



Improving the Validity of English Language Learner Assessment Systems

FULL POLICY BRIEF

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Introduction

English Language Learners (ELLs) are the fastest growing group of students in American public schools. According to Payán and Nettles (2008), the ELL population doubled in 23 states between 1995 and 2005. The U.S. Census Bureau estimates that by 2050, the Hispanic school-age population will exceed the non-Hispanic white school-age public school population (Fry & Gonzalez, 2008). Amidst these dramatic increases, ELL achievement remains among the lowest of all students. For example, on the 2009 National Assessment of Educational Progress (NAEP), 72% of 8th-grade ELL students scored below basic in mathematics as compared to 26% of non-ELL students (National Center for Education Statistics, 2009). Despite 8 years of strong No Child Left Behind (NCLB, 2002) accountability provisions, ELL academic achievement remains one of the greatest challenges confronting states, school districts, and schools.

Drawing from a 3-year research effort funded by the U.S. Department of Education, UCLA's National Center for Research on Evaluation, Standards, and Student Testing (CRESST) has developed a list of five priorities for improving the validity of assessment systems for ELL students. We define validity as the degree to which an assessment system produces accurate information about ELL students' performance and provides a sound basis for policy decision-making. Our recommendations include improvements in:

1. English Language Proficiency Standards and Assessments,
2. ELL Classification and Reclassification,
3. Content Assessments for ELL Students,
4. ELL Test Accommodations, and
5. Teacher Capacity and ELL Students' Opportunity to Learn.

Recognizing that economic conditions across the United States are challenging and that states are often in different places on their ELL programs, we have prioritized each recommendation as 1, 2, or 3 (with 1 being the highest) and estimated resource

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requirements as high, moderate, or low, to assist states and school districts in improving ELL assessment policies and practices. Recommendations are based on a series of CRESST research reports from the 3-year project and comprehensive input and feedback from state and school district ELL experts and policy makers at the 2009 Council of Chief State School Officers Assessment Conference. Research findings from the project that led to the specific recommendations are described throughout this document (see Appendix A for the list of CRESST reports including the 3-year project research). We conclude with our recommendations for new research and an urgent call to action.

We encourage states and school districts to use this document as a guide for discussion and action. Both an action guide (Appendix B) and a recommended readings list (Appendix C) are included at the end of this policy brief to help states and school districts discuss, evaluate, and improve the validity of their ELL accountability systems. As with all CRESST's work, we welcome your feedback and suggestions.

1. English Language Proficiency Standards and Assessments

A valid ELL assessment system begins with clear, high quality standards and close alignment between standards and assessments. Standards, including content and performance expectations, establish goals for curriculum, teaching, and learning, whereas assessments provide data on how well students are doing. For systems to work well, the two must be in sync. However, our research revealed that alignment, especially between state English language proficiency (ELP) standards and ELP assessments, frequently needed improvement. We found, for example, that some states have clear mismatches between the proficiency levels articulated in their ELP standards and those in their ELP assessments. Table 1 shows differences in both the number of levels and terminology across and within three states. Such misalignment may lead to confusion about learning goals and inaccurate interpretations by schools, districts, and states about ELL students' degree of English acquisition.

Table 1
State ELP Standards and ELP Assessment Proficiency Levels for Three States (2006–2007 School Year)

State	State ELP standards proficiency levels	State ELP assessment proficiency levels
State 1	(4 levels) Beginning, Intermediate, Advanced, Transitional	(5 levels) Level 1, Level 2, Level 3, Level 4, Level 5
State 2	(4 levels) Beginning, Lower Intermediate, Upper Intermediate, Advanced	(5 levels) Entering, Beginning, Developing, Expanding, Bridging
State 3	(6 levels) Pre-production, Early Production, Emergent, Intermediate, High Intermediate, Transitional	(5 levels) Pre-emergent, Emergent, Basic, Intermediate, Proficient

Table 2
Level 5 ELP Standards Level Definitions from Two States

State 1 Advanced – Level 5	State 2 Advanced – Level 5
<ul style="list-style-type: none"> • Apply knowledge of sound/symbol relationships and basic word-formation rules to derive meaning from written text (e.g., basic syllabication rules, regular and irregular plurals, and basic phonics). • Apply knowledge of academic and social vocabulary while reading independently. • Be able to use a standard dictionary to find the meanings of unfamiliar words. • Interpret the meaning of unknown words by using knowledge gained from previously read text. • Understand idioms, analogies, and metaphors in conversation and written text. 	<ul style="list-style-type: none"> • Understand and obtain meaning from a wide range of texts available to native English speakers. • Read academic texts at the appropriate level. Understand a variety of literary genres. • Read and comprehend grammar and rhetorical features appropriate for the grade level. • Master strategies of reading comparable to native English-speaking students at their grade level. • Understand vocabulary that is basic and academic and be able to figure out technical vocabulary. • Read and interpret texts across the curriculum.

We also found that definitions of proficiency and the levels through which proficiency developed varied widely across different states, making comparisons between states difficult. This finding also highlights the absence of any common academic English language framework on which states’ ELP standards should be based. Table 2 shows definitions from two states for their highest proficiency level on their respective ELP standards in the reading domain. The underlying standard from State 1 emphasizes decoding skills and strategies to find word meanings, while State 2 highlights the various genres and rhetorical features in academic texts. State 2 also emphasizes the understanding of different types of vocabulary. Which formulation best prepares ELL students for success is moot, as may be the relationship between ELP standards and the language competencies ELL students need for success in academic content.

Consequently, we suggest the following:

Recommendation 1.1: ELP standards and ELP assessments should be aligned with each other and with the related content standards.
(Priority: 2, Resources: Moderate)

Detail: Valid ELL assessment systems begin with rigorous state standards that drive all parts of learning, including state content standards, ELP standards, ELP assessments, instruction, classroom assessment, and professional

development. Close alignment of these components helps schools to know if ELL students are meeting or not meeting the standards. As illustrated in Table 1, however, improvement is needed to align the descriptions and the number of proficiency levels between ELP standards and an ELP assessment within a state. As the No Child Left Behind Act of 2001 (NCLB, 2002) specifies, the alignment between ELP and content standards should be taken into consideration in this alignment improvement work. By doing so, schools and teachers can more efficiently use the assessment results to adjust instruction or provide interventions for ELL students’ English development.

