# English Language Acquisition by Hispanic High School Students in Georgia 

# Applied Writing Assignment 

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## Introduction

In the State of Georgia, the recent influx of Hispanic immigrants has presented local school districts with new educational challenges. The school age children of these immigrants come from predominantly low-income households and they are deficient in English language skills.

Georgia, along with many other Southeastern states are classified as a new settlement states for Hispanic immigrants as opposed to traditional settlement states such as California, New York and Florida. The 2010 US census reported the Hispanic population grew from 5.4\% in 2000 to 8.8\% in 2010 in Georgia--a 96.1\% increase. The Hispanic population in many counties in Georgia has exploded with 19 counties with greater than $10 \%$ of Hispanic residents.

Compared to native-born Americans and other immigrant groups, these Spanish-speaking immigrants tend to have lower incomes and have more children in the primary and secondary school systems. According to the demographic profile of Hispanics in Georgia performed by the Pew Hispanic Center, 31\% of Hispanic children 17 and younger live below the poverty level in Georgia, and statewide, $10 \%$ of all K-12 students are Hispanic. In order for these groups to break out of the new underclass, it is essential that they achieve a high school education, and in Georgia, English language proficiency is a prerequisite for high school success and graduation (Pew 2011).

Fundamentally, achieving a high school education is an important factor in determining whether an individual will make a positive impact on our economy. Since local school districts have some freedom in determining the design of their ESL (English as a Second Language) programs, the level of language support that children from Spanish-dominant homes receives in Georgia varies across school districts. Studies have shown that Hispanic students in high schools with predominantly English native speakers are in academic environments in which there is little social support in their native language and limited resources toward English Language development. School districts in Georgia with large Hispanic student populations have in place excellent ESL programs with a higher
percentage of teachers who have ESL certification. These remedial and sometimes innovative programs are helping children succeed in other academic areas once the language skills have progressed to levels roughly equivalent to their native speaking peers. How important is the social environment in the schools in promoting language acquisition? Is immersion in an English-only environment the best way for the Hispanic student to learn English or can a student's native language be used as a bridge to learning in an English environment? How can school administrators design language acquisition programs in Georgia High Schools that will give the Hispanic students the language skills they need to succeed in school to achieve a High School diploma?

## Literature Review

As a result of the growing "English only" policies being enacted at many levels in the United States, Hispanic English Language Learners (ELL's) are being mainstreamed into classes with native speakers with as little as one year of ESL classes. Often, there is little funding for ESL support teachers and the content-area teachers may not be able to give the students the institutional support to provide them with the language assistance they need to succeed academically. Often the student sits silently in class. The teacher is unable to determine the level of understanding of the content material that student is able to grasp. In addition, there may be substantial gaps in the Hispanic student's education between the time that the student and family leaves their native country and becomes settled in one area long enough to consider entering the school system (Smith 2007).

Generally English language programs are most effective when implemented in the primary school grades, however students at the secondary level may not have developed the language skills that is necessary for school success. Most studies dealing with this problem examine in detail the complex task of educating students at the secondary level and the need to consider carefully the role that support in Spanish, the student's native language, plays in providing a bridge to specific learning and English language competence (Smith 2007).

There are many different levels that we use language and we must be competent in all of them. To simplify, in the High School setting, the ELL student must use English in basic interpersonal communication at the social level in addition to being be able to demonstrate academic English proficiency in class. In overall language development most experts in the field now recognize the importance of social language skills in acquiring content (classroom) language skills. For example, for an ESL student, it may be no less difficult to make up a believable excuse for his teacher as to why their homework was late than it would be for the English language learner to articulate possible causes of the American Civil War. We must know and use content language as well as be able to use language to convince and persuade. To be successful in life, both language skills are important and in the primary and secondary school setting, their development tracks are not easy to separate. From this example, it is easy to see how the social language skills would support academic language. Indeed, even small children demonstrate nascent and increasingly complex language skills in pretending with their peers and playing make-believe (Brown 2007 p.155).

The research literature concerning this urgent issue also contains many model programs that have adopted the native language as a bridge to learning and have achieved remarkable success. These successful schools represent models at the other extreme where the community is Spanish-dominant and the schools have been purposefully segregated to have majority ESL student populations (Bailey 2007). One particular 2007 study of a segregated school in New York illustrates the importance of the community and peer groups in providing an environment where English language learning can be successful. In the basic bilingual model, referred to as transitional bilingual education, instruction is in both Spanish and English. While some course content instruction is conducted in Spanish, ESL instruction is initially conducted in separate intensive remedial classes and introduced gradually into these content courses. This approach recognizes that language acquisition is a gradual process and that content education cannot wait for language ability to develop toward the last years of high school.

