

EFFECT OF GROUPING ON LANGUAGE DEVELOPMENT
OF ENGLISH LEARNERS

A Dissertation

Submitted to the
Faculty of Argosy University/San Francisco Bay Area
in partial fulfillment of
the requirements for the degree of
Doctor of Education

by

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Argosy University, San Francisco Bay Area

June 16, 2009.

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Abstract of Dissertation

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Abstract

The purpose of the study was to examine if there was a significant difference between first-grade English Learners (EL) who constitute a majority (>50%) of the English language mainstream classroom (homogeneous grouping) and first-grade EL who constitute a minority (<50%) of the English language mainstream classrooms (heterogeneous grouping) in the area of English language acquisition as measured by the California English Language Development Test (CELDT). To accomplish this, the researcher gathered CELDT scores of entire English language mainstream EL who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at a Unified School District (USD). In this study, the researcher also determined perceptions of the teachers of the entire English language mainstream EL, who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at the USD, on the advantages and disadvantages of homogeneous and heterogeneous grouping in EL. A questionnaire, developed by the researcher, was given to all the English language mainstream first-grade teachers at the USD. A study of teachers' perceptions helped substantiate that the non significant difference in differently grouped EL test scores was not due to the difference in teacher perceptions of EL groupings.

DEDICATION

To my parents, my husband, and my sister who believed in me and made me what I am today. Also, to my daughter Suhani who changed me from an ordinary woman to a mom.

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TABLE OF CONTENTS

	Page
List of Tables	xii
CHAPTER ONE: THE PROBLEM	1
Introduction.....	1
Problem Statement	6
Purpose of the Study	7
Background and Need for the Study.....	8
Theoretical Foundations of the Study	10
Research Questions.....	11
Null Hypotheses.....	12
Definition of Key Terms.....	12
Significance of the Study.....	14
Limitations and Delimitations.....	15
Limitations	15
Delimitations.....	15
CHAPTER TWO: REVIEW OF RELATED LITERATURE.....	16
Introduction.....	16
English Learners (EL).....	16
Definition of English Learners.....	17
Identification of English Learners	18
Assessment of English Learners' Level of Proficiency	19
Choice of Program Placements for English Learners	22
Reclassification of English Learners	25
English Learners' Proficiency in English and Academic Achievement.....	27
Effective Strategies for Teaching English Learners	28
Environmental Strategies	28
Linguistic and Non-Linguistic Strategies	30

Factors that Influence Second Language Acquisition	31
Learning Theories	34
Sociocultural Theory.....	34
Chomsky’s Theory of Language Acquisition.....	36
Theories of Second Language Acquisition.....	37
Comprehensible Output Learning Theory	40
Developmental Learning Theory	40
Behaviorist Learning Theory	42
Cognitive Learning Theory.....	42
Humanistic Learning Theory	42
Non-Achievement among English Learners and Need for Research	43
Grouping	44
History of Grouping English Learners.....	44
Effects of Grouping.....	46
Meta-Analyses of Studies on Grouping	50
Summary.....	53
CHAPTER THREE: METHODOLOGY	55
Introduction.....	55
Statement of Purpose	55
Research Questions.....	56
Null Hypotheses.....	56
Research Design.....	57
Rationale for the Design	59
Participant Sample and Description.....	60
Instrumentation	61
California English Language Development Test (CELDT)	62
Questionnaire	63
Data Collection Procedures.....	70
Data Analysis	71
Confidentiality of Participants and Data.....	74

Role of the Researcher	75
CHAPTER FOUR: FINDINGS.....	77
Introduction.....	77
Purpose of the Study.....	77
Null Hypotheses.....	78
Research Questions.....	78
Research Design.....	79
Participant Sample.....	81
Instrumentation.....	81
California English Language Development Test (CELDT).....	81
Questionnaire.....	82
Pilot and Field Test.....	83
Data Analysis.....	86
Findings Reported by Null Hypotheses.....	90
Null Hypothesis 1.....	90
Null Hypothesis 2.....	95
Summary.....	107
CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS...	108
Summary of the Study.....	108
Implications and Conclusions.....	111
Limitations.....	113
Future Directions.....	114
Concluding Remarks.....	115
REFERENCES	116

APPENDIX A: Protection of Human Subjects.....	132
APPENDIX B: Unified School District’s Board Policy.....	143
APPENDIX C: Institutional Permission Letter	145
APPENDIX D: Questionnaire Consent Form.....	147
APPENDIX E: Questionnaire.....	149
APPENDIX F: Matrix for Aligning the Questionnaire with Research Questions.....	155
APPENDIX G: Checklist for Evaluating the Questionnaire.....	157

LIST OF TABLES

Tables	Page
1. The Subgroups of English Learners and Teacher Perceptions	9
2. Comparison of Ethnicity Data of the Student Population of Unified School District and California in the Year 2006-2007	61
3. Summary of the Effects of Different Types of Grouping from the Literature Review	65
4. Comparison of Ethnicity Data of the Student Population of Unified School District and Pilot Unified School District in 2006-2007	68
5. Student Group from the Unified School District	81
6. Data of the Responses of the Teachers on the Pilot Questionnaire	85
7. Descriptive Statistics for the Entire Sample	89
8. Change in California English Language Development Test Scores of All Homogeneously Grouped First-Grade English Learners.....	91
9. Descriptive Statistics for the Homogeneous Group Only.....	92
10. Change in California English Language Development Test Scores of All Heterogeneously Grouped First-Grade English Learners.....	93
11. Descriptive Statistics for the Heterogeneous Group Only	94
12. <i>t</i> -Test for Independent Samples Comparing California English Language Development Test Scores for First-Grade Homogeneous and Heterogeneous Grouped Students.....	95
13. Data of the Responses of the Teachers of Homogeneously Grouped English Learners on the Questionnaire	97
14. Data of the Responses of the Teachers of Heterogeneously Grouped English Learners on the Questionnaire	99
15. Paired <i>t</i> -Test for California English Language Development Test Scores of Homogeneously Grouped First-Grade English Learners When Teachers have a Positive Attitude Towards Homogeneous Grouping	101

16. Paired <i>t</i> -Test for Change in California English Language Development Test Scores of Homogeneously Grouped First-Grade Learners when Teachers have a Negative Attitude towards Homogeneous Grouping	102
17. Paired <i>t</i> -Test for Change in California English Language Development Test Scores of Homogeneously Grouped First-Grade English Learners When Teachers have a Neutral Attitude.....	102
18. Paired <i>t</i> -Test for Change in California English Language Development Test Scores of Heterogeneously Grouped First-Grade English Learners when Teachers have a Positive Attitude towards Heterogeneous Grouping.....	103
19. Paired <i>t</i> -Test for Change in California English Language Development Test Scores of Heterogeneously Grouped First-Grade English Learners when Teachers have a Negative Attitude towards Heterogeneous Grouping	104
20. Paired <i>t</i> -Test for Change in California English Language Development Test Scores of Heterogeneously Grouped First-Grade English Learners When Teachers do not have a Neutral Attitude.....	105
21. <i>t</i> -Test for Independent Samples: California English Language Development Test Change Scores for Homogeneous and Heterogeneous Grouped Students who have Teachers with Positive Attitudes.....	105
22. <i>t</i> -Test for Independent Samples: California English Language Development Test Change Scores for Homogeneous and Heterogeneous Grouped Students who have Teachers with Negative Attitudes	106
23. <i>t</i> -Test for Independent Samples: California English Language Development Test Change Scores for Homogeneous and Heterogeneous Grouped Students who have Teachers with Neutral Attitudes.....	107

CHAPTER ONE: THE PROBLEM

Introduction

At the beginning of the last century, educators tried to use the ideal of democracy to fashion a model of education to develop the talents and aptitudes of students that would be personally rewarding in ways to enhance society (Watras, 2004). In the 1960s, the era of social equality, schools were made to pay greater attention to students who were socio-economically disadvantaged (Tanner & Tanner, 1995). It was during this period that the Elementary and Secondary Education Act (ESEA) of 1965 was enacted, which is currently reauthorized by the No Child Left Behind Act of 2001. Again, during the 1960s, the Civil Rights Act gave the federal government the authority to forbid local boards of education or federal funds unless they racially desegregated schools. This highlighted the importance of equality or equal educational opportunity amongst students (Watras).

In 1974, when the Supreme Court ruled that identical education does not constitute equal education, school districts were directed to take affirmative steps to overcome educational barriers faced by the English Learners (United States Department of Education, 2006). It was ruled by the U.S. Court of Justice that by merely providing English Learners (EL) with the same facilities, textbooks, teachers, and curricula, a school cannot guarantee equality of educational treatment to EL. Emphasis was focused on using research-based programs for effective instruction for EL (United States Department of Education).

In the 1980s, the report “A Nation at Risk” issued by the U.S. Department of Education highlighted the importance of increasing school performance by adopting

research-based programs and curricula (Tanner & Tanner, 1995). In 1986, in his report “What Works: Research about Teaching and Learning,” William J. Bennett, the U.S. Secretary of Education, wrote in the foreword that the aim of the report was to provide the American people with accurate and reliable information about what works in the education of children (Watras, 2004). This further emphasized the importance of adopting research-based curricula and teaching techniques (Watras).

Proposition 227, approved by voters in 1998, promoted the notion of using only English as the medium of instruction to EL to develop their English language, as well as, content knowledge at the given grade level. However, according to Valdez (2001), programs that use only English as a medium of instruction have been unable to provide EL enough access to English as they are not provided with enough support and opportunities to interact with native English speakers. Valdez noted that this restricted EL from having an opportunity to listen and employ English the way native English speakers do. In order to use a limited supply of bilingual and English as Second Language (ESL) teachers efficiently, a school district can end up isolating EL (Crawford, 1997). Often, the percentage of bilingual students in a particular school can be so high as compared to English proficient students that the school is left with no option but to group them altogether (Crawford).