Recommendation 1.2: ELP standards should include essential academic English language requirements.
(Priority: 2, Resources: Moderate)

Detail: There is widespread consensus that academic language proficiency is one of the key factors in determining students’ success in schools. Although states have developed their ELP standards with an emphasis on academic English language development, academic English is variously defined as seen in Table 2. Our research also revealed substantial variation in the degree and complexity of academic English presented in two ELP assessments. As a substantial body of theory and research is now available on the nature and development of academic English, states need to revisit their ELP

standards to ensure their consistency with available knowledge (Bailey, 2007; Chamot & O'Malley, 1994; Scarcella, 2003; Schleppegrell, 2001).

2. ELL Classification and Reclassification

Because assessment data are used to draw inferences about ELL performance and often to compare performance across time and locales, the adequacy and consistency of ELL classification and reclassification are key issues to consider in improving the validity of ELL assessment systems. Figure 1 shows a typical process.

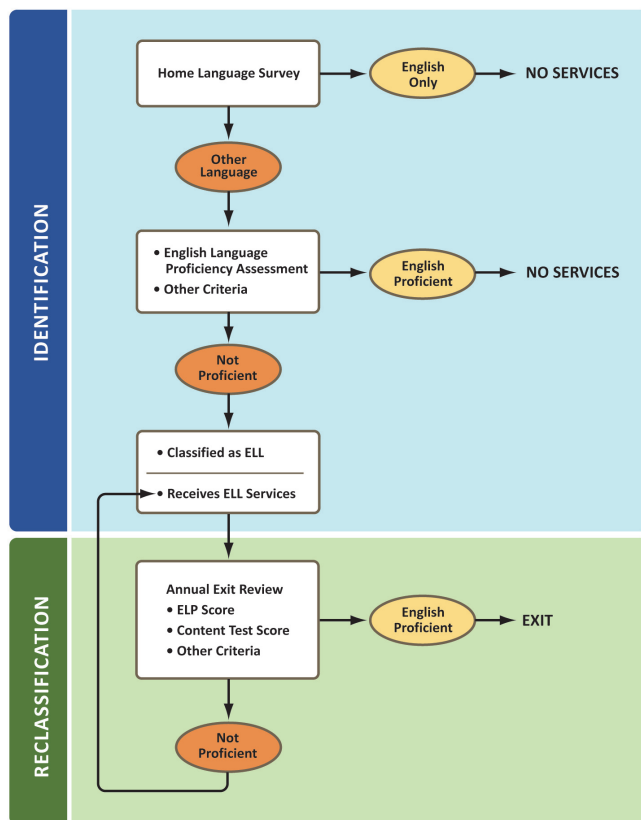


Figure 1. Common procedure for identifying and reclassifying ELL students (source: Wolf et al., 2008).

Our review of policies and practices revealed that states often used very different processes to identify and reclassify ELL students. For example, although there was a trend for states to use a single evaluation tool (i.e., ELP assessment) to identify English language learners, our research found that 16 states allowed local school districts to base the decision on a locally selected language assessment from an approved state list. Such practices, while supporting local flexibility, raise major comparability issues both within and across states.

Migrant students, who are oftentimes ELL students as well, may be especially impacted by lack of standardization. Migrant ELL students may be identified or reclassified in one school district or state, for example, but not identified or reclassified in another, merely due to inconsistent state criteria. Reporting may be negatively affected and migrant ELL students may receive inappropriate or inadequate services.

Similarly, for reclassifying ELL students, we found that states often used a number of different criteria, ranging from ELP test scores, content test scores, school personnel input, parent or guardian input, student grades, interviews, and observations. Figure 2 shows, for example, that 14 states used just one criterion, an ELP assessment, to reclassify students as English proficient. Eleven states used two criteria, usually test scores from both the ELP assessment and the content assessment. Eighteen states allowed individual districts to set their own reclassification criteria, which included subjective decisions. Such diverse methods inevitably lead to inconsistent identification and reclassification of many students, thus posing a central threat to the validity of the accountability system. Solutions are straightforward and should have low resource impact, leading to clearer understanding for all constituencies in the identification and reclassification processes.

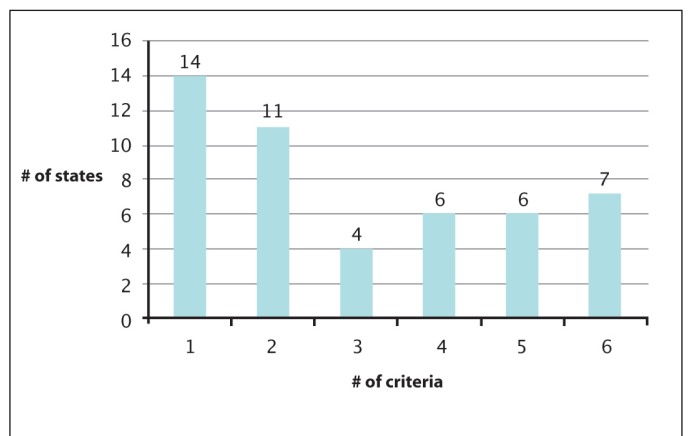


Figure 2. Number of criteria states use for ELL reclassification decisions, 2006–2007 school year.

Recommendation 2.1: States should clearly define ELL terms and be consistent in their use.
(Priority: 2, Resources: Low-Moderate)

Detail: Different terms and definitions for ELL students (e.g., non-English proficient, limited English proficient, language minority, or reclassified fluent English learner)

may imply different understandings of and attitudes toward ELL students. Simple, consistent definitions and descriptions should be used in all documents, which can help practitioners implement ELL policies appropriately. In particular, the definition for reclassified students should be clear so that practitioners understand what it means to be a reclassified student. Clear definitions will help the right ELL students receive the instruction and accommodations they need, while increasing the validity of reports.

Recommendation 2.2: States should evaluate and standardize their identification, classification, and reclassification criteria for ELL students.

(Priority: 1, Resources: Moderate)

Detail: State policy and supporting documents should specify the methods and criteria for identifying, classifying, and reclassifying ELLs. If multiple criteria are used, policy guidelines should specify how each criterion should be employed. Policies should specify whether and how the criteria may be modified by local districts due to their specific needs. Additionally, states should require local districts to document the criteria used to make decisions for each student.

Recommendation 2.3: States should examine their reclassification rates and evaluate the effects of their reclassification policies.

