of information: (1) ELL student groups’ scores (in the blue colors in the exhibit) are somewhat lower than nonELL students (in the orange colors), but (2) ELL students and nonELL students are making progress in reading and (3) ELL students gained slightly more than nonELL students at age nine (6 scale score points vs. 5) and at age 17 (6 scale score points vs. 4). Even though students at age 13 did not increase their scores from 2004 to 2008, they did maintain

Figure 1. NAEP reading scores for ELL and nonELL students, 2004 and 2008, by age

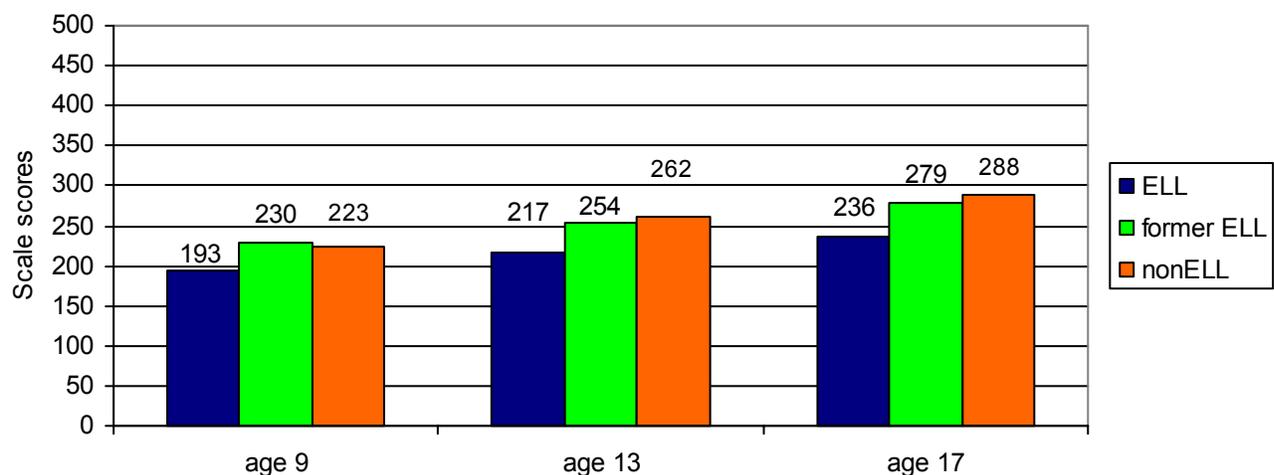


their reading skills. As a general statement, all students at age 9 were Level 200 readers. At age 13, ELL students had increased their scores but were still Level 200 readers while nonELL students had advanced to being Level 250 readers. By age 17, all students can generally be defined as Level 250 readers.

A more interesting comparison is the snapshot of ELL, nonELL, and former ELL students from the 2008 NAEP testing. Figure 2 shows that, for all three age groups, the former ELL students (green in the figure) have much higher scores than their ELL peers (blue) and score nearer to, or above, their nonELL peers (orange). For age 9, the former ELL

students scored 37 points above their ELL peers and 7 scale score points above their nonELL peers. For age 13, the former ELL students again scored 37 points higher than their ELL peers and only 8 points below their nonELL peers. Finally, at age 17, the former ELL students scored 43 points above their ELL peers and only 9 points below their

Figure 2. NAEP reading scores for ELL, former ELL, and nonELL students, 2008, by age



nonELL peers. The scores of the former ELL students and their nonELL peers are virtually indistinguishable, and definitely higher than the scores of the ELL students.

ELLs and students living in poverty

ELL students often are concentrated in schools that serve students living in poverty (as defined by eligibility for free or reduced price lunches). This has led to hypotheses about the effect of poverty on education and its increased effect on ELL students. In Figure 3, the 2004 and 2008 NAEP scale scores for ELL students and nonELL students, who are and are not eligible for federal school lunch programs, are provided. There are

four patterns that are fairly unmistakable.

First, the two orange lines represent the scores of nonELL students who are not living in poverty (i.e., are not eligible for free or reduced price lunches), 2004 and 2008. Clearly, these two student groups scored above any others, the scores increased with the age of the student group, and the scores of students tested in 2008 were higher than those in 2004.