The academic achievement of EL is related to their vocabulary development (Garcia, 1991; Saville-Troike, 1984). When EL are grouped with students with higher levels of proficiency in the English language, they are inclined to develop a better vocabulary (Bikle, 2005). At the same time, factors like exclusionary talk, difficult academic material, and struggle to keep pace with the group makes it extremely difficult

for students with lower levels of English proficiency to participate in group conversations (Bikle).

According to the study done by Durrett and Florence (1971), both homogeneous and heterogeneous grouping had a facilitating effect on children's cognitive growth and behavior modification. In their meta-analysis of studies done on homogenous grouping Kulik and Kulik (1982) and Slavin (1987) found that cross-grade homogeneous grouping boosted achievement in elementary school. They also found that homogeneously grouped students of different IQ levels showed similar levels of achievement than when grouped heterogeneously (as cited in Loveless, 1998). In their review of both quantitative and qualitative studies done on grouping by ability at the primary and elementary school levels, Harlen and Malcolm (1999) found that grouping did not necessarily affect student achievement. The Curriculum Development and Supplemental Materials Commission (1999) recommended that educators use "common sense" about grouping (p. 230). The Commission stated that grouping should be used as a tool and an aid to instruction, not an end in itself. Grouping should be used flexibly to ensure that *all* students achieve the necessary learning standards. According to Loveless, the studies that Slavin and the Kuliks reviewed were conducted before 1975. Loveless also added that several structural changes have occurred since that educational phase in grouping students.

This study is expected to add to the area of research because it investigated the effect grouping of EL in the first grade in their language development. The researcher gathered California English Language Development Test (CELDT) scores of the entire English language mainstream EL who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same school district for second grade

in the fall of 2007-2008 school year at a DISTRICT¹. The CELDT is administered annually in the fall (California Department of Education, 2006). The first-grade CELDT served as the pretest for this study and the second-grade CELDT served as the posttest.

Based on the reviews of Kulik and Kulik (1982) and Slavin (1987), Allan (1991) suggested the need for considering teacher attitudes and approaches to grouping when determining results. Allan contended that a difference in student test scores in differently grouped classrooms in the studies reviewed may have been as a result of teacher biases or expectations rather than the way students were grouped. Allan, therefore, suggested that considering teacher and parent attitudes towards grouping while studying the effect of grouping on student learning can minimize any emotional effects of grouping.

Harlen and Malcolm (1999) reviewed studies that were carried out since Slavin's review in 1987. According to Harlen and Malcolm, the studies they reviewed did not show any proof that the students taken into consideration in each study, whether heterogeneously or homogeneously grouped, received the same treatment in terms of quality of teaching or teacher expectations. Harlen and Malcolm suggested, as a conclusion from their review of the studies, that the effect of grouping on learning should not come from just comparing the test scores of students in terms of student achievement but from other factors as well. According to Harlen and Malcolm, information about the effect of composition of groups on learning should come from classroom observations and from interviews with students and teachers. The two authors questioned the study methodology used in some of these studies.

In this study, the researcher also determined perceptions of the teachers of entire English language mainstream EL who were enrolled in first grade for the 2006-2007

¹The selected school district will be referred to as DISTRICT.

school year and maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at a DISTRICT on the advantages and disadvantages of homogeneous and heterogeneous grouping in EL. A survey questionnaire was administered to all the English language mainstream first-grade teachers at the DISTRICT. A study of teacher perceptions served to substantiate that any significant difference in differently grouped EL test scores was not due to the difference in their teachers' perceptions of grouping.

Harlen and Malcolm (1999) also postulated that class size, another important variable that affects learning, was not taken into consideration in the studies that have been carried out since Slavin's review in 1986. According to Finn, Pannozzo, Achilles (2004) class sizes affect students' academic performance. The DISTRICT has the policy of maintaining reasonably equal class sizes within each grade level throughout the district by the use of inter-school district transportation. The uniformity of class sizes helped in controlling the effect of class size on EL language development. For more specific results, the scores of Charter Schools, nonsectarian public schools that do not follow many of the regulations that apply to traditional public schools (WestEd, 2000) and Special Education Classrooms, classrooms with students with identified learning and physical disabilities (Watson, 2008), were not studied. An English language mainstream classroom is defined as one in which students who are either native English speakers or who have acquired reasonable fluency in English are placed (California Department of Education, 2006). A mixed methodology was used to find any significant effect of grouping on the language development of the EL. The quantitative analysis helped in interpreting the data obtained to determine if there was a significant statistical difference

between EL language development and the type of grouping. The qualitative analysis helped in interpreting the data obtained to determine that the change in the CELDT scores of EL if they occurred due to the corresponding attitudes of their teachers towards grouping. In particular, this researcher through this study sought to determine if there was a significant difference in the English language acquisition between first-grade EL who constitute a majority (>50%) of the English language mainstream classroom (homogeneous grouping) and first-grade EL who constitute a minority (<50%) of the English language mainstream classrooms (heterogeneous grouping) as measured by the CELDT.

Problem Statement

Despite all the efforts made to improve their performance, California schools lag significantly behind other states in terms of student achievement (Loeb, Bryk, & Hanushek, 2007). The problem is that, “even schools doing well overall are not as successful with their EL” (Gandara & Rumberger, 2007, p. 3). The schools show high levels of performance among EL but they still fall behind native English speakers. In the school year 2004-2005, in second grade, only 23% of EL and EL reclassified as fully English proficient scored *proficient* on California Standards Test (Gandara & Rumberger). Not all reclassified fluent-English proficient (RFEP) are included while calculating the proficiency rate on the California Standards Test (CST; California Department of Education, 2006). Only RFEP students who have not yet scored at the proficient level or above on the CST in English Language Arts for 3 years after being reclassified are included (California Department of Education). Twenty-five percent of the students enrolled in California schools are English Learners (Ed-Data, 2008). EL

education is a major concern in California (Jepsen & Alth, 2005). Under the federal No Child Left Behind Act (NCLB), each school's EL population must demonstrate improvement and success in both English proficiency and academic achievement. This has further pushed the importance of increasing the performance of EL (Jepsen & Alth).

Purpose of the Study

This study examined whether there was a significant difference in the English language acquisition between first-grade EL who constitute a majority (>50%) of the English language mainstream classroom (homogeneous grouping) and first-grade EL who constitute a minority (<50%) of the English language mainstream classrooms (heterogeneous grouping) as measured by the CELDT. To determine this, the CELDT scores of entire English language mainstream EL who were enrolled in first grade for the 2006-2007 school year and maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at a USD were used.

In this study, the researcher also determined perceptions of the teachers of entire English language mainstream EL who were enrolled in first grade for the 2006-2007 school year and maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at a USD on the advantages and disadvantages of homogeneous and heterogeneous grouping in EL. The researcher believed that a study of teacher perceptions would help substantiate that any significant difference in differently grouped EL test scores was not due to the difference in teacher perceptions of groupings. A survey questionnaire was given to all the English language mainstream first-grade teachers at the selected school district. Based on their responses, teachers were grouped in one of the six teacher groups: (a) teachers of homogeneously grouped EL with more positive attitudes

toward homogeneous grouping, (b) teachers of homogeneously grouped EL with more negative attitudes toward homogeneous grouping, and (c) teachers of homogeneously grouped EL with no preference for either of the groupings, (d) teachers of heterogeneously grouped EL with more positive attitudes toward homogeneous grouping, (e) teachers of heterogeneously grouped EL with more negative attitudes toward heterogeneous grouping, and (f) teachers of heterogeneously grouped EL with no preference for either of the groupings. Next, the scores of the homogeneously grouped students for each teacher subgroup were compared with heterogeneously grouped EL in the same teacher subgroup. Table 1 illustrates the six data sets that served as the basis for this study. By comparing student scores within each teacher subgroup, the change in proficiency was attributed to the way students were grouped rather than to differences in teacher perceptions on grouping.

Background and Need for the Study

Approximately 3.8 million English Learners² were provided education by the K-12 educational system in the United States in the school year 2003-2004 (Hoffman & Sable, 2006). This comprised 11% of the school-aged population in the U.S. that year. By the year 2030, this percentage of language minority students is expected to increase to 40% of the school-aged population in the U.S. (Thomas & Collier, 2002). Twenty-five percent of the students enrolled in California schools are English Learners (Ed-Data, 2008). EL education is a major concern for the State of California.

² English Learners and EL will be used interchangeably throughout the dissertation as appropriate for smooth reading.

Table 1

The Subgroups of English Learners and Teacher Perceptions

CELDT scores of homogeneously grouped EL		
CELDT scores of homogeneously grouped EL with teachers with more positive attitude towards homogeneous grouping.	CELDT scores of homogeneously grouped EL with teachers with more negative attitude towards homogeneous grouping.	CELDT scores of homogeneously grouped EL with teachers with no preferences.
CELDT scores of heterogeneously grouped EL		
CELDT scores of heterogeneously grouped EL with teachers with more positive attitude towards heterogeneous grouping.	CELDT scores of heterogeneously grouped EL with teachers with more negative attitude towards heterogeneous grouping.	CELDT scores of heterogeneously grouped EL with teachers with no preferences.

Note. CELDT = California English Language Development Test, EL = English Learners.

