# An Assessment of the Dual Language Acquisition Model <br> On Improving Student WASL Scores at McClure Elementary School at Yakima, Washington. 

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Dr. Jack McPherson

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$\qquad$

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## FACULTY APPROVAL

An Assessment of the Dual Language Acquisition Model On Improving Student WASL Scores at McClure Elementary School at Yakima, Washington.

Approved for the Faculty

, | , Faculty Advisor |
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|  | , Date


#### Abstract

The purpose of the experimental research study was to determine the extent to which 3rd grade students enrolled in the dual language acquisition program at McClure Elementary School were successful in improving their performance on the reading portion of the WASL. To accomplish this purpose, a review of selected literature was conducted. Additionally, a $t$-test analysis for independent samples was undertaken to obtain baseline data from which related conclusions or recommendations were formulated. A t-test analysis for independent samples of baseline data indicated the Dual Language Acquisition Program (DLAP) had no effect on 3rd grade students’ WASL reading assessment scores at McClure Elementary School (MES). Accordingly, the hypothesis was not supported at all levels of probability.


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## CHAPTER 1

Introduction

## Background for the Project

English as a second language (ESL) is a system of instruction that enables students who are not proficient in English (English language learners) to acquire academic proficiency in spoken and written English. ESL is an essential component of all bilingual education programs in the United States for students who are English Language learners. In addition, ESL classes taught through academic content are crucial for English language learners when first-language academic instruction is not feasible (Ovando, et al., p. 9).

The authorities cited in the above statement have addressed the critical need for educators to provide bilingual education programs for English Language Learners (ELL). Cummins (2008) has also sought to explain the special language needs of ELL. According to this authority, ELL were often termed 'fluent' in the English language because they may have had the social conversational ability to speak English. Said Cummins:
. . . assessment administered to minority students showed that teachers and psychologists often assumed that children who had attained fluency in

English had overcome all difficulties with English. Yet these children frequently performed poorly on English academic tasks as well as in psychological assessment situations. . . . Despite teacher observation that peer-appropriate conversational fluency in English developed rapidly, a period of 5-7 years was required, on average, for immigrant students to approach grade norms in academic aspects of English (p.7).

The researcher, Elizabeth Robb, a veteran elementary reading specialist, has observed that the average ELL student at McClure Elementary School (MES) in Yakima, Washington, generally possessed little academic facility in their second language. The study focused on ELL students enrolled in the 3rd grade Dual Language Acquisition Program (DLAP) at McClure Elementary School (MES), and the effort to provide those students with instruction needed to assure their success on the Washington Assessment of Student Learning (WASL) reading assessment.

## Statement of the Problem

The study sought to determine whether Dual Language was an effective language acquisition program for McClure Elementary School (MES) English Language Learners (ELL). Washington Assessment of Student Learning (WASL) scores showed that ELL students were significantly below native English speakers in reading levels. McClure's students failed to meet Adequate Yearly Progress
(AYP) in several cells, including: English Language Learner (ELL) and Washington Assessment of Student Learning (WASL) reading. Additionally, administrators for the school and district were concerned that Reading First grants would be withdrawn due to the English Language Learner (ELL) students not meeting standard. Staff and administrators wanted to know if the Dual Language students improved reading scores as measured by the Washington Assessment of Student Learning (WASL) assessment.

Phrased as a question, the problem which represented the focus of the study may be studied as follows: Was the Dual Language Acquisition Program (DLAP) at MES effective in helping students succeed on the WASL reading assessment?

## Purpose of the Project

The purpose of the experimental research study was to determine the extent to which 3rd grade students enrolled in the Dual Language Acquisition Program at MES were successful in improving their performance on the reading portion of the WASL. To accomplish this purpose, a review of selected literature was conducted. Additionally, a $t$-test analysis for independent samples was undertaken to obtain baseline data from which related conclusions or recommendations were formulated.

