Practical Guidelines for the Education of English Language Learners

RESEARCH-BASED RECOMMENDATIONS FOR SERVING ADOLESCENT NEWCOMERS

CENTER ON INSTRUCTION

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Book 3: Research-based Recommendations for the Use of Accommodations in Large-scale Assessments

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FOREWORD

The fundamental principles underlying the *No Child Left Behind (NCLB) Act of 2001* focus on high standards of learning and instruction with the goal of increasing academic achievement—reading and math in particular—within all identified subgroups in the K-12 population. One of these subgroups is the growing population of English Language Learners (ELLs). NCLB has increased awareness of the academic needs and achievement of ELLs as schools, districts, and states are held accountable for teaching English and content knowledge to this special and heterogeneous group of learners. However, ELLs present a unique set of challenges to educators because of the central role played by academic language proficiency in the acquisition and assessment of content-area knowledge. Educators have raised multiple questions about effective practices and programs to support the academic achievement of all ELLs, including questions about classroom instruction and targeted interventions in reading and math, the special needs of adolescent newcomers, and the inclusion of ELLs in large-scale assessments. While ELLs vary in their academic outcomes and many thrive in U.S. schools, there is indeed a significant proportion—whether or not formally designated Limited English Proficient (LEP) or English Language Learner (ELL) and thus receiving support services for language development—who struggle considerably in developing English proficiency and academic skills, as well as meeting grade-level standards. This document was written primarily with this latter group in mind, and, in particular, the group of ELLs who are adolescent newcomers. This group of ELLs has a relatively short period of time in which to simultaneously develop academic language skills and master grade-level content. This document provides evidence-based recommendations for policymakers, administrators, and teachers in middle and high schools who seek to make informed decisions about effectively serving adolescent newcomers.

OVERVIEW

Who Are English Language Learners?

The U.S. Department of Education defines ELLs as national-origin-minority students who are limited-English-proficient. The ELL term is often preferred over Limited-English-Proficient (LEP) as it highlights accomplishments rather than deficits. As a group, ELLs represent one of the fastest-growing groups among the school-aged population in this nation. Estimates place the ELL population at over 9.9 million students, with roughly 5.5 million students classified as Limited English Proficient by virtue of their participation in Title III assessments of English language proficiency. The ELL school-aged population has grown by more than 169 percent from 1979 to 2003[1], and speaks over 400 different languages, with Spanish being the most common (i.e., spoken by 70 percent of ELLs).

Within this diverse and growing population there are many ELLs who thrive academically; however, there is also a significant proportion that struggles to reach grade level[2]. For example, on a national assessment of reading comprehension in 2005, only 7 percent of fourth grade ELLs with a formal designation scored at or above the proficient level compared with 32 percent of native English speakers[3]. Only 4 percent of eighth grade ELLs scored at or above the proficient level. Similarly, on a national assessment of mathematics, while only 36 percent of all fourth graders scored at or above the proficient level, within the ELL population designated limited English proficient, only 11 percent scored at or above the proficient level[4]. Thus, the great majority of the nation's ELLs are scoring at or below basic levels of academic proficiency despite an increase in the demand for numeracy and literacy skills in order to fully participate in society.

Statistics on the performance of ELLs are generally based on the performance of students designated as Limited English Proficient (LEP) within state accountability systems. This designation is unlike others, such as gender or ethnicity, insofar as students' membership in the group of LEP students is dynamic and meant to be temporary in nature. Generally, students are counted within the LEP group only as long as they are considered to lack enough proficiency in English to participate in mainstream classrooms. When ELLs have gained the proficiency in the English language needed to participate in grade-

level classes, they lose their LEP designation, are required to participate in the mainstream classroom without specialized support, and are no longer included in percent proficient calculations for the LEP subpopulation of a school. Because language proficiency plays a significant role in student achievement, this reporting practice will tend to underestimate the achievement performance of ELLs insofar as those students with the highest language proficiency are removed from the LEP group as they become proficient in English.

Under NCLB, students can be counted within the LEP category for up to two years after becoming proficient in English, thus allowing more proficient students to contribute to the percent proficient for accountability purposes. This reporting practice mitigates the problem of underestimation somewhat. However, states' results are generally not reported separately for current and former LEP students. Rather, the former LEP students are simply included in the LEP category for up to two years. Failure to distinguish between former and current LEP students when disaggregating accountability data makes it difficult to accurately evaluate the performance of schools in educating ELLs. Recent efforts to examine the performance of former LEP students have shown that some ELLs do quite well in public schools[5]. On the other hand, many ELLs who are no longer formally designated (ELL, LEP) continue to struggle with academic text and language; these learners are a growing concern for students, parents, educators, administrators, and policymakers.

Who Are Adolescent Newcomers?

Given the growing number of ELLs in U.S. schools, understanding and serving this population effectively is essential. A particular group of ELLs with unique needs includes the many immigrants who first enroll in U.S. schools at the middle or high school level, often with limited English proficiency and sometimes with limited formal schooling. We use the term "adolescent newcomers" to refer to this subset of ELLs who are currently enrolled in grades 6 though 12 who have attended an English-speaking school for fewer than two years. The proportion of ELLs who are adolescent newcomers varies from school to school, but estimates suggest that it is a relatively small population within the overall ELL population. For example, data from the 2000 census indicate that over half of secondary school ELLs were born in the U.S.[6]; and that, of the 44% of ELLs who are immigrants, many entered U.S. schools at some point before or during the elementary years. Although adolescent

newcomers are a particularly vulnerable and often highly visible group of learners, it is important to note that they are but part of a much larger population of foreign- and U.S.-born ELLs that must be served.

Although there is considerable variation within the ELL population, adolescent newcomers are an especially diverse group of learners. They differ on key factors related to academic achievement, including amount and degree of formal schooling, level of literacy in their native language, and age of arrival in U.S. schools. Therefore, meeting the needs of adolescent newcomers requires a concerted and thoughtful effort on the part of educators who serve them. While simultaneously developing conversational ability and basic reading skills, these learners must quickly begin to develop oral and written academic language skills for the development of academic knowledge and success in content-area classrooms. These students must develop these skills in a much shorter window of time than that of other ELLs and especially their native English-speaking peers.