Academic performance of EL is related to their proficiency in English (Garcia, 1991; Saville-Troike, 1984). An important goal of both state and federal policy is to enable EL to become English proficient (De Cos, 1999). A review of the literature revealed that there are several strategies, recommended by research, for teaching EL in order to address their diverse needs. One strategy to improve EL proficiency in English is to provide opportunities for EL to interact with native English speakers. The feedback from native English speakers helps EL modify and speak English better than they would on their own (Gass & Varonis, 1994; Polio & Gass, 1998; Swain & Lapkin, 1998). Research also reveals that there is a correlation between classroom interactions and improved reading comprehension amongst EL (Echevarria, 1996; Saunders & Goldenberg, 1999). Indirect correction of grammatical or syntactical errors during class conversations helps EL in learning grammatically correct English (Doughty & Varela, 1998; Iwashita, 2003; Leeman, 2003).

According to Valdez (2001), programs which use English as a medium of instruction for EL to develop their English language have been unable to provide EL enough access to this support. Again, according to Valdez, EL are not provided with enough opportunities to interact with native English speakers in these programs. In Valdez's opinion, this restricts EL from having an opportunity to listen and employ English the way native English speakers do. At times, using limited supply of bilingual and English as Second Language (ESL) teachers efficiently means that a school district isolates EL (Crawford, 1997). At other times, the percentage of bilingual students in a particular school is so high as compared to English-proficient students that the school is left with no option but to group them altogether (Crawford).

A large number of EL still fall behind on their performance on state tests (Gandara & Rumberger, 2007). With pressure from the federal 2001 NCLB Act to demonstrate improvement and success in both English proficiency and academic achievement amongst EL, schools have to increase the performance of EL (Jepsen & Alth, 2005).

Theoretical Foundations of the Study

Sociocultural theory is the theoretical foundation of this study. All humans need a Language Acquisition Support System; that is, the people with whom they interact (Bruner, 1983). Children acquire their first language through interaction with their primary caretakers and others with whom they interact regularly. The contextualized language use of the primary caretakers, while interacting with children and manipulating objects in familiar situations, help children acquire their language skills (Bruner). In classrooms, conceptual understanding develops through interactions among students

(Edwards & Westgate, 1994). When learners interact with knowledgeable others, they get an enriching experience. This drives both language and cognitive development. Language learners when interacting with more knowledgeable peers internalize their strategy of using language to develop their own language (Vygotsky, 1978). The Zone of Proximal Development in the Sociocultural Theory is the difference between what learners can accomplish independently and what they can accomplish with the support of more knowledgeable peers (Vygotsky). In this study, the researcher examined whether there is a significant difference in the English language acquisition between first-grade EL who constitute a majority (>50%) of the English language mainstream classroom (homogeneous grouping) and first-grade EL who constitute a minority (<50%) of the English language mainstream classrooms (heterogeneous grouping).

Research Questions

Using the CELDT scores, two research questions guided this study:

1. What is the change in the proficiency in English of homogeneously grouped English language mainstream first-grade EL, as measured by CELDT (a) when teachers have a positive attitude towards homogeneous grouping of English language mainstream first-grade EL, (b) when teachers have a negative attitude towards homogeneous grouping of English language mainstream first-grade EL, and (c) when teachers do not have a preference for one kind of grouping over the other?
2. What is the change in the proficiency in English of heterogeneously grouped English language mainstream first-grade EL (a) when teachers have a positive attitude towards heterogeneous grouping of English language mainstream first-grade EL, (b) when teachers have a negative attitude towards heterogeneous grouping of English

language mainstream first-grade EL, and (c) when teachers do not have a preference for one kind of grouping over the other?

Null Hypotheses

H_01 : There is no significant difference in the proficiency in English of first-grade EL who constitute a majority (>50%) of the English language mainstream classroom (homogeneously grouped) and first-grade EL who constitute a minority (<50%) of the English language mainstream classrooms (heterogeneous grouped) as measured by CELDT.

H_02 : There is no significant difference in the proficiency in English of homogeneously and heterogeneously grouped first-grade EL in any of the six teacher perception subgroups: (a) teachers of homogeneously grouped EL with positive attitude towards homogeneous grouping, (b) teachers of homogeneously grouped EL with negative attitude towards homogeneous grouping, (c) teachers of homogeneously grouped EL with no preferences, (d) teachers of heterogeneously grouped EL with positive attitude towards heterogeneous grouping, (e) teachers of heterogeneously grouped EL with negative attitude towards heterogeneous grouping, and (f) teachers of heterogeneously grouped EL with no preferences.

Definition of Key Terms

English as a Second Language Program (ESL). The U.S. Department of Education (2005) defines English as a Second Language program as one of technique, methodology, and special curriculum designed to teach EL. This program generally uses English as the medium of instruction with little use of the native language. This program enables EL to achieve English proficiency and academic mastery of subject matter and

higher order skills including critical thinking. This, in turn, helps students to meet appropriate grade promotion and graduation requirements. Students are exposed to a learning environment in which they participate actively. Instruction is always presented in a meaningful context. It is categorized by three phases: ESL I (Beginner), ESL II (Intermediate), and ESL III (Advanced). These phases are based on a child's English proficiency (U.S. Department Education). The outcome of this instructional process must enable children to listen, comprehend, speak, read, write, analyze, and think in English. The ESL program includes the following: Communication-based ESL approach, Content-based English as Second Language, Sheltered English Instruction, and Grammar-based ESL (Crawford, 1997).

English Language Mainstream Classroom. An English Language Mainstream Classroom is where students who are either native English speakers or who have acquired reasonable fluency in English are placed (California Department of Education, 2006).

English Learners (EL). The California Department of Education (2007) referred to the definition of an EL, given under the Education Code Section 306, as a child who does not speak English or whose native language is not English and who currently is not able to perform ordinary tasks in English. English Learners and EL will be used interchangeably throughout the dissertation as appropriate.

Fluent English Proficient (FEP). When EL are able to demonstrate that they are able to compete effectively with English-speaking peers in mainstream classes, they are designated as Fluent English Proficient (California Department of Education, 2007).

Homogeneous grouping. According to Learn North Carolina (2005), grouping students according to apparent aptitude, accomplishment, interests, or other characteristics is called homogeneous grouping.

Heterogeneous grouping. The practice of mixing students of varying abilities, interests, or ages in academic classes is called heterogeneous grouping (Learn North Carolina, 2005).

According to Harlen and Malcolm (1999), when students are not grouped according to their ability but are grouped randomly or are deliberately mixed using factors such as their social background or gender, then they are said to be heterogeneously grouped.

Reclassification of EL. According to the California Department of Education (2007), reclassification is the process by which students that have been identified as English learners are reclassified to Fluent English Proficient when they have demonstrated that they are able to compete effectively with English-speaking peers in mainstream classes. Under current law, identified English Learners must participate in the annual administration of the CELDT until they are reclassified.

Significance of the Study

The pedagogical justification given for ability grouping is that it makes it easier for the teacher to address a larger group of students' needs at the same time (Glass, 2002). In contrast, the sociological justification given for rejection of ability grouping is that it perpetuates and creates disadvantages for the economically disadvantaged and minority students by exposing them to inferior curricula (Glass). These justifications were not supported by research (Glass). This study helped to determine the impact of

ability grouping on the language development of EL. Every year the government allocates to school districts millions of dollars on programs such as English as a Second Language Program, Content-based English as a Second Language Program, and Sheltered English Instruction. These dollars are spent in giving special training to teachers and paying these teachers special stipends and providing extra money for buying materials (U.S. Department of Education, 2004). In this study, the researcher also suggests direction for most effective use of these dollars.

Limitations and Delimitations

Limitations

1. The student study participant population is limited to a specific school district, so broad-scope generalizations may not be valid to other populations. This study is limited to students enrolled at a Unified School District, California, during the school year 2007-2008.

2. Numerous variables might have influenced student success while a student was in school or at home. These variables include but are not limited to a student's ethnicity, knowledge of the first language, intelligence, aptitude, attitude, and parents' education.

3. Actual implementation of ESL programs varies across states, districts, schools, and even classrooms; therefore, this may make it hard to apply the research done on one group of students to another group of students.

Delimitations

1. Lack of a large sample may cause some statistical skewing.

2. The researcher has been serving as a teacher to EL and has also learned English as a second language; therefore, researcher bias may be present.

CHAPTER TWO: REVIEW OF RELATED LITERATURE

Introduction

A review of the literature on ways of grouping and working with English Learners is conducted as it pertains to this study. Although the focus of the study was to find the effect of grouping on EL, several related topics were considered to give a better understanding of the context of the study. The chapter is divided into five segments, which discuss applicable literature and research to investigate the presented findings. The first section presents information on how EL are defined, identified, assessed, and placed by different school districts throughout the United States. In the second section, the relationship between EL performance and their proficiency in English is discussed. In the third section, research regarding the effective strategies for teaching EL, factors that influence second language acquisition, theories on language acquisition and learning on the part of EL is presented and examined. The fourth section discusses the problem of nonachievement amongst EL and the need for more research into what more schools can do to improve literacy among EL. The fifth section provides an overview of the available research on the history of grouping EL. Research on the effectiveness of different types of grouping on students is also discussed. Meta-analyses of studies on grouping students are also presented in this section. Finally, the available literature is summarized and critiqued.

English Learners (EL)

One out of every five school-aged children is an English Learner in the United States (U.S. Census Bureau, 2001). One in every four school-going children is an English Learner in California (California Department of Education, 2006). Approximately 3.8

million EL were provided education by the K-12 educational system in the United States in the school year 2003-2004 (Hoffman & Sable, 2006). This comprised 11% of the school-aged population in the U.S. that year. This number is expected to increase for the next several decades (Kindler, 2002). By the year 2030, the percentage of language-minority students is expected to increase to 40% of the school-aged population in the United States (Thomas & Collier, 2002). California schools have more than 40%, that is, one-third of EL in the U.S. (Macias, 2000). Nearly 1.6 million school-going children in the State of California are EL. Their education is, therefore, of major concern in this state (Jepsen & Alth, 2005).