## Delimitations

The study included data from the 2006-2007 and 2007-2008 school years at MES. Participants included two groups of student participants including: A control group of 2006/2007 not enrolled in the DLAP and, an experimental group of $3^{\text {rd }}$ grade students who received DLAP instruction.

## Assumptions

For purposes of this study, the following assumptions were believed to be true:

1. Students at MES attempted to be successful at reading and learning in English.
2. The results of the WASL correctly assessed students' reading and comprehension abilities.
3. The DLAP in place at MES supported ELL students' second language learning.

## Hypothesis or Research Question

Dual language instruction will improve reading scores of participating $3^{\text {rd }}$ grade students at MES as measured by the WASL reading assessment. Null Hypothesis

No significant difference will be found between dual language instruction and reading achievement of participating 3rd grade students at MES as measured
by the WASL reading assessment. Significance was determined for $\mathrm{p} \geq$ at 0.05 , 0.01 and 0.001 levels.

## Significance of the Project

The study was designed to determine the extent to which participating 3rd grade students who were taught in a DLAP were able to improve their scores on the WASL reading assessment. This information could prove useful for MES and Yakima School District (YSD) teachers seeking evidence of the value of a dual language instruction for students requiring special assistance. Research data produced could support YSD efforts to demonstrate AYP.

Procedure
In 2004, McClure Elementary School (MES), in an effort to best serve the needs of the ELL students in our school, implemented a dual language strand beginning in the kindergarten grade. Two of the four classrooms used the dual language strand, one teaching content in Spanish, and one teaching content in English. The strand would 'share' students, with students moving between the two classrooms. Each year thereafter, a new grade level would initiate the dual language strand. First grade initiated the DLAP in 2005. Second grade initiated the program in 2006, and 3rd grade followed in 2007. Students who began the program in 2004 continued with the program the following year.

When students reached the 3rd grade, all students were required to take the Washington Assessment of Student Learning (WASL) in the subjects of reading and math. This test was only given in English. In the past, ELL students have traditionally struggled with this assessment. The students did not process academic language essential success and ELL students needed a DLAP to attain Cognitive Academic Language Proficiency (CALP).

This experimental study was conducted during 2006-2007 and 2007-2008 at MES. In September 2008, the writer (Elizabeth Robb) sought and obtained permission to undertake the study from Mr. Del Carmichael, principal at MES. The names and WASL reading scores of participating 3rd grade students enrolled in the DLAP were then obtained from school records. The assistance of MES Assessment Coordinator, Lisa Cyr was then invited to facilitate assessment of participating student WASL scores throughout the 2006-2007 and 2007-2008 school years. During spring semester, 2009, final data analysis was completed and study outcomes were determined for significance.

## Definition of Terms

Significant terms used in the context of the present study have been defined as follows:

Annual Yearly Progress. Annual Yearly Progress was defined as the academic progress that each school made on an annual basis. The WASL provided measurement tool used to assess AYP.

Cognitive Academic Language Proficiency. A language-related term, (CALP) was most frequently used to discuss the language proficiency levels of students who were in the process of acquiring a new language.

Content ESL program. A program where students are taught in English with ESL strategies implemented during instruction which support other language learning.

Dual Language Acquisition Program. A two-way bilingual program, DLAP has been utilized to integrate language minority and language majority students, and to provide instruction in the minority language, Spanish along with English.

English Language Learner. Any learner or student who was in the process of learning the English language.
experimental research. Research in which at least one independent variable is manipulated, other variants are controlled, and the effect on one or more dependant variables is observed.

McClure Elementary School. A developmental pre-kindergarten through fifth grade elementary school in the Yakima School District, Yakima, Washington.
$\underline{t \text { - test for independent samples. A parametric test of significance used to }}$ determine whether there is a significant difference between the means of two independent samples at a selected probability level.

Washington Assessment of Student Learning. A standardized test (WASL) adopted by the State of Washington as the primary, high-stakes test for measuring student achievement in reading, writing, math and science.

