

Site: **Linguistic Diversity in ECE** at <http://ecelinguisticdiversity.wikidot.com>Source page: **The Effects of Linguistic Diversity on Standardized Testing** at<http://ecelinguisticdiversity.wikidot.com/the-effects-of-linguistic-diversity-on-standardized-testing>

The Effects of Linguistic Diversity on Standardized Testing

fold

Table of Contents

- Introduction
- Test Development
- Bias in Assessment and Evaluators
- Current Accommodations
- Future Accommodations
- Conclusion
- Bibliography
- Annotated Bibliography
- Web Resources

Introduction

Due to the increasing number of English language learners (ELLs), educators, parents and students should be concerned with the standardized testing practices in the United States and the problems and complications that are arising. The focus is on scores, not the knowledge learned or not learned. Standardized test scores determine many things for schools, teachers and students. This is a very important topic to discover because ELLs are struggling to perform well in comparison to their English speaking peers on these tests. Due to a language barrier, test scores are not accurately reflecting the instruction occurring in the classroom. Tests are formatted in standard English which also makes them difficult for English speaking students (Han et al, 2008). Even if students are able to speak and understand English, using school language is much different than everyday English (Butler & Stevens, 2001.) Teachers and schools are blamed for students' low test scores when reality is that many educators struggle because of insufficient support from school officials, policy makers and test designers.

Testing equality is a touchy subject because U.S. education reflects the belief that having standardized tests in one language creates a fair testing environment and creates an equal education opportunity. However, instead of testing content, these tests measure how proficient students are in English. There is great need for a "fix", but at this point there is not a simple solution. Many policy makers and test creators believe English language learners belong to one monolithic group and need tests translated into only one language (Fairbain & Fox, 2009). Getting tests translated into native languages

for each student would be a difficult task because there are ELLs from all languages. All students have a right to an education, English speaking or not. Standardized tests are not only language challenging



for ELLs but are also difficult to understand contextually. There are many culture biases within the tests. Many reading passages and content questions evaluate students with questions relating to American culture, for example having a reading passage about Halloween. Many ELLs would have difficulty answering questions about this reading because the context of Halloween is a concept they have not yet understood.

Standardized tests should assess students' knowledge about a subject instead of assessing their language understanding. At this point standardized tests are not valid. There needs to be an improvement on what the tests measure and it needs to be done in a fair equitable way. These tests are not only ineffective for ELLs but also for English speaking students.

Test Development

Tests are designed with a different type of **domain discourse** or **register** of language (Fairbain & Fox, 2009, p. 14). This is referring to the academic language used on a test, a language that is not used in everyday conversation. The language on the test requires analysis and a deep understanding of English words and how they can be manipulated. Depending on where the child is developmentally, English language learners can be faced with *new sentence structure*, *vocabulary* and *grammar*. Connected along side of domain discourse is a **heavy language load**. A heavy language load ties in with domain discourse. A heavy language load is when directions and word items must be sorted through and understood in order to actually take part in any meaningful text in the test (Diaz-Rico & Weed, 2006). A heavy language load can require deep analysis, especially someone new to the language and all of its conventions. This analysis takes *time*. Time is an important factor on standardized tests. A heavy language load also creates a frustrating mindset and challenges the child's ability to manipulate the language.

The English language learners are also accountable for other subjects than reading including mathematics. There is an assumption that mathematics is an easier subject to sift through for the students who are coming from a Romance Language because the number system is more universal. However, *morphological complexity*, *sentence length* and *word length* are also affecting English language learners (Mahoney, 2008). Mathematical terms such as *greater than*, *less than* and *divisible by*, can create complexities for all children but especially for English language learners. Relating back to the language load of a test, all subjects can be linguistically complex and difficult to analyze.

