Closing the Achievement Gap For Hispanic English Language Learners / Transitional Bilingual Students

A Special Project

Presented to

Dr. Jack McPherson

Heritage University

In Partial Fulfillment

of the Requirement for the Degree of

Masters of Education

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Spring 2008

FACULTY APPROVAL

Closing the Achievement Gap For

Hispanic English Language Learners /

Transitional Bilingual Students

Approved for the Faculty

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ABSTRACT

The purpose of this quantitative research study was to determine the extent to which 4th grade Hispanic ELL / transitional bilingual students improved reading and writing proficiency scores, from 2004 to 2007, as measure by the WASL. To accomplish this purpose, a review of selective literature was conducted. Additionally, 4th grade students' WASL scores, from 2004 to 2007 provided essential baseline data from which related inferences, conclusions, and recommendations were formulated. Using the Chi-Square method of statistical analysis, the hypothesis was supported (i.e., fourth grade Hispanic ELL / transitional bilingual students will demonstrate lower reading and writing proficiency scores, over a four year period from 2004 to 2007, as measured by the Washington Assessment of Student Learning).

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Introduction

Background for the Project

Based on observations made while teaching in both elementary and secondary schools in Washington State since 2002, the researcher (Rosa M. Labarta) has become aware of the need for students to demonstrate improvement in standardized test scores. The added challenge presented by an ever increasing Hispanic English Language Learner (ELL) / transitional bilingual student population has resulted in a tendency to lose focus on meeting the real needs of Hispanic ELL / transitional bilingual students and, on the ultimate goal to provide all students an opportunity to fully develop academically. This tendency to focus more on overall test results rather than addressing the real needs of ELL's has resulted in a sink-or-swim situation for many Hispanic ELL / transitional bilingual students.

Since 1993, when the Washington State Legislature passed House Bill 1209, high academic standards have been expected at all Washington State schools, as reflected in Washington Assessment of Student Learning (WASL) scores. However, although some schools have clearly made steady progress meeting state standards, there has been an apparent lack of progress by Hispanic ELL / transitional bilingual students across the state at the elementary and middle school levels. This conclusion was reached based on recent research conducted by the Washington School Research Center and published in Research Report # 5 (2003), entitled "*Effective Practices for Hispanic Students. Lessons Learned from Texas Schools.*" Research detailed in this report studied schools with high percentages of Hispanic students and concluded:

Although there were schools with large numbers of Hispanic students where the schools performed at a reasonably high level, when we disaggregated the data by ethnicity at these schools, it was clear the Hispanic students were not sharing in that success (p. 3).

Similarly, the annual report of the State Bilingual Instruction Program, School Year 2004-2005 (2005), entitled "*Educating English Language Learners in Washington State*," addressed issues related to the needs of ELL's in Washington State. Findings in this report indicated the declining achievement gap trend among ELL's continued across the state, as indicated in the following statement:

In the 2004–05 school year, a total of 87,343 ELL's were served statewide, more than the previous year. Most of these ELLs received little or no instruction in their primary language, even though research has found that long-term academic performance is more likely to occur when students have significant exposure to instruction in both English and their primary language (p. 1).

Socioeconomic issues related to the growing presence of legal and illegal immigrants in the United States have been also reflected in schools across the country and have been identified for some time by the U.S. Department of Education. A publication issued by the U.S. Department of Education entitled "*Programs for English Language Learners.*" (1999), provided the following guidance to school districts:

School districts in many parts of the country are experiencing a substantial increase in the enrollment of national-origin-minority students who cannot speak, read or write English well enough to participate meaningfully in educational programs without appropriate support services. In the absence of specific steps to address the language-related limitations experienced by such students, these students are at risk of losing the educational opportunities provided to students generally (p. 3).

Finally, the urgent and growing need to provide special literacy-based instructional programs for a burgeoning Hispanic ELL / transitional bilingual student population has become an essential extension of Washington State's changing demographics and diversity. Based on the *Office of Superintendent of Public Instruction, Washington State Report Card*

(October 2006), there were 485 students enrolled in grades K-5 in Eastgate Elementary School (EES), Kennewick, Washington. The ethnicity of the elementary school was broken down into 22.7% White, 73.4% Hispanic, 0.2% Black, 0.2% American Indian/Alaskan Native, and 1.0% Asian. In May 2007, 88.6% of students received free or reduced meals. Migrant students made up 32.6% of the school population, along with 40.7% transitional bilingual students, and 8.7% special education students.

Statement of the Problem

Hispanic ELL / transitional bilingual students have shown lower growth than English native speaker students in the early elementary grades, resulting in a clearly defined widening achievement gap as measured by Washington Assessment of Student Learning (WASL) scores. For the purpose of this project, the students' Washington Assessment of Student Learning scores were measured and assessed at grade 4 for a four year span.

Phrased as a question, the problem which represented the focus of the present study maybe stated as follows: To what extent did 4th grade Hispanic ELL / transitional bilingual students improve reading and writing proficiency scores, from 2004 to 2007, as measured by the WASL?

Purpose of the Project

The purpose of this quantitative research study was to determine the extent to which 4th grade Hispanic ELL / transitional bilingual students improved reading and writing proficiency scores, from 2004 to 2007, as measured by the WASL. To accomplish this purpose, a review of selective literature was conducted. Additionally, 4th grade students' WASL scores, from 2004 to 2007, provided essential baseline data from which related inferences, conclusions, and recommendations were formulated.

Delimitations

The project focused on a four year time period, from 2004 to 2007, and utilized data reflecting reading and writing WASL scores of participating 4th grade students at Eastgate Elementary School (ESS), Kennewick, Washington. A causal comparative study of two groups of participants was undertaken involving Hispanic ELL / transitional bilingual students and English native speaker students. The writer (Rosa M. Labarta) sought to determine if the Hispanic ELL / transitional bilingual students demonstrated lower achievement on reading and writing skills than English native speaker students. Test scores were obtained directly from district personnel responsible for maintaining student data and represented individual scores for students. The writer was able to readily access and measure the students' progress across the four year assessment period and established achievement trends as the selected student sample history was available within the school records.

Assumptions

As reflected above in the statement of hypothesis the researcher made the basic assumption that 4th grade Hispanic ELL / transitional bilingual students at EES would demonstrate lower reading and writing proficiency scores, from 2004 to 2007, as measured by the WASL. Although the study encompassed by this project was not performed at other elementary schools, the researcher further assumed the chosen student population represented other schools serving a typical Hispanic ELL / transitional bilingual student population and the results were applicable across the school district. In the researcher's view, a high drop out risk has resulted from overlooking the needs of Hispanic ELL / transitional bilingual students.