From this basic model of bilingual education in New York, the speech community model of bilingual education was developed. This model recognizes the sociolinguistic context of second language acquisition. The students' community where practices, identity and power interactions provide a context for learning English as well as enhance the learning of other subject content (Garcia 2007).

In spite of this schools success, the speech community model is not without critics. The weaknesses are rooted in the segregated nature of the school population. The sociolinguistic isolation concerns some students who feel that they will not be able to function outside of their community. The student's lack of contact with other ethnic groups could work to perpetuate and create ethnic stereotypes. Negative attitudes toward non-English languages reduce the student's school performance by making them less willing to use their first language in public and reducing their self-confidence of their linguistic skills, however, educational programs can be designed that can counteract these effects by treating children's first language as an educational resource rather than a liability. Some researchers favor programs that develop language skills in both of a student's languages rather than attempting to replace a first language with English. Such programs usually are conducted partly in each language, depending on a children's current language skills, but they do not confine either language to lessons lasting only short periods each day. The main objective is to build new language skills while also promoting respect for a child's original language and culture (Hernandez 1997).

In the traditional model that is prevalent in Georgia, the Spanish-speaking student is placed in a majority English language environment with native speakers and given ESL instruction separate from other classes. This model is favored for two reasons. First, the rigid standardized testing in English of the No Child Left Behind Act, together with other stringent content-area specific Regents-test graduation requirements, has forced school districts to focus most of their resources on school achievement of the majority student population and the mainstreaming of native Spanish speaking
students. Secondly, the political realities in Georgia place any school expenditures that allow instruction in Spanish in public schools under harsh scrutiny. In 22 states, content instruction in both Spanish and English is illegal (Beykont 2000).

Given the general agreement on the benefits of the new community approach to language acquisition and the widely accepted immersion model, we are able to expand our research question. How can these models and methods of language education be use in designing language programs in Georgia? Should school districts use the academic support that the Spanish language provides by designing "magnet schools" to attract English language learners? Should a student’s cultural identity be subordinated in"English only" class room environment?

## Research Design and Hypothesis

In this correlation study, we are interested in the degree of the relationship of two variables of four primary research hypotheses. The research questions restated as a statistical question becomes: How much of the variability in test scores is explained by the informal and formal language-learning environment.

Hypothesis 1: Because of better language learning support in Spanish from faculty and Spanish speaking peer groups in High Schools with high percentage of Hispanic populations, Hispanic students perform better on standardized test of English Language Arts and tests of other content areas.

DV: Passing or meets requirements test scores of Hispanic students.
IV: Hispanic population percentage of Georgia public school systems.
Hypothesis 2: Because of better language learning support in Spanish from faculty and Spanish Speaking peer groups in High Schools with high percentage of Hispanic populations, Hispanic students classified as Limited English Proficiency (LEP) perform better on standardized test of English Language Arts and tests of other content areas.

DV: Passing or meets requirements test scores of LEP students.
IV: Hispanic population percentage of Georgia public school systems.
Hypothesis 3: Because of being immersed in an English language-learning environment, Hispanic students in Georgia public school systems with low percentages of Hispanic populations, perform better on standardized test of English Language Arts and tests of other content areas.

DV: Passing or meets requirements test scores of Hispanic students. IV: Hispanic population percentage of Georgia public school systems.

Hypothesis 4: Because of being immersed in an English language-learning environment, LEP students in Georgia public school systems with low percentages of Hispanic population, perform better on standardized test of English Language Arts and tests of other content areas. DV: Passing or meets requirements test scores of LEP students. IV: Hispanic population percentage of Georgia public school systems.

Null Hypothesis: There is no relationship between the language learning environment of Georgia Public Schools and Test Scores of Hispanic and LEP students in grades 1 to 12.