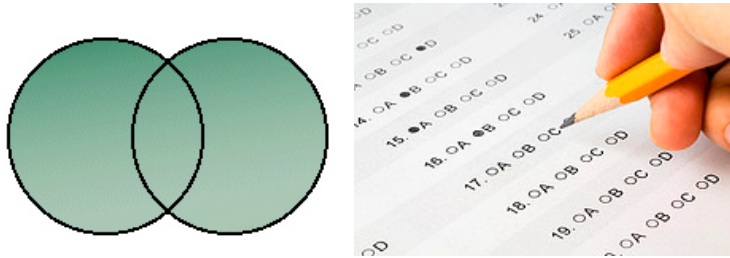
Example:

1. $5 > 3 + \underline{\quad}$
- a. 1
 - b. 2
 - c. 3
 - d. 4

On top of the academic language comes the formatting that test developers have decided to include in standardized tests. The format of a test is referring to the setup of the questions, many diagrams and answering system that the test developers have created for a particular test. Examples of different formats on tests can be seen below. The formatting can range from Venn diagrams where students must compare and contrast. Grids, boxes, or arbitrary lines are placed within the test for students to write down their answers in a specific location in order for their work to be correct. Test developers are always creating new ideas for testing children and many of these ideas come from the standard

culture where ELL may not be aware.

Examples of formats on current standardized tests:



- The first picture is of a Venn diagram. This is a cultural tool used in the United States for standardized testing and ELL may not be aware of its function.
- The second picture is a United States answering tool known as a bubble sheet. This answering system is arbitrary and causes confusion for test takers.

Developing a test that is fair for *all* students can be a difficult process. However, Fairbain and Fox (2009) recommend the following in order to create a more equitable test:

- Short/clear sentences
- Stems with simple structure
- Consistent paragraph structure
- Use present tense and active voice
- Minimize rephrasing and rewording ideas
- Use pronouns carefully
- Use high frequency words
- Identify and explain cognates
- Write items with reading below grade level
- Include graphical/visual support

Bias in Assessment and Evaluators

The **dialect** used on standardized tests creates a bias against students who do not speak a Standard English, or academic, dialect. Research done by Solano-Flores (2006) shows that the academic language used on standardized tests is confusing for all students—not just English language learners. “Test items tend to contain dense text and scant contextual information, use colloquial terms with unusual meanings, provide unintended clues that may lead students to misinterpret them and to use incorrect problem-solving strategies, and use unnecessarily complex syntactical structures” (Solano-Flores, 2006, p. 2363-2364). Not all students, whether or not their first language is English, are proficient in the Standard English that is characteristic of standardized tests today. Simply helping students become familiar with test format and wording such as the phrase “all of the above” (a phrase that hardly appears outside of a multiple choice test) can drastically improve test scores.

For more information on dialect, please see [Dialect Integration](#)

The difference position presented in *Dialects in schools and communities* states that, “Because no one linguistic system can be shown to be inherently better, there is no reason to assume that using a particular dialect can be associated with having any kind of inherent deficit or advantage” (Wolfram,

Adger, & Christian, 1999, p. 20). If this is the case, we have to ask why students are being asked perform on a standardized test that is only presented in one dialect—academic, Standard English?

In addition to students who speak a non academic dialect of English, there are also many English language learners present in American schools today. While conversational English can be acquired fairly rapidly for English language learners (two to three years), academic English such as that found on standardized tests can take four to seven years to adequately acquire (Solórzano, 2008). Tsang and Stack (2008) put up comparable numbers, stating that while the Standard English found on standardized tests can be troublesome for all students, it takes English language learners five to six years just to reach the national average for performance and understanding.