Hypothesis

Fourth grade Hispanic ELL / transitional bilingual students will demonstrate lower reading and writing proficiency scores, over a four year period from 2004 to 2007, as measured by the Washington Assessment of Student Learning (WASL).

Null Hypothesis

Fourth grade Hispanic ELL / transitional bilingual students will not demonstrate lower reading and writing proficiency scores, over a four year period from 2004 to 2007, as measured by the Washington Assessment of Student Learning (WASL).

Significance of the Project

One of the most significant issues evolving from socioeconomic conditions debated in the United States, related to the growing presence of legal and illegal immigrants, has been to what degree the immigrant part of the population readily acculturated into the mainstream society and whether ethnic subcultures have been created which had the potential to undermine the social fabric.

These socioeconomic issues were directly related to the academic performance assessment of Hispanic ELL / transitional bilingual students, which has turned even more complex as data has become more difficult to analyze when English native Hispanic speaking students have been included in reports and evaluations upon which critical Kennewick School District (KSD) district-wide decisions were made. This practice has tended to mask real issues facing a significant population of Hispanic ELL / transitional bilingual students across the state, virtually ensuring this population of students' failure to meet minimum academic standards in elementary school.

The project was also significant from an ethical standpoint in that although generalized test scores for the overall school population at EES indicated that the school in general was reaching the required state academic standards, there were indications that a number of bright Hispanic ELL / transitional bilingual students did not share in the general school population academic success and had in fact been overlooked. Findings produced from the present study will hopefully prove significant for KSD Educators responsible for planning, evaluating, and supporting Hispanic ELL / transitional bilingual curricular programs.

Procedure

Procedures employed in the present study evolved in several stages. During Fall semester 2007, the researcher, after engaging in conversations concerning Hispanic ELL / transitional bilingual students with the EES school principal and teaching colleagues, made the determination to undertake the present study. To conduct the study, reading and writing scores for individual students in the researcher's school (i.e., EES), which has a high population of Hispanic ELL / transitional bilingual students eligible for assistance, were collected throughout 2007-2008 to identify a demographics-based student population sample including ethnicity and placement based on English proficiency. Reading and writing WASL scores for individual students were requested from the school principal and responsible KSD representatives. Scores were examined across a four-year time period, from 2004 to 2007, for students in the selected groups. These data were correlated with similar data for a general population sample across same time span to determine achievement trends and measurement gaps. During 2008, related inferences, conclusions, and recommendations emanating from an analysis of essential base-lined data were presented to KSD administrators and other school district personnel.

Definition of Terms

Significant terms used in the context of the present study may be defined as follows:

academic performance assessment. Academic performance assessment was a measurement of academic performance and progress of individual schools. Academic performance assessment was also used to rank schools statewide based on student test scores.

acculturate. Acculturation was a process of adapting to a new culture, being able to adapt to two or more cultural patterns.

achievement gap. Achievement gap was the difference in test scores between ethnic groups, between students from high- and low-income households, and students for whom English was not the primary language.

chi square. Chi square was a nonparametric test of significance appropriate when the data were in the form of frequency counts; chi square compared proportions actually observed in a study with expected proportions to see if they were significantly different.

English as a Second Language. English as a Second Language was a program of techniques, methodology and special curriculum designed to teach English Language Learner students English language skills, which included listening, speaking, reading, writing, study skills, content vocabulary, and cultural orientation. English as a Second Language was usually in English with little use of native language.

English language learner. English language learner was a national-origin-minority student who was limited-English-proficient. English language learner was often preferred over limited English proficient as English language learner highlighted accomplishments rather than deficits.

inferential statistics. Inferential statistics was data analysis techniques for determining the likelihood that results obtained from a sample or samples were the same results that would have been obtained for the entire population.

native speaker. Native speaker was a speaker of a particular language who had spoken that language since earliest childhood.

quantitative research. Quantitative research was the collection of numerical data in order to explain, predict and / or control phenomena of interest.

sink – or - swim. Sink-or-swim was a tendency to mainstream the students too early. This term has also been defined as Submersion, in which English language learner students have

been placed in a regular English-only program with little or no support on the theory that English language learner students picked up English naturally.

Transitional Bilingual Program. This program, also known as early-exit bilingual education, utilized student's primary language in instruction. The program maintained and developed skills in the primary language and culture while introducing, maintaining, and developing skills in English. The primary purpose of a Transitional Bilingual Program was to facilitate the English language learner student's transition to an all English instructional program while receiving academic subject instruction in the native language to the extent necessary.

Washington Assessment of Student Learning. Washington Assessment of Student Learning was at the center of the state assessment program and was currently comprised of a series of criterion-reference tests in reading, writing, mathematics, and science.

Acronyms

ELL. English language learner

EES. Eastgate Elementary School

ESL. English as a second language

GDP. Gross Domestic Product

KSD. Kennewick School District

LEP. Limited English proficient

OSPI. Office of the Superintendent of Public Instruction

WASL. Washington Assessment of Student Learning

CHAPTER 2

Review of Selected Literature

Introduction

The review of literature and research summarized in Chapter 2 was organized to address:

- Communicating in a Multilingual/Multicultural Society.
- Programs for English Language Learners.
- Educating English Language Learners in Washington State.
- Data Analysis for Continuous School Improvement.
- Influence of immigration on the economy and schools.
- Summary.

Data current primarily within the last five years were identified through an online computerized literature search of the internet. A hand-search of selected research materials was also conducted.

Communicating in a Multilingual/Multicultural Society

Research conducted by Campbell (2006) focused primarily on aspects of language and culture relating to teaching, listening, reading and writing with English Language Learners which described methodologies applied to the acquisition of a second language. This authority emphasized the importance of teaching reading and writing in the student's native language, particularly in the elementary grades, as a means of facilitating transition to English language instruction.

Campbell (2006) authored an informative history of bilingualism in the United States, dating from colonial times to the period of cultural assimilation, or "melting pot" cultural monolingualism early in the twentieth century, to present day issues. Said Holmes (2001): "Language reflects society's attitudes and values, but some researchers in the area of language have argued that language may also determine what people notice, what categories they

establish, what choices they believe are available and consequently the way they behave." (p 317).

Programs for English Language Learners

A U.S. Department of Education Office for Civil Rights publication entitled, "Programs for English Language Learners," addressed the legal background and provided a comprehensive definition of the responsibilities of school districts to make equal educational opportunities available to ELL students. This manual was intended to provide school districts resource materials to plan and assess school programs to facilitate compliance with the Civil Rights Act of 1964. As quoted from the legal background section:

"Under federal law, programs to educate children with limited proficiency in English must be: 1. based on sound educational theory; 2. adequately supported so that the program has a realistic chance of success; and 3. periodically evaluated and revised, if necessary." (p. 4).