Academic Language as Key to Academic Success

Mastery of academic language is arguably the single most important determinant of academic success for individual students. While other factors—such as motivation, persistence, and quantitative skills—play important roles in the learning process, it is not possible to overstate the role that language plays in determining students' success with academic content. Unfortunately, ELLs often lack the academic language necessary for success in school. This lack of proficiency in academic language affects ELLs' ability to comprehend and analyze complex texts, limits their ability to write and express themselves effectively, and can hinder their acquisition of content in all academic areas, including mathematics. Many ELLs have well-developed conversational skills yet lack the specialized language of academic discourse central to school success. An example of the distinction between conversational and academic language may help to explicate this point:

> When a student walks up to a newspaper stand and purchases a newspaper, he utilizes his conversational language skills to converse with the clerk and make the purchase. In contrast, other skills altogether are used to read and understand the front-page article, as well as to discuss the pros and cons of the proposed policy change

that the article describes. The student might use still other skills to compare the writer's opinion to his own, and to the opinion of the store clerk. The oral and written language required to be able to engage in the latter "conversation" will involve more advanced and specialized vocabulary, more complex sentence structures, and more complex discourse structures than that required for the former.

Many skills and factors are wrapped up in the notion of academic language. Vocabulary knowledge (including the multiple meanings of many English words), the ability to handle increasing word complexity and length over time, and understanding complex sentence structures and the corresponding syntax of the English language are all aspects of academic language. Other aspects relate to text itself, including the organization of expository paragraphs, the function of transitions such as *therefore* and *in contrast*, and a wide range of vocabulary that appears far more often in text than in oral conversation.

A particular aspect of academic language and source of ELLs' difficulties focused on in this report is academic vocabulary—the words necessary to read and talk about—and learn—content-area knowledge. Academic vocabulary is central to text and plays an especially prominent role in the upper elementary, middle, and high school years as students read to learn about concepts, ideas, and facts in content-area classrooms such as math, science, and social studies. In doing so, ELLs encounter many words that are not part of everyday classroom conversation. Words such as *analyze*, *therefore*, and *sustain* are more likely to be encountered while reading than in conversation, and they are often key to comprehension and learning[7].

The need for well-developed academic language skills runs well beyond high school graduation. Many learners—especially learners from minority backgrounds—who graduate from high school and enroll in post-secondary education often need additional support and remediation to succeed in their post-secondary classrooms[8]. This highlights the importance of academic English as it relates to oral language, reading skills, and writing. Supporting the development of academic English skills requires a systematic and concerted effort on the part of educators who serve adolescent newcomers. In this light, this document provides evidence-based recommendations for policymakers, administrators, and teachers in middle and high schools who seek to make informed decisions about effectively serving adolescent newcomers.

Methods

As a starting point to identify the relevant research for this report, we drew on the findings from two reports. The first, *Developing Literacy in Second-Language Learners: Report of the National Literacy Panel on Language-Minority Children and Youth* (NLP)[9], is a seminal review that systematically and rigorously synthesized the research on acquiring literacy in a second language. The second, *Educating English Language Learners: A Synthesis of Research Evidence*[10], is a narrative review of relevant research in this area. Since these reviews incorporate studies published before 2002, we also systematically searched for empirical[a] research published after that time. *Creating Access: Language and Academic Programs for Secondary School Newcomers* (Short & Boyson, 2004) is a third document that we consulted and that we recommend for those who are involved with program development. It addresses many issues of program implementation, offers practical advice for educators, and describes select newcomer programs across the United States.

There are many gaps in the direct evidence available from research on adolescent newcomers. Some of these gaps are addressed in research conducted with the overall population of ELLs, and some are addressed or informed by the research conducted with native English speakers. Therefore, when necessary and appropriate, we examined the relevant empirical research on adolescent literacy and reading instruction conducted with ELLs who are not newcomers, as well as research conducted with native English speakers where generalization to the population of adolescent newcomer ELLs was warranted. For example, although there have been few, if any, empirical evaluations of comprehensive newcomer programs, there is a great deal of evidence from research conducted with both native English speakers and ELLs that can and should come to bear on instructional decisions.

Organization

This document serves as a practical guide for policymakers, administrators, and teachers who seek to make informed decisions about educating adolescent newcomers. The guide addresses instructional elements to effectively meet learners' needs, as well as organizational elements of programs designed to support teaching and learning. This document will be particularly helpful to those administrators and teachers endeavoring to create or improve programs that serve newcomers. The document is organized into two sections: the first

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[a] Many articles on newcomer programs that were attained are not reflected—or cited—in this report because they were thought pieces, discussions without data, whether qualitative or quantitative in nature, or not relevant to the questions at hand. Electronic databases searched included *PsycINFO, Academic Search Premier, ERIC,* and *Education Abstracts.*

addresses elements of effective instruction for adolescent newcomers and the second addresses organizational elements that support instruction in schools serving these learners. Within each section, we describe the conceptual framework as well as the sources we consulted and present in-depth recommendations for educators seeking to better serve their adolescent newcomer students.

ELEMENTS OF EFFECTIVE INSTRUCTION
FOR ADOLESCENT NEWCOMERS

Conceptual Framework

The conceptual framework for this section uses a developmental perspective that assumes that there are many skills involved in literacy learning and many factors that influence this learning. This is especially the case for this diverse group of adolescent newcomers. Although there are many factors that influence adolescent newcomers' success in middle and high schools, the recommendations that follow focus on the cognitive and language skills that are required for academic success in all classrooms, especially content-area classrooms. The key outcomes on which these recommendations are based include *reading comprehension*, especially comprehension of content-area texts, and *expository writing*. The recommendations reflect an understanding that adolescent newcomers are likely to struggle with academic English. The recommendations also reflect an understanding of how adolescent newcomers' skills can be resources—how they can use their developed cognitive skills and content knowledge to their advantage in the U.S. classroom. For example, newcomers who arrive with a strong basis in math concepts can quickly and simply map new English words (i.e., labels) onto these pre-existing concepts.

Evidence-based Recommendations for Instructional Elements

Effective programs for adolescent newcomers demonstrate six elements of effective instruction. Of course, there are many more elements of effective instruction that are generally applicable to all learners—for instance, effective teachers must establish high standards for their students, engage and motivate their students, and create supportive environments that reaffirm their students' cultural backgrounds. However, the six elements highlighted here have particular importance for adolescent newcomers and complement these more general instructional principles. Furthermore, these six elements stand outside the question of language of instruction; they are essential regardless of the language in which students are taught. Thus, once states and districts have made decisions regarding the use of English and/or native language in instruction, they must attend to each of these elements to insure that newcomers receive effective instruction.

