Estudios de lingüística inglesa aplicada



PROMOTING ACQUISITION OF ACADEMIC VOCABULARY IN ENGLISH-MEDIUM SECONDARY EDUCATION IN THE USA

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In U.S. secondary schools, particularly in large urban areas, many English language learners (ELLs), which term here designates those who immigrate to the United States and learn English as their second language while attending school, demonstrate an impressive command of oral skills. Some students who have been in the country for only a few years speak English well in day-to-day situations. However, this level of language proficiency may cause others to overestimate these students' readiness to handle academic subjects in English, as ELLs often have acquired only the vocabulary of daily social interaction. Social encounters are context embedded and do not require technical or specialized vocabulary. Many ELLs who are competent to handle these encounters in English have not yet acquired a higher level of language proficiency that encompasses the vocabulary and skills necessary to succeed in school. This level of language proficiency is needed for formal academic learning of subject-specific material, for which the context is considerably reduced and the conceptual tasks are more challenging. ELLs need to be able to use complex, abstract vocabulary to understand and succeed through academic English. This article examines the unique challenges that ELLs encounter when acquiring academic vocabulary in their core subjects and presents practical and, where possible, research-based strategies to foster the acquisition of vocabulary that can be used across the content domains.

Key words: Vocabulary acquisition, English language learners, academic vocabulary, BICS, CALP, instructional strategies

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Muchos aprendices de lengua inglesa (ELLs, sigla en inglés de "English Language Learners") demuestran un dominio impresionante de las habilidades orales. Algunos sólo llevan en los Estados Unidos unos pocos años y hablan inglés bien en situaciones cotidianas. Sin embargo, este nivel de conocimiento del idioma puede hacer que muchos sobreestimen la preparación de estos estudiantes para el manejo de temas académicos en inglés, pues a menudo éstos solamente han adquirido el vocabulario de la interacción social diaria. Los encuentros sociales son contextos ensamblados y no requieren de un vocabulario técnico o especializado. Muchos aprendices de la lengua inglesa, los cuales son hábiles en el manejo de estas situaciones en inglés, no han adquirido todavía un nivel más elevado de conocimiento en el idioma que abarque el vocabulario y las habilidades necesarias para obtener éxito en el contexto educativo. Este nivel de conocimiento del idioma es necesario para el aprendizaje académico formal del material específico de una determinada materia, para la que el contexto se reduce considerablemente y las tareas conceptuales son más desafiantes. Estos alumnos necesitan poder utilizar un vocabulario complejo y abstracto para poder comprender y tener éxito con el inglés académico. Este artículo examina los particulares desafíos que deben afrontar estos estudiantes cuando adquieren el vocabulario académico de sus materias básicas y presenta estrategias prácticas basadas en las investigaciones para fomentar la adquisición del vocabulario, las que se pueden utilizar de manera transversal en las áreas de contenido.

Palabras clave: Adquisición de vocabulario, principiantes en la lengua inglesa, vocabulario académico, BICS, CALP, estrategias instruccionales.

1. Introduction

The United States is home to an ever-increasing number of English language learners (hereafter ELLs), that is, students who have emigrated from non-English speaking countries. It is estimated that from 1995 to 2001 the population of students in U.S. schools who were identified as ELLs grew by 105% (Kindler, 2002). All in all, at the beginning of the new millenium,

there were approximately 4.5 million ELLs enrolled in kindergarten through grade 12 in the United States (National Center for Education Statistics, 2002).

The case of ELLs in secondary schools (here defined as grades 6 through 12) is of particular interest and concern to educators. While many of these students receive English instruction and/or bilingual education when they first enter U.S. schools, they are often mainstreamed within two or three years. Mainstreaming is a practice in the United States in which students who have completed a bilingual program or one designed solely for English as a second language (ESL) students, or who are otherwise deemed to be appropriately prepared, are placed in content instruction classes alongside their native-born counterparts. Thereafter, they may or may not receive further special assistance with the English language. Suddenly then these students find themselves in classes in math, science, social studies and other subjects, in which they are expected to participate and thrive in a manner similar to that of the U.S.-born students. While the ELLs and their teachers are delighted to see them take such a significant step, reality soon sets in when they discover that before them in their content courses are new and higher expectations and rigorous challenges—not only having to compete with native speakers, but also acquiring the literacy skills and mastering the grade-level academic content required by their standards-based curriculum. Side-by-side with their American-born peers, they are expected to learn content, read and write grade-level materials and take and pass all the same classes, state and standardized tests in English—even though English is not their first language. This is especially notable in the current context of state and national standards that set high achievement and performance levels for all students.