Definition of English Learners

The term English Learner (EL) is used interchangeably with terms such as Limited English Proficient (LEP) learners, English Second Language Learners (ESL), Non-English Speakers, Language Minority Students, and Non-Native English Learners (North Central Regional Educational Laboratory, 2004). In their guide on addressing the needs of EL, St. Clair County Intermediate School District of Michigan defines EL as the, “new, politically-correct term for LEP” (St. Clair County Intermediate School District, 2003, p. 4). According to the Houston County Board of Education of Georgia (2005), EL are those students whose native or first or dominant language is not English. According to the Tennessee State Board of Education (2005), EL are defined as follows:

Non-English language background students who have problems meeting the same high educational standards set by the state as their English-speaking counterparts because of a lower level of proficiency in English, and have difficulty in regular classroom because of limited English proficiency. (p. 4)

Rye City School District of New York (2006) defines EL as nonnative-speaking students who are learning how to speak English in an American school system.

According to Tracy Unified School District (2006), if the scores of a student on CELDT indicate that the student is not fluent in English that student should then be designated as EL. For the U.S. Department of Education (2006), EL are national minority students who have limited English proficiency. The U.S. Department of Education (1994) defines EL as those individuals who are not born in the United States and whose native language is other than English or who come from environments in which a language other than English is dominant. For Missouri Department of Elementary and Secondary Education (2007), EL are speakers of other languages who are in the process of learning English. In its document on reclassification of EL, the California Department of Education (2007) referred to the definition of an EL, given under the Education Code Section 306, as a child who does not speak English or whose native language is not English and who currently is not able to perform ordinary tasks in English. It can be summarized from the different definitions of EL that EL are students for whom English is not their first language and who are in the process of learning the English language.

Identification of English Learners

This section provides examples of how EL are identified by different U.S. school districts. Home language surveys are used to identify EL by Commonwealth Pennsylvania Department of Education (2002), Hayward Unified School District (2006), Jefferson Parish Public School System (2006), Mississippi Department of Education (2005), Parkrose School District (2005), St. Clair County Intermediate School District (2003), and TUSD (2006). Minnesota State Department of Education requires its school districts to identify EL through the information provided by the child's parents on the state home language questionnaire or district survey form (Minneapolis Public Schools,

2003). For the Tennessee State Board of Education (2005), school districts identify EL through home language surveys and from documents from other school districts. With the Houston County Board of Education (2005), EL are based on the home language survey and English potential questionnaire. At Rye City School District (2006), EL are identified through their Home Language Questionnaire. At Douglas County School District of Nevada (2006), EL are identified through home language surveys and through observation of their nonnative speaker problems. Alpine School District of Utah (2007) also adopts the strategy of identifying students as an EL at the time of registration through home language surveys. If a student is not identified at the time of registration as an EL, the Alpine School District uses the student's classroom teacher's judgment to identify that student as an EL. The Missouri Department of Elementary and Secondary Education (2007) gives guidance to its school districts to either administer a home language survey or include home language questions on the school enrollment form to identify EL. In brief, based on the aforementioned information, EL are identified based on the information about their home language provided by their parents or guardians at the time of their enrollment.

Assessment of English Learners' Level of Proficiency

The Commonwealth Pennsylvania Department of Education requires its school districts to acquire an appropriate assessment tool to determine the English proficiency level of EL. It lists Language Assessment Scales, Woodcock-Munoz Language Survey, Basic Inventory of Natural Language, Bilingual Syntax Measure I & II, and Idea Proficiency Test as some examples of tools to follow (Commonwealth Pennsylvania Department of Education, 2002).

The Minnesota State Department of Education requires its school districts to assess English language proficiency of identified EL through oral interview, oral proficiency test, reading test, and writing sample. The school districts in Minnesota are supposed to make preliminary decisions based on these results if standardized test scores are not available (Minneapolis Public Schools, 2003). St. Clair County Intermediate School District leaves the responsibility with the school districts to choose a test to assess EL for their English language proficiency level. It recommends using Woodcock-Munoz Language Survey but lists other tests that can be used instead if the school district determines it is more comfortable using them (St. Clair County Intermediate School District, 2003).

At Parkrose School District (2005), Woodcock Munoz Language Survey is used to determine the English proficiency level of EL in elementary and middle schools. To determine the English proficiency level of EL in high school, Language Assessment Scales are used. The Mississippi Department of Education (2005) requires its school districts to administer Harcourt's Stanford English Language Proficiency Test within the first few weeks of the EL joining the school system and then again at the end of the school year. Tennessee State Board (2005) requires its school districts to test all identified EL on the state-approved English language proficiency test. Houston County Board of Education (2005) requires its school districts to administer the Language Assessment Battery to the identified EL within 7 days of their identification. Jefferson Parish Public School System of Louisiana (2006) assesses identified EL with two tools: (a) the Language Assessment Scales for initial placement and identification of LEP

status, and (b) English Language Development Assessment for annual language development and progress.

At the Rye City School District (2006), Language Assessment Battery-R is used to assess EL for their eligibility to enroll in a program. Thereafter, every spring, at every grade level, New York State English as a Second Language Achievement Test is administered to all EL in every program. Hayward Unified School District (2006) tests EL on CELDT for English language proficiency within a week of registration. EL are then further assessed on their primary language within 90 calendar days. At the Douglas County School District (2006), EL are assessed on the Language Assessment Scale or the Pre-Language Assessment Scale within 30 days of the beginning of the school year or within 2 weeks if they enter school after the first 30 days. In Tracy Unified School District (TUSD), after the identification of EL, the LEP coordinator or designee is required to test them on CELDT within 30 calendar days (TUSD, 2006). The designated EL are then assessed in the areas of speaking, listening, reading, and writing in their primary language within 90 days of being so designated. For EL who speak Spanish, the IDEA Proficiency Test is used. For other designated EL, schools are allowed to use an informal assessment if no formal test is available (TUSD).

Alpine School District points out that the school's ESL trained paraprofessional conducts an assessment interview, completes the Primary Home Language Other than English Form, and administers state approved language assessment to the identified EL. They are required to test the students within 14 school days after identification (Alpine School District, 2007). According to Missouri Department of Elementary and Secondary Education (2007), it does not require its school districts to use any specific assessment

method for assessing EL. It does require its school districts to use Maculaitis Assessment of Competencies to measure the yearly English language proficiency progress of EL.

From the review of different strategies of assessing EL, it can be summarized that each and every school district in the United States usually follows its state's educational department's procedures to assess EL. It can be also inferred from this review that each educational department has identified assessment tools based on its goals.

Choice of Program Placements for English Learners

The EL are remarkably diverse within themselves. They differ from each other in terms of their age, prior educational experiences, cultural heritage, socioeconomic status, country of origin, and levels of both primary language and English language development, including literacy development. Some EL are first generation immigrants and some are second generation who represent languages from practically every country in the world. Some EL are Native Americans who, for generations, have maintained their language traditions. Over and above these overall differences, EL have individual differences in terms of their attitude, aptitude, and ability (Boyle & Peregoy, 2000).

In 1974, a class suit was brought by nonEnglish-speaking Chinese students against officials responsible for the operation of the San Francisco Unified School District (U.S. Department of Education, 2006). It sought relief against the unequal educational opportunities which violated the Fourteenth Amendment. The Supreme Court ruled that identical education does not constitute equal education under the Civil Rights Act of 1964. The Court ruled that the school district must take affirmative steps to overcome educational barriers faced by the nonEnglish-speaking Chinese students in the school district. Known as the U.S. Supreme Court case *Lau vs. Nichols*, it highlighted the

importance of developing programs that addressed the diverse needs of EL (U.S. Department of Education). This resulted in the development of special instructional programs for EL (Odden & Picus, 2004). These programs include (a) Bilingual Education Programs, (b) English as Second Language Programs, (c) Immersion Education Programs, (d) ESL Pullout Programs, and (e) English to Speakers of Other Languages Programs (Houston County Board of Education, 2005).

Based on the U.S. Supreme Court case *Lau vs. Nichols*, school districts have been given the responsibility of selecting a program for addressing the needs of its EL population. Commonwealth Pennsylvania Department of Education recommends its school districts to select a program for its EL based on sound educational and second language acquisition theory. It requires them to develop programs for EL based on the number of EL in their school district as well as on the needs of EL (Commonwealth Pennsylvania Department of Education, 2002). Minnesota State Department of Education recommends its school districts place EL in mainstream classrooms. If ESL/Bilingual programs are opted for instead, then Minnesota State Department of Education requires its school districts to place EL based on their age and proficiency level (Minneapolis Public Schools District, 2003). According to the St. Clair County Intermediate School District (2003), the responsibility of choosing the program for its EL is left to the school district. It guides the school district to make the choice based on the needs of its students and availability of resources.

According to the Mississippi Department of Education (2005), school districts place their identified EL in different programs based on the composition of their student population, availability of resources, and their community's preferences. Tennessee State

Board of Education (2005) requires its school districts to provide identified EL with ESL programs through various service delivery models with proven effectiveness. Houston County Board of Education (2005) recommends its school districts offer an English to Speakers of Other Languages (ESOL) program to all identified EL. Parkrose School District (2005) has adopted ESL Pullout, Sheltered Instruction and ESL Class Period for its identified EL. Jefferson Parish Public School System (2006) places identified EL in ESL. Rye City School District (2006) has pointed to freestanding programs for EL with instructions in English offered to identified EL. In Hayward Unified School District, on the basis of the English language assessment, the students are classified as Initially Fluent English Proficient (IFEP) or English Learner. The parents of IFEP as well as English-only students are given the option to enroll their children into either Mainstream English or Bilingual Alternative or the Dual Language Immersion Program. The parents of EL are given the option to enroll their children into either Structured English Immersion or Mainstream English or Bilingual Alternative or the Dual Language Immersion Program (Hayward Unified School District, 2006). The Douglas County School District (2006) offers its identified EL balanced structured immersion and pull-out services within both an ESL and a regular classroom based upon their individual needs.