4

Adequate Yearly Progress (AYP)



Adequate Yearly Progress
Grade 3-8 and 10
Reading
Grade 3-8 and 10
Mathematics

		All Students	Economically Disadvantaged	Asian/Pacific Islander	Black, non-Hispanic	American Indian/Alaskan	Hispanic	Multi-Racial	White, non-Hispanic	Students with Disabilities	Limited English Proficient
Percent Proficient	Reading	Met	Met	Met	Met	Met	Not Met	Met	Met	Not Met	Not Met
	Mathematics	Met	Met	Met	Met	Met	Met	Met	Met	Not Met	Not Met
Percent Tested	Reading	Met	Met	Met	Met	Met	Met	Met	Met	Met	Met
	Mathematics	Met	Met	Met	Met	Met	Met	Met	Met	Met	Met
Graduation Rate*		Not Met									
Attendance Rate*		Met									
AYP Designation by Subgroup		Not Met	Met	Met	Met	Met	Not Met	Met	Met	Not Met	Not Met

AYP Determination by Indicator

Reading Proficiency:	Not Met
Mathematics Proficiency:	Not Met
Reading Participation:	Met
Mathematics Participation:	Met
Graduation Rate:	Not Met
Attendance Rate:	Met
AYP Status of Your District:	Not Met

Legend

This legend explains terms used in the above chart that describe whether each student group met this year's AYP goals.

For test indicators, AYP can be met in one of four ways:

- 1) meeting the AYP targets with current year results;
- 2) meeting the AYP targets with two-year combined results;
- 3) meeting the improvement requirements of Safe Harbor;
- 4) meeting the AYP targets by combining currently proficient students with those students projected to become proficient.

For non-test indicators, AYP can be met in one of three ways:

- 1) meeting the AYP targets with current year results;
- 2) meeting the AYP targets with two-year combined results;
- 3) making improvement over the previous year.

N/A	Not Applicable.
NR	Not Required – This indicator was not evaluated for this subgroup because the subgroup size was smaller than the minimum number needed to achieve a statistically reliable result. 30 students is the minimum size for the proficiency and non-test indicators, while 40 is the minimum size for the participation rate indicators.
Met	This subgroup met AYP for this indicator with its current year, two-year combined, Safe Harbor, or growth measure results.
Not Met	This subgroup did not meet AYP for this indicator.

Note: The AYP determination for Attendance Rate and Graduation Rate is evaluated using only the results of the 'All Students' group.



Adequate Yearly Progress (AYP) is a federally required measure. Every school and district must meet AYP goals that are set for Reading and Mathematics Proficiency and Participation, Attendance Rate, and Graduation Rate. These goals are applied to ten student groups: All Students; Economically Disadvantaged Students; Asian/Pacific Islander Students; Black, non-Hispanic Students; American Indian/Alaskan Native Students; Hispanic Students; Multi-Racial Students; White, non-Hispanic Students; Students with Disabilities (IEP); and Students with Limited English Proficiency (LEP). If any one of these groups does not meet AYP in Reading or Mathematics Proficiency, or in Participation, Attendance Rate, or Graduation Rate, then the school or district does not meet AYP. AYP also can affect the state designation that a school or district receives in one of two ways. Not meeting AYP for consecutive years will have both federal and state consequences. Federal consequences could include a school or district being identified for improvement. State consequences could include a reduction in the state's rating designation.

Columbus Public Schools, Franklin County

This report card for Columbus Public Schools in Franklin County, Ohio is just an example of how biased testing practices can effect Limited English Proficient students (this term is used by the state because it is the wording present in the current legislation). LEP students are among a small group of sub-groups that did not meet adequate yearly progress as defined by achievement on biased Ohio Achievement Tests.

There are many bias located within Assessment testing that creates unfair disadvantages for English Language Learners. The bias range from the set up of tests to the graders behind the scene. In one particular research study, Ball examined the grading styles of four European-American teachers and four African-American teachers, grading two sets of essays by two different dialect groups. One group was European-American students speaking English, while the other group was African American students speaking African Vernacular. The scores showed a wide range of difference. Both sets of teachers agreed that European-American students had better quality essays compared to African American students. However, African American Teachers had a much easier time grading the African Vernacular essays than did European-American Teachers. (Ball, 1997). European teachers felt the students were on a lower standard of English and needed more help (Ball, 1997). European-American teachers "had trouble grading AFV style writing because they are not accustomed to this language. They fear the cultural influence these tests may have on other students" (Ball, 1997).