(Priority: 2, Resources: Moderate)

Detail: We found that different reclassification policies were associated with different ranges in achievement gaps between ELL and non-ELL students. For example, reclassified students in states that required ELL students to reach the highest proficiency levels on their ELP test in order to exit ELL status often performed higher than their non-ELL peers on content assessments. On the other hand, reclassified students in states with more lenient ELL exit standards performed comparably to other ELL students on content assessments. We note that a strict reclassification policy may generate more long-term ELL students who have been identified as ELL for over 3 years. Few state ELP reclassification programs focused on the underlying causes and possible solutions for students who fail to become reclassified as fully English proficient. Without clear reclassification policies and adequate school or classroom support, ELL students may be retained in English learning remedial programs and have limited

access and time for other challenging courses. This may delay graduation and have negative postsecondary consequences.

States and districts need to closely analyze ELL student performance on both content and ELP assessments for exiting or close-to-exiting students as well as long-term ELL students. We recommend that states, districts, and schools regularly use data systems to track reclassification rates and evaluate whether their reclassification policies have positive or negative consequences for reclassified and long-term ELL students. States should revise policies if necessary.

Recommendation 2.4: States should create a longitudinal database system to provide validity evidence for ELL assessments and to support appropriate decisions for ELL students.

(Priority: 2, Resources: Moderate)

Detail: Longitudinal databases to support ELL identification and reclassification decisions should include unique student identification numbers that are used consistently across schools. Databases should contain detailed background information (e.g., native language, level of English language proficiency, instructional history, mobility, socioeconomic status) to enable investigations of the validity and effects of decisions from the assessments across ELL subgroups. The data should link individual student and teacher IDs so that student performance can be linked to teacher professional development and can guide the improvement of instruction for students' specific needs.

3. Content Assessments for ELL Students

Content assessments—for example, state assessments of math, science, or English language arts—are developed for the purpose of measuring knowledge, skills, and understanding of academic content (i.e., the intended construct). A fundamental validity concern for any assessment is that it measures the intended construct(s) and is not confounded by constructs that are not the intended target of the assessment. Because it requires at least some language skills, even a math content test administered in English is therefore also a test of English skills for ELL students. Consequently, the language demands of any test may get in the way of ELL students showing what they know and inappropriately constrain

their performance. The following recommendations will lead to more valid content assessment results for ELL students.

Recommendation 3.1: States should include explicit item-writing rules and specific principles in their content test Requests for Proposals (RFPs), specifying that test developers avoid unnecessary linguistic complexity on test items. (Priority: 2, Resources: Moderate)

Detail: In one of our studies, we examined language characteristics in three states' mathematics and science assessments. Despite the limited amount of text in the test items, we found a broad and varied range of linguistic complexity among the three states. Some assessments were linguistically complex, while others were less so. The item-writing guidelines and principles adopted by each state were associated with the linguistic complexity of that state's items.

Figure 3 illustrates how a math test item may be linguistically modified to increase ELL understanding (Abedi, 2009). The original version begins, "A certain reference file contains approximately..." The modified version simplifies the language to, "Mack's company sold..." The modified version is linguistically easier to understand without changing the construct being assessed. Research indicates that linguistic modification helps performance of other low-performing students, not just ELL students (Abedi, 2006).

Original:	Modified:
A certain reference file contains approximately six billion facts. About how much millions is that?	Mack's company sold six billion pencils. About how many millions is that?
A. 6,000,000	A. 6,000,000
B. 600,000	B. 600,000
C. 60,000	C. 60,000
D. 6,000	D. 6,000
E. 600	E. 600

Figure 3. Example of linguistically modified test item (Abedi, 2009)

Recommendation 3.2: Test validation should include procedures to identify and reduce potential item bias in content items. (Priority: 2, Resources: Low-Moderate)

Detail: Whereas Recommendation 3.1 applies to the test developmental stage, this recommendation calls for review

and empirical study of ELL performance during field and/or operational tests. We recommend that content reviews of linguistic complexity be combined with differential item functioning analyses for ELL students to identify items that may be biased against ELLs, that is, those items that ELL students miss at a substantially higher rate than non-ELL students of the same ability level. Biased items should be carefully examined and revised or replaced as appropriate. Our research results clearly indicated that easy items (based on non-ELL students' performance) with more complex language are likely to function differentially against ELL students (Wolf & Leon, 2009). States and/or test developers should make efforts to examine ELL students' performance and the language characteristics in their content assessments.

4. ELL Test Accommodations

Test accommodations are changes intended to make content tests more accessible for students who otherwise would face obstacles in showing what they know but without changing the construct(s) measured by the test. For ELL students, test accommodations—changes in test administration settings, administration procedures, and/or tasks—are aimed at reducing the confounding of language and content knowledge and skills on content tests administered in English. Accommodations are intended to "level the playing field" for ELL students, helping them take the same tests as mainstream students. However, our studies raised concerns on the use of some accommodations, including the consistency of accommodation use and the comparability of accommodated and non-accommodated scores. We make the following suggestions to increase the appropriate and valid use of accommodations.

Recommendation 4.1: States should provide comprehensive accommodation guidelines based on current research for selecting and using ELL accommodations. Assign responsibility of disseminating guidelines to a specific person. (Priority: 2, Resources: Low-moderate)

Detail: Although many states have made progress in developing and producing accommodation guidelines for ELL students, our case studies and examination of existing state and local school documentations and databases revealed great variability in guidelines and practices. We found that detailed state guidelines were associated with better school and teacher knowledge of

accommodation policies and procedures, as well more consistent implementation and compliance with state provisions. Detailed guidelines can help increase the comparability of ELL results to non-ELL students.

But just having guidelines is not enough. In our studies, we found that most schools did not have an ELL specialist or coordinator. These schools often had difficulty following sound accommodation practices, resulting in incorrect or even no accommodations provided to ELL students. State policy accommodations should specify:

Who is eligible for accommodations? We found that many teachers did not know who was eligible for accommodations. When teachers clearly know who is eligible for accommodations, they usually provide similar accommodations during instruction and classroom assessment, thereby helping ELL students prepare for state-level tests.

Who makes accommodation decisions? We recommend that a team of both content and ELL teachers be the decision makers who meet regularly to identify students' needs and assign appropriate accommodations.

Accommodations assignment criteria. State guidelines should specify useful assignment criteria to local decision makers, based on students' native language, levels of English language proficiency, content test results, and instructional practice. For example, one of our studies found a positive accommodation effect when it was administered to ELL students who had acquired content knowledge and had previous experience with the given accommodation. Such research-based examples could help inform specific state guidelines.