At Tracy Unified School District (TUSD), the scores of a student on CELDT indicate that the initially identified EL is fluent in English to be designated as FEP. The child is then placed in the regular program. The other designated EL are offered placement in either Sheltered English Immersion or bilingual programs (TUSD, 2006). A Structured English Immersion Program or a Dual Language Program is offered for EL at Alpine School District (2007). According to the Missouri Department of Elementary and

Secondary Education (2007), the school districts choose the research-based best practice suitable to them locally to teach EL.

Reclassification of English Learners

According to the Commonwealth Pennsylvania Department of Education (2002), school districts are required to reclassify EL to FEP based on their proficiency level. Minnesota State Department of Education requires its school districts to transition EL into mainstream classrooms based on their performance or recommendation of the teacher or the parent (Minneapolis Public Schools District, 2003). At St. Clair County Intermediate School District (2003), schools reclassify EL based on their performance on the Michigan Educational Assessment Program. Other criteria include teacher observations.

The Mississippi Department of Education (2005) requires its school districts to use Krashen's Gradual Exit Variable Threshold Model to reclassify EL. According to Houston County Board of Education (2005), school districts can allow an initially identified English Learner exit ESOL program if he or she shows success on the recommended tests. Parents can also sign a waiver to make their child exit the ESOL program.

At Parkrose School District (2005), EL who continue to show progress for 2 years are reclassified as FEP and placed in regular classrooms. The Tennessee State Board of Education (2005) requires its school districts to reclassify EL as FEP if they show proficiency in English on recommended assessments for reading and language arts. With Rye City School District (2006), English Learners are mainstreamed into regular classrooms if they show proficiency in English.

Jefferson Parish Public School System (2006) reclassifies EL if they pass the given English language assessments. Change in language proficiency level of an EL at Hayward Unified School District (2006) is based on that student's performance. In Tracy Unified School District (TUSD), the reclassification of an EL to FEP can be initiated by the recommendation of one of the designated staff or the student's parent (TUSD, 2006). EL are exited at Douglas County School District (2006) if they are assessed proficient on English Language Proficiency Assessment or approach standard level on Criterion Referenced Test and High School Proficiency Examination.

Based on Education Code Section 313(d), the California State Board of Education has established four reclassification criteria for school districts to use in reclassifying students from EL to FEP. The criteria are as follows: (a) an assessment of English-language proficiency, that is, CELDT; (b) teacher evaluation of student's academic performance on district assessments; (c) parent opinion and consultation; and (d) comparison of performance of EL in basic skills, that is, the performance level of EL on California English-Language Arts Standards Test (California Department of Education, 2007). A school's diversity specialist, in Alpine School District (2007), can reclassify an EL as FEP. To achieve this, the school's diversity specialist has to fill out an exit form after successfully monitoring that student's progress for 2 years. Missouri Department of Elementary and Secondary Education guides its school districts to reclassify its EL based on the assessment of both their English language proficiency and subject area knowledge. It suggests its school districts use the same tool to conduct the posttest that they used to determine limited English proficiency. According to Missouri Department of Elementary

and Secondary Education (2007), class grades and performance of the EL on Missouri Assessment Program test can also be used to reclassify EL.

It can be summarized from this aforementioned review that different state education departments have different requirements for their school districts though most include assessments of English proficiency and of academic achievement. Different tools and strategies are used to reclassify EL from state to state and school district to school district. “One size does not fit all” appears to hold true for EL in the country.

English Learners’ Proficiency in English and Academic Achievement

Cummins (2003) has provided the three dimensions of English language proficiency. They are conversational fluency, discrete language skills, and academic proficiency. According to Cummins, conversational fluency involves mastering Basic Interpersonal Communication Skills (BICS). He defined BICS as the ability to communicate in English in social situations. The discrete language skills, according to Cummins, involve acquisition of grammar, literacy, and phonics through direct instruction from a teacher and from reading practice. Cummins contended that academic proficiency is the ability to use a language to perform complex tasks in that language. He called it Cognitive Academic Language Proficiency (CALP). According to the research done by Collier (1987, 1989) and Cummins (1981a), it takes an average of 5 years for EL to attain CALP and only 2 years to attain BICS. Scarcella (2003) contended that BICS and CALP mostly develop simultaneously.

Street (1996) and Valdez (2000) posited that EL should not be taught CALP, but Scarcella (2003) rejected Street and Valdez’s point of view and insisted on teaching CALP. According to Scarcella, CALP includes multiple, dynamic interrelated

competencies that alone can make an EL academically successful in school. Cummins (2003) shared the same belief as Scarcella—to be successful in school one has to have CALP. An EL's proficiency in English helps in predicting that EL's academic achievement (DeAvila & Havassy, 1974; Ducan & DeAvila, 1979; Rumbaut & Ima, 1988). Studies have also proven that there is a significant connection between proficiency in English and standardized achievement scores, as well as grade point averages (Abedi, 2001; Castellon-Wellington, 2000; Garcia-Vazquez, Vazquez, Lopez, & Ward, 1997; Stevens, Butler, & Castellon-Wellington, 2000; Ulibarri, Spencer, & Rivas, 1981). According to Gonzales (2000) and Trejo (2003), English proficiency is also important for success in the labor market. However, Ducan and DeAvila (1979) added that English language proficiency is not necessarily related to cognitive ability. According to Abedi (2001), the length of time an EL has lived in the U.S. and the length of time spent in one school can also be factors that influence an EL's performance on standardized achievement tests. The proficiency of EL in English does influence achievement tests but not entirely. Proficiency in English is not, in and of itself, a guarantee of academic success (Jepsen & Alth, 2005).

Effective Strategies for Teaching English Learners

Environmental Strategies

School and classroom settings affect student learning. Availability of light, air, water and restroom access, seating arrangements, carpeting, wall displays, cleanliness, access to diverse texts and practices, classroom organization, noise and temperature come under the physical attributes of a classroom and school settings that affect learning (Fulton, 1991). According to Lockheed and Levin (1993), in some of the earliest school

effectiveness studies, a clean and orderly school environment has been found to be one of the five characteristics of effective schools. Vosko (1991) suggested providing a room that has flexible furnishings which can enable users to rearrange the space to accommodate a variety of learning activities. Dutro (2006) suggested providing students with ample access to and interaction with a variety of texts, resources, and instructional strategies that can help to eliminate the barrier between the world of the EL and American culture.

A classroom's social environment consists of the teacher's behavior, interaction between the teacher and the students, and interactions among the students (Moos, 1979). According to Antunez (2005), to promote a positive interaction among students, a teacher should establish a participatory and inquiry-based classroom or use cooperative learning strategies. In a participatory and inquiry-based classroom or cooperative learning strategy, students are made to work in small groups. This helps them to engage in active practice of language and content, meaningful learning activities, and productive interactions with their peers (Kagan, 1986). They get multiple opportunities for the authentic use of language through conversations and discussions in class with both teachers and other students (Zehler, 1994). At the same time, instead of competing the students learn to work together while fostering mutual learning (Holubec, Johnson, Johnson, & Roy, 1984).

Chamot and Manzanares (1985) recommended using the "Suggestopedia" strategy based on the modern understanding of the functioning of brain and effective learning. Suggestopedia strategy emphasizes the use of pictures, colors, music,

dramatized texts, songs, games, and anything that makes a rich sensory learning environment (Chamot & Manzanares).

Linguistic and Non-Linguistic Strategies

For a student to understand a given concept thoroughly, the student should be able to comprehend 75% of the ideas and 90% of the vocabulary of the content area of the reading text (Mora, 1998). Academic language scaffolding strategies can be used to develop English comprehension among EL (Chamot & O'Malley, 1987).

Chamot and Manzanares (1985) summarized several prevailing strategies for teaching language to learners. To review some of them briefly, they are as follows: (a) The Audio-Linguistic Strategy requires the learner to practice imitating language models and patterns until they can be reproduced automatically. (b) The Silent Way Strategy involves making a learner approach the language as a puzzle to work out. (c) The Community Language Learning Strategy is patterned upon counseling techniques. (d) The Language Experience Strategy uses students' experience for concept development and vocabulary growth. This strategy brings together writing, reading, art, and language. (e) The New Concurrent/Code Switching Strategy uses a structured form of code switching for delivery of content instruction. (f) The Total Physical Response Strategy is based on teaching a language through actions and commands. (g) The Notional Functional Strategy has its goals, content selection and sequencing, methodology, and evaluation based on a learner's social and vocational communicative needs. In this strategy, content, meaning, and context take priority over form. (h) The Communicative Strategy uses real-life situations that necessitate communication. Students learn through their own motivation and desire to communicate and learn.

(i) Strategic Interaction Strategy involves the use of interactive scenarios to foster better communicative strategies in the target language. (j) The Natural Approach Strategy is based on the principle that language is best taught when it is being used to transmit messages, not when it is explicitly taught for conscious learning. Here, reading and writing are taught as natural extensions to the oral development of the language. (k) The Content-Based approach incorporates subject matter instruction appropriate to the student's age and grade level into a language development program.

Factors that Influence Second Language Acquisition

Based on his research, Collier (1995) stated some factors that can influence a child's second language acquisition during the school years. They are socio-cultural factors, language development factors, academic development factors, and cognitive development factors.

