Creating a Next-Generation System of K–12 English Learner (EL) Language Proficiency Assessments

Maurice Cogan Hauck, Mikyung Kim Wolf, and Robert Mislevy

November, 2013
Acknowledgments

The authors would like to thank the ETS External Advisors on K–12 English Learner Research, Georgia Garcia, Kenji Hakuta, and Charlene Rivera, for their thoughtful comments on an earlier draft of this paper. We would also like to thank our ETS colleagues David Anderson, Meredith Christiansen, Phil Everson, Steve Lazer, Scott Paris, Rose Payan, Emilie Pooler, George Powell, and John Young for their valuable input at various stages in the development of this paper. Any errors remain the responsibility of the authors.
Introduction

This paper is the first in a planned series of white papers from ETS on the theme of conceptualizing next-generation English language proficiency assessment systems to support the education of K–12 English learners (ELs) in the United States. This paper provides a high-level vision of such an assessment system, and other papers in the series will provide more detailed analysis of key topics of interest within such a system. The goal of this paper, and the series, is to present research-based ideas, principles, and recommendations for consideration by those who will be conceptualizing, developing, and implementing English language proficiency assessments for K–12 ELs and by all stakeholders in their education and assessment. We also hope to contribute to the active current discussion in the field on improving the instruction and assessment of EL students as well as contribute to bringing these ideas into practice.

Current State of the Art

A defining characteristic of the current U.S. educational system is the large and growing number of students who are English learners.\(^1\) EL students bring with them rich linguistic and cultural assets, but at present they tend to lag behind their native English-speaking peers in academic performance, in large part due to the challenges of developing their English proficiency. The importance of effectively educating these students, of having an educational system that supports their needs and recognizes their potential, is difficult to overstate.

The dozen years since the authorization of the No Child Left Behind (NCLB) legislation of 2001 have been a period of considerable change and advancement in the education and assessment of K–12 EL students. NCLB changed the landscape for the education of ELs in two important ways: It required the inclusion of English learners in standards-based assessments of all students for accountability purposes (i.e., NCLB Title I, which requires the assessment of students in mathematics and English language arts in Grades 3–8 plus one year of high school), and it created, in NCLB Title III, a requirement that each state establish new English language proficiency (ELP) standards, which must correspond to the state’s Title I content standards, and institute a standards-based ELP assessment to be administered annually to all students classified as English learners.

The current state of the art in the assessment of the language proficiency skills of English learners has been largely shaped by NCLB. It is a significant accomplishment that each state now has developed or adopted ELP standards and that standardized ELP assessments based on those standards have been administered for several years. One defining feature of this era has been a strong emphasis on accountability as the primary purpose of K–12 ELP assessments. Additionally, these assessments have reflected an increasing recognition of the importance of academic language to the success in school of ELs. There have also been greater efforts to ensure and document the technical qualities of assessments by, for example, issuing technical reports detailing such information as test reliabilities, results of alignment studies, and correlations with other measures.

The current generation of ELP assessments, however, has significant limitations. In fact, the focus that NCLB has put on the importance of educating and assessing ELs also makes clear that these “much better” assessments are not nearly “good enough” to serve the needs of EL students and those charged with educating them. We see three key areas in which the current generation of assessments is in need of improvement:

1. The heavy emphasis on the use of ELP assessment for accountability purposes has not been balanced by a similar emphasis on implementing assessments to support teaching and language development. While the annual summative assessments are systematically implemented within and across states, the initial ELP assessments for identifying or diagnosing EL students’ language proficiency and interim ELP assessments throughout the course of instruction have received relatively little attention. Often, these initial and interim ELP assessments are not connected in any principled manner with the annual summative ELP

---

\(^1\) While a definition of the term “English learner” is an issue of ongoing discussion within the field, for the purposes of this paper we will use the term to refer to students who are not native English speakers and are in the process of learning English.
assessments in terms of the constructs and score results, leaving the overall use of ELP assessments rather disjointed and sporadic. One specific concern is that the results from ELP assessments are not currently used to inform educators about students’ academic achievement and are not linked to results from content assessments.