The urgent need for school districts to fund and otherwise support ELL programs was emphasized in the following statement from the manual: "Once a district has selected an educational approach, it needs to provide the necessary resources to implement the program." (p. 4).

Educating English Language Learners in Washington State

In a research publication entitled "Effective Practices for Hispanic Students in Washington State" (2003) the Washington School Research Center attempted to identify schools within the state with high percentages of Hispanic and ELL students demonstrating high achievement at the school-level. However, although some high-achieving schools with

large Hispanic and ELL student populations were identified, disaggregating the data showed that Hispanic and ELL students were not sharing in school academic success. Consequently, the search was directed outside Washington Sate to identify a school system with similar ethnic configurations as were found in Washington schools. When addressing effective practices for Hispanic students, the report was quoted as follows: “Our challenge was to find a state with schools that have been successful in overcoming or at least narrowing the achievement gap between Hispanic and non-Hispanic students.” (p. 4).

Facing similar challenges in identifying successful instructional strategies for ELL / transitional bilingual students Texas schools have demonstrated progress in narrowing the achievement gap both at the elementary and middle/junior high school level. Relevant data were then obtained directly from teachers and administrators at selected Texas schools and analyzed to determine specific characteristics of success. Effective practices for Hispanic students with regard to the implementation of programs to support ELL’s addressed the practice of second language instruction. Washington School Research Center authorities concluded that:

“Approaches to serving the academic needs of LEP students vary. Frequently, students who speak no English are placed in the districts’ “newcomer” classes where they are taught in Spanish if that is their primary language. English instruction is increased as students gain English language competency. However, staffing this type of program is difficult in many districts given the shortage of bilingual teachers and difficulty in hiring bilingual staff. These schools actively recruit and develop bilingual staff. Once enrolled in an elementary or middle school, LEP students are typically assessed using a screening instrument measuring cognitive academic language proficiency, such as the *Woodcock - Muñoz Language Survey*. Students are then placed in appropriate level ESL, primary language, or bilingual classes based on the results.” (p. 19).

As further quoted from The Effective Practices for Hispanic Students research report:

"It is expected that these students will meet standards along with their peers. Although LEP students are exempt from the English TAAS/TAKS for three years, they must take the Spanish-language version along with their peers." (p. 20).

Washington State Office of the Superintendent of Public Instruction (OSPI) has produced a number of informational reports outlining the state of Washington's ELL program. The program has provided financial assistance for services to ELL students in accordance with the state's Transitional Bilingual Instruction Act of 1979 as amended in 1984. Additionally, ELL funding has been provided by the federal government to supplement local funding. The OSPI annual report based on the State Transitional Bilingual Instruction Program for the 2004 -2005 school year, "Educating Language Learners in Washington State", addressed specific issues with regard to: Staffing and instruction; enrollment patterns of students and how these instructional and enrollment patterns, and languages have changed over time; length of time of student enrolment in the program, and academic as well as linguistic performance of ELL students served by the program. Patterns of growth for the Transitional Bilingual Instruction program over the 20 years, from 1985 – 2005, were described in this report. The report concluded that primary language instruction was critical to the students' future academic performance, as evidenced in the following quotation:

"Research has been conducted to determine the effectiveness of different approaches for educating ELLs. In general, studies have found that the more instruction that is provided in the student's primary language, the better the overall academic performance of the student over a long-term period. Experts believe that developing proficiency in one language promotes the development of proficiency in a second language. Results of the analysis of student-level data that OSPI reported in 2000 were consistent with this conclusion. These findings would

indicate that more academic instruction needs to be given in the student's primary language rather than simply relying on English-language instruction." (p. 15).

Data Analysis for Continuous School Improvement

In a publication entitled "Data Analysis for Continuous School Improvement," Bernhardt (2004) provided a concise presentation of the use and analysis of data to gain an understanding of developing trends and the projection of their future impact. This publication addressed the use of data to improve student learning in elementary, middle and high schools and school districts concerning the use and evaluation of data beyond required state assessments. As stated by Bernhardt: "We want data about all parts of the school gathered and analyzed on a regular basis to understand the entire system, not just student achievement data, and not just when external forces require it." (p. 13).

Bernhardt described various techniques for gathering data and the levels of analysis available, including simple snapshot measurements to trend analyses determined by intersecting two or more measurements or two or more variables over time. Examples of the applicability of data analysis included: How has the enrollment of non-English-speaking kindergarteners changed over the past three years?; and, what instructional strategies do third grade teachers use with students whose native languages were different from that of the teacher?

Influence of Immigration on the Economy and Schools:

As cited in "Immigrationomics", a monthly report published by the American Institute for Economic Research, Ford (2007) provided a perspective on ethical issues from an economic point of view and in a global or national context. This authority emphasized how legal, illegal and migrant workers have impacted the U.S. economy and schools. In economic terms, the role that immigration has played in the U.S. labor force, in specific major industries, and in

schools was considered. With regard to the influence of all immigrants on the U.S. economy, Ford stated:

"An estimated 37 million legal and illegal immigrants accounted for about one-eighth of the total U.S. population at year-end 2006. About 21 million of all immigrants, some 57 percent of them, were then in the U.S. labor force of roughly 151 million workers. Their labor force participation rate was, therefore, about seven percentage points higher than the overall U.S. participation rate of about 50 percent." (p. 2).

Additionally, with regard to the impact on the U.S. labor force and the projected funding of current government programs as these programs have been structured, Ford further stated: "Moreover, looking ahead, as the fast- approaching wave of 76 million U.S. baby-boom retirees mounts, it threatens further deterioration of the already troublesome and shrinking ratio of U. S. workers per retiree. In order to sustain our real GDP growth at a reasonable three percent rate, our labor force needs to grow by at least one percent, currently about 1.5 million workers per year." (p. 8)

Ford's research with regard to the influence of increasing immigrant demographics on the U. S. economy alluded also to the enormous impact this phenomenon has on the ability of school districts to educate ELL / transitional bilingual student populations.

Summary

The review of selected literature and related investigation reported in Chapter 2 supported the following research themes:

1. Language has reflected society's attitudes, values, and may also influence what people have noticed, what choices they made, and the way they behaved.

2. Under federal law, programs intended to educate English Language Learners should be based on sound educational theory, adequately funded to ensure success and periodically evaluate and revised.

3. Although Washington State educators have invested significant resources in designing effective learning practices for Hispanic ELL / transitional bilingual students, these students have not consistently shared in school academic successes.

4. Educators need data about all parts of the school to be gathered and analyzed on a regular basis to understand the entire system, not just student achievement data and not just when required due to external forces.

5. The burgeoning impact of legal, illegal, and migrant workers has significantly impacted the U.S. economy and the ability of school districts to serve Hispanic ELL / transitional bilingual students.