For each element, we provide the rationale for its importance, explain its defining features, and provide examples of how it might be used in classroom practice. The minimal research that has evaluated these instructional approaches requires that teachers and administrators monitor and evaluate their effectiveness for their students. For some of these recommendations, their effectiveness will also depend on the degree to which they match students' strengths and weaknesses.

1. All middle and secondary school classrooms must address the language and literacy skills adolescent newcomers need for content area learning.

Why?

To meet the increasing literacy demands of the workplace, all students must leave high school with the ability to speak and understand academic English, read complex texts for understanding, and write expository texts proficiently. These are not simple goals, particularly for students who enter middle and high school with limited English proficiency. Such students must acquire the content knowledge, academic vocabulary, command of language structures, and strategic thinking skills necessary to meet these goals, in a relatively short period of time. For adolescent newcomers, the challenges of content-area texts can be even greater than for other students and these students' learning must be accelerated toward these grade-level content standards very quickly.

The growing consensus among educators and researchers is that preparing all students for academic reading and writing tasks requires an understanding that content-area reading (e.g., mathematics, social studies) provides unique challenges to students with respect to sophisticated language and text structures. Therefore, content-area instruction must incorporate support for the language and literacy demands of the material[11]. This is especially true for those students entering high school less equipped with academic language, including ELLs and many of their native English-speaking classmates. No longer can educators assume that English Language Arts teachers alone will carry the burden of teaching students to read to learn. Instead, a content-based literacy approach that incorporates explicit instruction in language and literacy addresses the needs of all adolescent learners, but in particular has the potential to draw on the cognitive skills and knowledge of many newcomers.

How?

The goal of a content-based literacy approach is the successful comprehension of content-area texts (e.g., a social studies textbook, a science article, a math conceptual word problem) and successful writing of expository texts in the content areas (e.g., an historical analysis essay, a lab report, an explanation of how a problem is solved in math). Similarly, this approach involves the identification of potential sources of students' comprehension difficulties, and targets instruction to address them. As part of this approach, teachers provide explicit instruction in language and literacy skills (e.g., vocabulary instruction) within the context of meaningful purposes for reading and writing (e.g., to learn about the human circulatory system or to write a persuasive essay taking a position on U.S. foreign policy). This content-based approach anchors instruction in the literacy demands facing students encountering middle and high school texts, rather than in the remediation of "basic" reading skills.

> ### Content-based Language & Literacy Instruction in Action
>
> *The International High School at La Guardia Community College in New York serves newcomers with fewer than four years of residence in the U.S. at the time of application, and sends more than 90 percent of its graduates on to college[14]. The curriculum revolves around a content-based literacy approach. Unlike traditional ESL instruction, the students learn academic English skills in heterogeneous classrooms focused on content-area learning. The curriculum is organized around interdisciplinary themes, such as "Origins," "Inquiry and Action," or "World of Money." Each theme is developed by a team of teachers and integrates challenging material with intensive study of academic English.*

In a content-based approach, teachers evaluate their students' needs relative to content knowledge and to content-specific language and literacy demands. Teachers begin their planning aware of the content knowledge and concepts that students need to learn based on grade-level content standards[12]. Then they identify the particular challenges that newcomers are likely to encounter with respect to literacy (e.g., students may lack strategies to effectively scan a chapter for key terms) and language (e.g., they may lack the vocabulary for the key concepts or lack an understanding of particular sentence structures to explain a process). Based on this information, teachers identify

two objectives for each lesson: one for content learning and another for language and literacy learning. In teaching toward those dual objectives, teachers address content through language as well as language through content.

For example, a science teacher focused on a cell biology text can improve reading comprehension and increase content area learning by building background knowledge before reading or by teaching relevant conceptual vocabulary. Alternatively, a history teacher can teach historical thinking by having students write an essay on the causes of the Civil War. This is also an opportunity to teach her students about cause and effect sentence structures in writing. This process is modeled within *Sheltered Instruction Observational Protocol (SIOP),* a lesson-planning approach designed to meet the needs of ELLs in content-area classes[13].

2. All adolescent newcomers need instruction in academic language— the language they need for text comprehension and school success.

Why?

All students require proficiency in academic language. Whether the task is comprehending a challenging text, composing an essay for a state writing assessment, or participating in an academic discussion, command of academic English is essential. Language proficiency includes various aspects of vocabulary knowledge, grammar, and listening comprehension skills. For native English speakers[15] and ELLs[16], there is a strong relationship between language skills—especially vocabulary—and reading comprehension. The relationship is a reciprocal one: Knowing more words supports successful comprehension, while successful comprehension and more reading lead to more opportunities to learn words. Although few would disagree with the importance of vocabulary instruction for adolescent newcomers, current practices are not necessarily sufficient to support the development of vocabulary knowledge, which is a sophisticated, complex undertaking[17].

There are two important distinctions to be made about vocabulary: The first is the distinction between *breadth* of vocabulary knowledge (the number of words one knows) and *depth* of vocabulary knowledge (how well one knows the meaning(s) of a word). *Depth* includes knowing a word's multiple meanings, its relationship to other words, its connotations in different contexts, and the various ways that it can be changed into other forms (e.g., noun to adjective) or other words (e.g., into antonyms)[18]. ELLs, including newcomers, are likely to be

limited in breadth and depth of vocabulary. The second distinction is between teaching words that are new *labels* for existing *concepts* and words that are new concepts. This distinction is particularly important for adolescent newcomers. Some may arrive at school with a large number of well-developed academic concepts but need the English words and proficiency to describe them, whereas other adolescent newcomers may need in-depth instruction in new academic concepts and the corresponding vocabulary.

How?

Effective vocabulary instruction for adolescent newcomers is *explicit*, *systematic*, *extensive*, and *intensive*. To be explicit, it must include not only direct teaching of the meanings of specific key words but also include direct instruction in effective word-learning strategies, such as breaking words down into parts, using contextual clues, and using glossaries and dictionaries as references. To be *systematic*, teachers must thoughtfully choose the words that they teach, identify the most useful general academic words that are not specific to any one particular text, and create multiple opportunities for meaningful exposure to the words and their meanings. To be *extensive*, vocabulary instruction should be incorporated into virtually every lesson, every day, and across the curriculum. Vocabulary instruction across the curriculum is arguably the most important instructional leverage point for adolescent newcomers[b]. Finally, to be *intensive*, vocabulary instruction should teach for depth of knowledge, giving students an understanding of multiple meanings of words, relations with other words, and different forms of words. Teaching for depth of vocabulary requires a significant investment of time, but is crucial if students are to develop academic language to be used independently for learning.