## Acronyms

AYP. Adequate Yearly Progress
CALP. Cognitive Academic Language Proficiency
DLAP. Dual Language Acquisition Program
ELL. English Language Learner
ERIC. Educational Resources and Informational Center
ESL. English as a Second Language
L1. First Language
MES. McClure Elementary School
OSPI. Office of the Superintendant of Public Instruction

WASL. Washington Assessment of Student Learning
YSD. Yakima School District

# CHAPTER 2 <br> Review of Selected Literature 

## Introduction

The review of literature and research presented in Chapter 2 allowed the researcher (Elizabeth M. Robb) to conduct in-depth investigation of significant topics associated with English as a Second Language. For example, the manner in which bilingualism positively effects children's linguistic and educational development was explored. Significant research related to language acquisition for second language learners was also studied. Finally, instructional strategies related to English Language Learners were also considered. A summary of major research themes emanating from these subtopics has also been provided.

Data current primarily within the last five (5) years were identified through and online computerized literature search of the Educational Research Informational Center (ERIC), the internet, and Proquest. A hand-search of selected research materials was also conducted.

## Bilingual Language Programs in the Schools

According to Cummins (2008), before the question of whether dual language programs were appropriate in schools, the term 'globalization' needed to be discussed. Globalization was considered a positive development from the
perspective of business community, by making world markets more accessible to trade. Along with world trade, though, the increasing movement of people from one country to another needed to be considered. Cultural mobility and cultural diversity in today's world has created great differences in student's second language acquisition programs for families coming to America. Several groups have promoted educational policies which they hoped would solve the problems of diverse communities and ELL integration in schools and society. Inclusion of immigrant children and their assimilation into mainstream society made culturally and linguistically diverse groups no longer visible or audible. Assimilation has especially discouraged students from maintaining their mother tongue along with their cultures.

Cummins further maintained that "when we destroy children’s language and rupture their relationship with parents and grandparents, we are contradicting the very essence of education" (p.2). Instead, this authority advocated for bilingualism and for maintaining the mother tongue of immigrant students in the schools. Cummins concluded that bilingualism has had positive effects on children's linguistic and educational development. Students who developed abilities in two or more languages gained a deeper understanding of how language was used effectively. Finally, Cummins suggested that literacy in both languages
helped students develop flexibility in their thinking as a result of processing information through two different languages.

Language Acquisition for Second Language Learners
According to Cummins, second language acquisition has always been a controversial subject in the schools. Teachers and administrators often prematurely exited students from support programs due to the assumption that students were adequately fluent in English. A leading language theorist, Cummins maintained that second language learning involved two types of language proficiency which a student encountered when learning. For example, the language used by students outside of the classroom to convey meaning to friends and family, and which was supported by contextual or interpersonal cues, was referred to as Basic Interpersonal Communicative Skills (BICS). On the other hand, Cognitive Academic Language Proficiency (CALP), has been defined as the language a student might encounter in the classroom. The later was more difficult to master, and CALP remained both cognitively demanding and contextembedded. Cummins stated that "Despite teacher observation that peerappropriate conversational fluency in English developed rapidly, a period of five to seven years was required, on average, for the immigrant students to approach grade norms in academic aspects of English" (p. 2).

According to Aukerman (2007), while there may not have been a dispute about the period of time ELL students took to become proficient in academic language, there was a definite dispute between the distinction of BICS and CALP.In a 2007 , in an article entitled, A Culpable CALP: Rethinking the Conversational/Academic Language Proficiency Distinction in Early Literacy Instruction, Aukerman considered whether the two, BICS and CALP, were still relevant and whether they truly helped us understand ELL students as well as we needed. Said Aukerman: "rather than blaming the academic difficulties many ELL's experience on something they are said to lack-mastery of the "right" language-I propose that we educators need to consider what we have often lacked in meeting their needs" (p. 530). Aukerman also contended that CALP was considered "the decontextualized, cognitively demanding language used in school whereas the contextualized, cognitively undemanding language picked up through familiar interactions, gestures and tone of voice is BICS" (p. 533), and was also very difficult to justify from an educator's standpoint.