CHAPTER 3

Methodology and Treatment of Data

Introduction

The purpose of this quantitative research study was to determine the extent to which 4th grade Hispanic ELL / transitional bilingual students improved reading and writing proficiency scores, from 2004 to 2007, as measured by WASL scores. To accomplish this purpose, a review of selective literature was conducted. Additionally, 4th grade students' WASL scores, from 2004 to 2007, provided essential baseline data from which related inferences, conclusions, and recommendations were formulated.

The writer performed a casual-comparative study of two groups of students, Hispanic ELL / transitional bilingual students and English native speaker students to determine if Hispanic ELL / transitional bilingual students demonstrated lower achievement in reading and writing skills than English native speaker students. Participants in the study included 4th grade students who attended the writer's school across a four year time period.

Chapter 3 contains a description of the methodology used in the study. Additionally, the researcher included details concerning participants, instruments, design, procedure, treatment of data and summary.

Methodology

This quantitative, causal-comparative research study utilized a methodology based on a two-dimensional chi square analysis. Chi square was used to determine the difference between reading and writing WASL scores of the following two groups of students:

- Group X: Hispanic ELL / transitional bilingual students
- Group Y: English native speakers

The chi square test compared the proportions actually observed in the study to the expected proportions to determine if they were significantly different.

Participants

This study involved fourth grade students at Eastgate Elementary School (EES), Kennewick School District (KSD), Washington, during a four year time period, from 2004 to 2007. As cited above, participating students were organized in two groups consisting of Hispanic ELL / transitional bilingual students and English native speaker students. In general, students represented low income socioeconomic backgrounds and were predominantly of Hispanic ethnicity. A balanced number of male and female students were included in the study.

Instruments

For purposes of this study, the writer used 4th grade reading and writing WASL scores for the 2004-2007 school years. Washington Assessment of Student Learning test scores used by the writer in this causal-comparative study were obtained directly form district personnel responsible for maintaining student data and represented individual scores for the students. These test score data were the same data used by school and school district administrative personnel to formulate external reports and has been considered extremely reliable.

Design

The researcher's use of the causal-comparative methodology utilized the same WASL score data employed by KSD and district administrative personnel to prepare external reports.

The chi square analysis sought to determine whether Hispanic ELL / transitional bilingual students consistently showed a lower rate of growth across a four year time period, from 2004 to 2007. Use of this nonparametric test of significance was appropriate when data were organized by percentages and proportions that could be converted to frequencies.

Procedure

The sequence of procedures followed in the present study evolved in the following stages:

1. During Fall semester 2007, the researcher, after engaging in conversations concerning Hispanic ELL / transitional bilingual students with the EES school principal and teaching colleagues, made the determination to undertake the present study.
2. To conduct the study, reading and writing scores for individual students in the researcher's school (i.e., EES), which has a high population of Hispanic ELL / transitional bilingual students eligible for assistance, were collected throughout 2007-2008 to identify a demographics-based student population sample including ethnicity and placement based on English proficiency.
3. Reading and writing WASL scores for individual students were requested from the school principal and responsible KSD representatives.
4. Scores were examined across a four-year time period, from 2004 to 2007, for students in the selected groups.
5. These data were correlated with similar data for a general population sample across the same time span to determine achievement trends and measurement gaps.
6. During 2008, related inferences, conclusions, and recommendations emanating from an analysis of essential base-lined data were presented to KSD administrators and other school district personnel.

Treatment of the Data

A two dimensional chi square methodology was used in conjunction with the Windows STATPAK statistical software that accompanied the "*Educational Research: Competencies for Analysis and Applications*" text (Gay, Mills, and Airasian, 2006). This allowed the researcher to compare 4th grade reading and writing scores of Hispanic ELL / transitional bilingual students and English native speaker students. To test the null hypothesis, which would indicate no significant difference between Hispanic ELL /transitional bilingual students and English native speaker students' reading and writing scores as measured by the WASL, a two dimensional chi square was performed. The STATPAK software used the following formula to test for significance:

$$x^2 = \Sigma \cdot \left[\frac{(f_o - f_e)^2}{f_e} \right]$$

Where f_o = observed frequency and f_e = expected frequency

Significance was determined based on X^2 distribution table A.6, p 576, of the "*Educational Research: Competencies for Analysis and Applications*" text (Gay, Mills, and Airasian, 2006) for $p < 0.05$

To protect the privacy of all students, new Excel files were created for analysis from the data files provided by EES and KSD. The files thus created were analyzed to determine the number of students in each category who met the standards as defined by the state's minimum WASL reading and writing scale scores. Having the number of students meeting standards in each category a table was generated listing the frequencies associated with each 4th grade category for school years 2004 to 20007. These data were then analyzed using the STATPAK two dimensional chi square function.

Summary

Chapter 3 provided a description of the research methodology employed in the study, participants, instruments used, research design and procedure utilized. Details concerning treatment of the data obtained and analyzed were also presented.

CHAPTER 4

Analysis of the Data

Introduction

Description of the Environment

The present study was designed to determine the extent to which 4th grade Hispanic ELL / transitional bilingual students improved reading and writing proficiency scores, from 2004 to 2007, as measured by WASL.

Hypothesis

Fourth grade Hispanic ELL / transitional bilingual students will demonstrate lower reading and writing proficiency scores, over a four year period from 2004 to 2007, as measured by the Washington Assessment of Student Learning (WASL).

Null Hypothesis

Fourth grade Hispanic ELL / transitional bilingual students will not demonstrate lower reading and writing proficiency scores, over a four year period from 2004 to 2007, as measured by the Washington Assessment of Student Learning (WASL).

Results of the Study

Eight tables have been provided listing the fourth grade EES population for each year from 2004 to 2007 as follows:

Table 1

English Native Speaking Students Fourth Grade 2004

:udent	ilingual	dling Code	thnic roup	ender	rade	ling Scores	ing Scores
1	No	2824	5	M	4	417	10
2	No	2824	4	F	4	417	10
3	No	2824	4	F	4	393	10
4	No	2824	5	M	4	417	7
5	No	2824	5	F	4	409	10
6	No	2824	5	M	4	414	12
7	No	2824	5	M	4	440	11