Allowable and prohibited accommodations. States should clearly specify both allowable and prohibited accommodations by content area and grade level. Clear definitions of each accommodation and its implementation procedures should also be included. Our case studies revealed, for example, that read-aloud accommodations were often interpreted differently by teachers. Some teachers read aloud just the test directions, others read aloud part of each test question, and still others read aloud the complete test. Providing a clear, operational definition and a detailed description about administration procedures will help teachers use the accommodations in a standardized way, resulting in enhanced comparability.

A key person, such as the testing coordinator or the ELL specialist, to help teachers and school administrators accurately implement accommodations. This individual should be well informed of state or district accommodation policies and monitor local implementation.

Recommendation 4.2: States and districts should conduct regular professional development meetings to inform both content and ELL teachers about appropriate accommodations use.

(Priority: 2, Resources: Moderate)

Detail: Comprehensive accommodation guidelines will be of limited value if teachers are not provided with appropriate training to implement the guidelines. Our research findings showed that few teachers, especially content teachers, were provided sufficient opportunities to understand and implement existing state ELL accommodation policies. This insufficiency was particularly true for content teachers. Professional development should include information on the latest ELL assessment and accommodation research findings in order to promote the valid use of accommodations linked to empirical evidence of what and how accommodations best work for ELL students.

Recommendation 4.3: State guidelines should require systematic recording on a statewide database of specific accommodations provided to individual students. Such data can be used to evaluate the validity and efficacy of accommodations.

(Priority: 2, Resources: Moderate-High)

Detail: Our studies found that states lacked adequate records of the accommodations provided to individual students on states' standards-based content assessments. We also found a substantial mismatch between state and local school records of accommodations administered to individual ELL students. As part of the test administration procedures, schools also should document who was involved in accommodation decisions and the accommodations each ELL student received.

Entry of accommodations data in a statewide database (see Recommendation 2.4) can promote transparency across different levels of reporting (i.e., state, district, and school) and can function to increase the accuracy of school accommodation records. Accessible to teachers, the database should contain ELL characteristics (e.g., native language, English language proficiency levels,

mobility) and the types of accommodations provided to each student. Establishing systematic recording practices will provide valuable information to improve the validity of assessing ELL students' content knowledge and skills. The information will also help states identify successful and less successful accommodation strategies for specific student groups and individual students.

Recommendation 4.4: States and districts should monitor the use of accommodation guidelines regularly to ensure consistent application of accommodation policies.

(Priority: 3, Resources: Moderate-High)

Detail: An effective accommodations monitoring process can help policy makers evaluate and improve local schools' accommodation usage and further inform policies and guidelines. Regular monitoring will boost active implementation of accommodation guidelines, improve data-recording practices, and promote comparable data from one locale to the next. As part of the monitoring process, states not only need to analyze the accommodation data, examining the extent to which the individualized accommodations are implemented during testing, but also have occasional meetings with district personnel to gather information on the effectiveness of the implemented policies.

5. Teacher Capacity and ELL Students' Opportunity to Learn

Accountability systems are intended to support the improvement of learning. The quality of ELL students' opportunity to learn the knowledge and develop the skills that will be assessed and teachers' capacity to meet student needs, while not primary emphases in our studies, are fundamental to such improvement. In addressing the validity of assessment for ELL students, some of our study findings also have implications for (a) the nature of the curriculum and instruction that can engage ELL students and (b) for teacher capacities that need to be developed.

Recommendation 5.1: Encourage schools to use an integrated approach to developing content and English language proficiencies, simultaneously teaching academic language and content knowledge.

(Priority: 1, Resources: Moderate)

Detail: Our study findings demonstrated that many state

content assessments contain academic vocabulary that may be difficult for ELL students. If students do not understand the questions in an assessment because they don't understand academic language, inferences about students' knowledge and skills may be invalid. Schools should integrate academic language instruction along with content instruction to improve assessment validity and increase ELL students' opportunity to learn.

Recommendation 5.2: Encourage and build teachers' capacity to use appropriate ELL accommodations during classroom instruction and assessment.

(Priority: 2, Resources: Moderate)

Detail: When appropriately and effectively used, testing accommodations are an important way to increase the validity of content assessment for ELL students. Accommodations also offer an essential strategy for providing ELL students access to content curriculum that is delivered in English (i.e., without accommodations, ELL students' language skills may limit their ability to benefit from content curriculum and instruction). Consistent with previous research, our findings imply that even direct linguistic-support accommodations (e.g., English glossary and reading aloud the entire test) do not help ELL students on state content tests if students have not previously used the same accommodations in classrooms. It seems self evident as well that without appropriate linguistic support in curriculum and instruction, ELL student learning is likely to be highly compromised.

Study findings that content teachers often have little knowledge about ELL accommodations give significant pause. Inadequate knowledge translates into infrequent use of accommodations during classroom content instruction or assessment. Implications for teacher capacity building seem clear.

Recommendation 5.3: Pre-service teacher education and post-service professional development should expand and integrate ELL assessment and accommodation knowledge and strategies.

(Priority: 3, Resources: High)

Detail: Teacher survey and interview responses from our study sample suggested that both content teachers and ELL specialists often lacked sufficient knowledge about successful ELL assessment and accommodation strategies. We also found a lack of sufficient communication between these two important groups. With the rapid growth of ELL

populations, states should place a substantial focus on increasing teacher knowledge of current ELL issues and appropriate assessment and accommodation strategies including pre-service teacher education and continuing teacher education. Program goals should include adequate time for cross-articulation of successful strategies between content teachers and ELL specialists.

Future Research Agenda

Continuing research on assessment and instruction of ELL students must be conducted to provide empirical evidence that supports and improves current reform efforts. We particularly call for more rigorous research on the following eight topics to improve both the validity and quality of ELL assessment systems. Longitudinal studies that track the same ELL students across multiple years are likely to provide more information for long-term solutions than short-term, cross-sectional studies.

Topic 1. ELL Policy.

Although NCLB has been in effect since 2002 and places strong emphasis on adequate yearly progress for all students including ELL students, very little research has directly examined NCLB's effect on ELLs. Looking at whether and how current programs are affecting ELL students' learning is essential to improving current policy and practices. But solid studies will require resolution of some of the issues addressed in this policy brief. Additional research in this area would likely lead to improved educational policies, both nationally and at state levels, which in turn could lead to improved outcomes for ELL students.

Topic 2. Expand the current empirical research on constructs of academic English language.