After analyzing the results, Ball has begun to encourage teachers to step up to administrators and ask them for help in finding solutions for today's writing assessments. This is a first step all teachers can take, in closing the gap for different dialects and language learners. Teachers need to be advocates and voices for these students. Ball is also encouraging teachers of different cultures to work together to help these students.

For more information on African American Vernacular English, please see [AAVE In Education](#)

There is this great fear teachers have of offending students because they simply do not understand the different dialects. This poses a huge problem because often times, these culturally different students do know what they are doing and do know the English Language well. The difference between the two groups is dialect. Instead, teachers should be learning about these different dialects and finding ways to help these students.

Another bias is located within the tests themselves. Solano-Flores found that many tests may be given in different languages, however these tests are not written in different dialects specific to that region (Solano-Flores, 2008). It is a first step that test administrators recognize the need to test in different languages. However, with over 6,000 languages in the world (Diaz-Rico, 2006), tests need to be created in different dialects to meet needs of every child.

Many teachers may take results of these tests and interpret them incorrectly, often labeling the student with a learning disability. It is a teachers responsibility to learn about a child's culture and literary abilities in their native language so that the child does not become labeled with a learning disability. Listed below are some general guidelines to follow:

GENERAL GUIDELINES FOR DISTINGUISHING LANGUAGE DIFFERENCES FROM DISORDERS

- "The disorder must be present in the child's native language and English but this condition may occur for other reasons.
- Testing must be conducted in the native language and/or both the native language and in English,
- Assessments must be conducted using both formal and informal measures.
- Language must be assessed in a variety of speaking contexts.
- Patterns of language usage must be described.

- Error patterns must be determined.
- The child's language performance must be compared to that of other bilingual speakers who have had similar cultural and linguistic experiences, i.e., the child should be compared to members of the same cultural group who speak the dialect and who have had similar opportunities to hear and use the language.
- Factors which may be contributing to the interruption of development in the native language must be identified" (Ortiz, 2004).

Current Accommodations

An accommodation is defined as "support provided to students for a given testing event either through modification of the test itself or through modification of the testing procedure to help students access the content in English to better demonstrate what they know" by removing sources of difficulty. Another form of accommodation is to change the test response format. The goal of accommodations is to ensure that testing is fair for English language learners to be able to show they know content and can apply this information on a standardized test (Abedi, Hofstetter & Lord, 2004, p.6).

The most common accommodations that are found in the nation's schools are:

- Extra testing time
- Individual or small group administration
- Testing in a separate location where more breaks are permitted
- Using a bilingual dictionary, a word list or a glossary
- Translation into one's native language
- A bilingual version of the test
- A modified English version of the test

Many factors are considered before a child receives accommodations for a standardized test. First, the amount of time the child has spent in the United States and English speaking schools is taken into account, as well as the student's academic and social English proficiency. Additionally, a student's performance on other tests and schoolwork is considered to gauge how well they may perform on standardized tests. After all of these factors have been deliberated upon, individuals including teachers, school and district officials, and parents and guardians will decide whether accommodations are necessary for the student during the testing process.

How effective are certain accommodations?

Testing students in their native language has been tried many times but often when a test is translated into a different language, the content and meaning of certain test items will be lost in translation. This essentially means that two different tests are being administered among the student population. Additionally, in a study completed by Guillermo Solano-Flores and Min Li in 2006, groups of ELL students whose native language was Haitian-Creole were tested in Standard English, Standard Haitian-Creole and two different dialects of Haitian-Creole. The results of this study showed that students performed best on the test that was written in the local dialect of their native language. However, the test that students performed worst on was the test in Standard



Haitian-Creole. This study shows that several languages have multiple dialects and translation into a native language may not necessarily be the best option for students as it may not be the dialect to which they are accustomed (Solano-Flores & Li, 2006).

Allowing English language learners **extra time** seems logical as they may take extra time to read and comprehend material. However, the effectiveness of this accommodation has been found to be inconclusive. Some studies have found this accommodation to be effective for English language learners but it also helped in raising native speakers' scores so extra time may benefit *all* students during standardized tests.