8	No	2824	4	M	4	429	9
9	No	2824	4	F	4	389	8
10	No	2824	4	F	4	389	7
11	No	2824	4	F	4	385	7
12	No	2824	5	M	4	387	6
13	No	2824	5	F	4	417	9
14	No	2824	5	M	4	424	10
15	No	2824	4	M	4	421	10
16	No	2824	5	F	4	414	10
17	No	2824	5	M	4	440	10
18	No	2824	4	M	4	417	10
19	No	2824	5	F	4	421	9
20	No	2824	5	F	4	417	10
21	No	2824	4	F	4	449	11
22	No	2824	4	F	4	397	5
23	No	2824	5	M	4	449	9
24	No	2824	4	M	4	409	10
25	No	2824	4	F	4	421	8
26	No	2824	4	F	4	411	10
27	No	2824	5	M	4	404	8
28	No	2824	5	M	4	421	10
29	No	2824	4	F	4	429	10
30	No	2824	4	F	4	429	11
31	No	2824	5	M	4	434	6
32	No	2824	4	M	4	414	11
33	No	2824	5	M	4	424	12
34	No	2824	4	F	4	440	9
35	No	2824	4	F	4	417	8
36	No	2824	5	M	4	406	10
37	No	2824	4	F	4	395	6
38	No	2824	5	M	4	424	9
39	No	2824	4	M	4	397	10
40	No	2824	4	F	4	449	10
41	No	2824	5	F	4	421	11
42	No	2824	5	M	4	414	8
43	No	2824	5	M	4	402	8
44	No	2824	4	M	4	429	11
45	No	2824	4	M	4	424	10
46	No	2824	4	M	4	477	8
47	No	2824	5	F	4	429	9
48	No	2824	5	F	4	429	8

Table 2

Hispanic ELL / Transitional Bilingual Students Fourth Grade 2004

udent	ilingual	ding Code	thnic roup	ender	rade	ling Scores	riting cores
1	Yes	2824	4	M	4	387	6
2	Yes	2824	4	M	4	424	8
3	Yes	2824	4	M	4	395	6
4	Yes	2824	4	F	4	409	9
5	Yes	2824	4	F	4	389	6
6	Yes	2824	4	M	4	429	11
7	Yes	2824	4	F	4	400	10
8	Yes	2824	4	F	4	391	10
9	Yes	2824	4	M	4	417	8
10	Yes	2824	4	M	4	409	10
11	Yes	2824	4	M	4	387	4
12	Yes	2824	4	M	4	368	7
13	Yes	2824	4	M	4	404	10
14	Yes	2824	4	M	4	378	5
15	Yes	2824	4	M	4	406	10
16	Yes	2824	4	F	4	404	8
17	Yes	2824	4	F	4	406	10
18	Yes	2824	4	F	4	385	8
19	Yes	2824	4	F	4	395	6
20	Yes	2824	4	F	4	406	10
21	Yes	2824	4	F	4	402	8
22	Yes	2824	4	F	4	421	10
23	Yes	2824	4	F	4	404	8
24	Yes	2824	4	F	4	387	5
25	Yes	2824	4	F	4	397	8
26	Yes	2824	4	F	4	411	10
27	Yes	2824	4	M	4	400	9
28	Yes	2824	4	F	4	389	6

Table 3

English Native Speaking Students Fourth Grade 2005

udent	ilingual	ling Code	thnic roup	ender	rade	ling Scores	riting cores
1	No	2824	5	F	4	436	10
2	No	2824	5	M	4	415	9
3	No	2824	5	M	4	415	10
4	No	2824	5	M	4	390	7
5	No	2824	4	M	4	400	10
6	No	2824	4	F	4	412	8
7	No	2824	5	M	4	392	6
8	No	2824	4	M	4	395	9
9	No	2824	4	F	4	409	10
10	No	2824	4	M	4	426	9
11	No	2824	5	M	4	381	
12	No	2824	5	F	4	400	9
13	No	2824	5	F	4	426	10
14	No	2824	5	M	4	409	10
15	No	2824	4	F	4	402	9
16	No	2824	5	F	4	459	9
17	No	2824	5	M	4	404	6
18	No	2824	5	M	4	430	9
19	No	2824	5	M	4	418	8
20	No	2824	5	M	4	415	6
21	No	2824	4	M	4	436	8
22	No	2824	5	F	4	422	11
23	No	2824	5	F	4	426	12
24	No	2824	4	F	4	436	9
25	No	2824	4	F	4	415	10
26	No	2824	4	F	4	426	9
27	No	2824	5	M	4	415	10
28	No	2824	4	M	4	400	
29	No	2824	4	M	4	415	9
30	No	2824	5	M	4	426	6
31	No	2824	5	F	4	415	10
32	No	2824	4	F	4	430	11
33	No	2824	4	F	4	409	6
34	No	2824	4	M	4	404	10
35	No	2824	4	F	4	422	9
36	No	2824	4	M	4	418	8
37	No	2824	4	F	4	402	11
38	No	2824	5	M	4	392	
39	No	2824	5	M	4	392	
40	No	2824	5	F	4	412	9

Table 4

Hispanic ELL / Transitional Bilingual Students Fourth Grade 2005

:udent	ilingual	dling Code	thnic roup	ender	rade	ling Scores	'riting cores
1	Yes	2824	4	F	4	412	10
2	Yes	2824	3	F	4	392	10
3	Yes	2824	4	M	4	422	7
4	Yes	2824	4	F	4	407	11
5	Yes	2824	4	M	4	392	7
6	Yes	2824	4	M	4	404	8
7	Yes	2824	4	F	4	415	7
8	Yes	2824	4	F	4	426	7
9	Yes	2824	4	F	4	407	10
10	Yes	2824	4	F	4	375	9
11	Yes	2824	4	F	4	426	9
12	Yes	2824	4	F	4	426	10
13	Yes	2824	4	F	4	400	10
14	Yes	2824	4	F	4	430	10
15	Yes	2824	4	F	4	412	8
16	Yes	2824	5	F	4	415	9
17	Yes	2824	4	F	4	422	10
18	Yes	2824	4	M	4	404	6
19	Yes	2824	4	M	4	373	10
20	Yes	2824	4	M	4	407	10
21	Yes	2824	4	F	4	400	8
22	Yes	2824	4	M	4	409	7
23	Yes	2824	4	F	4	418	8
24	Yes	2824	4	F	4	383	9
25	Yes	2824	4	F	4	407	10

Table 5

English Native Speaking Students Fourth Grade 2006

:udent	ilingual	dling Code	thnic roup	ender	Grade	eading Scores	'riting cores
1	No	2824	4	M	4	414	10
2	No	2824	4	M	4	393	9
3	No	2824	2	M	4	432	7
4	No	2824	5	M	4	393	11
5	No	2824	5	M	4	404	6
6	No	2824	5	M	4	404	11
7	No	2824	5	F	4	432	9
8	No	2824	5	M	4	409	8
9	No	2824	4	F	4	424	10
10	No	2824	4	F	4	432	10