Collier (1995) defined socio-cultural factors as a student's own individuality and the surrounding social and cultural factors that influence the student's past, present, and future in all contexts of home, school, community, and the broader society. According to Collier, when students are exposed to a new language, their self-esteem, their school's instructional and administrative program structure, and their community or regional social patterns influence their language acquisition. Students' interactions with the members of the community help students learn the language. These members include family members, peers, teachers, people students meet in their day-to-day life and even through people and characters they watch in films, in television series, and in the news media. Even characters in a storybook read aloud can influence the language development in children (Bialystok, 2001). Social conditions and educational

expectations at home are also very important in influencing language development among children (Bowey, 1995; Heath, 1983; White, 1982). However, parental and community attitudes toward reading and use of literacy are the main factors that influence language development among school-going children (Grabe & Stroller, 2002). According to Mueller (1986),

Attitudes constitute an immensely important component in the human psyche. They strongly influence all of our decisions: the friends we pick, the jobs we take, the movies we see, the foods we eat, the spouses we marry, the clothes we buy, and the houses we live in. We choose the things we choose, to a large extent, because we like them. (p. 7)

Lois Meyer (2000), in the paper “Barriers to Meaningful Instruction for English Learners,” discussed the importance of teacher perceptions. Meyer posited that the perception of teachers of EL is one of the main factors that influence language development among EL. In 1999, Trigwell, Prosser, and Lyons described the effect of teachers’ perceptions of learning and teaching on teacher approaches to teaching that affect their students’ approach to learning and their learning outcomes. Radnofsky, Evertson, and Murphy (1990), through their study, recommended including teacher perceptions to enhance student learning. Vygotsky’s (1978) sociocultural theory, the Zone of Proximal Development, also highlighted the importance of teacher input as one of the main factors that influence language development. According to Vygotsky, the Zone of Proximal Development is the difference between what the learners can accomplish independently and what they can with the support of a more knowledgeable other, such as a teacher. Vygotsky contended that social interaction between a learner and a more knowledgeable peer or adult drives both language and cognitive development.

According to Collier (1995), the innate ability of human beings to acquire an oral language as well as the meta-linguistic, conscious, formal teaching of a language and the acquisition of the written system of language come under language development factors. These factors also include the acquisition of the oral and written systems of the student's first and second language domains, such as phonology, vocabulary, morphology and syntax, semantics, pragmatics, nonverbal and other extra-linguistic features, and discourse (Collier).

Cummins (1979, 1989) posited that cognitive academic skills in the first language, a language development factor, are likely to transfer to the second language. Recent research supports this view. A study of Spanish-speaking students transitioning from second to third grade found that those students who had been explicitly taught to read in Spanish transferred a variety of skills such as phonemic awareness, word reading, word knowledge, and comprehension strategies to English (August, Calderon, & Carlo, 2002).

Fenner (2003) also found that the factors that influence ESL student learning of English literacy include their first language literacy and the type of literacy instruction they receive. Based on their study, Grabe and Stroller (2002) added that students must have a sufficient knowledge of the second language to make effective use of first language skills to enhance their comprehension in the second language.

Research indicates that with proper instruction, another language development factor, about 85% to 90% of students in any classroom should be able to read grade-level texts independently (Diamond, Gutlohn, & Honig, 2000). After aggressive intervention and remediation, only about 2-5% of children will not learn how to read (Diamond et al).

Instruction that explicitly targets the phonological building blocks of language and the units of print that represent them has been shown to be most effective for beginning and problem readers (Brady & Moats, 1997; Lyon, 1998; Moats, 1994, 1995; National Research Panel, 2000).

According to Collier (1995), a student's acquisition of academic language is influenced by all school work in language arts, mathematics, the sciences, and social studies for each grade level. Work in these academic areas helps to expand a student's vocabulary, sociolinguistic, and discourse dimensions of language to higher cognitive levels.

Collier (1995) defined cognitive development factors that influence a student's acquisition of a second language as a student's natural ability and the environment in which the student is born and raised. These factors, according to Collier, influence the thought processes in a student's acquisition of a language. These thought processes include remembering, problem solving, and decision making. Cognitive development factors, according to Diaz-Rico and Weed (2002), also include a student's yearning to seek out opportunities to learn new things and interact with others. According to these authors, cognitive development factors also involve the student's age. Collier found that it took EL longer to catch up with the native English speakers at a younger age than during middle school years.

Learning Theories

Sociocultural Theory

According to Vygotsky (1978), sociocultural theory describes the ways in which a language learner acquires language. He contended that social interaction is the key to

learning. Language learners, when interacting with native speakers of the language, internalize their strategy of using language to develop their own language. According to Vygotsky, when learners interact with knowledgeable others they get an enriching experience. This drives both language and cognitive development (Vygotsky). In a work, originally published in Russian in the then Soviet Union, Vygotsky stated the following:

Every function in the child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (interpsychological), and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All higher functions originate as actual relations between human individuals. (p. 57)

Vygotsky (1978) also discussed how a child learned best by interacting with other children. According to this scholar, the interaction helps the child to share his or her opinions and concerns. This helps in developing the language skills of the child. According to Peregoy and Boyle (1997), adults or even older children can act as role models, support providers, motivators and cheerleaders for the learners. They add that children, with whom their parents interact regularly, have better vocabulary than the ones with whom their parents do not interact as often.

Bruner (1975; 1983) added to Vygotsky's discussion of the process of cognitive and language development. According to Bruner, all humans need a language acquisition support system. Children acquire their first language through interaction with their primary caretakers and others with whom they interact regularly. The contextualized language use of the primary caretakers, while interacting with children and manipulating objects in familiar situations, help children acquire their language fluency.

Gee (1992, 1996, 1997, 1989, 2001, & 2004), a sociocultural researcher, defined discourse (verbal interaction and sociocultural realities) and described the importance of

oral and written interaction to its acquisition. Gee described how it helped the novice to recognize meaningful patterns of language and thinking that are a part of the discourse. He stated that acquisition of discourse also requires the novice to be willing to adapt to the ways of thinking and communicating of discourse community. According to Gee, it is important that proficient people within the discourse community interact with and mentor the novice in understanding the discourse. Gee also contended that second language learners must learn the discourse of the academic disciplines that they pursue apart from learning social language.

Leeman's (2003) study discussed the importance of recast, that is, when a learner makes an error, a more proficient speaker of the language repeats the phrase correctly. Leeman found that second language learners who receive recasts perform better than the second language learners, learning the same language, who did not use recasts. Iwashita (2003) conducted a study on the effectiveness of various kinds of interactional moves, such as recasts, negotiation or clarification of a nontarget language-like expression, a completion of an unfinished statement, a translation of a word for the learner, and a continuation of a correct expression. Iwashita found recast was the most effective interactional move. Doughty and Varela (1998) found similar results when studying the effect of recasts focusing on past tense verbs with adult EL during a content-based lesson.

Chomsky's Theory of Language Acquisition

Chomsky (1957, 1979) opined that social interaction was not the primary force in language development. He argued that all humans were born with a specific brain structure that facilitated language acquisition:

In the case of language, one must explain how an individual, presented with quite limited data, develops an extremely rich system of knowledge. The child, placed

in a linguistic community, is presented with a set of sentences that is limited and often imperfect, fragmented and so on. In spite of this, he succeeds in “constructing” in internalizing the grammar of his language, developing knowledge that is very complex, that cannot be derived by induction or abstraction from what is given in experience. We conclude that the internalized knowledge must be limited very narrowly by some biological property. (p. 63)

Chomsky termed this biological property as Language Acquisition Device. According to him, social interaction serves merely as a source for the linguistic data. It is LAD, he contended, that helps the child process the data and develop language.

Theories of Second Language Acquisition

Krashen (1981) reviewed the research in second language acquisition. He summarized his findings as follows:

What theory implies, quite simply, is that language acquisition, first or second, occurs when comprehension of real messages occurs, and when the comprehension of real messages occurs, and when the acquirer is not ‘on the defensive’. . . language acquisition does not require extensive use of conscious grammatical rules, and does not require tedious drill. It does not occur overnight, however. Real language acquisition develops slowly, and speaking skills emerge significantly later than listening skills, even when conditions are perfect. The best methods are therefore those that supply ‘comprehensible input’ in low anxiety situations, containing messages that students really want to hear. These methods do not force early production in the second language, but allow students to produce when they are ‘ready’, recognizing that improvement comes from supplying communicative and comprehensible input, and not from forcing and correcting production. (Krashen, pp. 6-7)

Based on his review, Krashen proposed five hypotheses regarding the second language acquisition process: the Acquisition-Learning Hypothesis, Natural Order of Acquisition Hypothesis, Monitor Hypothesis, Input Hypothesis, and Affective Filter Hypothesis.

Carroll (1967) and Upshur’s (1968) studies on language acquisition formed the basis of Krashen’s Acquisition-Learning Hypothesis. Carroll (1976) found that students who lived in a country for a while where the language they were learning was the dominant language, did better than the students who were learning the same language but

had not experienced living in that country. Upshur (1968) found that the English language development courses did not make a significant effect on students' English language acquisition. According to Krashen (1981), with the Acquisition-Learning Hypothesis, language can be acquired as well as learned. When second-language learners are exposed to highly contextualized, natural settings in terms of language they are supposed to acquire, second-language learners acquire that language just the way they acquired the first language. Similarly, second-language learners can also be explicitly taught a second language. Krashen suggested that acquiring a second language is better than learning it. According to Krashen, EL learn the correct usage of the English language through interaction with native English speakers. After acquiring the second language, learning some basic grammatical and syntactical (word order) rules can also improve second language learners' knowledge of the second language.