The use of **dictionaries** was found to be unsuccessful in a study where commercial dictionaries were provided for a science portion of a standardized test. Reasons for this ineffectiveness were attributed to the complex vocabulary often found in English dictionaries. There were also questions of whether using dictionaries were a valid accommodation as they have the possibility to provide too much information about the content being tested.

The general consensus across studies completed in regards to **glossaries** is that they are not particularly effective when used as the sole accommodation. However, research has shown that when these word lists with simple definitions are used in conjunction with extra time, English language learners' scores on standardized tests improved (Abedi, Hofstetter & Lord, 2004).

Future Accommodations

Currently much research is being done on linguistic diversity and its impact on standardized testing. It is important that as the amount of English language learners increase in American schools, that teachers are prepared to adequately teach lessons that are tailored for both native and non-native English learners. Because ELLs fall at different points on the normal curve, it is difficult to get an accurate representation of what students know unless you test them in their native language. Previous research indicates that "ELLs can be viewed as bilingual individuals whose proficiencies in English and in their native language fall at different points depending on the carrying strengths and cognitive characteristics they exhibit in their two languages. They may have different patterns of language dominance and their strengths may be expressed differently in different contexts and in the written and oral mode" (Solano-Flores and Trumbull, 2003). Because students often come into the classroom at different times of the year and are from different countries, it is unfair to assume students are all at the same comprehensive level come test time. It is important that standardized tests take into account the importance of using a child's native language to ensure the outcomes of tests are valid.

In the classroom, ELLs are already faced with many obstacles. First they must translate everything that is being said into their native language and then they must learn all of the content being taught to them. Come test time, they must regurgitate all of the information back out on to a test which will then be evaluated to see if they are at a passing level or if they understand the content. It is incredibly important that teachers recognize this and "use classroom strategies that make activities more comprehensible all while creating a linguistically affirmative classroom climate" (Curran, 2003). It is also important to model respect for languages so that students feel comfortable enough to ask questions when they do not understand what is being taught to them. Embracing and acknowledging a student's language makes the learner feel proud of who they are. Being bilingual can be extraordinarily beneficial for students and making students aware of this can help increase their motivation for learning.

The NCLB Act requires states to report student's progress in terms of student's scores on standardized tests. Previous research has indicated problems with ELL assessments that include "inconsistency of ELL classification across and within states, sparse LEP (limited English proficient) subgroup stability, measurement quality of annual yearly progress instruments for LEP students, LEP baseline scores, and LEP cutoff points" (Abedi, 2004). The problem with standardized tests is that they are typically constructed for native English speakers and not for ELLs. It clearly then does not make sense to give students who are not proficient in English, tests that are tailored toward native English speakers. Research has suggested that "unless the primary purpose of a test is to evaluate language proficiency, it should not be used with students who cannot understand the instructions or language of the test" (Solorzano, 2008).

In addition it is important to look at previous research so that we can learn about what has not been studied. Currently there are over 4.5 million ELLs in the nation's public schools (Abedi, 2004) and this number has said to be increasing at a steady rate. Because performance on standardized tests matter to schools and because it is "a matter of survival for schools and teachers" (Bielenberg et al., 2005) continuous effort must be put in place to ensure students pass these tests. However, "high stakes testing has the potential to undermine English language learners' opportunities for high school graduation and education beyond high school. It is important for English language learners to learn the language skills required for everyday communication as well as what is needed for subject matter" (Bielenberg et al., 2005). The attitudes of teachers and administrators are important because they must make continuous efforts to ensure students comprehend what they are learning and should fight for the fairness of standardized tests. "The federal government can play a key role in this by funding and encouraging programs that improve teachers' role of content delivery, language sheltering and the teaching of academic language" (Abedi, 2004).