11	No	2824	4	F	4	452	11
12	No	2824	5	M	4	384	8
13	No	2824	4	M	4	452	9
14	No	2824	4	M	4	420	10
16	No	2824	5	F	4	379	10
17	No	2824	4	F	4	428	11
18	No	2824	5	M	4	404	8
19	No	2824	5	F	4	432	10
20	No	2824	4	M	4	428	9
21	No	2824	5	M	4	381	8
22	No	2824	4	F	4	424	11
23	No	2824	4	F	4	437	8
24	No	2824	4	M	4	381	3
25	No	2824	4	F	4	417	10
26	No	2824	4	M	4	428	10
27	No	2824	4	F	4	371	9
28	No	2824	5	M	4	444	11
29	No	2824	5	F	4	414	10
30	No	2824	5	F	4	420	10
31	No	2824	4	F	4	412	9
32	No	2824	5	F	4	428	9
33	No	2824	2	F	4	424	12
34	No	2824	4	F	4	414	9
35	No	2824	4	F	4	414	8
37	No	2824	4	F	4	432	9
38	No	2824	5	M	4	412	8
39	No	2824	4	M	4	400	9
40	No	2824	5	M	4	424	10
41	No	2824	5	M	4	424	10
42	No	2824	4	F	4	467	10
43	No	2824	5	M	4	424	10
44	No	2824	4	M	4	388	6
45	No	2824	5	M	4	432	10
46	No	2824	5	F	4	420	9
47	No	2824	3	M	4	432	11
48	No	2824	5	M	4	428	9
49	No	2824	4	M	4	424	9
50	No	2824	5	F	4	420	9
51	No	2824	5	F	4	432	10

Table 6

Hispanic ELL / Transitional Bilingual Students Fourth Grade 2006

:udent	ilingual	ding Code	thnic roup	ender	Grade	eading Score	ing Score
1	Yes	2824	4	M	4	424	8
2	Yes	2824	4	M	4	412	10
3	Yes	2824	4	M	4	406	9
4	Yes	2824	4	F	4	417	8
5	Yes	2824	4	F	4	424	9
6	Yes	2824	4	M	4	414	10
7	Yes	2824	4	F	4	424	10
8	Yes	2824	4	F	4	395	9
9	Yes	2824	4	M	4	388	2
10	Yes	2824	4	M	4	400	9
11	Yes	2824	4	M	4	414	7
12	Yes	2824	4	F	4	424	10
13	Yes	2824	4	M	4	409	7
14	Yes	2824	4	F	4	437	9
15	Yes	2824	4	M	4	417	9
16	Yes	2824	4	M	4	371	9
17	Yes	2824	4	F	4	424	11
18	Yes	2824	4	F	4	404	9
19	Yes	2824	4	F	4	424	8
20	Yes	2824	4	M	4	424	6
21	Yes	2824	4	M	4	417	7
22	Yes	2824	4	M	4	414	9
23	Yes	2824	4	F	4	404	8
24	Yes	2824	4	M	4	386	7
25	Yes	2824	4	M	4	412	9
26	Yes	2824	4	F	4	388	6

Table 7

English Native Speaking Students Fourth Grade 2007

tudent	Bilingual	ding Code	thnic roup	Gender	Grade	eading Score	ing Score
1	No	2824	4	F	4	425	11
2	No	2824	4	F	4	424	10
3	No	2824	5	M	4	452	9
4	No	2824	8	M	4	390	10
5	No	2824	4	F	4	424	9
6	No	2824	4	F	4	409	9
7	No	2824	5	F	4	438	9
8	No	2824	4	F	4	400	9
9	No	2824	5	F	4	385	8

10	No	2824	5	M	4	394	7
11	No	2824	4	M	4	396	7
12	No	2824	4	F	4	417	9
13	No	2824	4	F	4	396	8
14	No	2824	4	F	4	396	4
15	No	2824	5	M	4	405	8
16	No	2824	4	F	4	396	10
17	No	2824	4	F	4	400	9
18	No	2824	4	F	4	419	12
19	No	2824	4	F	4	385	7
20	No	2824	4	F	4	403	10
21	No	2824	4	M	4	414	10
22	No	2824	5	M	4	394	6
23	No	2824	4	M	4	425	10
24	No	2824	4	M	4	401	10
25	No	2824	5	F	4	425	10
26	No	2824	4	M	4	409	7
27	No	2824	2	F	4	424	10
28	No	2824	4	M	4	390	9
29	No	2824	4	F	4	424	10
30	No	2824	5	M	4	385	8
31	No	2824	4	F	4	394	9
32	No	2824	4	M	4	433	10
33	No	2824	4	F	4	403	8
34	No	2824	4	F	4	424	9
35	No	2824	4	F	4	390	6
36	No	2824	5	M	4	394	6
37	No	2824	7	F	4	390	8
38	No	2824	4	F	4	419	9
39	No	2824	5	F	4	401	8
40	No	2824	4	M	4	407	6
41	No	2824	4	M	4	405	6
42	No	2824	5	M	4	409	10
43	No	2824	4	F	4	425	10
44	No	2824	4	M	4	401	8
45	No	2824	4	F	4	407	10
46	No	2824	4	F	4	390	7
47	No	2824	4	M	4	390	8
48	No	2824	4	M	4	396	8
49	No	2824	5	F	4	403	10
50	No	2824	4	M	4	390	10

Table 8

Hispanic ELL / Transitional Bilingual Students Fourth Grade 2007

:udent	ilingual	dling Code	thnic roup	ender	rade	eading Score	ing Score
1	Yes	2824	4	F	4	400	10
2	Yes	2824	4	M	4	396	8
3	Yes	2824	4	M	4	385	8
4	Yes	2824	4	M	4	388	9
5	Yes	2824	4	M	4	392	7
6	Yes	2824	4	M	4	412	9
7	Yes	2824	4	M	4	409	5
8	Yes	2824	4	F	4	394	7
9	Yes	2824	4	M	4	385	9
10	Yes	2824	4	M	4	383	7
11	Yes	2824	4	M	4	380	8
12	Yes	2824	4	F	4	403	7
13	Yes	2824	4	F	4	394	8
14	Yes	2824	4	F	4	392	8
15	Yes	2824	4	F	4	390	9
16	Yes	2824	4	F	4	392	7
17	Yes	2824	4	F	4	375	8
18	Yes	2824	4	M	4	392	6
19	Yes	2824	4	F	4	378	8
20	Yes	2824	4	M	4	396	7
21	Yes	2824	4	M	4	388	5
22	Yes	2824	4	F	4	400	10
23	Yes	2824	4	M	4	400	8
24	Yes	2824	4	F	4	372	10
25	Yes	2824	4	M	4	390	8
26	Yes	2824	4	F	4	383	7
27	Yes	2824	4	F	4	392	8
28	Yes	2824	4	M	4	403	8
29	Yes	2824	4	M	4	383	6
30	Yes	2824	4	F	4	390	8
31	Yes	2824	4	M	4	390	8