Although Aukerman was not convinced that CALP and BICS represented two different degrees of language acquisition, Cummin’s theory of BICS and CALP were credited for providing "educators a way of talking about how language learning might figure into children’s scholastic difficulties" (p. 533). Aukerman further credited the contribution of BICS and CALP for the
ability to "foster greater recognition of the importance of developing the native language" (p. 533). Both Aukerman and Cummins agreed that CALP development in the native language more easily transferred to the second language. Finally, Aukerman sought to determine the question, how CALP was measured. On one hand, doing well on the literacy related aspects of a language may just be test-wiseness. Others might argue that knowledge of content and knowledge of language was intertwined and that tests designed to measure language ability were actually were measuring content knowledge along side of language knowledge.

With regard to commercially developed English proficiency assessments used to identify ELL or to measure English language proficiency, many educators have expressed dissatisfaction with these instruments and the resulting data. Objections included contextually inappropriate items among other factors. Further, some authorities have questioned whether CALP, which was based on proficiency levels as determined by various instruments, may or may not have correctly measured English language proficiency. Whether CALP represented a valid means for measuring language proficiency or not, what was determined to be important was that ELL students be appropriately placed and supported and services provided (Pacific Region, 2007)..

## Instructional Strategies for English Language Learners

The rapid growth in the ELL and Hispanic student populations has confronted American educators with serious instructional challenges while emphasizing the need for special language assistance for non-English speaking students. This was explained by Batt (2008) as follows:

Since the implementing of No Child Left Behind (NCLB) mandates, much attention has been focused on the education of the rapidly growing English language learners in U.S. schools. Disaggregated accountability reports for these subgroups are required as a result of NCLB . . . during the academic year 2003-2004, 5.5 million students in the U.S. were limited English proficient, and 80 percent of these Limited English Proficient students spoke Spanish as their first language (2008).

Since the influx of ELL students into the public schools was so profuse, and upon considering the recent adoption of high-stakes testing, the state and federal standards, effective educational strategies for ELL students needed to be implemented. Without the studied benefit of a dual language or native language instructional program to facilitate English language proficiency, Manyak (2007) suggested that a framework for robust literacy instruction for ELL should consist of four elements: "explicit code and comprehension instruction, language rich
instruction, socioculturally informed instruction, and additive literacy instruction" (p.197).

The initial strategy Manyak suggested provided "explicit instruction in phonemic awareness and phonics with a balanced approach to literacy" (p197). However this authority noted that ELL generally experienced difficulty in reading comprehension. To help these students, an instructional strategy of activating background knowledge and inferring meanings of words was needed. To be successful when monitoring comprehension, a systematic code-based instructional model would not be adequate to show the gains ELL needed to make to compete with native speakers of English.

Language-rich instruction used to accelerate ELL oral language and academic vocabulary development was recommended by Mohr \& Mohr (2007) as a way for teachers to show they valued contributions and expected elaborations. These authorities developed a valuable tool that provided specific guidance to teachers who sought to extend ELL engagement in the classroom. Their Response Protocols provided possible teacher responses to a variety of student utterances and was intended to help teachers to improve the language acquisition climate of their classroom. Manyak maintained that a strong relationship between vocabulary knowledge and reading comprehension was part of the explicit, robust literacy instruction needed for ELL. This researcher also believed ELL
instruction should make use of materials culturally familiar to these students. Said Manyak: "socioculturally informed instruction revealed that many culturally and linguistically diverse students possess knowledge, linguistic abilities and problem solving skills that represent important resources for literacy learning" (p.198). For example, ELL can be engaged in translations for their parents during visits to doctors and can help interpret tax and immigration documents. Socioculturally informed instruction encouraged teachers to recognize valuable cultural experiences and resources and to find ways to incorporate them in classroom activities. In this manner literacy may be connected to socio-cultural activities in ELL lives when out of school, which can enhance their English literacy skills. Moll \& Darwin (1996) investigated how young ELL were able to develop literacy skills in two languages. These researchers concluded when bilingual children developed skills in either of their two languages, the development of their literacy skills growth in the second language contributed positively. Manyak was in agreement that "teachers should actively advocate some form of consistent native language literacy instruction (i.e. dual language) in their schools or communities" (p.198) and this could be provided during the school day, or through specialist daytime classes. Additionally, teachers were encouraged to advise parents to develop community-based programs aimed at teaching native language literacy to young ELL.