2. The constructs underlying the ELP assessments used in different states are as varied as the states’ ELP standards (Bailey & Huang, 2011; Wolf et al., 2008). At the time the current ELP assessments were designed and developed, the construct of academic language or “the language of school” for this context had not been effectively defined (Dicerbo, P., Anstrom, K., Baker, L., Rivera, C., in press). As a result, the representation of this construct was limited, and assessment of the construct was operationalized in varied ways across the assessments. This has led to limitations in the comparability of the results (e.g., different assessments may assign the same student to different levels or classifications), and also to difficulties in interpreting results for teachers. In addition, the current ELP assessments tend to assess English language proficiency in terms of the independent skills of listening, speaking, reading, and writing. This limits, to some degree, the inferences that can be made about students’ ability to communicate in real-life school settings, in which integrated use of the language skills is crucial.

3. Assessment results are not directly useful to students and educators. Given their focus on accountability purposes, current Title III assessments are not designed to provide timely information that would support and inform teaching and learning and do not represent the full picture of EL achievement. One clear limitation of the usefulness of current assessment results comes from the length of score reporting timelines: scores from annual assessments are often provided only after so much time that they cannot reasonably inform instruction.

An additional limitation of the current generation of ELP assessments is that they are burdensome for students and educators. For students, the assessments require several hours of testing time, often spread over multiple days. For educators, the burden is considerably greater given the training and preparation involved, particularly for the scoring of speaking, and because the speaking measures need to be individually administered, all of which makes Title III test administrations a considerable logistical undertaking.

Context of Current Reforms

At present, the landscape of education and educational assessment is changing again in ways that will significantly alter what is expected of EL students and how they will be assessed. As of this writing, 45 states and Washington, D.C., have adopted the Common Core State Standards (CCSS), and the move to “fewer, clearer, higher” college- and career-readiness standards has become pervasive in the U.S. educational system. Along with CCSS, consortia are developing new assessments of mathematics and English language arts that promise a next-generation approach to content assessment, with technology-enabled assessment systems designed to provide instructionally useful information and rigorous assessment of the higher-order critical thinking skills emphasized by the CCSS. It is worth noting that the CCSS place particular emphasis on the role of advanced language skills; the need to read, analyze and respond to challenging texts and to use language to collaborate with others is a hallmark of the standards.

Both the new standards and the assessments based on them will increase the level of challenge for ELs and those charged with their education. At the same time, they provide the opportunity for significant improvements in how ELs are instructed and assessed. The central question is how to better equip English learners with the English proficiency they need to meet the rigorous college- and career-readiness standards.

Currently, two consortia of states (ASSETS and ELPA21), as well as individual states such as California and New York, are working toward new ELP assessments. California has already rewritten its state English Language Development (ELD) standards to better correspond to the CCSS expectations, and other states, including New York, are in the process of doing so. California’s new 2012 ELD Standards (California Department of Education, 2012) highlight meaningful and interactive language use in the classroom, with each standard...
being specifically connected to the CCSS English language arts standards. At the same time, efforts are underway by state assessment consortia of content and ELP assessments to work toward a common definition of the term “English learner” (see Linquanti & Cook, 2013).

There are also important academic efforts underway to address these issues. A national initiative called Understanding Language, led by Kenji Hakuta (see a set of papers released by the initiative; e.g., van Lier & Walqui, 2012), has recently instantiated new approaches to defining the characteristics of language needed to instruct EL students in ways that will support their access to the CCSS. And explicit efforts have been made to guide the field to establish new ELD/ELP standards, such as the Framework for English Language Proficiency Development Standards Corresponding to the Common Core State Standards and the Next Generation Science Standards (ELPD Framework; CCSSO, 2012), which highlights the strong interconnections between language and content, signaling a new way of assessing ELP in this CCSS era (Linquanti & Hakuta, 2012).

**Vision for a Next-Generation Assessment System**

Having considered the limitations of current ELP assessments and the context within which new ones will be created, this paper will now propose key features that next-generation ELP assessments should include. Our intention is to present a high-level vision of what a next-generation assessment system should be and do in order to support K–12 EL students on their path to gaining the English language proficiency needed to access content and develop the skills necessary to succeed in English-medium classrooms and to develop college and career readiness. This vision is not an outline for a test design. Rather, it is a discussion of key principles, and their implications, that we hope will influence the ongoing public discussion about the next generation of K–12 ELP assessments that are currently being conceptualized and will be designed and developed in the coming months and years.