Effective vocabulary instruction for newcomers, as for other ELLs, begins with careful selection of words to teach. Researchers agree that teachers should identify and invest the majority of time in teaching general-purpose academic words—such as *analyze*, *frequent*, and *abstract*[19]—that are sophisticated in meaning but also appear in a variety of academic texts. The selection should start with the specific academic texts used in the classroom. Unfortunately, textbooks are not always helpful in the selection of vocabulary words; most often the words highlighted in them are simply rare and interesting words, such as *dandelion* or *burrowed*. These words appear so

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[b] In fact, such systematic, intensive vocabulary instruction is fundamental to the educational attainment of many subgroups of learners, including racial and ethnic minorities and children from low income households. The benefits of a curriculum-wide focus on the development of students' academic language would be felt across the population of learners at a school.

rarely in other texts that they are unimportant compared to *analyze* or *abstract,* which appear across texts[20]. And focusing on simply rare or interesting words that are not key to comprehension can actually distract a reader from the main idea in the text[21]. These considerations are doubly important for teachers of newcomers who have to select the words to teach from a very large number of words that are unfamiliar for their students.

Complexities of Academic Language:
What Makes Texts Difficult for Newcomers

If we examine these three sentences that adolescent newcomers might encounter in a text, we notice several potential sources of language difficulty:

1. When father heard that Lisa had ripped up the letter from Steve, father commended her for it.

2. The mother made him get out and he ran off.

3. Directions. Make and record three observations.

The first example illustrates how context can often be unreliable; based solely on the context of the word, a student might suspect that "commended" has a negative connotation. The second example illustrates how the multiple meanings of words can cause difficulties for students with shallow vocabulary knowledge; a newcomer may know the meaning of "make" as "to build" and thus not comprehend the sentence. The third example illustrates the important role that academic language can play in a content-area text (even one as simple as a sentence providing directions); without a solid understanding of the scientific concept of an observation, it will be difficult for a student to complete the task.

In addition to the selection of which words to teach, the other key decision for educators designing vocabulary instruction centers on striking a balance between *direct teaching of word meanings in meaningful contexts* and *teaching word-learning strategies.* Although good readers learn many words just by encountering them while reading, struggling readers can find it difficult to discern the meaning of novel words from context. Thus, direct instruction in the meanings of specific words is crucial. Such instruction should engage students in using the words while speaking and writing. Moving beyond the common, yet insufficient, techniques of copying definitions or writing sentences with the words, students should engage in using words in multiple, meaningful ways. For instance, students should talk with peers to connect words to their

> ### *Complexities of Academic Language: A Math Example*
>
> *Just before the bell rang at the end of class, Faith measured the following two dimensions of a right rectangular prism.*
> *Length: 9 centimeters   Width: 6 centimeters*
> *She did not have time to measure the height of the prism, but she knew that the volume of the prism was 162 cubic centimeters.*
> *a. Based on Faith's information about the prism, what is the height, in centimeters, of the prism? Show or explain how you got your answer.*
> *b. What is the total surface area, in square centimeters, of the prism? Show or explain how you got your answer.*
> *c. If the length, the width, and the height of the original prism are all doubled, the resulting prism has a total surface area that is m times greater than the total surface area of the original prism. What is the value of m? Show or explain how you got your answer.*
> *d. If the length and the width of the original prism are both doubled, the resulting prism has a volume that is n times greater than the volume of the original prism. What is the value of n? Show or explain how you got your answer.*
>
> *This example, drawn from a state math standards text[14], illustrates some of the complexities of language involved in solving a math problem. First, students need to have a deep understanding of key math concept vocabulary, such as* "dimensions," "volume," *and* "surface area." *Second, students need to know the math-specific meaning of the multiple-meaning word* right, *as in a* right rectangular prism. *Third, students need to be able to understand that* "If" *in c. and d. signal that a new hypothetical situation is being described and that* "resulting prism" *refers to the prism in this situation. Students must also be able to establish which information is essential to solving the problem and which is not.*

personal experiences, to other words learned, and to different versions of the word. Similarly, teachers should hold students accountable for using words taught when writing for academic purposes.

Given the enormity of this task of learning words, no teacher or curriculum can possibly expose newcomers to, and directly teach, knowledge of the many thousands of words that are needed for academic success. Therefore, in addition to providing direct instruction of particular words, teachers must also provide students instruction that equips them with strategies to more effectively learn words independently while reading and engaging in conversation. Effective word-learning strategies for ELLs include breaking a word down into parts and/or using surrounding words to determine the

meaning of a word and using dictionaries or glossaries[22]. Additionally, depending on their native language oral and reading proficiency, some ELLs may benefit from instruction in recognizing cognates, words that have similar structure and meaning in the two languages (e.g., "information" in English and "información" in Spanish)[23]. Estimates indicate that over 30 percent of English words share common roots with words in Spanish and many of these are academic words.

3. Adolescent newcomers need direct, explicit instruction to support their comprehension of challenging texts.

Why?

Consistent with findings for native English speakers, research indicates that adolescent newcomers benefit from direct, explicit instruction in reading comprehension[25]. Many students in middle and high school—ELLs and native English speakers alike—can accurately and automatically read words aloud but struggle to comprehend what they read[26]. These "automatic word-callers" often struggle when asked to approach texts strategically, monitor their understanding, and learn new information from texts. Effective comprehension instruction focuses on these skills and strategies, which are especially important for adolescent newcomers.

How?

Effective comprehension instruction is explicit and purposeful, engages students actively, and promotes students' own understanding of the process of reading comprehension. To be explicit, teachers must define, explain, discuss, and reinforce good comprehension practices in multiple contexts and across different types (i.e., genres) of text. Educators should connect strategies to the specific purposes of reading certain texts (e.g., to learn about the Civil War or to solve an algebra problem) and should present these strategies as part of the active process of comprehension. To be engaging, instruction should be planned in such a way that students understand that they need to focus on the language and the thinking behind the strategies. This approach to strategy instruction stands in direct contrast to approaches that teach strategies as procedures to be memorized. To promote student thinking and reflection on the reading comprehension process, the goal of instruction should be for readers to be able to independently monitor their own understanding, identify when comprehension breaks down, and use appropriate strategies to address their difficulties.