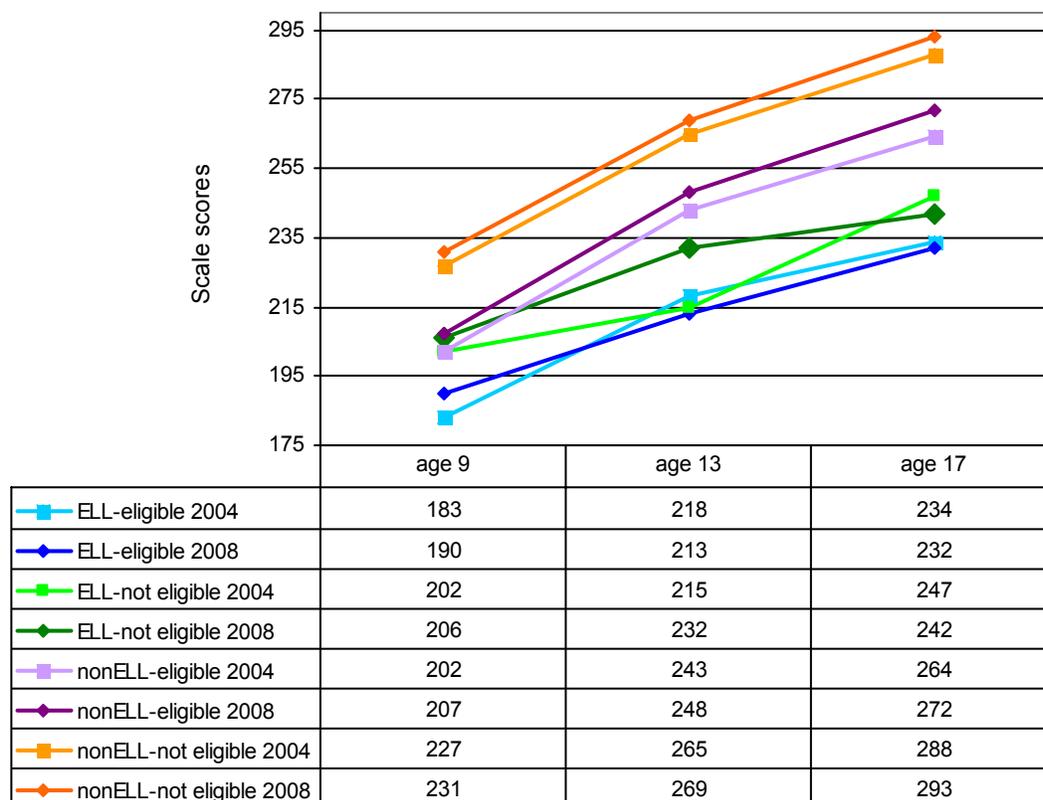
Next, the two blue lines represent the scores of ELL students who are living in poverty, for 2004 and 2008. These two student groups scored below others and, while

the scores increased with the age of the student group, the scores for the 13- and 17-year old students were lower in 2008 than in 2004.

Third, the two purple lines represent the scores of nonELL students who are living in poverty, for 2004 and 2008. At ages 13 and 17, these students' scores were continuing to improve and were above any of their ELL student peer groups. However, their English reading skills when tested at age 9 were approximately equal to those of the ELL students who were not living in poverty.

Finally, the two green lines represent the scores of ELL students

Figure 3: NAEP reading scores for ELL and nonELL students, living in poverty and not living in poverty, in 2004 and 2008, by age



who are not living in poverty, for 2004 and 2008. These students' scores cannot be clearly interpreted, especially in relation to their age-peers. As 9-year-olds, they score similarly to the nonELL students who do live in poverty. As 13 year-olds, they scored similarly to their ELL age peers (2004 testing) and somewhat below their nonELL age peers who live in poverty (2008 testing). Finally, at age 17, the scores are about the same for both testing years.

Perhaps the most interesting facet of Figure 3 is the age 9 ELL students who do not live in poverty and the nonELL students who do live in poverty. Their scores are virtually inseparable each year (2004: scores of 202 for both groups; 2008: score of 206 for ELLs not living in poverty and 207 for nonELLs living in poverty). While the nonELL living in poverty student groups' scores indicate that their reading skills increase with age, this is not the pattern for ELL students who do not live in poverty. Why this occurs cannot be explained merely by looking at the data, but would necessitate further study of these students.

Summary

As a subgroup of students who participate in NAEP testing, often with accommodation to allow their participation in a more meaningful manner, the students' reading scores demonstrate that:

- The scores of all students, including ELL students, generally increase with age;
- The scores of ELL students, particularly in the lower age groupings, often increase at a greater rate than those of their nonELL age peers;
- The scores of former ELL students are close to, or above, their nonELL age peers;
- NonELL students who do not live in poverty clearly outscore nonELL students who do live in poverty, and ELL students who do and do not live in poverty;
- ELL students who live in poverty tend to score lower in reading skills than either group of nonELL students and ELL students who do not live in poverty;
- NonELL students who live in poverty score higher than the ELL subgroups at the higher

age groups, but not at age 9; and

- At age 9, ELL students who do not live in poverty and nonELL students who do live in poverty score almost identically.

The next time that NAEP will be administered as part of the long-term trend assessment will be in 2012. We look forward to that time and a continuing review of how well ELL, former ELL, and nonELL students are progressing in their reading skills.

Notes

¹. "What is The Nation's Report Card?" *NAEP 2008: Trends in Academic Progress* (April, 2009). Washington, DC: National Center for Education Statistics, U.S. Department of Education. Accessed on May 5, 2009 from

www.nces.ed.gov/nationsreportcard.

All data used for these analyses come from this source.

². We use the term "nonELL" to indicate that this group may include former ELL students, not just monolingual English-literate students.

Judith Wilde is the Executive Director of the National Clearinghouse for English Language Acquisition.



askNCELA's Inbox

in which we highlight the answers to commonly asked questions that appear in our email inbox.

Who sets academic targets for English proficiency, the state or the Local Education Agency (LEA)?

Setting academic targets for English proficiency is the responsibility of the states, and so each state varies in terms of the policies that are used in order to determine when ELLs qualify for English Language Development (ELD) programs. States also may set statutory limits on the number of years that children receive services, as long as these limits fall within those of the Elementary and Secondary Education Act (ESEA). Generally, the ESEA allows ELL students to receive services and to be assessed in the native language for three years, with an additional two years allowed on a case-by-case individual basis.

askNCELA@gwu.edu is NCELA's email helpline. We are happy to answer questions and to provide technical assistance information upon request.