A comprehensive, operational definition of academic English has yet to be developed. Questions include what unique vocabulary, grammatical features, and language functions constitute academic English? Is there a common developmental sequence? New research in this area should examine the academic language demands of various subject areas and grade levels. Research should examine stages of academic English language development and implications for curriculum, instruction, and assessment.

Topic 3. Continue validity research on ELP assessment uses, especially score reporting.

Our research revealed that states using the same ELP assessment often employed different scoring and reporting systems. For instance, some states used a composite score of four modality scores (listening, speaking, reading, and writing) equally whereas some states weighted each modality score differently to create a composite score. Different weighting and reporting methods will produce different decisions related to ELL students. Additional research would increase our knowledge regarding the extent of such practices and potentially lead to more consistent and valid practices.

Topic 4. Develop research-based item-writing guidelines for accessible and fair test construction for ELL students.

We discussed earlier that item-writing rules could reduce unnecessary linguistic complexity in content assessments. Research that examines which writing rules and how the writing rules are most effective would provide helpful information to states and assessment developers alike. The research could also lead to principles for guiding the language characteristics of content assessments. For instance, Abedi, Courtney, and Leon (2003) discuss several principles including the use of high frequency words, avoiding colloquial and double-meaning words, and reduction of unnecessary expository materials for mathematics assessments.

The concept of Universal Design has been promoted for the assessment of students with disabilities but may also hold promise for ELL students (Thompson, Johnstone, & Thurlow, 2002). New types of assessments, including computer and game-based strategies, may also work for ELL students. Designing assessments that are accessible to the greatest number of students possible could reduce the need for accommodations.

Topic 5. Expand accommodations research.

Despite numerous studies on the effects of accommodations, some findings are inconclusive and provide limited evidence to assure valid procedures for selecting and applying appropriate accommodations. Our review studies found that no state ELL accommodation manuals in 2006–2007 described research-based rationale or use for accommodations. Consequently,

rigorous research in both assessment construction (Topic 4) and accommodations should be a high priority. Findings will likely lead to improved ELL accountability policies, increased system validity, and improvements in instructional practice.

Topic 6. Use the variation across states to examine the validity and consequences of different ELL policies and practices.

Our research found substantial variance in ELL policies and performance between states and school districts. For example, the magnitudes of 8th-grade math achievement gaps between current ELLs and non-ELLs were considerable and the size of the gaps varied across the three sample states. Patterns of performance reclassified ELLs—that is, those designated as English proficient—also varied. Causes for the differences in gaps are elusive. Additional research will help identify the important variables that influence disparate performance. We also found high variance in the methods that states and school districts use to identify and reclassify ELL students. Examining the validity and consequences of ELL identification and reclassification criteria would be part of this research. The end goal is to make better decisions about ELL students and the schools that serve them.

Topic 7. Examine the characteristics, conditions, and programmatic variables that are associated with ELL success and failure, especially for long-term ELL students.

A significant proportion of ELL students never exits ELL status and continues to lag behind their peers. For example, in California more than 50–60% of ELL students remain in ELL status for more than 10 years (Grissom, 2004; Parrish et al., 2006) with continued low-performance compared to their reclassified peers (Kim & Herman, 2009). Consequently, there is a dire need for research to identify methods to help long-term ELL students acquire English language proficiency, exit ELL status, and increase academic achievement.

There is also limited empirical research on the assessment and instructional needs for ELL students at different levels of English proficiency. Like many student groups, ELL students are heterogeneous, with a broad range of performance. Consequently, differential support may need to be provided to ELL students based on ELL strengths and needs. This research topic would investigate specific

classroom support and assessment methods for different levels of ELL students.

Topic 8. Investigate ELL students' opportunity to learn including classroom materials.

The low performance of ELL students on content assessments is sometimes attributed to a lack of opportunity to learn. We have anecdotal evidence, for example, that some ELL students are being taught with below-grade level materials. Such practices may be based on a belief that ELL students will find such materials easier to understand due to ELL language and/or content knowledge deficiencies. But this practice may prevent ELL students from reaching the same high standards expected of all students. Opportunity to learn research could help better define what constitutes adequate opportunity to learn, examine the types of opportunities to learn (including classroom materials) affecting ELL achievement, and determine what specific tools effectively measure opportunity to learn. The research would likely expand the availability and quality of tools for monitoring students' opportunities to learn and improve teacher instruction.

Call to Action

The ELL performance gap is one of the most challenging issues confronting American education. NAEP scale scores of ELL students in reading, for example, were virtually unchanged between 2002 and 2007. In both years, 8th-grade ELL students scored 41 points lower than their non-ELL counterparts. The persistent achievement gap has negative implications for ELL students. For example, in New York City only 23.6% of ELL students graduate from high school within 4 years (Zehr, 2009), which has lifelong consequences. To address these critical problems, we encourage policy makers to work closely with their staffs and other ELL experts to implement many of the recommendations in this policy brief. The enclosed Action Guide for Improved ELL Accountability Systems (Appendix B) is intended to assist states in this process, with a realistic focus on resources and capacity.

While as a nation we have greatly expanded our knowledge about ELL instruction and assessment, a great deal of work remains. As Adam Urbanski, Vice-President of the American Federation of Teachers stated, "If we always do what we've always done, we will get what we've always got."