We have identified three qualities that the next generation of K–12 ELP assessments must have, and one significant question that must be resolved in the design effort.

The three qualities are:

1. It must be conceptualized and designed as an assessment system, rather than as a single assessment (or even a series of assessments).
2. This system must be based on an overarching, well-defined conceptual framework, including a clear definition of the construct of interest for the entire system.
3. The system must contain key supporting elements designed to support effective use of the information gathered by the assessments.

The question to be resolved is: What use will be made of digital delivery and technology-enhanced assessment tasks?

Each of these four topics, the three qualities plus the outstanding question, will now be discussed in turn.

**An Assessment System**

The range of assessment needs for K–12 ELs and stakeholders in their education will require an assessment system rather than a single assessment or even a series of assessments. The need for a system-based approach is based on the nature of assessments themselves. Language proficiency assessments are used for many different purposes, and these purposes differ as to: what aspects of language proficiency are assessed; what decisions need to be made about students or programs; whether assessment results are to be used locally (e.g., within a classroom) or in a broader context (e.g., for state-level reporting); how much precision is needed in reporting the results; and what level of test security is appropriate. Further, assessment methods can differ substantially with respect to the kinds of evidence they provide about language skills, how reliable they are, what kinds of technology they require, and how much time they demand of students and teachers.
Current knowledge about how people develop language capabilities, as well as about how to design and use assessments, provides the opportunity to develop a K–12 EL assessment system with a relatively small number of rather different assessments that are much better tuned to the needs of students and educators. A system of complementary assessments, if thoughtfully designed, can work together to provide the range of needed information at appropriate points in the school year, and at appropriate points in the student’s tenure as an EL. One of the central uses of a comprehensive system of ELP assessments is to inform the extent to which students’ English language proficiency is inhibiting or facilitating growth in students’ academic content learning and providing information about how to move students forward in the academic program. Thus, the ELP assessment system should be closely linked to content assessment systems so that EL students’ performance on content assessments can be interpreted based on students’ ELP assessment performance. An ELP assessment system will then function in a complementary manner with content assessments to successfully monitor and inform the teaching and learning process for ELs.

A system-based approach is important because the assessments must be intertwined with curriculum (or standards) and instruction. In order to make the various assessments meaningful, ways to operationalize the curricula (both ELP and content curricula) into assessments and ways to make the assessment results more accessible and useful should be carefully thought out as part of the fundamental design of the system. Figure 1 provides a graphic representation of such a system.

**Figure 1: Vision for a Next-Generation ELP Assessment System for K–12 ELs**

A key first step is to consider the various assessment purposes of the system. The system must provide information as needed to satisfy accountability purposes related to progress in developing ELP as well as or better than the current assessments, but it must also provide information that will inform and support teaching and learning in the classroom. While current-generation K–12 EL assessment programs are built around a summative assessment designed to track year-to-year growth of individuals and cohorts, provide accountability reporting, and inform re-classification decisions, a next generation-system should complement that summative assessment with:

- Baseline assessments fulfilling such functions as screening (to determine if individual students are or are not eligible for EL services) and placement/classification (to determine what level of instruction or other EL services are most appropriate for individual students); and

---

2 Note that each function need not be a separate assessment. While no single assessment could adequately fulfill all of these functions, it is entirely possible that a single assessment could serve, for example, both a screening and a placement function, if carefully designed. Similarly, diagnostic and formative functions could be served by a single assessment, though we list them separately.
Creating a Next-Generation System of K–12 English Learner (EL) Language Proficiency Assessments

While this may read like quite an extensive wish list, taking a systems-based approach to the design of the system also allows distinct opportunities for efficiencies. Not all of the assessments need to be built to the same level of precision (and cost) as summative assessments. For example, screening assessments may require fewer tasks than summative assessments, and tools for formative assessment may not need extensive field testing if their validity argument is based more on content representation and fidelity of implementation than on statistical data. Additionally, it is not necessary to launch the entire system at once. It may be more practical to launch elements of the system in a staged manner, starting with functions for which the need is most pressing. The key point is to first conceptualize a framework for the system, then to develop the various components of the system to be consistent with that framework. This point is elaborated more in the following sections.