DV: Passing or meets requirements test scores of Hispanic and LEP students.
IV: Hispanic population percentage of Georgia public school systems.
Data for this study comes from the Governor's Office of Student Achievement (GOSA) found at the Georgia Department of Education Website. The accountability section contains the Report Card along with standardized test scores to comply with state and federal student performance reporting requirements. Test scores from the 2009-2010 school year for grades 1-12 are analyzed. Results of 49 tests beginning with the First Grade Georgia Criterion-Referenced Competency Tests (CRCT) by subject area in grades 1 through 8 and ending with the Georgia High School Graduation Tests (GHSGT) given in the $11^{\text {th }}$ and $12^{\text {th }}$ grades. Test scores from the End-of-Course Tests (EOCT) given in High Schools by content area are also included in the analysis. Students in grades nine
through 12 take these standardized tests and it determines $15 \%$ of the final course grade. An overall score of 70 out of 100 is required to pass the course.

Also on the GOSA website we find Hispanic defined as "A person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race" and Limited English Proficiency (LEP) as "a student who is an English Language Learner (ELL)". An ELL student has a primary language other than English. English Language Learners may receive appropriate standard accommodations based on their individualized programs.

Test scores from the 181 public school systems in Georgia, 160 county and 21 city, are provided in Microsoft Excel spreadsheets and the Pearson $\boldsymbol{r}$ correlation function in Excel's data analysis statistical tools is applied to the data. The raw spreadsheets contain data for individual tests and schools and aggregated data by county and city school systems for all schools in that system. All major ethnic groups are disaggregated, as are special student populations such as those classified as LEP students. The filter function in Excel is used to isolate school systems, demographic information, Hispanic, and LEP test scores. School systems with fewer than 10 students taking a particular test did not report passing or meets requirements data and were not included in the analysis. Typically, these low number of test takers were from school systems with low populations of Hispanic or LEP students. Whether this absence of data at the low end of the correlation study significantly affects the results is not known. If the office of the Governor does not consider this information significant, then we may assume that it is not. Another factor that may bring into question the results of the correlation is that LEP test takers are not disaggregated by ethnic group. The Georgia DOE website did not provide the breakdown of Hispanic LEP students with this data set and the information was not found elsewhere on the Georgia DOE website. The assumption is made in this study is that Hispanic students make up a large percentage of LEP students across school systems. No school systems had reportable LEP test scores that did not have reportable Hispanic test scores. The number of LEP test takers was generally
correlated with school systems with higher populations of Hispanic students. Recently, Georgia has been the destination of refugee groups displaced by the various conflicts around the world and the heads of the households from these groups find employment in the same industries not requiring English language ability located in the same population centers as large numbers of Hispanic families are found. DeKalb County accepted $63 \%, 81 \%$, and $87 \%$ of the refugee population destined for Georgia in 2006, 2007, and 2008 respectively, with a high of 2,846 refugees being accepted statewide in 2008. The DeKalb System was included in all tests in the data set; the Decatur City System within DeKalb County was not included (GDCH 2011). These numbers indicate that Hispanic student populations dominate the LEP program in Georgia Schools.

Other issues with the data set found during the investigation were considered but were judged not to affect the overall statistical integrity of the study. Lumpkin County and Muscogee Counties reported zero percentage for Hispanic student populations but over 10 students were found in their Hispanic test taking population. A summary analysis was performed for selected tests and the percentage of test takers in the Hispanic group among all test takers of the particular test was used as proxy estimates for the Lumpkin (7\%) and Muscogee (5\%) Counties’ overall Hispanic Populations. Additionally, a problem was found in the data set for the $5^{\text {th }}$ grade CRCT tests. The data for the Science and Social Studies tests were identical. Consequently, the correlation coefficients for the two tests are the same. An email was sent to the webmaster of the site, but as of the date of this report, clarification has not been received.

## Analysis of Data

The results of the 49 tests with the sample number and correlation coefficient is found in Table 1. As indicated in the table among the school systems included in the Hispanic test data, about 80\% of the schools have students in the LEP group in the early grades. As expected, this percentage decreases to the 50 to $40 \%$ range as the grade level of the tests increases. Only 35 school systems have
ten or more test takers in the LEP group among the 87 school systems with participants in the Hispanic group taking the GHSGT.

The CRCT for grades 1 to 5 are shown in the bar graph in Figure- 1 below. All but one of the correlation coefficients for both Hispanic and LEP students are in the negative range. This indicates that test scores are inversely related to the portion of the student in the school systems that are Hispanic. This data supports Hypothesis 3 and 4 of our research: Hispanic and LEP students in the primary grades do better on standardized tests immersed in environments where native English students predominate. This holds for both groups in grades one to three, however in grades four and five the Hispanic test takers seem to benefit more than LEP students. Please note again the duplicated data for the Science and Social Studies test data.