> **Reading Comprehension Instruction in Action: Reciprocal Teaching**
>
> *Reciprocal teaching is a* scaffolded *approach to teaching* comprehension strategies. *Although designed for native English speakers who struggle with reading comprehension, it is an instructional practice that has been found effective for ELLs as well[28]. Aimed at teaching students, who work together in small groups, to actively process text, it involves teacher modeling of four critical strategies (i.e., questioning, clarifying, predicting, and summarizing) and gradual transfer of responsibility for implementing these strategies to students. Through extended discussions and modeling, students learn to apply the strategies independently and with different texts. For ELLs, the approach provides explicit instruction in comprehension strategies, teacher support for understanding language, and extensive opportunities for students to use academic language with peers. The following excerpt from a reciprocal teaching conversation illustrates how the teacher can scaffold the language demands for a struggling 7th grade student learning to ask questions[29].*
>
>> TEXT: Spinner's mate is much smaller than she, and his body is dull brown. He spends most of his time sitting at one side of her web.
>
> **Student:** *(No question)*
> **Teacher:** *What's this paragraph about?*
> **S:** *Spinner's mate. How do spinner's mate…*
> **T:** *That's good. Keep going.*
> **S:** *How do spinner's mate is smaller than… How am I going to say that?*
> **T:** *Take your time with it. You want to ask a question about spinner's mate and what he does, beginning with the word "how."*
> **S:** *How do they spend most of his time sitting?*
> **T:** *You're very close. The question would be, "How does spinner's mate spend most of his time?" Now, you ask it.*
> **S:** *How does spinner's mate spend most of his time?*

As outlined in the recent *Reading Next* report, there are at least five approaches that have been shown to be effective in improving students' reading comprehension and that are promising approaches for use with adolescent newcomers[27]. These approaches are important elements of literacy instruction which should be used in connection with vocabulary instruction. They include:

1) *comprehension strategies instruction,* in which strategies of various types are explicitly provided to students to use with a wide variety of texts,

2) *comprehension monitoring and meta-cognitive instruction,* in which students are taught to consciously monitor their own understanding, reflect on the processes by which they make sense of text, and identify when and where their understanding breaks down,

3) *teacher modeling,* in which teachers think aloud to make their use of strategies apparent to students,

4) *scaffolded instruction,* in which teachers provide high levels of support for students practicing new skills and then incrementally decrease support as students become increasingly independent in their use, and

5) *apprenticeship models,* in which teachers act as content-area experts and apprentice students in the ways of reading and writing within their subject area.

Although many good readers employ these approaches to reading comprehension automatically and unconsciously, others, particularly ELLs, require direct and explicit attention to use them successfully.

4. Adolescent newcomers must receive intensive instruction in writing for academic purposes.

Why?

Reading and writing are closely related and therefore adolescent newcomers are likely to struggle with academic writing for many of the reasons previously discussed, including limited oral proficiency in English, limited exposure to English texts, and possible gaps in background knowledge for the topic at hand. It is important to note that given the interrelatedness of reading and writing, intensive and effective instruction in writing can improve reading comprehension as well as writing skills[30].

How?

Effective writing instruction, like effective reading instruction, must be guided by an understanding of the specific sources of students' difficulties and/or targeted skills for improvement. Writing instruction for newcomers must be integrated with instruction in academic language and reading comprehension in order to provide the kind of repetition that all ELLs—but especially adolescent newcomers—require to develop proficiency in all aspects of literacy. By providing a variety of opportunities for students to write for meaningful, academic purposes, and by building in opportunities for feedback (e.g., student conferences) students can engage in language learning in different ways. Further,

writing provides a unique opportunity for students to produce academic language without the time pressure involved in speaking, and if done correctly can also be a non-threatening way in which to try out the use of different, new words.

Research conducted with native English-speaking adolescents has demonstrated that teaching writing strategies, having students summarize information in a written format, providing models and support for writing, and using approaches that teach the steps in the writing process (e.g., pre-writing, drafting, revising) are effective ways to improve students' writing[31]. However, traditional explicit grammar instruction that is taught in isolation, outside of meaningful contexts—a fairly common practice in English-as-a-Second-Language classrooms—has not been shown to be effective and can actually detract from writing proficiency. Instead, approaches that encourage students to think purposefully about language while writing to communicate meaning, and to reflect on this process, are more promising. For instance, a sentence-combining approach to grammar instruction, in which students are taught to use more complex and sophisticated sentence structure through activities in which they combine two or more basic sentences to build a meaningful composite sentence, can be effective in improving students' writing. Research with adolescent ELLs is scarce, but there is some evidence that writing about content, opportunities for independent reading, and teaching students to revise may improve these learners' writing[32].

5. Effective classroom instruction begins with systematic assessment of students' strengths and needs as well as ongoing monitoring of students' progress.

Why?

Although all newcomers may qualify for a program on the basis of recent arrival to the U.S. and beginning English proficiency, these two commonalities mask very striking and important differences within this population—differences that have a significant impact on academic achievement. Adolescent newcomers vary with respect to native language skills and content knowledge as well as their proficiency in English. In any given classroom of newcomers, variation in students' mathematical computation skills, knowledge of the scientific process, experience with Social Studies concepts, and general academic competencies are likely to vary more than in almost any other single classroom. Some students may arrive with grade-level reading skills in their native language and having studied advanced mathematics, whereas others may have never

attended school in their home country or learned to read or do basic calculations. Because of these differences, adolescent newcomers progress at very different rates and instruction must be calibrated accordingly. And because of these differences in abilities, rates of learning, and English language development, ongoing assessment of students' language, literacy, and content skills must be a guiding force of instructional planning for newcomers.

How?

An effective assessment system focuses on multiple skills and includes different sources of information, each serving a distinct purpose. Together, sources of student data should serve to identify students' difficulties as well as strengths, monitor students' progress, and measure outcomes. Within the classroom, teachers may need to use multiple measures and instruments to serve these purposes[33]. High-quality classroom assessment requires multiple measures of students' skills with the aim of targeting instruction towards the sources of students' difficulties and capitalizing on their strengths. However, it's important to strike a balance between getting enough information to make sound and informed instructional decisions and not "over-testing" students.