Students' acquisition of content vocabulary is an on-going classroom concern for secondary school teachers. ELLs and their teachers, however, face a particular challenge in this regard. After all, acquiring academic vocabulary is one of the keys to school success, yet ELLs face special challenges in acquiring content vocabulary in their *second* language. This article will examine some of these challenges and suggest specific

strategies that teachers can use to assist students to overcome them successfully.

2. Social Vocabulary vs Academic Vocabulary

Many mainstreamed secondary school English language learners (ELLs) struggle with academic reading and writing because they are not familiar with content vocabulary from their respective classes. They often find their class textbooks too difficult to comprehend and their writing assignments too demanding to complete satisfactorily. By comparison, many of the same ELLs display an impressive command of oral skills in English. Even those who have been in the country for only two or three years often speak the language quite well in day-to-day situations. However, their level of basic interpersonal communicative skills (BICS) (Cummins, 1979) may cause others to overestimate their readiness to handle the rigors of content courses in English. BICS is hypothesized to be a less complex or demanding type of second language proficiency than that required for academic success, one involving both language knowledge and control but within a limited and highly reinforced communicative sphere. When students have acquired BICS, they have acquired only the language needed for daily social interaction—language used at parties, on the telephone and in the school cafeteria, for example. Given that BICS is often repetitive, predictable and supported by conversational routines, gestures, body language and immediate feedback, these social encounters are rich in contextual cues. Moreover, because the language used is not technical or specialized, its comprehension is cognitively undemanding.

The following is an excerpt from a conversation with a ninth grade ELL:

...I couldn't make up my mind at first like who I'm going to take to the prom [dance]: Jessica, Barbara, Maribel or Luz. But I finally made up my mind. I'm going with Maribel. I asked her last week at lunch, and she told me that she will definitely go with me. We already talked about how we're going to get there [to the prom]. I told her that my godfather owns a limo[sine] company in the Bronx, and so we could easily get a limo for the

night and go in style. Maribel told me she's wearing blue, and I guess that's my clue to make sure I buy her flowers for her hand [corsage] that has some blue in it to go with her dress. You know how girls are about those things....

The above passage exhibits native-like flow, idiomatic phrasing and generally grammatically correct sentence structure. The vocabulary is both adequate and appropriate for the social setting. From listening to this student, a teacher might think that he possesses the linguistic and academic skills to handle grade-level work.

Upon closer scrutiny, however—and in particular when the focus turns to academic English—the gap between ELLs and the requirements for success in mainstream instruction becomes more apparent. Even informal assessment of ELLs' academic skills such as their ability to comprehend and manipulate grade-appropriate content vocabulary often shows that they fall short of school standards and teacher expectations. In other words, many ELLs who have acquired BICS have not yet acquired the higher-level skills known collectively as Cognitive Academic Language Proficiency (CALP). CALP is the type of proficiency necessary to succeed in high school (Cummins, 1979). It typically takes between five and seven years for ELLs to acquire CALP (Cummins), and the time can be longer for ELLs who have experienced some interruption in their formal education (Thomas and Collier, 1997). A large part of successful learning in content courses derives from being able to tackle the demanding task of learning and using content vocabulary in the language of instruction (Nation, 2001; Nation & Coxhead, 2001). CALP is needed for formal academic learning of subject-specific vocabulary and for processing written content materials, in which contextual cues are sparse and comprehension is difficult. This important fact allows us to better understand the academic challenges faced by the many ELLs who start their U.S. education at the secondary school level, as well as the daunting task that confronts their schools and teachers.