REFERENCES

- Abedi, J. (2006). Language issues in item-development. In S. M. Downing & T. M. Haladyna (Eds.), *Handbook of test development* (pp. 377-398). Mahwah, NJ: Lawrence Erlbaum Associates.
- Abedi, J. (2009, April). Computer testing as a form of accommodation for English language learners. In L. L. Cook & J. L. Herman (Chairs), *Validity in ELL assessment: Challenges and promising approaches*. Structured poster session presented at the annual meeting of the American Educational Research Association (AERA), San Diego, CA.
- Abedi, J., Courtney, M., & Leon, S. (2003). *Effectiveness and validity of accommodations for English language learners in large-scale assessments* (CSE Tech. Rep. No. 608). Los Angeles, CA: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST).
- Bailey, A. L. (2007). *The language demands of school: Putting academic English to the test*. New Haven, CT: Yale University Press.
- Chamot, A. U., & O'Malley, J. M. (1994). *The CALLA handbook: Implementing the cognitive academic language learning approach*. Reading, MA: Addison-Wesley.
- Fry, R., & Gonzalez, F. (2008, August). *One-in-five and growing fast: A profile of Hispanic public school students* (Report). Washington DC: Pew Hispanic Center. Retrieved from <http://pewhispanic.org/files/reports/92.pdf>
- Grissom, J. B. (2004, July 30). Reclassification of English learners. *Education Policy Analysis Archives*, 12(36). Retrieved from <http://epaa.asu.edu/epaa/v12n36/>
- Kim, J., & Herman, J. L. (2009). A three-state study of English learner progress. *Educational Assessment*, 14(3-4), 212-231.
- National Center for Education Statistics (2009). *The Nation's report card: Mathematics 2009. National assessment of educational progress at Grades 4 and 8*. (NCED 2010-451; Data calculated from NAEP Explorer). Washington, DC: Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://nces.ed.gov/nationsreportcard/pdf/main2009/2010451.pdf>
- No Child Left Behind Act of 2001, Pub. L. No. 107-110, § 115 Stat. 1425 (2002).
- Parrish, T. B., Merickel, A., Perez, M., Linqianti, R., Socias, M., Spain, A., et al. (2006). *Effects of the implementation of Proposition 227 on the education of English learners, K-12: Findings from a 5-year evaluation* (Final report for AB 56 and AB 1116, submitted to the California Department of Education). Palo Alto, CA: American Institutes for Research.
- Payán, R. M., & Nettles, M. T. (2008, January). *Current state of English-language learners in the U.S. K-12 student population* (English-Language Learners Symposium Fact Sheet). Princeton, NJ: Educational Testing Service. Retrieved from http://www.etsliteracy.org/Media/Conferences_and_Events/pdf/ELLSymposium/ELL_factsheet.pdf
- Scarcella, R. (2003). *Academic English: A conceptual framework* (Tech. Rep. No. 2003-1). Santa Barbara, CA: University of California, Linguistic Minority Research Institute.
- Schleppegrell, M. J. (2001). Linguistic features of the language of schooling. *Linguistics and Education*, 12(4), 431-459.
- Thompson, S. J., Johnstone, C. J., & Thurlow, M. L. (2002). *Universal design applied to large scale assessments* (Synthesis Report 44). Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes. Retrieved from <http://education.umn.edu/NCEO/OnlinePubs/Synthesis44.html>
- Wolf, M. K., & Leon, S. (2009). An investigation of the language demands in content assessments for English language learners. *Educational Assessment*, 14(3-4), 139-159.
- Wolf, M. K., Kao, J. C., Griffin, N., Herman, J. L., Bachman, P. L., Chang, S. M., & Farnsworth, T. (2008). *Issues in assessing English language learners: English language proficiency measures and accommodation uses—practice review* (CRESST Report 732). Los Angeles, CA: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST).
- Zehr, M. A. (2009). English-learners pose policy puzzle. *Education Week*, 28(17), 8-17.

APPENDIX A

CRESST REPORTS FROM THE THREE-YEAR ELL PROJECT

- Kim, J., & Herman, J. L. (2009). *A three-state study of English learner progress*. (CRESST Report 764). Los Angeles, CA: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST).
Supports Recommendations 2.2, 2.3, 2.4
- Wolf, M. K., Griffin, N., Kao, J. C., Chang, S. M., & Rivera, N. (2009). *Connecting policy to practice: Accommodations in states' large-scale math assessments for English language learners*. (CRESST Report 765). Los Angeles, CA: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST). **Supports Recommendations 4.1, 4.2, 4.3, 4.4, 5.1, 5.3, 5.4**
- Wolf, M. K., Herman, J. L., Bachman, L. F., Bailey, A. L., & Griffin, N. (2008). *Recommendations for assessing English language learners: English language proficiency measures and accommodation uses—Recommendations report*. (CRESST Report 737). Los Angeles, CA: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST).
- Wolf, M. K., Herman, J. L., Kim, J., Abedi, J., Leon, S., Griffin, N., et al. (2008). *Providing validity evidence to improve the assessment of English language learners*. (CRESST Report 738). Los Angeles, CA: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST).
Supports Recommendations 1.2, 2.2, 2.3, 2.4, 3.1, 3.2, 5.2
- Wolf, M. K., Kao, J., Griffin, N., Herman, J. L., Bachman, P. L., Chang, S. M., et al. (2008). *Issues in assessing English language learners: English language proficiency measures and accommodation uses—Practice review* (CRESST Report 732). Los Angeles, CA: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST).
Supports Recommendations 1.2, 2.1, 2.2, 4.1
- Wolf, M. K., Kao, J. C., Herman, J. L., Bachman, L. F., Bailey, A. L., Bachman, et al. (2008). *Issues in assessing English language learners: English language proficiency measures and accommodation uses—Literature review* (CRESST Report 731). Los Angeles, CA: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST).
Supports Recommendations 1.1, 1.2, 5.2
- Wolf, M. K., Kim, J., Kao, J. C., & Rivera, N. (2009). *Examining the effectiveness and validity of Read-Aloud and Glossary accommodations for English language learners in a math assessment*. (CRESST Report 766). Los Angeles, CA: University of California, National Center for Research on Evaluation, Standards, and Student Testing (CRESST).
Supports Recommendations 4.1, 5.3

APPENDIX B

ACTION GUIDE FOR IMPROVED ELL ACCOUNTABILITY SYSTEMS

The following action guide is intended to help states and school districts discuss, evaluate, and improve the validity of their ELL accountability systems. Page 14 includes space for listing either state or school district improvement goals.