An effective approach to assessment acknowledges that there are several dimensions to any one academic domain (e.g., language, literacy, social studies, science, math). Effective literacy assessments, for example, disentangle students' word-level decoding skills from their reading comprehension ability and identify the aspects of academic language (e.g., vocabulary, syntax, etc.)

Classroom Assessment in Action

Liberty High School in New York is a one-year program that prepares ninth grade newcomers—many of whom have had interrupted schooling and approximately a quarter of whom are not literate in their first language—to enter mainstream high schools. Based on initial assessment of their English language proficiency and native language literacy, students are placed in one of eight different levels in an English-as-a-Second-Language course. The staff has generated assessments to be used for placement and progress monitoring purposes at each level, as well as authentic performance assessments based in the curriculum. Teachers work collaboratively to design their curriculum based on the information from the annual placement assessment, ongoing progress monitoring assessments conducted six to eight times a year, and informal daily assessments embedded in the curriculum[35].

that may prove challenging while reading. Similarly, assessments of newcomers' math abilities would shed light not only on students' computational skill, but also on their knowledge of math vocabulary and mathematical problem solving.

As with assessments for all students, classroom assessments of newcomers should be ongoing and integrated into instruction such that they provide quality feedback about students' progress toward rigorous standards[34]. These assessments should cover a far broader range of students' skills and provide more detailed information than traditional standardized assessments. They also should provide insight into the processes involved in learning, rather than simply the products of learning. Reading comprehension assessments, for instance, should shed light on the process of comprehension as students read texts rather than simply classify students into reading levels. Effective teachers of newcomers have a systematic approach for monitoring the progress of students individually, compiling the data, and planning targeted class-wide and individualized instruction on the basis of the learner's needs.

6. Students with word-reading difficulties need targeted and explicit instruction to promote their reading skills.

Why?

The ability to decode words is a necessary condition for effective comprehension among all students, yet not all students will develop these skills without explicit instruction. As with other dimensions of academic achievement, adolescent newcomers are likely to vary considerably in their preparation for and progress in acquiring word-reading skills. Although newcomers with well-developed literacy skills in their native language are likely to make faster progress in reading than those students with limited or interrupted formal schooling, any newcomer who lacks the ability to decode words requires targeted, systematic intervention in phonics in order to benefit from higher-level reading comprehension instruction. The proportion of newcomers who need explicit instruction in decoding will depend largely on the characteristics of the specific population served. Therefore, careful identification of the source of students' word reading difficulty is crucial before providing any intervention. Further, for all students, comprehension and vocabulary instruction should begin immediately and should by no means be postponed until students have mastered the code; delaying the onset of comprehension and vocabulary instruction would only place these students at a further disadvantage.

How?

Effective interventions for adolescents who struggle to decode words are similar to those found to be effective with younger children in that they provide systematic and explicit instruction in the code of English reading. This instruction will most often need to be conducted in small-group or one-on-one settings in order to be intensive, as well as to avoid using whole-class time on instruction that is not necessary for many adolescent newcomers. These interventions are characterized by explicit instruction in letter-sound correspondences in English, including phonics instruction, and instruction to build fluency. More comprehensive interventions also include attention to the development of comprehension and vocabulary skills. Optimal intervention is carefully planned and coordinated so that it relates to and builds on classroom instruction. It is important to point out that many code-based interventions for struggling readers will begin with explicit phonemic and phonological awareness instruction—instruction in the sounds of the language. This phase of intervention can be omitted for students who are literate in another alphabetic language[36] and instead instruction should focus on the sound-symbol correspondences in English, and in turn word reading.

ORGANIZATIONAL ELEMENTS OF EFFECTIVE NEWCOMER PROGRAMS

Conceptual Framework

This section of the report focuses on factors that influence the effectiveness of instructional practices, in particular those factors that can be controlled by school and district administrators to create conditions that foster effective teaching and rapid learning for adolescent newcomers. Given the variation within the population of newcomers, the differences in the capacity of the teaching forces who serve them, and the local nature of constraints and requirements with respect to educational programming and administration, it is not possible to specify a single prototype for a "model" newcomer program. To date, there are no studies that evaluate the effectiveness of newcomer programs. However, based on case studies of exemplary programs and research conducted with native English speakers that provides guidance for theoretically sound decisions, certain elements have been identified as key ingredients for programs that serve newcomers. Although it would be desirable to have rigorous tests of the effectiveness of recommendations, both individually and collectively, such evidence is not available at this time.

These recommendations are based on a two-step process of research and review. First, potentially effective practices were identified based on a review of case studies of exemplary programs. A review of these case studies generated several practices that were potential sources of the programs' reported successes. In the second step, the theoretical and empirical bases for those practices were examined to determine if there is reason to believe that these practices would be effective for newcomers. Thus, while there was no direct evidence of the effectiveness of individual elements on student outcomes, there was empirical support for the theoretical principles behind the elements of effective programs reflected in the five recommendations that follow.

Evidence-based Recommendations for Organizational Elements

There are five specific organizational elements that are important to consider in the context of delivering effective instruction for adolescent newcomers. Although these elements do not, in and of themselves, promote language or content learning, they are likely to contribute to establishing positive environments in which students' opportunities to learn are maximized. Of

course, there are other general organizational elements that are essential to any effective school. For instance, strong leadership by principals, ongoing professional development of teachers, and internal accountability are necessary components of effective schools. However, each of the five elements described below have particular importance for newcomer programs and merit special attention by educators creating such programs[c].

1. Systematic Support for Assessment and Placement of Students

Effective newcomer programs are often supported by district and schools with formal student assessment systems. As previously described, formal assessment systems provide information to guide placement, identify students' strengths and weaknesses, monitor progress, and measure outcomes. Instructional leaders at the district level should provide support to ensure that teachers are equipped with multiple reliable and valid measures that are used consistently across schools, and that instruction is driven by the information provided by these assessments. These district and school leaders can also help bridge the gap between ongoing classroom assessments and the large-scale evaluative assessments of accountability systems by ensuring that the assessments within the system are aligned. Among newcomer programs recognized to be effective, there is often a clear understanding between district leaders and school staff about the role of student assessment in program placement, in decisions to exit students from the program, and in meeting the academic goals of the program. Assessment and placement in appropriate programs and/or classrooms is particularly important to the special case of adolescent newcomers.