For more information on teacher attitudes, please see [Teacher Attitudes](#)

Conclusion

Although standardized tests are biased and accommodations need to be made to make the tests equitable for all students, standardized testing is an important part of our education system. It is a privilege and right that all students be tested. It creates accountability for the education of all students. If some demographics were exempt from testing, their education might be swept under the rug. Holding high standards for all students is extremely important, and standardized testing is one way to keep those standards high.

Bibliography

Ball, A. F. (1997). *Expanding the dialogue on culture as a critical component when assessing writing*. *Assessing Writing*, 4(2), 169-202.4)

Curran, M. E. (2003). *Linguistic diversity and classroom management*. *Theory into practice* 42(4). College of Education, The Ohio State University: Columbus, Ohio

Diaz-Rico, L.T. & Weed, K.Z. (2006). *The crosscultural language and academic development handbook: A complete K-12*



reference guide (3rd ed.). Boston, MA: Pearson.

Fairbain, S. & Fox, J. (2009). *Inclusive achievement testing for linguistically and culturally diverse test takers: Essential considerations for test developers and decision makers*. *Educational Measurement: Issues and Practice*, 28(1), 10-24.

Mahoney, K. (2008). *Linguistic influences on differential item functions for second language learners on the national assessment of educational progress*. *International Journal of Testing*, 8(1), 14-33

Ortiz, S. O. (2004) *Comprehensive assessment of culturally and linguistically diverse students: A systematic, practical approach for nondiscriminatory assessment*. Prepared for Presentation at the Minnesota School Psychologists Association Conference: January 27, 2005.

Solano-Flores, G. (2006). *Language, dialect, and register: Sociolinguistics and the estimation of measurement error in the testing of English language learners*. *Teachers College Record*, 108(11), 2354-2379.

Solano-Flores, G. (2008). *Who is given tests in what language by whom, when and where? The need for probabilistic views of language in the testing of English language learners*. *Educational Researcher*, 37(4), 189-199.

Solano-Flores, G. & Li, M. (2006). *The use of generalizability (G) theory in testing of linguistic minorities*. *Educational Measurement: Issues and Practice*, 25, 13-22.

Solano-Flores, G., & Trumbull, E. (2003). *Examining language in context: The need for new research and practice paradigms in the testing of English-language learners*. *Educational Researcher*, 32, 3-13

Solórzano, R. W. (2008). *High stakes testing: Issues, implications, and remedies for English language learners*. *Review of Educational Research*, 78(2), 260-329.

Tsang, S.-L., Katz, A., & Stack, J. (2008). *Achieving testing for English language learners, ready or not?*. *Education Policy Analysis Archives*, 16(1), 1-29.

Walt, W., Adger, C. T., & Christian, D. (1999). *Dialects in schools and communities*. Mahwah, New Jersey, Lawrence Erlbaum Associates.

Annotated Bibliography

Web Resources

Ohio's Statewide Testing Website

This site offers valuable information about Ohio's statewide tests such as the Ohio Achievement Test and the Ohio Graduation Test. The helpful content includes what students should know for each test

and what resources are available to students, teachers and parents.

U.S. Department of Education-No Child Left Behind

The U.S. Department of Education's breakdown of the No Child Left Behind Act includes a fact sheet, frequently asked questions, as well as information about how NCLB is making a difference across the country.

The National Center for Fair and Open Testing

This site focuses on developing fair and equitable tests for *all* students throughout the country. However, information about how NCLB and high-stakes tests affect ELLs can also be found.

UNESCO

This site advocates for bilingual education and instruction in one's native language. UNESCO's mission statement, strategies and resources can be helpful information when working with ELLs.

Education Alliance

Initial assessment, ongoing assessment and high-stakes testing are topics discussed on this site. There is a section that answers important questions and relevant research is used as support.

Colorin Colorado

A must-see website for anyone working with ELLs. Webcasts, recommended readings and related links provide valuable insight into effective ways to instruct these students.

page revision: 92, last edited:

Unless stated otherwise Content of this page is licensed under [Creative Commons Attribution-ShareAlike 3.0 License](#)