Recommendations	Status	Action Needed	Estimated Completion Date	Comments
<p>Recommendation 1.1. ELP Standards and Assessments: Alignment ELP standards and ELP assessments are aligned with each other and with the related content assessments.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Level 1 · Planning <input type="checkbox"/> Level 2 · Early work in progress <input type="checkbox"/> Level 3 · Final work in progress <input type="checkbox"/> Level 4 · Complete 			
<p>Recommendation 1.2. ELP Standards and Academic English ELP standards include essential academic English language requirements.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Level 1 · Planning <input type="checkbox"/> Level 2 · Early work in progress <input type="checkbox"/> Level 3 · Final work in progress <input type="checkbox"/> Level 4 · Complete 			
<p>Recommendation 2.1. ELL Classification and Reclassification: Definitions State provides clear definitions of ELL students, including reclassified/exited students.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Level 1 · Planning <input type="checkbox"/> Level 2 · Early work in progress <input type="checkbox"/> Level 3 · Final work in progress <input type="checkbox"/> Level 4 · Complete 			
<p>Recommendation 2.2. ELL Classification and Reclassification: Criteria State has evaluated and standardized its identification, classification, and reclassification criteria of ELL students.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Level 1 · Planning <input type="checkbox"/> Level 2 · Early work in progress <input type="checkbox"/> Level 3 · Final work in progress <input type="checkbox"/> Level 4 · Complete 			
<p>Recommendation 2.3. ELL Classification and Reclassification: Data Review State uses data annually to evaluate reclassification rates and policies.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Level 1 · Planning <input type="checkbox"/> Level 2 · Early work in progress <input type="checkbox"/> Level 3 · Final work in progress <input type="checkbox"/> Level 4 · Complete 			
<p>Recommendation 2.4. ELL Classification and Reclassification: Longitudinal Database State has a longitudinal database system that provides validity evidence supporting classification and reclassification decisions.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Level 1 · Planning <input type="checkbox"/> Level 2 · Early work in progress <input type="checkbox"/> Level 3 · Final work in progress <input type="checkbox"/> Level 4 · Complete 			
<p>Recommendation 3.1. Content Assessment: Item-Writing Rules State has explicit item-writing rules and principles for avoiding unnecessary linguistic complexity on test items.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Level 1 · Planning <input type="checkbox"/> Level 2 · Early work in progress <input type="checkbox"/> Level 3 · Final work in progress <input type="checkbox"/> Level 4 · Complete 			
<p>Recommendation 3.2. Content Assessment: Validation for ELLs Test validation procedures examine the language demands of test items on content assessments.</p>	<ul style="list-style-type: none"> <input type="checkbox"/> Level 1 · Planning <input type="checkbox"/> Level 2 · Early work in progress <input type="checkbox"/> Level 3 · Final work in progress <input type="checkbox"/> Level 4 · Complete 			

APPENDIX B (continued)

Recommendations	Status	Action Needed	Estimated Completion Date	Comments
<p>Recommendation 4.1. Test Accommodations: Guidelines State has comprehensive accommodation guidelines for selecting and using ELL accommodations.</p>	<input type="checkbox"/> Level 1 - Planning <input type="checkbox"/> Level 2 - Early work in progress <input type="checkbox"/> Level 3 - Final work in progress <input type="checkbox"/> Level 4 - Complete			
<p>Recommendation 4.2. Test Accommodations: Use State and/or districts regularly include appropriate accommodation practices in their professional development programs.</p>	<input type="checkbox"/> Level 1 - Planning <input type="checkbox"/> Level 2 - Early work in progress <input type="checkbox"/> Level 3 - Final work in progress <input type="checkbox"/> Level 4 - Complete			
<p>Recommendation 4.3. Test Accommodations: Recordkeeping State records accommodations use in a statewide database.</p>	<input type="checkbox"/> Level 1 - Planning <input type="checkbox"/> Level 2 - Early work in progress <input type="checkbox"/> Level 3 - Final work in progress <input type="checkbox"/> Level 4 - Complete			
<p>Recommendation 4.4. Test Accommodations: Evaluation State regularly evaluates district use of accommodation guidelines.</p>	<input type="checkbox"/> Level 1 - Planning <input type="checkbox"/> Level 2 - Early work in progress <input type="checkbox"/> Level 3 - Final work in progress <input type="checkbox"/> Level 4 - Complete			
<p>Recommendation 5.1. Teacher Capacity and Opportunity to Learn: Integrated Approach State policy encourages schools to use an integrated curriculum and instructional approach.</p>	<input type="checkbox"/> Level 1 - Planning <input type="checkbox"/> Level 2 - Early work in progress <input type="checkbox"/> Level 3 - Final work in progress <input type="checkbox"/> Level 4 - Complete			
<p>Recommendation 5.2. Teacher Capacity and Opportunity to Learn: Classroom State policy encourages teachers to use appropriate ELL accommodations during classroom instruction and assessment.</p>	<input type="checkbox"/> Level 1 - Planning <input type="checkbox"/> Level 2 - Early work in progress <input type="checkbox"/> Level 3 - Final work in progress <input type="checkbox"/> Level 4 - Complete			
<p>Recommendation 5.3. Teacher Capacity and Opportunity to Learn: Knowledge and Strategies Pre-service teacher education and post-service professional development includes ELL assessment and accommodation knowledge and strategies.</p>	<input type="checkbox"/> Level 1 - Planning <input type="checkbox"/> Level 2 - Early work in progress <input type="checkbox"/> Level 3 - Final work in progress <input type="checkbox"/> Level 4 - Complete			
<p>*State/District Improvement Goal #1</p>	<input type="checkbox"/> Level 1 - Planning <input type="checkbox"/> Level 2 - Early work in progress <input type="checkbox"/> Level 3 - Final work in progress <input type="checkbox"/> Level 4 - Complete			
<p>*State/District Improvement Goal #2</p>	<input type="checkbox"/> Level 1 - Planning <input type="checkbox"/> Level 2 - Early work in progress <input type="checkbox"/> Level 3 - Final work in progress <input type="checkbox"/> Level 4 - Complete			
<p>*State/District Improvement Goal #3</p>	<input type="checkbox"/> Level 1 - Planning <input type="checkbox"/> Level 2 - Early work in progress <input type="checkbox"/> Level 3 - Final work in progress <input type="checkbox"/> Level 4 - Complete			

* We have included space for states and school districts to include their own ELL accountability system goals.

APPENDIX C

RECOMMENDED READINGS

English Language Proficiency Standards and Assessment

- Abedi, J. (Ed.). (2007). *English language proficiency assessment in the nation: Current status and future practice* (Report). Davis, CA: University of California. Retrieved from http://education.ucdavis.edu/research/ELP_Report.pdf
- Anstrom, K., DiCerbo, P., Ferraro, M., & Stoops Verplaetse, L. (2009, June 19). *Academic language in secondary-level standards and classrooms* [Webinar]. Retrieved from National Clearinghouse for English Language Acquisition website: <http://www.ncele.gwu.edu/webinars/event/11/>
- Assessment and Accountability Comprehensive Center. (2009). *Framework for high-quality English language proficiency standards and assessments*. San Francisco, CA: WestEd.
- Bailey, A. (2007). *The language demands of school: Putting academic English to the test*. New Haven, CT: Yale University Press.
- Burger, D., Mauricio, R., & Ryan, J. (2007, June). *English language proficiency assessment in the Pacific Region* (Issues & Answers Report, REL 2007–No. 014). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Pacific. Retrieved from <http://ies.ed.gov/ncee/edlabs/projects/project.asp?ProjectID=59>
- Cook, H. G. (2005, December). *Aligning English language proficiency tests to English language learning standards* (Report 5). Aligning assessment to guide the learning of all students: Six reports on the development, refinement, and dissemination of the web alignment tool. Washington, DC: The Council of Chief State School Officers. Retrieved from <http://www.ccsso.org/publications/details.cfm?publicationid=293>
- Gottlieb, M., Katz, A., & Ernst-Slavit, G. (2009). *Paper to practice: Using the TESOL English language proficiency standards in preK–12 classrooms*. Alexandria, VA: Teachers of English to Speakers of Other Languages (TESOL).
- Gottlieb, M., & Sato, E. (2009, June 15). *Assessing K-2 English language proficiency: Principles, purposes and practices* [Webinar]. Retrieved from National Clearinghouse for English Language Acquisition website: <http://www.ncele.gwu.edu/webinars/event/12/>
- Scarcella, R. (2009, August 21). *Defining academic English language* [Webinar]. Retrieved from National Clearinghouse for English Language Acquisition website: <http://www.ncele.gwu.edu/webinars/event/1/>