In one promising model, all ELLs who enter the district spend a day or more at a central location where they are administered an extensive battery of assessments of language and content knowledge, in English and in their native language when possible and appropriate, given the individual newcomer's educational history in their native language. Based on the newcomers' language proficiency assessment results, students are then placed in specialized newcomer programs, programs with some language support (i.e., more general ESL or bilingual classes), or mainstream classrooms according to uniform criteria set at the district or state level.

This type of centralized assessment facility allows districts to pool their resources in one location, particularly in staff members fluent in a variety of

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[c] Just as the preceding recommendations on instructional practice stand outside of the question of the language of instruction, these five organizational elements are essential whether the program follows a bilingual model, a structured English immersion model, or some combination of the two.

languages, and allows greater consistency in student placement. For instance, at the Toronto District Reception Centre, newly arrived immigrants aged 13–18 undergo a day-long assessment process which involves an extensive background interview, review of academic records, and assessments in oral language, reading, math, and writing. All interviews and assessments are conducted by multilingual, certified teachers with experience teaching ELLs. Staff members then place students into the appropriate newcomer, ESL, or mainstream setting and send a detailed written report on the student to the receiving school[37]. What is an appropriate setting for a given student depends to a large extent on both the student's language proficiency and the programs in place for supporting students' language and literacy needs. Investing time and resources into student assessment and placement is the first step towards ensuring that newcomers receive appropriate instruction upon school entry. Having relatively extensive information on students' profiles and abilities is not only important for accurate placement, but it also provides valuable information for teachers. The initial report from an assessment center can serve as the starting point for a teacher's planning and the first step in an ongoing process of measuring and monitoring student learning, as described in the previous section.

2. *Heterogeneous Grouping*

Effective programs recognize that students often learn language among their peers with different levels of oral language proficiency; these programs provide structured opportunities for newcomers to work collaboratively with more advanced ELLs and native English speakers. Much research suggests that that structured opportunities for interaction with peers is an important aspect of second language learning[38]. Such opportunities include working collaboratively on a common project, discussing an academic topic, or asking one another questions about personal experiences. We acknowledge that the benefits of learning from more advanced peers can be in conflict with teachers' needs to target instruction for students at particular levels of proficiency; programs that serve newcomers address this tension in different ways. At International High School in New York—the successful newcomer program previously described above—ELLs of different proficiency levels and language backgrounds are grouped together throughout the day[39]. At César Chávez Multicultural Academic Center—another successful program for newcomers, housed in a comprehensive middle school in Chicago—students are grouped by English

proficiency level in ESL classes but grouped heterogeneously for content-area classes[40]. Such school-within-a-school programs have the added advantage that newcomers can spend part of the day learning alongside native English-speaking classmates. Although they take many different forms, effective programs share a concerted and purposeful effort to provide flexible grouping in which students can not only receive instruction targeted to their skill levels, but also have many opportunities to learn from their peers who are more proficient in English than they are.

3. Extended Instructional Time

Effective programs recognize that newcomers may not necessarily develop high levels of proficiency in English literacy and content knowledge if they are only provided with the traditional academic year of 180 six-hour days. Instead, adolescent newcomers must be immersed in language-rich environments, engaged with challenging content in English, and provided with effective instruction for more time than are their native English-speaking counterparts. For example, at the César Chávez Multicultural Academic Center, students are required to attend school year-round, with special intervention and enrichment courses offered during intersession periods. Other programs provide targeted summer school or after-school programs that are meant to supplement the instruction students receive during the regular school year.

A strong research base supports the notion that, provided instruction is deemed effective, greater time on task is essential to the success of students performing below grade level, ELLs in particular[41]. To be most successful, supplemental programs should be designed to meet individual students' specific academic needs and be well-coordinated with the overall instructional program. In addition to increasing the overall instruction time, effective newcomer programs increase the amount of instructional time focused on language and literacy development, whether through two- to four-hour ESL blocks daily, extended time for content-based literacy instruction designed with particular language and literacy objectives in mind, or, preferably, a combination of both.

4. Coordinated Efforts: Newcomer Programs, Programs for Advanced ELLs, and Mainstream Classes

Effective newcomer programs recognize that they provide temporary, short-term supports, in some cases for only part of the school day, for students' first entry into U.S. schools. A guiding principle is that following their placement in a newcomer program these students will continue to require additional support to meet high academic standards in mainstream classrooms. Most newcomer programs are characterized as a first step in a long-term process within which the students transition into increasingly integrated settings with decreasing levels of support.

For this model to be successful, teachers must coordinate curriculum and instruction across newcomer programs, ESL/bilingual programs, and mainstream classes. For instance, at International Newcomer Academy in Fort Worth, Texas, recent immigrants in grades 6 through 12 attend the academy for a semester or year. Although operated at a separate site, the program organization reflects the goals of all ELL centers, operated in 16 of the district's schools. Teachers in the newcomer program base their courses on the state's standards, an emphasis that yields substantial effects for student achievement according to district records—the program has one of the highest success rates for the district's end-of-course algebra test. Entry and exit procedures (e.g., collection of assessment data, teacher evaluation of students' placement) are carefully monitored by the district, as is students' academic progress toward state standards after leaving the program. Program counselors assist students in making the transition to mainstream middle and high schools by providing students with individual planning meetings, academic orientation to their home school, and connections to other newcomers who have successfully transitioned into a mainstream setting.

5. Targeted Resources for Language and Literacy Instruction

Effective programs—usually led by educators focused on students' core instructional needs in terms of language and content learning—target resources to those areas most likely to have an impact on student achievement. Rather than spreading resources across infrastructure, staff, or materials only tangentially related to instruction, educators leading these programs make instructional improvement a first priority, either by creating contexts that maximize students' opportunities to learn, or by supporting teachers in ways that are directly relevant to students' needs.

For instance, effective newcomer programs often have smaller class sizes in order to maximize interactions between students and to allow teachers to provide more individualized instruction. Smaller classes are particularly beneficial for those students most in need of opportunities to speak and interact with one another[42]. Similarly, effective newcomer programs provide professional development to teachers that focuses on developing teachers' knowledge of second language development, literacy instruction, and content-based literacy instruction.