In the 8 tables provided, the fourth grade student population at EES from 2004 to 2007 was listed. The tables were extracted from Excel files provided by KSD for each of the years studied and were arranged to provide reading and writing scores for both groups studied. It was important to note, as explained in Chapter 1, the English native speaking student population included Hispanic students who were considered English native speakers and thus

were not assigned to a transitional bilingual class or similar program. Ethnic Group Codes have been designated by KSD as follows:

American Indian or Alaskan Native	Asian
Black (Not of Hispanic Origin)	Hispanic
White (Not of Hispanic Origin)	Native Hawaiian or Pacific Islander
Multiracial	

In Table 9, an analysis of the data for the two groups has been provided using a two-dimensional chi square test to determine if a significant difference existed between the two groups studied. To perform the analysis, reading and writing WASL test scores from tables 1 through 8 were filtered using Excel to establish the number of students in each group meeting state minimum standards as provided by OSPI. These minimum standards were defined as follows:

Reading scale score = 400 or above Writing scale score = 9 or above

Table 9

A two Dimensional X^2 STATPAK Analysis for the English Native Speaking and Hispanic ELL / transitional bilingual Groups.

Year	spanic ELL / Transitional ingual Meeting Standards Group X	nglish Native Speakers Meeting Standards Group Y
Reading Scores 400 or e	16	40
Writing Scores 9 or above	12	33
Reading Scores 400 or e	20	34
Writing Scores 9 or above	15	26
Reading Scores 400 or e	21	41
Writing Scores 9 or above	15	38
Reading Scores 400 or e	7	31
Writing Scores 9 or above	7	29

df = 7 $X^2 = 19.5372$

From Gay, Mills and Airasian (2006) Appendix A , Table A.6, p 576, Distribution of X^2 it was determined that for df= 7 and $X^2 = 19.5372$, $p < 0.01$

Findings

Major findings produced from the analysis provided in Table 9 and from data presented allowed for the following inferences and conclusions to be formulated:

Since the X^2 analysis returned a value of $p < 0.05$, it was concluded that there was a significant difference between the Hispanic ELL / transitional bilingual group and the English native speaking group as measured by the WASL reading and writing test scores for the four years studied. Data analysis also inferred from the results of the analysis that the fourth grade Hispanic ELL / transitional bilingual group demonstrated significantly lower reading and writing scores than the fourth grade English native speaking group. The Null Hypothesis was thus rejected.

The results shown in table 9 have also been represented in graphical bar chart form in Appendix A. The chart provides a direct comparison at a glance of the total students tested in each group and the percentage meeting state standards for the four years studied.

Discussion

As previously observed by the researcher prior to undertaking the study, there appeared to be a significant difference between the two groups studied related to their reading and writing proficiency as measured by reading and writing WASL scores. Based on a statistical treatment of the data as reflected by the X^2 analysis, the writer's previous observations were confirmed.

To further confirm the author's findings, supplement the analysis of the data and formulate final conclusions and recommendations, the researcher performed a follow-up study

to determine the progress made by the 4th grade 2004 Hispanic ELL / transitional bilingual students at the 7th grade level in 2007.

For this purpose, available 7th grade 2007 reading and writing WASL score data for the 28 Hispanic ELL / transitional bilingual students in the 2004, 4th grade class were researched and compared to their 4th grade 2004 score data. This comparison has been presented in table form in Appendices B and C. Based on this comparison, the following observations were noted:

- Of the 28 Hispanic ELL / transitional bilingual students listed in table 2 of chapter 4, 16 were found who were still within the school district in 2007.
- Of the 16 Hispanic ELL / transitional bilingual students found, 4 met state minimum reading standards in 4th and 7th grade and 4, who met state minimum reading standards in 4th grade, did not meet state minimum reading standards in 7th grade. Of the 16 Hispanic ELL / transitional bilingual students found, 8 did not meet state minimum reading standards in either 4th or 7th grade.
- Of the 16 Hispanic ELL / transitional bilingual students found, 2 met state minimum writing standards in 4th and 7th grade and 5 who met state minimum writing standards in 4th grade did not meet state writing minimum writing standards in 7th grade. Nine students did not meet state minimum writing standards in either 4th or 7th grade.

Summary

In Chapter 4, the researcher organized the student WASL score data received from KSD personnel and distributed these data into two specific groups consisting of Hispanic ELL / transitional bilingual students and English native speaking students. These data were then analyzed using standard statistical educational research methods commonly used to test for significance appropriate when the data has been presented in the form of frequency counts or percentages. In summary, using the X^2 method of statistical analysis, the hypothesis was

supported (i.e., fourth grade Hispanic ELL / transitional bilingual students will demonstrate lower reading and writing proficiency scores, over a four year period from 2004 to 2007, as measured by the Washington Assessment of Student Learning).

A follow up study comparing the WASL scores for the group of 4th grade Hispanic ELL / transitional bilingual students in 2004 with their 2007, 7th grade WASL scores also indicates they have not made significant progress and in fact show negative progress as a group.

CHAPTER 5

Summary, Conclusions and Recommendations

Summary

The purpose of this quantitative research study was to determine the extent to which 4th grade Hispanic ELL / transitional bilingual students improved reading and writing proficiency scores, from 2004 to 2007, as measured by the WASL. To accomplish this purpose, a review of selective literature was conducted. Additionally, 4th grade students' WASL scores, from 2004 to 2007, provided essential baseline data from which related inferences, conclusions, and recommendations were formulated.

Conclusions

Based on the review of selected literature and major findings produced from the present study, the following conclusions were reached:

1. Language has been in fact reflected in society's attitudes, values, and influenced people's behavior as well as the choices they have made.

2. Programs intended to educate English Language Learners have been based on sound educational theory as required by Federal Law but also needed to be adequately acknowledged and funded to ensure success and periodically evaluated and revised to conform to changing demographics.

3. Although Washington State educators have invested significant resources in designing effective learning practices for Hispanic ELL / transitional bilingual students, these students have not consistently shared in school academic successes.

4. Educators need data about all parts of the school to be gathered and analyzed on a regular basis to understand the entire system, not just student achievement data and not just when required due to external forces.

5. The burgeoning impact of legal, illegal, and migrant workers has significantly impacted the U.S. economy and the ability of school districts to serve Hispanic ELL / transitional bilingual students.

6. The Chi-Square analysis performed in chapter 4 supported the author's hypothesis in that the data studied indicated Hispanic ELL / Transitional Bilingual students consistently underperformed their English speaking counterparts based on their WASL scores.

7. The author also provided evidence that the Hispanic ELL / Transitional Bilingual students did not show adequate progress in their reading and writing scores in the four years from 4th to 7th grade.