## Summary

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

1. Authorities advocated for bilingualism and concluded that bilingualism had been determined as having a positive effect on children's linguistic and educational development.
2. Although peer appropriate conversational fluency develops rapidly, a period of 5-7 years was required on average for second language students to approach grade norms in academic aspects of English.
3. The rapid growth in the ELL and Hispanic student populations has confronted American educators with serious instructional challenges while emphasizing the need for special language assistance in the form of educational instructional strategies for non-English speaking students.

## CHAPTER 3 <br> Methodology and Treatment of Data

## Introduction

The purpose of the experimental research study was to determine the extent to which $3^{\text {rd }}$ grade students enrolled in the dual language acquisition program at MES were successful in improving their performance on the reading portion of the WASL. To accomplish this purpose, a review of selected literature was conducted. Additionally, a $t$-test for independent samples was undertaken to obtain baseline data from which related conclusions or recommendations were formulated.

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

## Methodology

An experimental methodology was used was to determine the extent to which $3^{\text {rd }}$ grade students enrolled in the dual language acquisition program at MES were successful in improving their performance on the reading portion of the WASL. A $t$ - test for independent samples was utilized for data analysis to determine significance between the control and experimental groups. Both groups were administered the same test and each group received a different
treatment. Both groups were tested in the spring using the WASL reading assessment. The research was conducted during the 2006-2007 and 2007-2008 school years using the students that were enrolled in 3rd grade content ESL and DLAP classrooms.

## Participants

The study focused on ELL students enrolled in the 3rd grade Dual Language Acquisition Program (DLAP) at McClure Elementary School (MES), and the effort to provide those students with instruction needed to assure their success on the Washington Assessment of Student Learning (WASL) reading assessment. Participants were organized into control and experimental groups as follows:

- Control Group X: $473^{\text {rd }}$ grade students in the Content ESL program at MES during the 2006-2007 school year.
- Experimental Group Y: 48 3rd grade students who were enrolled in DLAP at MES during the 2007-2008 school year.
- Only the experimental group received instruction in the DLAP


## Instruments

The primary instrument used in the study was the Washington Assessment of Student Learning (WASL) reading assessment. A standardized test, the WASL measures student learning of basic skills and knowledge important to children’s
success in school. The Washington State Office of Superintendent of Public Instruction (OSPI) develops and administers all state assessments and reports achievement data for individual students, schools, districts, and the state. This information helps districts and schools refine instructional practices gives focus to the curriculum, and provides parents with information about how well their child is doing and where additional help may be needed

The reading portion of the WASL assesses reading comprehension using short answer, multiple-choice, and essay-type questions. All multiple-choice questions are machine-scored. Short-answer questions and extended-response questions are scored by trained raters who use scoring guides defined by Washington educators. The trained scorers consist of a large group of Washington teachers who are monitored closely by Pearson Educational Measurement, the state's testing contractor. WASL scorers who are not Washington educators must have, at a minimum, a four-year college degree. All scorers, both Washington teachers and Pearson personnel, are monitored daily to ensure their scores meet criteria of accuracy and consistency set by Washington educators. The OSPI uses rigorous methods to ensure the scoring process yields valid and reliable results. Valid scoring means that a scorer assigns the same score to a student response as would be assigned by an expert panel of Washington educators. Reliable scoring means that different scorers consistently assign the same score to a student response.