In 1973, Brown, in his studies on children's acquisition of English as their first language, found that children tended to acquire the same grammatical morphemes in relatively the same order. Dulay and Burt's (1973, 1974) study on children's second language acquisition found similar results irrespective of a child's native language background. Both of these studies served as the basis for Krashen's Natural Order Hypothesis. According to Natural Order Hypothesis, second-language learners acquire the grammar of the second language in the same order irrespective of the learner's age or method of language instruction (Krashen, 1981). Krashen added that this did not mean that grammar can be taught in the natural order of acquisition.

Krashen's (1981) Monitor Hypothesis compares the acquired system of a language with learning system of the language. Krashen and Pon's (1975) study and

Stafford and Covitt's (1978) study formed the basis for the Monitor Hypothesis.

According to the Monitor Hypothesis, when individuals acquire a language they are able to communicate versus when individuals learn a language, they are able to monitor, edit, or self-correct language production. Krashen discusses how acquisition helps people convey their ideas without the extensive knowledge of the rules behind the usage of a language. However, Krashen adds, it is through learning the language that language learners are able to communicate more comprehensibly to others. Krashen, at the same time, warns about overusing the self-correction/monitor strategy developed through the learning of the rules of language. According to Krashen, this can delay second language acquisition and production.

According to Krashen's (1981) Input Hypothesis, when learners are exposed to a more complex (but not too complex) language than their current level of language proficiency, their knowledge of that language increases. With time, this exposure helps the second language learners acquire vocabulary and language structures. Hatch (1971), Wagner-Gough and Hatch (1975), and Butterworth's (1972) studies formed the basis for Krashen's Input Hypothesis. This can also be related to Vygotsky's (1978) Zone of Proximal Development learning theory.

Affective Filter Hypothesis states that learners acquire a second language best in a nurturing environment (Krashen, 1981). Lack of motivation, lack of self-confidence, and a high level of anxiety hinder language acquisition. These variables act as filters to the language learning and can be removed with the help of a positive environment that is cooperative and has established routines and culturally familiar learning materials (Krashen).

The studies done by Naimon, Frohlich, Stern, and Todesco (1978) and Gardner, Smyth, Clement, and Gliksman (1976) contributed in the formation of the Affective Filter Hypothesis. Naimon et al.'s study indicated that there was a strong correlation between classroom anxiety and academic failure. Gardner et al.'s study found similar correlation between anxiety and speaking a foreign or second language.

Comprehensible Output Learning Theory

Swain (1995, 1997) expanded Krashen's Input Hypothesis. Swain (1995) contended that second language acquisition requires both comprehensible input as well as output. According to Swain, comprehensible output involves a situation in which second language learners have to review their speech or written work in order for it to be comprehensible for their conversation partner(s) or reader(s). Swain claimed that it is necessary to have comprehensible output as it promotes language fluency through formulating, testing, and self-correcting with the direct or indirect feedback from proficient speakers/writers of the target language.

Developmental Learning Theory

Piaget's (1952) theory on cognitive development explains how human intelligence develops through an intellectual regulatory process geared by adaptation to the environment. During this ongoing relationship with the environment, the human assimilates and takes in the process of experience, accepts new encounters and fits them into existing schemes, and accommodates-reacts to new experiences that are not consistent with existing schemes and so changes one's scheme to accept or accommodate the new information (Piaget).

Piaget (1952) felt that a baby is an active and curious organism that reaches out and seeks to regulate a balance between assimilation and accommodation. This balance is what Piaget described as equilibrium. Piaget believed that when a child hears contradictory statements that challenge established schemes, equilibrium is disturbed. Piaget called such a disruption in equilibrium cognitive conflict or disequilibrium. According to Piaget, when children experience cognitive conflict they set out in search of an answer that will enable them to achieve states of equilibrium and learn.

Piaget (1952) considered the process of equilibrium an important factor in the cognitive growth and development of a child. It was for this reason Piaget insisted that children must be allowed to do their own learning. According to him, children learn when they are ready to learn. Piaget realized that humans progressively develop or mature to higher stages of cognitive development. According to Piaget (1972), there are four developmental stages through which children progress. These stages are sensorimotor, preoperational, concrete operations, and formal operations. The sensorimotor stage lasts from birth till the child is 2 years old. This is the stage when children through physical interaction with their environment develop conceptual knowledge about reality. The memory is not permanent. The preoperational stage starts at the age of 2 and lasts till the age of 7. During this stage, the child is unable to conceptualize abstractly and needs concrete physical situations. According to Piaget, it is during concrete operational stage, which is between the age of 7 and 11, the child starts conceptualizing. At this stage the child is able to create logical structures that explain his or her physical experiences and solve abstract problems (Piaget).

Behaviorist Learning Theory

According to the Behaviorist Theory, learning is an observable change in behavior. People are born as blank slates. A change in behavior that can be measured confirms that learning has taken place (Barrett Cunia, 2007). Based on behavior learning theorists, Pavlov (1906), Watson (1924), Thorndike (1932), Bloomfield (1933), and Skinner (1957), experiential learning occurs through experience, repetition, stimulation and response. A language can be learned, according to the behavior learning theorists, through imitation, practice, feedback on success and habit formation (Lightbown & Spada, 1999).

Cognitive Learning Theory

Tolman (1949) developed the Cognitive Learning Theory. He rejected the behaviorist theory of learning that behavior was an automatic response to an event. According to Tolman, behavior was goal-oriented and had both direction and purpose. He believed that it is the motivation guided by a desire to achieve a goal or to avoid unpleasant circumstances that makes people do something.

Tolman's theory of cognitive learning was distinct from other theories in the sense that it stated reinforcement was not necessary for learning (Krueger, Saul, & Lin, 2000). The educational implication of the Cognitive Learning Theory is that people control their own learning (Barrett Cunia, 2007).

Humanistic Learning Theory

Erickson (1950), who gave the stages of psychological development, Kohlberg (1969), who gave the theory of moral reasoning, and Prawat (1985), who gave the theory of affective education, are some of the prominent humanistic learning theorists. They

believed that individuals learn whatever they desire to learn. According to these scholars, this desire of an individual is guided by that individual's need to express creativity, personal experience, and intrinsic motivation (Krueger et al., 2000). According to Echevarria and Graves (1998), "The humanistic teacher is one who desires students to learn to interact well with one other and to feel as good as possible about themselves" (p. 37). The students are a "learning community" and learning takes place through cooperation amongst students.

Non-Achievement among English Learners and Need for Research

Despite all the efforts made to improve their performance, California schools lag significantly behind other states in terms of student achievement (Loeb et al., 2007). The problem is that "even schools doing well overall are not as successful with their EL" (Gandara & Rumberger, 2007). In an examination of the academic achievement made by EL, Gandara and Rumberger found that EL including EL reclassified as fully English proficient (RFEP), lag far behind English-only students. They found that RFEP performed better than English-only students during elementary and middle school years. According to their findings, however, the performance of RFEP dropped as they reached eighth grade. They found that 23% of RFEP students and EL combined scored proficient in Grade 2 while only 19% of RFEP students and EL combined scored proficient in Grade 11. In their analysis, Jepsen and Alth (2005) found that as the percentage of EL in a school increased that school's mean Academic Performance Index scores dropped.

Parrish et al. (2006) also found a large and consistent gap between EL, including RFEP, and native English speakers' SAT-9 scores in Grade 5 in both math and reading. According to Gandara, Rumberger, Maxwell-Jolly, and Callahan (2003), EL are much

less likely to pass the state test for high school than native English speakers. In 2003, while 79% of native English speakers passed the math portion of the California High School Exit Exam (CAHSEE), only 49% of EL passed the math portion (Jepsen & Alth, 2005). In the same year, while 82% of native English speakers passed the language arts section of the CAHSEE, only 39% of EL passed the same section (Jepsen & Alth).

Based on the fact that EL still lag far behind the native English speakers, Gray and Fliechman (2004) stated that,

Cut through the fog of competing claims made by researchers and policymakers about effective approaches for meeting the needs of English language learners (ELLs) and one fact remains: Educators daily face the challenge of teaching this large and growing student population. (p. 84)

Adding to which, in the National literacy Panel's report, August and Shanahan (2006a) highlight the need for more research into what schools can do to improve literacy among EL quoting,

[There is] a great need for more and better research into what schools should do to improve literacy among English language learners. Beyond the obvious need for more studies and more replications further evaluating promising instructional innovations, there is a need for a more sophisticated approach to research [which takes into account [that] educational outcomes may be influenced by individual, sociocultural, crosslinguistic, and developmental factors. What is needed is an ambitious research agenda that pursues the development and systematic analysis of the effectiveness of instructional routines to foster success within the context of these individual and contextual factors that moderate and mediate literacy learning outcomes for language minority students. (p. 361)

Grouping

History of Grouping English Learners

Historically, heterogeneous grouping was used as a basis for the American education system as early as the mid-1800s. Children of all ages were taught together in a one-room school house. It was in the middle of the 19th century when Horace Mann,

Secretary of Education in the State of Massachusetts, brought forth the idea of grouping students according to their age and ability level. Increasing population and a large influx of immigrants into the country made his idea popular (McAvoy, 1998). Each grade level represented an ability group and gave rise to the first form of ability tracking (Loveless, 1998).

Racial segregationists, under the pretext of providing individualized education, insisted that the schools should also have a separate curriculum for children of different races and economic classes. They used tracking as a tool to discriminate (Loveless, 1998). EL who were considered inferior to Anglo-Saxon American students, had a separate curriculum (Tozer, Violas, & Senese, 2002).

James Coleman's 1966 study *Equality of Opportunity* revealed "the potential benefits of heterogeneous classes and the deleterious effects of social isolation of economically disadvantaged children" (as cited in Tanner & Tanner, 1980, p. 125). U.S. Supreme Court case *Lau vs. Nichols* (1974) highlighted the importance of developing programs that addressed the diverse needs of EL. This resulted in the development of special instructional programs for EL (Odden & Picus, 2004).