The difficulty in reading, comprehending, and writing academic English faced by ELLs who are proficient only in BICS can be exemplified by comparing the following passage from *the Declaration of Independence*, a document with which all secondary school students must become familiar,

to the above sample of student speech. Clearly, the mastery of the former type of discourse far from guarantees facility with language such as this:

Prudence, indeed, will dictate that Governments long established should not be changed for light and transient causes; and accordingly all experience hath shewn, that mankind are more disposed to suffer, while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed. But when a long train of abuses and usurpations, pursuing invariably the same Object evinces a design to reduce them under absolute Despotism, it is their right, it is their duty, to throw off such Government, and to provide new Guards for their future security. —Such has been the patient sufferance of these Colonies; and such is now the necessity which constrains them to alter their former Systems of Government. The history of the present King of Great Britain [George III] is a history of repeated injuries and usurpations, all having in direct object the establishment of an absolute Tyranny over these States. To prove this, let Facts be submitted to a candid world. (us.history.org).

3. Obstacles to Learning Academic Vocabulary in English-medium Secondary Education in the USA

Irrespective of the specific content area—be it math, science, or history—academic subject matter entails characteristic challenges that may present obstacles to ELLs in their efforts to acquire content vocabulary. In what follows I will briefly address four such challenges: the concentration of unfamiliar words; the use of synonyms and subtle shades of meaning; the use of idioms; and the need to distinguish between connotative and denotative meanings.

Concentration of Unfamiliar Words

To begin with, the sheer number of unfamiliar words encountered in content classes can overwhelm ELLs. Each class lecture or discussion and most passages in the texts contain a multitude of words that may lie far beyond the student's present knowledge. Consider that in math a student has to learn to use such terms as *exponents*, *square roots*, *rational numbers*,

irrational numbers, and scientific notation, while in science class the same student is expected to answer questions about nuclei, chromosomes, membranes and cytoplasm. At the same time, in a history unit, the ELL will have to learn such content vocabulary items as loyalists, revolution, colonists, taxation and patriotism. Indeed, the sheer number of key terms that the ELL is required to learn in content courses is intimidating!

Use of Synonyms and Subtle Shades of Meaning

Another challenge that ELLs face in acquiring content vocabulary is the need to expand or add to the meanings of words that they might already know. Some content vocabulary consists of words that function in one way in one subject area and in another way in a different area. For instance, the term "power" has a different meaning in history than in math, where it refers not to military or political strength but to an exponential level of a given base number. Or, to take another example, a "table" in mathematics is a set of data arranged in rows and columns to demonstrate a relationship, as in a "multiplication table," whereas in earth science a "table" can also be a topographical feature (a "plateau" or "mesa") or a geological phenomenon (a "water table"). Moreover, these and other content words can function as different parts of speech in different contexts, with each having a distinct meaning. In addition to the noun forms already cited, for example, both "table" and "plateau" can be used as verbs, as in expressions like "The committee tabled (i.e., delayed action on) the bill" and "Population growth plateaued (i.e., leveled off) due to emigration."

Finally, some content vocabulary items may appear or even be quite similar, yet contain subtle shades of meaning. The challenge of distinguishing such terms as "democracy" and "republic," for example, makes these words particularly difficult for ELLs to acquire.

Use of Idioms

Idioms also present a unique challenge for ELLs. It is not uncommon for content materials to incorporate idioms, and teachers often omit to explain such phrases unless directly requested. As a result, ELLs not only grapple with learning the technical jargon in a second language, they are also

simultaneously presented with an array of fixed expressions of often inscrutable meaning. Here are some examples of idioms found in the content textbooks used by ELLs in the United States: to get a ballpark figure; to be an underdog; to kill two birds with one stone; to go on a wild goose chase; to cover all bases; to play hardball; and to go at something tooth and nail. Indeed, an English-speaking music teacher might find it perfectly natural to say that "Mozart really knew how to tickle the ivories," but it is hard to imagine a statement that would be more confusing to an ELL!