Figure-2 illustrates the correlation results of CRCT test by school system for the middle grades 6, 7, and 8 . Once again, Hypothesis 3 and Hypothesis 4 are generally supported but not as uniformly as found in that support Hypothesis in the early grades. The effect of native English speakers on LEP students is not as strong and support for Hypothesis 2 is indicated. LEP students may be receiving some collaborative help from their Spanish speaking peer groups in grades 6 and 7. In some cases there are correlations that are close to zero supporting the Null Hypothesis.


Finally, the test results among the groups and school systems at the high school level, shown in Figure-3, indicate support for the Null hypothesis in the EOCT data. Low or no correlation predominates for most tests beginning in the ninth grade. What is remarkable about the results of the correlation study for the graduation tests is support for Hypothesis 2. The results of the GHSGT indicate that LEP students may receive significant support in environments where Hispanic students

Figure 3: High School End of Course Tests and Graduation Tests

are found in higher percentages of population of the students in the school system. This support may be in the form of collaboration with Spanish-speaking peer groups or from a faculty in the specific content areas that have a higher percentage of teachers with ESL endorsements.

The results of this correlation study confirm the effectiveness of the immersion model in language learning in the early years of a child's formal education. Younger students may be eager to share experiences in educational settings with groups inclusive across ethnicities and they may not be burdened by ethnic based prejudices held by adults and older children. Cooperative learning experiences allow mixed groups of children to work as a team to achieve common academic goals also fostering acceptance and enhancing children's self-esteem. Children from different ethnic backgrounds quickly learn to work together to complete a task and develop more positive feelings about themselves and one another (Siefert 2000 p.420). In the early school years, the language patterns of children are still forming and language acquisition seems effortless. The assumption that young children learn a new language quickly and easily and that the younger the child, the more quickly a second language is acquired may not be true in a classroom dominated by native speakers. The more verbal native speakers may monopolize language interactions. The child's culture and unique temperament must be taken into account in teaching a second language (Gordon 2000 p.470-2).

By the high school years, children have formed strong cultural identity reinforced by language. Strong peer group support is often necessary to survive in large high schools with a diverse student body. This may explain why we see evidence of support in schools with large Hispanic populations. The effects of peer groups in the learning environment can have a detrimental effect on learning in general, not just in language acquisition, however due the high dropout rate for Hispanic students early in High School, we can predict that non-native English speakers who have progressed to the $11^{\text {th }}$ and $12^{\text {th }}$ grades will be highly motivated students.

Studies have shown that ELL students' language proficiency improves when English is used in informal social situations and school and peer interactions are important aspects of language acquisition (Carhill 2008). The correlation results of this study do not go far enough to tell us if the ELL student is interacting with a native English student, a Spanish speaking student of equal or higher English language ability, or is getting test preparation assistance from highly qualified faculty members.

## Concluding Statements

Studies of correlation such as this one are not very useful if only generalizations based on popularly held sociological principals can be drawn from the analysis. Teachers at the various grade levels with experience in multi-cultural learning environments could use this data to stimulate their discussions of the best approaches to adopt in the classroom. Indeed, specific learning strategies may explain some of the general results of this study. The successful teacher is flexible and uses whatever strategy works to help the student succeed in school. One area of the correlation study that is needed is the percent of Faculty in support roles specifically for ELL's and the percentage of teachers in all content areas have English as a Second Language credentials.

Possible areas of further research can focus on qualitative examination of the extent of implementation, participation and expenditures per student on specific federal and state programs that relate to ELL success. The general regard and appreciation of Spanish among students and faculty should be part of the survey. One example of this type of support is the extent that the school has developed parent information in Spanish on their website. How far does the school go in meeting the federal requirement that student performance information be in a form that the parents are able to understand. Factors that may be external to the school, such as support systems in the community, whether government or private sector funded should also be examined qualitatively.

Finally the culmination of the qualitative research could be the selection of a single school to be the subject of a case study. Supported by the qualitative and quantitative evidence, select Georgia High Schools among the groups could be analyzed in case studies to see how they overcome the disadvantages that the Hispanic student faces in acquiring the language skills to succeed in school. From an organizational standpoint, how have institutional and social barriers to success been overcome through effective and innovative programs? The analysis could be use to develop further hypotheses that could better explain the factors of success as measured by improving the odds that a Hispanic student in Georgia will graduate from High School.