An Overarching Conceptual Framework

The various assessments within this system must be based on an overarching, well-defined conceptual framework that includes a definition of the overall construct of interest for the system as well as a principled set of guidelines for operationalizing assessments of that construct. Such a framework will ensure that all assessment elements in the system complement each other to measure the construct in a comprehensive way, even as they emphasize different aspects of the construct or collect information in different ways. The framework will also ensure that the results provided by each assessment element are directly useful for their intended purposes.

The overarching conceptual framework must be informed by current research into the nature of language proficiency in general as well as the specific domain of language proficiency needed for K–12 students to successfully learn in the content areas. For instance, specific language-use tasks that students need to perform in school and their language characteristics as exemplified in the ELPD Framework (CCSSO, 2012) are an important source to consider. The overall construct definition for the system should highlight students’ communicative language-use abilities and command of academic language needed to access content, and should consider the requirements for college and career readiness expected of all students by the CCSS along with the specific challenges for EL students in meeting these requirements (i.e., a path for EL students to successfully access mainstream content instruction in a manner that will get them to the same end-point as non-EL students).

Crucially, developing such a conceptual framework will, along with the Theory of Action described below, drive the process of thinking strategically about how various pieces of assessment information will be used, and designing the assessments and other elements in the system to deliver that information in an efficient and effective manner. It will require work and thinking to be done up front, which will in turn drive efficiency and frugality of the system as a whole, ensuring that the system is both modular (with elements able to function independently) and extensible (with new elements able to be added over time), even as it functions in an integrated manner to support the assessment needs of K–12 ELs (See Wolf et al. [2012] for more details on an example of a K–12 ELP system that is modular and extensible).

---

3 While drafting even a high-level definition of English language proficiency is beyond the scope of this paper, we note that such a definition must consider a range of contextual and functional factors related to the language needs of ELs in K–12 schools including, for example, the English needed for social, navigational, and academic purposes within the school context.
Supporting Elements

Of course, the collection of meaningful, actionable information about the knowledge, skills, and abilities of K–12 ELs is not an end in itself. Beyond assessments per se, there are also several key non-assessment supporting elements that are necessary to ensure that end users of the assessment information can access it, interpret it, and use it effectively. Essential supporting elements include a data management and score reporting system and a range of professional development supports for educators using the system.

Data management and score reporting is an area in which significant improvement over the current state of the art is possible and can have real impact. The new system should provide a single point of entry at which educators and other stakeholders can easily access all relevant information related to a student’s performance on all assessments in the system. The data management or score reporting in the system, while structured to ensure appropriate data privacy, should allow qualified users an easy link to the students’ content-assessment performance. Over time, assessment results could provide a profile of the students’ current abilities as well as the history of how their English abilities have developed (and how their EL assessment results relate to their content assessment results), a profile that can travel with the students throughout their educational careers.

A well-designed range of professional development supports for educators who will use the system is also essential to ensuring the effective use of the system and the assessment results. The professional development support should be systematic and regular, including specific training on how to interpret assessment results. Depending on the assessment delivery model and purposes, professional development may also include training in scoring some or all of the assessments. Scoring training opportunities can provide useful information not only about the construct (i.e., what is assessed and what to teach) but also about the functions of each assessment. Common training opportunities and local scoring of some assessments, particularly formative assessment, could prove cost effective and educationally beneficial to both students and teachers.

The Role of Digital Technology

There is a reason that we pose the role of digital technology as a question, rather than a clear recommendation. There are many exciting innovations going on in the world of assessment related to digital technology, not least of which is the application of techniques from the world of gaming (e.g., creation of realistic, immersive scenarios in which assessment tasks can be embedded). Several of these developments are particularly relevant for K–12 ELP assessment, in which the construct of interest is fundamentally centered around the ability of students to use language to accomplish meaningful goals. While currently available digital technologies have the potential to advance the assessment of this construct in some important ways, there are also challenges that must be considered. Our goal in this section is to highlight the potential advantages of digital delivery, recognize some of those challenges, and suggest a path to principled evaluation of competing factors.