Connotative and Denotative Meanings

Similar to idioms, connotative meanings present an additional difficulty for ELLs as they acquire content vocabulary. Many of the words used in content materials carry connotative or figurative meanings that may be unfamiliar to ELLs. Yet these meanings appear side by side with more literal, technical jargon. Imagine, for example, the difficulty faced by an ELL who encounters such connotative/denotative hybrid expressions as "George Washington was the *father* of our *republic*" or "The founding *fathers nurtured* our *infant democracy*." The language proficient learner—or teacher—tends to take for granted the complex levels of semantic understanding necessary to comprehend such expressions. For the ELL, however, processing discourse of this kind represents a painstaking activity in which misconceptions can easily arise and persist.

4. Pedagogical Implications

This article seeks to bring to the forefront at least three implications. To begin with, teachers must be aware that there can be a discrepancy between their students' spoken language abilities in informal social settings and their academic language abilities in the classroom. That is, a student's ability to speak English fluently does not necessarily translate into or indicate a readiness to undertake the rigors of academic work. Secondly, traditional methods of teaching content vocabulary do not work for ELLs. In times past, students were given lists of vocabulary words together with their respective meanings, which they were expected to memorize. This task was a mechanical one, with no guarantee that an ELL had either mastered the

vocabulary items or could use and apply them appropriately. Clearly, new, more focused techniques are called for. Finally, and on a related note, teachers must recognize that ELLs cannot master key vocabulary after only one encounter. Students have to interact with the words repeatedly and in different ways in order to strengthen their understanding of the terms. In fact, most forgetting of vocabulary happens immediately after the initial exposure to a given item (Pimsleur, 1967), which demonstrates that review of and further exposure to each item are necessary to ensure that students learn the new vocabulary. Thus, given that ELLs are required to learn specialized content vocabulary quickly in order to keep up with the curriculum and to be prepared for a variety of examinations, teachers must find effective ways to present and *practice* content vocabulary using deliberate, targeted strategies (Suarez Suberviola & Varela Mendez, 2002).

5. Classroom Strategies

ELLs face significant challenges in the content classroom. However, there are many strategies that teachers can employ to render textbooks and academic discourse more accessible to and manageable for these students. This section describes three such strategies that have received considerable support in the research literature, namely graphic organizers, brainstorming webs and games. Other strategies can be added based on the practical experience of each classroom teacher. To encourage and contribute to the development and study of more such techniques, the present section also describes two additional strategies—known as "exit slips" and "popcorn review"—that other teachers and I have found useful in promoting the acquisition and retention of content vocabulary by ELLs in secondary schools in the United States.

Graphic Organizers

Graphic organizers are visual representations or visual aids that support the understanding of text. Examples of graphic organizers include webs, t-charts, Venn diagrams, and KWL charts. Such devices are used to present information in a structured and organized way (Chamot & O Malley, 1994). Graphic organizers provide ELLs with a structure through which they

can visualize relationships between new content words and known concepts. Teachers should assist students to become independent users of graphic organizers. To assist in this goal, only a few graphic organizers should be selected and used repeatedly in the content classroom. As students become proficient users of particular graphic organizers, others can be introduced gradually. Through these variations, graphic organizers can present, illustrate and reinforce content vocabulary in ways that can be effective for many different types of learners.

Brainstorming Webs

Brainstorming webs are usually unstructured diagrams that begin with a central fact or concept. They are designed to generate a large number of related ideas and to promote creative thinking and problem solving. Like graphic organizers, brainstorming webs are visual thinking tools. They allow students to follow their own logical process as they think through or solve problems. Because webs are graphic, ELLs can use them to *see* the place of key concepts and vocabulary within sets of other related concepts. Webs, therefore, represent an excellent device for reinforcing vocabulary and deepening ELLs' content knowledge.

Games

Games have been shown to have advantages and effectiveness in learning vocabulary in various ways. They lower the affective filter through relaxation and fun, promote spontaneous use of the language, and foster friendly competition in the classroom. Vocabulary games, in particular, bring real world context into the classroom, and enhance students' use of English in a flexible, communicative way (Nguyen & Nga, 2003). Games are a great and fun way to introduce new terms and concepts and to reinforce those already learned. Such games as bingo, scrabble, and hangman are especially effective for use with ELLs. In addition, the Internet offers websites where teachers can enter key words of their choice to make crossword and word search puzzles, both of which can help English learners to acquire and practice content vocabulary.