CONCLUSIONS

Meeting the complex and diverse needs of adolescent newcomers is far from simple. There are several instructional and organizational elements that must be in place to serve these learners effectively. To meet the challenges posed by texts in middle and high school, newcomers require:

- content-based literacy instruction

- an instructional emphasis on developing academic language

- explicit comprehension instruction

- instruction in writing for academic purposes

There are many ways in which these instructional elements can be combined in the service of adolescent newcomers. However, to maximize their potential as instructional approaches, these elements must be combined with:

- high-quality ongoing classroom assessment

- appropriate intervention for newcomers with word-reading difficulties

To support the implementation of these six instructional approaches, we have provided five organizational elements that must simultaneously be in place:

- systems for assessment and placement

- heterogeneous student grouping

- extended time for learning

- coordinated efforts

- targeted resources

Each of these organizational and instructional elements can enhance the opportunities to learn that schools provide to newcomers. We have provided an overview of the evidence behind each element and an explanation of how it might be implemented. However, we strongly urge readers to pursue a deeper understanding of each element by pursuing the resources referenced throughout. We also support the need for more direct empirical research on the effectiveness of newcomer programs, both in terms of their individual instructional and organizational elements, and as collective packages or whole programs. In addition, more rigorous evaluations of existing programs and of modifications to programs would significantly enhance our understanding of

programs and their potential impacts on student achievement. Enabling our nation's newcomers to reach the highest standards of achievement demands the concerted and best efforts of our educators and educational researchers.

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ENDNOTES

[1] For documents that outline the demographics of this population, including its size, see NCES (2004); Capps, Fix, Murray, Ost, Passel, & Herwantoro (2005); Population Resource Center (2000).

[2] August & Hakuta (1997); Biancarosa & Snow (2004); NCES (2005a, 2005b).

[3] NCES (2005b).

[4] NCES (2005a).

[5] Texas reported performance on the 2002 state accountability assessment in English Reading for ELLs as a function of their scores on the Reading Proficiency Test in English (RPTE). The RPTE is designed to assess proficiency in English and is used to indicate when students are ready to take the state accountability test in English. The study found that 15.8% of students passed the English reading test if they scored at the Beginning level on the RPTE in 2002. This percent passing compared to 30.4% for Intermediates, 76.4% for students who scored Advanced in 2002, and 89.6% for students who scored Advanced in 2000. Similar results were found at each grade from 3 through 10, although some differences are noted between the early and later grades. Results can be found at http://www.tea.state.tx.us/ student.assessment/reporting/results/rpteanalysis/2002/reading/statewide.html. In a study of students who first entered Grade 9 in 1996, the New York State Education Agency found that 32.6% of current ELLs graduated high school in four years, while 60.1% of former ELLs graduated high school in four years, as compared to 54.5% of students who had never been ELLs. These percentages increased to 49.5%, 76.5%, and 70.5% at seven years. Thus, while former ELLs are completing high school at rates comparable to non-ELLs, it's clear that many ELLs are still not successful. For the complete report see: http://www.regents.nysed.gov/2005Meetings/March2005/ 0305emscvesidd4.html. Both reports were last accessed by the authors on September 28, 2006 in preparing this report.

[6] Capps, Fix, Murray, Ost, Passel, & Herwantoro (2005).

[7] For a discussion of academic language see Scarcella (2003), and of reading vocabulary see Nagy & Anderson (1984); Nagy & Scott (2000); Stahl (1999); Stahl & Nagy (2006).

[8] NCES (2004).

[9] August & Shanahan (2006).

[10] Genessee, Lindholm-Leary, Saunders, & Christian (2006).

[11] Biancarosa & Snow (2004).

[12] Short & Boyson (2004).

[13] Echevarria, Vogt, & Short (2004); Echevarria, Short, & Powers (2006).

[14] Ancess & Darling-Hammond (1994); International High School (2006).

[15] E.g., Anderson & Freebody (1981); Chall, Jacobs, & Baldwin (1990).

[16] For a review, see Geva (2006).

[17] Constantino & Lavadenz (1993); Roser & Juel (1982); Watts (1995).

[18] Stahl (1999); Nagy & Scott (2000).

[19] E.g., Beck, McKeown, & Kucan (2002); Graves (2006); Kame'enui, Dixon, & Carnine (1987); Stahl & Nagy (2006).

[20] Hiebert (2005).

[21] Wixon (1986).

[22] Beck, McKeown, & Omanson (1987); Carlo, August, & Snow (2005); Fukkink & de Glopper (1998); Kieffer & Lesaux (in press); Nagy, Breninger, & Abbott (2006); Nagy, Winsor, Osborn, & O'Flahavan (1993); Nation (2001); Swanborn & de Glopper, K. (1999).

[23] García & Nagy (1993).

[24] Massachusetts Department of Education (2006).

[25] NICHD (2000); Shames (1998); Klingner & Vaughn (1996).

[26] For a review on the skills of ELLs, see Lesaux, Koda, Siegel, & Shanahan, (2006); for a discussion of struggling adolescent readers, see Biancarosa & Snow (2004) and the empirical references therein. The term "automatic word-callers" comes from Buly & Valencia (2002).

[27] Biancarosa & Snow (2004).

[28] Klingner & Vaughn (1996); Hernandez (1991).

[29] Palinscar & Brown (1984).

[30] Bangert-Drowns, Hurley, & Wilkinson (2004); Berninger, Abbott, Abott, Graham, & Richards (2002).

[31] Graham & Perin (2006).

[32] Echevarria, Short, & Powers (2006); Sengupta (2000); Tsang (1996).

[33] National Research Council (2003).

[34] National Research Council (2003).

[35] Short & Boyson (2004).

[36] This recommendation is based on the theoretical work of Ziegler & Goswami (2005) and empirical evidence relating performance on phonological awareness across different languages, e.g., Branum-Martin, et al. (2006), Geva, Yaghoub-Zadeh, & Schuster (2000), and Durgunoglu, Nagy, & Hancin-Bhatt (1993).

[37] Boyson, Coltrane, & Short (2002).

[38] Blum-Kulka & Snow (2004); National Research Council (2000); Rogoff (1990).

[39] Ancess & Darling-Hammond (1994); International High School (2006).

[40] Short & Boyson (2004).

[41] National Research Council (2000).

[42] Folger (1989); Pedder (2006).