Digitally delivered assessments\(^4\) offer advantages that can improve assessment of the construct of interest:

- They can deliver tasks in authentic, enriched contexts (e.g., simulations of realistic language use situations), allowing students to demonstrate their language-use abilities rather than producing language in traditional, form-oriented task settings or simply demonstrating knowledge about language.

- They can create greater engagement for students (by, for example, offering more immersive, interactive tasks), not only making the testing experience more positive for students but also potentially providing more meaningful assessment results, given that students’ greater engagement in assessment tasks increases our ability to accurately infer their true abilities.

\(^4\) We use the term “digital delivery” to encompass desktop computer delivery, tablet delivery, and future delivery platforms relying on digital technologies that are as yet unknown.
• They can reflect the changing nature of language proficiency and the target domain of language use, in which computer-mediated communication plays an increasingly prominent role. In other words, digital delivery allows assessment tasks to reflect the ways that the students learn and use language in this digital age.

• They have the potential to provide enhanced implementation of techniques informed by an “assessment as learning” approach in which tasks help students gain language proficiency as well as providing assessment information.

Digitally delivered assessments also promise a range of practical advantages:

• The data management and score reporting system described in a previous section must inevitably be digital in nature; linking this system to digitally delivered assessments promises considerable streamlining, so that all information is entered, processed, and made available in the most efficient manner.

• Digital delivery makes automated scoring of constructed responses a possibility, as the digital capture of written responses (via keyboard) and spoken responses (via digital voice capture) are necessary inputs for automated scoring.

• Digital delivery can serve as a robust delivery platform for Professional Support elements of the system, allowing teachers and other users of the system to move smoothly between the Professional Support elements and the assessments.

While the advantages of going to a digital delivery model are compelling, it is worth recognizing that there are also significant challenges to be addressed, including the following questions:

• Could digitally-delivered assessments be a particular source of construct-irrelevant variance for the K–12 EL population?

• Are schools prepared to provide at scale the technology needed to administer the assessments?

The first question is a conceptual assessment question. The most appropriate way to answer it is to ensure that any new digital assessments are field tested on an appropriately diverse population, including students who are ELs with disabilities and students who are not ELs, to ensure that ELs are not disadvantaged by the technology and the assessment tasks are able to capture their ability levels. Additionally, appropriate tutorials should be included to provide new users with the guidance they need before using assessments or other elements of the system.

The second question is essentially about resources and therefore would need to be answered by states or other local educational authorities as applicable to their own contexts. In working to answer these questions, we recommend thinking about the advantages and disadvantages of going to a full digital delivery model by conducting an analysis structured around the following sets of questions:

• Given the advantages of digital delivery outlined above, which of them could be reached (or to some reasonable degree approximated) in a paper-and-pencil format? What could be retained and what would be lost in using paper-based — rather than digital — delivery?

• Once the relative advantages of digital delivery have been defined based on the analysis proposed in the bullet above, how do these advantages relate to the costs of establishing a digital delivery system? Also, how are the costs of a digital delivery system balanced between start-up costs and ongoing operational costs?

• What is the potential of a blended solution in which digital delivery is used for some elements of the system, and traditional paper-based formats for others? This decision should be made by analyzing, for each assessment, what information is needed, who will use it, what decisions will be made based on it, and what level of security will be necessary.

It is worth emphasizing that the digital/paper decision does not need to be an all-or-nothing decision, and it
need not be a one-time decision. It may be perfectly appropriate to move first to digital delivery on assessments that support lower-stakes decisions and do not need to be given to large populations at a single administration (e.g., diagnostic and placement assessments), with a move to digital delivery of assessments supporting higher stakes decisions and requiring more large-scale simultaneous administrations to be reserved for later.

A consistent theme of the approach we are recommending is taking a “design thinking” approach to the assessment system as a whole, and planning the deployment and format of the various pieces in a way that is carefully organized around the system’s fundamental purpose: supporting K–12 EL students on their path to gaining the English language proficiency needed to succeed in English-medium classrooms and to develop college and career readiness.