Recommendations

As a result of the conclusions cited above, the following recommendations have been suggested:

1. Educators should understand that language reflected in society's attitudes and values is a major force in influencing peoples' behaviors and the choices they make.
2. To implement a late-exit program dedicated to the primary use of Spanish instruction in Kindergarten with increasing English instruction starting in first grade and increasing up to 60-80% in grades 5 and 6; training of teachers and administrators serving Hispanic ELL / transitional bilingual students must be improved to provide an active learning involvement for language and cognitive skill development.
3. To provide effective learning practices for Hispanic ELL / transitional bilingual students, Washington State educators should invest significant resources in the design of such practices.
4. To fully comprehend the American system of public education, educators need to analyze data focused not merely on student achievement, but on all learning components in a particular school.

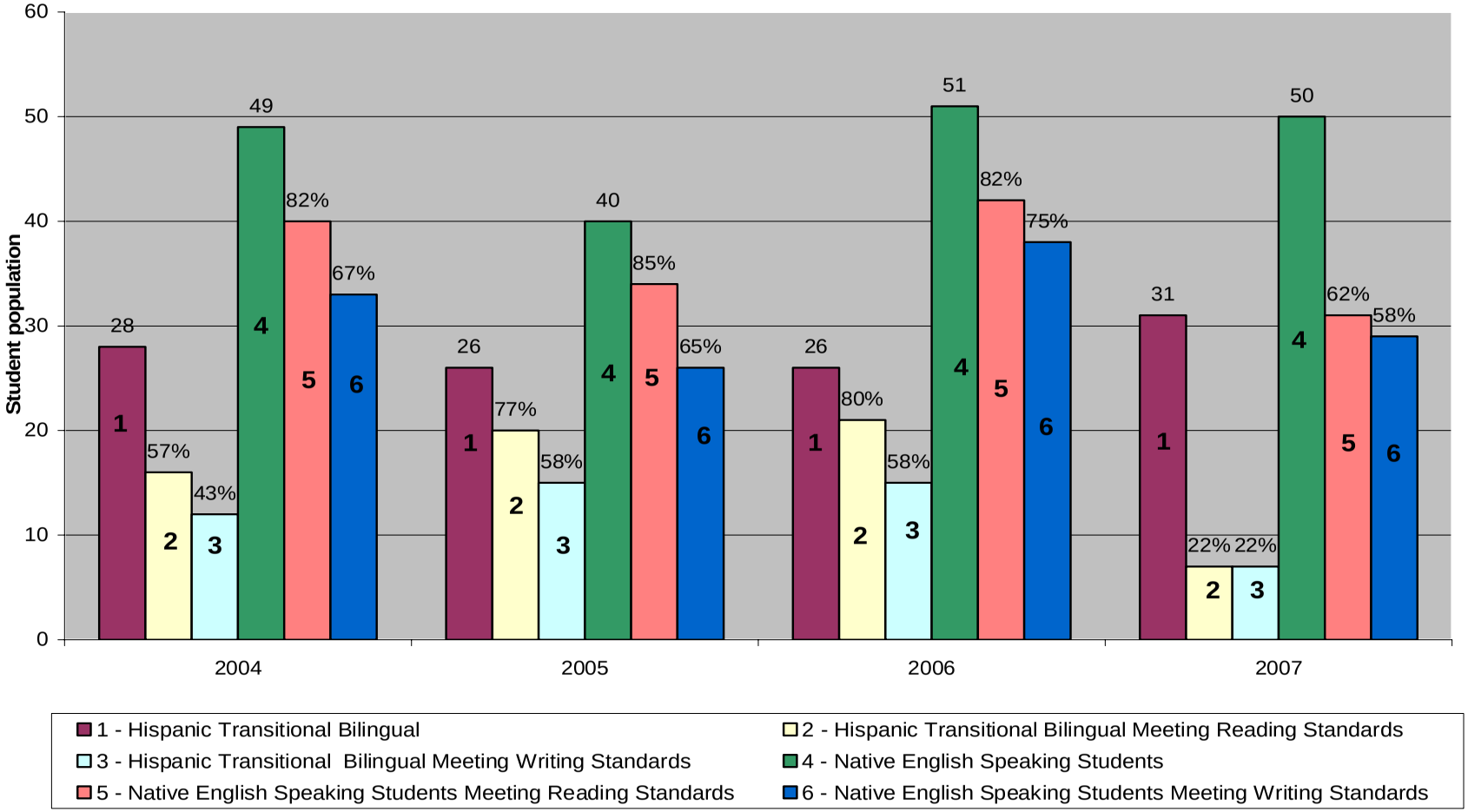
5. To positively enhance the inculcation of legal, illegal and migrant workers into American society, educators must support economic initiatives to impact their burgeoning numbers.
6. An analysis of data presented in Chapter 4 supported the author's hypothesis that fourth grade Hispanic ELL / transitional bilingual students will demonstrate lower reading and writing proficiency scores, over a four year period from 2004 to 2007, as measured by the Washington Assessment of Student Learning (WASL).
7. School / School Districts seeking information relating to closing the achievement gap for Hispanic ELL / transitional bilingual students may wish to utilize information contained in this study or, they may wish to undertake related research more suited to their unique needs.

Appendix A

Appendix A: Kennewick School District - Eastgate Elementary - Fourth Grade WASL Scores 2004-2007.

APPENDIX A

Kennewick School District - Eastgate Elementary - Fourth Grade WASL Scores 2004 -2007



Appendix B

Appendix B: Hispanic ELL / transitional bilingual students 2004 and 2007 Reading scores.

Appendix C

Appendix C: Hispanic ELL / transitional bilingual students 2004 and 2007 Writing scores.

Student	Ethnic Group	Gender	Writing Scores Grade 4 2004	Writing Scores Grade 7 2007	Met Writing Standards Grade 4	Met Writing Standards Grade 7
1	4	M	6	6	No	No
2	4	M	8	7	No	No
3	4	M	6	5	No	No
4	4	F	9	10	Yes	Yes
5	4	F	6	**Data not available**		
6	4	M	11	8	Yes	No
7	4	F	10	8	Yes	No
8	4	F	10	9	Yes	Yes
9	4	M	8	8	No	No
10	4	M	10	**Data not available**		
11	4	M	4	**Data not available**		
12	4	M	7	6	No	No
13	4	M	10	**Data not available**		
14	4	M	5	4	No	No
15	4	M	10	**Data not available**		
16	4	F	8	5	No	No
17	4	F	10	8	Yes	No
18	4	F	8	**Data not available**		
19	4	F	6	8	No	No
20	4	F	10	7	Yes	No
21	4	F	8	**Data not available**		
22	4	F	10	**Data not available**		
23	4	F	8	**Data not available**		
24	4	F	5	**Data not available**		
25	4	F	8	**Data not available**		
26	4	F	10	8	Yes	No
27	4	M	9	**Data not available**		
28	4	F	6	8	No	No