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| TABLE 1 | School Systems | Hispanic | School Systems | LEP |  | School Systems | Hispanic | School Systems | LEP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Test | n | r | n | $r$ | Test | n | $r$ | n | $r$ |
| CRCT Grade 1 English | 112 | -0.1800 | 90 | -0.1082 | CRCT Grade 6 Social | 103 | -0.2225 | 51 | 0.0410 |
| CRCT Grade 1 Math | 112 | -0.0562 | 91 | -0.0732 | CRCT Grade 7 English | 97 | -0.1292 | 49 | -0.0005 |
| CRCT Grade 1 Reading | 112 | -0.1912 | 90 | -0.1938 | CRCT Grade 7 Math | 97 | -0.0513 | 52 | 0.0795 |
| CRCT Grade 2 English | 110 | -0.1843 | 87 | -0.1753 | CRCT Grade 7 Reading | 97 | -0.1228 | 49 | -0.0246 |
| CRCT Grade 2 Math | 110 | -0.1355 | 89 | -0.1575 | CRCT Grade 7 Science | 97 | -0.1922 | 52 | -0.1717 |
| CRCT Grade 2 Reading | 110 | -0.3147 | 87 | -0.2977 | CRCT Grade 7 Social | 97 | -0.1729 | 48 | 0.0198 |
| CRCT Grade 3 English | 113 | -0.0807 | 81 | -0.0405 | CRCT Grade 8 English | 96 | -0.0114 | 44 | -0.1255 |
| CRCT Grade 3 Math | 113 | -0.0568 | 81 | -0.1056 | CRCT Grade 8 Math | 97 | -0.0572 | 46 | -0.0990 |
| CRCT Grade 3 Reading | 113 | -0.0422 | 81 | -0.0321 | CRCT Grade 8 Reading | 97 | -0.0765 | 44 | -0.2069 |
| CRCT Grade 3 Science | 113 | -0.1131 | 81 | -0.0989 | CRCT Grade 8 Science | 95 | -0.2209 | 47 | -0.2046 |
| CRCT Grade 3 Social | 113 | -0.1297 | 81 | -0.1206 | CRCT Grade 8 Social | 95 | -0.1573 | 44 | -0.0436 |
| CRCT Grade 4 English | 106 | -0.1575 | 79 | 0.0003 | EOCT 9th Grade Lit/Comp | 94 | -0.2168 | 45 | 0.0546 |
| CRCT Grade 4 Math | 107 | -0.1495 | 80 | -0.0222 | EOCT American Literature | 85 | -0.0150 | 33 | 0.1708 |
| CRCT Grade 4 Reading | 106 | -0.2214 | 79 | -0.0233 | EOCT Biology | 96 | -0.0674 | 46 | -0.0924 |
| CRCT Grade 4 Science | 107 | -0.2177 | 80 | -0.0608 | EOCT Economics | 76 | 0.0401 | 28 | 0.0580 |
| CRCT Grade 4 Social | 106 | -0.2672 | 79 | -0.1586 | EOCT Geometry | 50 | 0.2572 | 18 | 0.1214 |
| CRCT Grade 5 English | 107 | -0.1394 | 61 | 0.0142 | EOCT Mathematics I | 96 | 0.0499 | 45 | -0.0120 |
| CRCT Grade 5 Math | 107 | -0.1695 | 61 | -0.0223 | EOCT Mathematics II | 85 | 0.0510 | 32 | -0.0853 |
| CRCT Grade 5 Reading | 107 | -0.2246 | 61 | -0.0677 | EOCT Physical Science | 75 | -0.0621 | 35 | 0.1108 |
| CRCT Grade 5 Science | 107 | -0.3115 | 61 | -0.2624 | EOCT US History | 86 | -0.2183 | 36 | 0.1079 |
| CRCT Grade 5 Social | 107 | -0.3115 | 61 | -0.2624 | GHSGT English | 87 | -0.1018 | 35 | 0.3235 |
| CRCT Grade 6 English | 103 | -0.0384 | 51 | -0.0154 | GHSGT Mathematics | 87 | 0.0267 | 35 | 0.1337 |
| CRCT Grade 6 Math | 103 | -0.1566 | 53 | -0.2020 | GHSGT Science | 87 | -0.0540 | 35 | 0.3320 |
| CRCT Grade 6 Reading | 103 | -0.1045 | 51 | -0.0243 | GHSGT Social Studies | 87 | -0.0360 | 35 | 0.3289 |
| CRCT Grade 6 Science | 103 | -0.2341 | 53 | 0.0072 |  |  |  |  |  |