## Design

This experimental study utilized a $t$-test for independent samples. In the spring of 2007 and 2008, the control and experimental groups, as detailed above, were identified. The design involved two independent tests. The first test was administered to the control group in the spring of 2007. The second test was administered to the experimental group in 2008.

## Procedure

Procedures employed in the present study evolved in several stages, as follows:

1. During September 2008, permission was obtained from and granted by Del Carmichael, principal of McClure Elementary School
2. In January 2009, names of $3^{\text {rd }}$ grade Content ESL participants from 2006-2007 school year and DLAP participants from 2007-2008 school year and was obtained from school records.
3. In January 2009, WASL data was obtained and analyzed with MES Assessment Coordinator, Lisa Cyr.
4. During a spring semester, 2009, final data analysis was completed and study outcomes were determined for significance.
5. During spring semester, 2009, a review of literature was conducted through the Heritage University Library and Internet. Educational Resources and Informational Center (ERIC) and Proquest databases were also utilized.

## Treatment of the Data

A $t$-test for independent samples, used in conjunction with the Windows STATPAK statistical software program that accompanied the Educational Research : Competencies for Analysis and Applications Test (Gay and Airasian, 2003), allowed the researcher to compare reading proficiencies based on WASL results of the control and experimental groups. Significance was determined for $\mathrm{p} \geq$ at $0.05,0.01$ and 0.001 levels. The following $t$-test formula for independent samples was utilized:

$$
t=\frac{\bar{X}_{1}-\bar{X}_{2}}{\sqrt{\left(\frac{S S_{1}+S S_{2}}{n_{1}+n_{2}-2}\right)\left(\frac{1}{n_{1}}+\frac{1}{n_{2}}\right)}}
$$

## Summary

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

## CHAPTER 4

## Analysis of the Data

## Introduction

The present study sought to determine the extent to which the Dual Language Acquisition Program (DLAP) at MES was effective in helping students $3{ }^{\text {rd }}$ grade English Language Learners succeed on the WASL reading assessment. Chapter 4 was organized to include the following: description of the environment, hypothesis, null hypothesis, results of the study, findings, and a summary. Description of the Environment

This experimental study was conducted in the Yakima School District (YSD) at McClure Elementary School (MES), during the 2006-2007 and 2007-2008 school years. Participants were organized into two groups, including:

- Control Group X: $473^{\text {rd }}$ grade students in the Content ESL program at MES during the 2006-2007 school year.
- Experimental Group Y: 48 3rd grade students who were enrolled in DLAP at MES during the 2007-2008 school year.

The experiment focused on determining whether the DLAP students would advance their reading proficiency at the same pace as the students who
were in the Content ESL classrooms, as measured by the WASL reading assessment.

## Hypothesis/Research Question

Dual language instruction will improve reading scores of participating 3rd grade students at MES as measured by the WASL reading assessment. Null Hypothesis

No significant difference will be found between dual language instruction and reading achievement of participating third grade students at MES as measured by the WASL reading assessment. Significance was determined for $\mathrm{p} \geq$ at $0.05,0.01$ and 0.001 levels.

## Results of the Study

A $t$-test for independent samples was calculated to determine the level of significance between the control and the experimental groups. Figure 1 disclosed the results of the $t$-test for groups X and Y , while Table 2 represented the distribution of $t$ with 93 degrees of freedom. Significance was determined for $\mathrm{p} \geq$ at $0.05,0.01$ and 0.001 levels.

The sum of scores for Control Group X, (students in the DLAP) was 19139.0. The sum of scores for Experimental Group Y, (students in the content ESL program) was 19891.0. The mean score for Group X was 407.21, whereas the mean score for Group Y was 414.40 . The sum of the squared scores in Group

X was 7816561.00, while the sum of the squared scores in Group Y was 8267187.00. The degrees of freedom were 93 and the $t$ - value was -1.55 . The values used to determine significance were published in the textbook Educational Research: Competencies for Analysis and Applications (Gay and Airasian, 2003, page 561). Figure 1 has provided a summary of $t$-Test for Independent Samples, WASL reading assessment scores for 47 Control Group (X) participants, (content ESL students). Additionally, WASL reading assessment scores for 48 experimental Group (Y), (DLAP students) have also been presented.