Establishing an overall construct facilitates such evolution: the targets of measurement remain the same, but as technologies come online and capabilities broaden, new opportunities for obtaining better evidence will continue to arise. The common framework and systematic approach adapt to a vision of continuing improvement.

**Figure 2: A Proposed Theory of Action**

<table>
<thead>
<tr>
<th>COMPONENTS</th>
<th>ACTION MECHANISMS</th>
<th>INTERMEDIATE EFFECTS</th>
<th>ULTIMATE EFFECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Construct Framework</td>
<td>Teachers use framework to formulate learning goals and communicate them to students.</td>
<td>For Students and Parents</td>
<td>EL students, as individuals and as a group, have improved English language proficiency and improved content area learning.</td>
</tr>
</tbody>
</table>
| Assessments | Teachers and administrators:  
- use screening and placement information to maximize efficient allocation of resources to ELs.  
- use actionable data from formative and diagnostic assessments to inform adjustments to instruction.  
- use aggregated summative information to make decisions about instructional programs for ELs. | For Teachers | Teachers have more meaningful, timely and useful information. This helps them to help EL students develop English language proficiency and learn in content areas. |
| Data Management System | Students and parents receive timely score reports that provide meaningful, understandable information about student abilities and progress.  
Teachers use data from all assessments to track student progress against learning goals.  
Administrators use data from all assessments to identify districts/schools that need attention. | For Teachers and Administrators | Administrators and policymakers have valid, actionable information to make adequate decisions about the education of EL students. |
| Professional Support | Teachers have better understanding of assessment results and are able to use data more effectively. | | |
An additional tool useful in ensuring that the entire system works together effectively is a Theory of Action, a model that can be used to illustrate how elements of a proposed system are intended to work together to achieve the planned effects. A proposed Theory of Action for a Next-Generation System of K–12 EL Language Proficiency Assessments appears as Figure 2. In the course of planning and developing the assessment system, the Theory of Action must be the subject of considerable discussion and refinement. What should remain constant is that all discussion and planning takes into consideration how all of the system components are designed to function both independently and interactively to support the end goals listed as “ultimate effects” in the right-hand column.

As Figure 2 illustrates, the underlying premise is that a set of quality assessments aligned with the learning objectives will facilitate a better understanding of the students’ abilities as well as the learning goals, ultimately leading to improved teacher instruction and student achievement. A key advantage of the Theory of Action is that it presents the ultimate goals of the system, encapsulates the thinking about how these goals will be achieved, and serves as a mechanism to bring attention to key questions that must be resolved through the design and implementation processes, such as: How can the standards be operationalized in instruction and assessment? How can students be engaged to ensure that the assessments measure their true ability to the greatest extent possible? How will the data be made accessible and interpretable? What kinds of support need to be provided for teachers — both ELP teachers and content teachers — to take advantage of various results from a series of assessments?

**Conclusion**

We are living in a time of great change, great challenge, and great opportunity in both the education and the assessment of K–12 ELs. The goal of this paper has been to offer some key principles that should be considered in conceptualizing, developing, and implementing the next-generation of K–12 EL assessments. To take full advantage of the opportunity to improve assessment and instruction for EL students, a systematic change at different stakeholder levels is essential. The creation of an assessment system for EL students will facilitate this systematic change by calling for various stakeholders to collaborate from its conceptualization. This will be a significant undertaking, but it is one that is needed to better serve our students.

In addition to our ongoing research and development efforts to improve K–12 ELP assessments, ETS intends to continue contributing to discussion on this topic via additional white papers discussing current issues related to the assessment of K–12 ELs. These papers, which will be made public in the coming months, will address topics such as opportunities and challenges related to the need for specific assessment functions (such as identification, placement and classification, formative assessment, and summative assessment) as well as questions that are pervasive to all assessment of K–12 ELs, such as the role of digital technology in assessment design, accessibility issues related to K–12 ELP assessment, the critical role of classroom teachers, and the potential role of automated scoring of student responses.

---

5 We recognize that the neat distinction between “ELP teachers” and “content teachers” is an oversimplification as many English learners are served in various types of bilingual education settings in which they receive L1 content instruction. Our intention is to emphasize the importance of all teachers of ELs addressing the importance of language skills.
References