Content Assessment for ELL students

- Abedi, J. (2006). Language issues in item-development. In S. M. Downing & T. M. Haladyna (Eds.), *Handbook of Test Development* (pp. 377–398). Mahwah, NJ: Erlbaum.
- Bailey, A. L., & Butler, F. A. (2004). Ethical considerations in the assessment of language and content knowledge of English language learners K–12. *Language Assessment Quarterly*, 1(2–3), 177–193.
- Fairbairn, S. (2007, September). Facilitating greater test success for English language learners. *Practical Assessment Research & Evaluation*, 12(11) Available online from <http://pareonline.net/getvn.asp?v=12&n=11>

- Office of Elementary and Secondary Education. (2007). *Assessment and accountability for recently arrived and former Limited English Proficient (LEP) students*. Washington, DC: U.S. Department of Education. Retrieved from <http://www.ed.gov/policy/elsec/guid/lepguidance.doc>
- Pitoniak, M. J., Young, J. W., Martiniello, M., King, T. C., Buteux, A., & Ginsburgh, M. (2009). *Guidelines for the assessment of English language learners*. Princeton, NJ: Educational Testing Service. Retrieved from https://www.ets.org/Media/About_ETS/pdf/ELL_Guidelines.pdf
- Rabinowitz, S. N., & Sato, E. (2005). *The technical adequacy of assessments for alternate student populations*. San Francisco, CA: WestEd. Retrieved from <http://www.aacompcenter.org/pdf/taasp.pdf>
- Troncoso, O., & Feinberg, L. (2009, June 16). *Participation and performance of English learners in the National Assessment of Educational Progress (NAEP)* [Webinar]. Retrieved from National Clearinghouse for English Language Acquisition from <http://www.ncela.gwu.edu/webinars/event/10/>

ELL Test Accommodations

- Colorado Department of Education. (2008, September). *Colorado accommodations manual for English language learners* (2nd ed.). Denver, CO: Author. Retrieved from http://www.cde.state.co.us/cdeassess/documents/cela/2009/20081007_CO_ELL_ACCOMM.pdf
- Francis, D., Rivera, M., Lesaux, N., Kieffer, M., & Rivera, H. (2006). *Practical guidelines for the education of English language learners: Research-based recommendations for the use of accommodations in large-scale assessments*. (Under cooperative agreement grant S283B050034 for U.S. Department of Education). Portsmouth, NH: RMC Research Corporation, Center on Instruction. Retrieved from <http://www.centeroninstruction.org/files/ELL3-Assessments.pdf>
- George Washington University Center for Equity and Excellence in Education. (2008). *ELL accommodations toolkit* [Interactive Database]. Washington, DC: Author. Retrieved from <http://ells.ceee.gwu.edu/default.aspx>
- Selection taxonomy for English language learner accommodations (STELLA). (2009). [Computer Program]. Retrieved from <http://elladvantage.com/>
- Zenisky, A. L., & Sireci, S. G. (2007). *A summary of the research on the effects of test accommodations: 2005–2006* (Technical Report 47). Minneapolis, MN: University of Minnesota, National Center on Educational Outcomes.

ELL Classification and Reclassification

- Abedi, J. (2008, Fall). Classification system for English language learners: Issues and recommendations. *Educational Measurement: Issues and Practice*, 27(3), 17–31.
- Linquanti, R. (2001). *The redesignation dilemma: Challenges and choices in fostering meaningful accountability for English learners* (LMRI Report No. 2001-1). Santa Barbara, CA: University of California Linguistic Minority Research Institute. Retrieved from http://lmri.ucsb.edu/publications/01_linquanti-redesignation.pdf

ELL Instruction and Professional Development

- August, D., & Shanahan, T. (2006). *Developing literacy in second language learners*. Mahway, NJ: Lawrence Erlbaum Associates.
- Ballantyne, K. G., Sanderman, A. R., & Levy, J. (2008). *Educating English language learners: Building teacher capacity* (Roundtable Report). Washington, DC: National Clearinghouse for English Language Acquisition. Retrieved from <http://www.ncela.gwu.edu/files/uploads/3/EducatingELLsBuildingTeacherCapacityVol1.pdf>
- Chevalier, C. M. (n.d.). *Tapestry for teachers of English language learners*. Retrieved from Teachers of English to Speakers of Other Languages website: http://www.tesol.org/s_tesol/cat_tapestry.asp?CID=1585&DID=8732
- Gersten, R., Baker, S. K., Shanahan, T., Linan-Thompson, S., Collins, P., & Scarcella, R. (2007). *Effective literacy and English language instruction for English learners in the elementary grades: A practice guide* (NCEE 2007-4011). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <http://ies.ed.gov/ncee/wwc/publications/practiceguides>
- Levy, J., & Ballantyne, K. (2009, September 18). *Professional development for content area teachers of English language learners* [Webinar]. Retrieved from National Clearinghouse for English Language Acquisition website: <http://www.ncela.gwu.edu/webinars/event/2/>
- Stanford English Learner Resource Library (n.d.). *Stanford English Learner Library* [Online video library]. Retrieved from <http://ellib.stanford.edu>
- Yandian, S., & Ballantyne, K. (2009, March 17). *How to welcome and support head start dual language learners when they get to elementary school* [Webinar]. Retrieved from National Clearinghouse for English Language Acquisition website: <http://www.ncela.gwu.edu/webinars/event/8/>