Figure 1. Summary of $t$-Test for Independent Samples

Table 1: represented the $t$-value with 93 degrees of freedom used to determine significance in the study.

## Table 1

## Distribution of $t$ with 93 Degrees of Freedom

| Distribution of $\boldsymbol{t}$ with 93 Degrees of Freedom |  |  |  |
| :---: | :---: | :---: | :---: |
|  |  | p |  |
| df | 0.05 | 0.01 | 0.001 |
| 93 | 1.99 | 2.78 | 3.47 |

## Findings

Data obtained were used to compare differences in reading achievement, as measured by the WASL reading assessment, of 3rd grade students receiving instruction in the content ESL program during the 2006-2007 school year; and, students receiving instruction in the DLAP during the 2007-2008 school year. Through statistical analysis, it was determined there was no significant difference on WASL reading scores between Control (X) and Experimental (Y) groups at $\mathrm{p} \geq$ 0.05 (1.99) , 0.01 (2.78), 0.001 (3.47) levels. Accordingly, the hypothesis was not supported at all levels of probability. These findings supported the null hypothesis at all levels of probability. The problem which represented the focus
of the study was therefore answered in the negative. That is, the DLAP had no effect on $3^{\text {rd }}$ grade WASL reading at MES.

Summary
Data presented and analyzed in Chapter 4 indicated: The Dual Language Acquisition Program (DLAP) had no effect on 3rd grade students' WASL reading assessment scores at McClure Elementary School (MES. Accordingly, the hypothesis was not supported at all levels of probability.

Chapter 4 reviewed and detailed the description of the environment, hypothesis, null hypothesis, results of the study, findings, and a summary.

## CHAPTER 5

## Summary, Conclusions and Recommendations

## Summary

The purpose of the experimental research study was to determine the extent to which 3rd grade students enrolled in the dual language acquisition program at MES were successful in improving their performance on the reading portion of the WASL. To accomplish this purpose, a review of selected literature was conducted. Additionally, a $t$-test for non-independent samples was undertaken to obtain baseline data from which related conclusions or recommendations were formulated.

## Conclusions

From the review of related literature in Chapter 2 and an analysis of data presented in Chapter 4, the following conclusions were reached:

1. Authorities advocated for bilingualism and concluded that bilingualism had been determined as having a positive effect on children’s linguistic and educational development.
2. Although peer appropriate conversational fluency develops rapidly, a period of 5-7 years was required on average for second language students to approach grade norms in academic aspects of English.
3. The rapid growth in the ELL and Hispanic student populations has confronted American educators with serious instructional challenges while emphasizing the need for special language assistance in the form of educational instructional strategies for non-English speaking students.
4. The $t$-test analysis for independent samples of baseline data indicated the Dual Language Acquisition Program (DLAP) had no effect on $3^{\text {rd }}$ grade students' WASL reading assessment scores at McClure Elementary School (MES. Accordingly, the hypothesis was not supported at all levels of probability.

## Recommendations

Based on the conclusions cited above, the following recommendations have been suggested:

1. To have a positive effect on children's linguistic and educational development, educators should be strong advocates of bilingual education.
2. To facilitate language acquisition for ELL's, instructors should allow 5-7 years for ELL to approach grade- level norms in academic English.
3. To meet the increasing instructional challenges for ELL populations, special language assistance in the form of instructional strategies should be implemented for non-English speaking students.
4. To further facilitate second language acquisition, English Language Learners can benefit from both content ESL and DLAP instructional strategies.
5. School districts interested in DLAP may wish to utilize information contained in the present study or, they may wish to undertake research more suited to their unique needs.

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