Exit Slips

Exit slips provide a fast and easy way for teachers to gauge what students have learned at the end of a class. Five or ten minutes before the class ends, the teacher passes out slips of paper to her students. On these slips, students spend a few minutes writing a brief account of what they did and/or did not understand during the class period. As they leave, they return these papers to the teacher. This allows ELLs and other students to communicate their learning accomplishments and concerns to the teacher. It also helps teachers to monitor their students' progress and to ascertain which areas of vocabulary and concept instruction need further attention.

Popcorn Review

In this strategy students "pop up" and share one thing that they have learned from the previous class, using the content vocabulary presented in the preceding session. This is a great way to review recently introduced material interactively; moreover, it can provide an effective segue or springboard for the introduction of new concepts. One advantage of using this technique regularly is that students can *rehearse* their responses in advance. This allows ELLs to focus on the meaning and pronunciation of words about which they are unsure and to practice their fluency in their second language. As a result, they participate more readily than when they feel that they have been put on the spot.

6. Conclusion

Over the past decade, rapidly changing demographics have brought an increasing number of ELLs into U.S. classrooms. This trend is likely to continue, with 40% of the school-aged population in the United States projected to be ELLs by 2030 and with more than 460 languages now represented in U.S. classrooms (U.S. Census Bureau, 2006). Therefore, classroom teachers and administrators need to be equipped with the fundamental knowledge and skills necessary to encourage and support the acquisition of CALP and to assist all students to succeed in acquiring crucial vocabulary in content areas.

This is especially critical for ELLs at the secondary level, who not only need to master course content but must also be prepared to take and pass high-stakes exams in order to graduate. Many of these students experience difficulties acquiring the specialized vocabulary that is a vital part of their content courses. However, by integrating the fundamentals of English language development into their teaching, as well as employing targeted instructional strategies, content teachers can support ELLs' vocabulary learning and contribute to their preparation for the higher and more rigorous levels of learning that they will encounter in secondary school and beyond.

References

- Chamot, A. U., & O'Malley, J. M. (1994). *The CALLA handbook: Implementing the cognitive academic language learning approach.* White Plains, NY: Addidon Wesley Longman.
- Cummins, J. (1979). Cognitive/academic language proficiency, linguistic interdependence, the optimum age question and some other matters. *Working Papers on Bilingualsm*, 19, 121-129.
- Declaration of Independence: The Want, Will and Hopes of the People, http://www.ushistory.org/declaration/document/index.htm.
- Kindler, A. L. (2002). Survey of the states' Limited English Proficient students and available educational programs and services 2000-2001, summary report. Washington, DC: National Clearinghouse for English Language Acquisition & Language Instruction Educational Programs.
- Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge, UK: Cambridge University Press.
- Nation, I. S. P. & Coxhead, A. (2001). The specialised vocabulary of English for academic purposes. In J. Flowerdew and M. Peacock (Eds.), *Research perspectives on English for academic purposes* (pp. 252-267). Cambridge, UK: Cambridge University Press.
- National Center for Education Statistics. (2002). Early estimates of public elementary and secondary education statistics: School year 2001-2002.
- Nguyen, T. T. H. & Nga, K. T. T. (2003). Learning vocabulary through games. *Asian EFL Journal*, 5(4). Retrieved February 13, 2006, from http://www.asian-efl-journal.com/dec_03_sub.Vn.php
- Pimsleur, P. (1967). A memory schedule. *Modern Language Journal*, 51, 73-75.

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Suarez Suberviola, E. & Varela Mendez, R. (2002). Vocabulary acquisition strategies. *Didactica (Lengua y Literatura)*, 14, 233-250.

- Thomas, C. & Collier, V. (1997). School effectiveness for language minority students. Washington, D.C.: National Clearinghouse for Bilingual Education, George Washington University, Center for the Study of Language and Education.
- U.S. Census Bureau 2006 http://www.ell.spps.org/sites/f6151329-e58b-4abc8e3f-3005439078c7/uploads/Student_demographics.pdf

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