In the current educational organization to choose a program for its EL, school districts have to depend on a number of factors. These factors include (a) the demographic characteristics of EL, (b) the availability of resources, (c) the school district's commitment towards the education of its minority group of students, (d) program factors, (e) data collected on language assessments and achievement tests, and (f) legal mandates (Mora, 1998). These factors have made it hard for a school district to group EL uniformly (Crawford, 1997). Most times, the percentage of bilingual students

in a particular school is significantly higher compared to English-proficient students so that the school is left with no option but to group them altogether (Crawford). At other times, EL are placed in regular classrooms to increase the efficient use of the limited supply of bilingual and ESL teachers (Crawford).

Effects of Grouping

Homogeneous Grouping

Positive affects of homogeneous grouping. Homogeneous grouping of students within the same grade level or class is considered a solution to the problems created by heterogeneous grouping (Ben-Ari, 1997). According to Gamoran (2006), teachers find that homogeneous grouping makes sense as it helps in matching instruction to student needs. Teachers argue that in a homogeneous setting a new experience is new for all concerned. They further add that being at a similar level in reading gives students a sense of relief that they are not the only ones struggling with the process (Cromwell, 1999).

When EL are grouped with other EL who speak the same language, they feel comfortable in sharing their ideas (Math.ed.ology, n.d.). They engage in more negotiation with each other than they would with native English speakers (Oliver, 2002). Their language and culture are validated when they are grouped with other EL who are bilingual but might not speak the same language as them (Math.ed.ology). According to Loveless (1998), homogeneous grouping does not harm anybody but can benefit high-ability students if they are given a more challenging curriculum than in a heterogeneous classroom. He added that homogeneous grouping can also help in building a better self-concept in low-ability students. Loveless pointed out that when students' prior achievement is considered in homogeneous grouping, racial disparities disappear.

Negative affects of homogeneous grouping. Homogeneous grouping has its own drawbacks. According to Oakes, Gamoran, and Page (1992), homogeneous grouping promotes inequality. It eliminates diversity that might foster rich and productive conversations in classrooms. The quality of instruction decreases (Oakes et al.). The teachers in low tracks spend more time managing student behavior than on instruction. On the other hand, high-track teachers have more time to spend on instruction. The content taught in high-track classes is also more rigorous than in low-track classes. This results in increasing the gap between the low and high achieving students (Oakes, 1985).

In 2008, Yu-Ting conducted a study on the students grouped in two different classrooms based on their proficiency in English. Yu-Ting found no statistically significant difference on the extent of progress made between these groups.

Heterogeneous Grouping

Positive affects of heterogeneous grouping. In 1965, Stager and Kennedy conducted an investigation from the standpoint of information acquisition, information processing, and group performance in small heterogeneous and homogeneous groups. They found that heterogeneous concrete groups were more effective than homogeneous concrete groups. This kind of grouping creates more diverse environments of experiences, cultures, and ideas (Cooper et al., 1990). According to Ben-Ari (1997), instruction is complex and is “predicated on the contention that intellectual heterogeneity is a potentially positive opportunity, which, when realized, leads to progress for all students and for the school as a whole, as well as to the attainment of intellectual and academic excellence” (section 2).

Social environment acts as a catalyst for language acquisition (Burner, 1983). In a heterogeneous setting, meaningful interactions take place between second language learners and native language speakers and second language acquisition occurs (Krashen, 1981). EL are able to get a great deal of meaning from nonverbal and paralinguistic cues embedded in the context of the interchange through informal conversations with the native English speakers (Cummins, 1981). The acquisition of Basic Interpersonal Communication Skills in EL becomes natural and rapid (Cummins). Based on Vygotsky's (1978) Zone of Proximal Development, in a heterogeneous group more knowledgeable peers help novices learn and acquire language through interaction.

In acquiring a second language, a person has to depend on native speakers for their modified comprehensible input (Ellis, 1985; Hakuta, 1986). The feedback provided by native English speakers help EL modify and speak English correctly (Gass & Varonis, 1994; Polio & Gass, 1998; Swain & Lapkin, 1998). Even the indirectly corrected grammatical or syntactical errors during class conversations helps EL in learning or acquiring grammatically correct English (Doughty & Varela, 1998; Iwashita, 2003; Leeman, 2003). These classroom interactions also improve reading comprehension (Echevarria, 1996; Saunders & Goldenberg, 1999).

Children prefer to imitate models who are socially accepted (Bandura, 1977). In a heterogeneous setting, children with higher cognitive ability become accepted models for imitation. After some time, at a certain level of competence, children's mechanism of imitation becomes self-regulatory (Morrison & Kuhn, 1983). Necessity for reciprocity decreases. Even without social and cognitive skills for collaboration and cooperation, children start learning through self-reinforcement (Morrison & Kuhn). For example,

when immigrant children are placed along with American children in a classroom, they absorb the manner in which the English language is phrased and spoken (Rothstein, 1998).

Bikle (2005), in her study on the process of vocabulary development in EL in heterogeneous groupings of immigrant children and American children, found that often vocabulary became the salient factor when working in groups to complete academic tasks. Bikle stated that in conversations students looked at words in many different ways, like making definitions, sorting out misunderstandings, stating prior knowledge, and making connections to Spanish or multiple meaning words in English. Writing about her findings on the creative effect of heterogeneous grouping, Bikle added that the students benefited greatly also in their ability to build vocabulary, constantly learning new words.

Negative affects of heterogeneous grouping. According to Loveless (1998), heterogeneous grouping can benefit low-ability students but can discourage higher achievement in high-ability students. Bikle (2005) stated that in terms of composition of groups, positive as well as negative impact of heterogeneous group composition, students with higher levels of proficiency in the English language were able to create richer linguistic environments, thus developing a greater vocabulary in the language. On the other hand, other factors like exclusionary talk, difficult academic material, and struggle to keep pace with the group makes it extremely difficult for students with lower levels of English proficiency to participate in group conversations.

Heterogeneous grouping can also be detrimental to the academic success of minority students as they may be reluctant to freely express themselves in the class (Cooper et al., 1990). According to Rosenbaum (1999), in a heterogeneous group the

brighter Hispanic students often face a lot of peer pressure from low-achieving Hispanic students. With a lack of academic support at home, they rely heavily on support in school. Any changes that reduce academic demands on the high-achieving Hispanic students makes them most vulnerable. They feel bored and slowed down. On similar terms, teachers in favor of homogeneous grouping argue that heterogeneous grouping slows down the class pace. They have, in effect, to devise two lesson plans for each period: one for the accelerated students and another for those with low skills (Cromwell, 1999). Accelerated students do not want to do extra work without being given an incentive of getting additional rewards. On the other hand, students with low skills struggle to keep up with the high achievers (Gamoran, 2006). Providing high quality education to the increased heterogeneity in student population is a big challenge that school districts face. As one teacher explicated in the Rosenbaum (1999) study,

Piquing the interest of the brighter kids would require extra readings, extra writing assignments, and extra discussions that we would have to schedule outside of class. It's too hard to do all of this. I really don't do enough for them. There's not enough time. (p. 26)

Gamoran and Weinstein (1998) found that teachers, in fact, lowered their standards to teach a heterogeneous class. They added that the quality of instruction was also low in these types of classes. Rosenbaum (1999) summed it all up by stating that, “detracking did not abolish inequality among students; it ignored it as much as possible” (p. 5).

Meta-Analyses of Studies on Grouping

In his meta-analysis of studies done on homogeneous grouping, Slavin (1987) found that cross-grade homogeneous grouping boosts achievement in elementary school. He added that all homogeneous groups of students—high, medium, and low—are

benefited by this kind of grouping. In their meta-analysis of studies done on homogeneous grouping, Kulik and Kulik (1982) agreed with Slavin on his findings. All three authors also agreed with each other on the finding that homogeneously grouped students of different IQ levels show similar levels of achievement than when grouped heterogeneously (as cited in Loveless, 1998). Their conclusions on this finding are different (Loveless). Slavin concluded that grouping has no effect on achievement. Kulik and Kulik dismissed this finding, stating that level of achievement in both kinds of groupings is the same due to an identical curriculum. According to Kulik and Kulik, if the course content is tailored to the ability level of students, it will show achievement in high-ability students. Slavin disagreed with them stating that the finding that high-ability students do better with higher level curricula are baseless. He argued that the better results are not because of the higher-level curricula, but for the fact that schools which show such results admit only the best students into these programs while rejecting others of lower ability.

Slavin (1987) considered homogeneous grouping as anti-democratic. He advised schools to use it only if it benefited someone. In Kulik and Kulik's (1982) opinion, homogeneous grouping only helped high-ability students. They had no evidence to prove it harmed anyone, and hence, they believed it should not be abolished.

According to Loveless (1998), the studies that Slavin and the Kuliks reviewed were conducted prior to 1975. He added that several structural changes had occurred since that educational phase in grouping students. In his meta-analysis of studies done on grouping, apart from analyzing Slavin and Kulik and Kulik's meta-analyses, Loveless analyzed two other studies that were conducted after 1975. One study was High School

and Beyond, which was a study that began with 10th graders in 1980. The other was National Education Longitudinal Study, which started with 8th graders in 1988. These two studies followed several thousand students through school, recording academic achievement, courses taken, and attitudes toward school. Students' transcripts were also analyzed and their teachers and parents were interviewed. The two massive databases sustained a steady stream of research on tracking. Based on his analysis, Loveless concluded that high-track students learned more than low-track students, even when factors such as prior achievement were statistically controlled. He added that race and tracking were not related and that heterogeneous classes helped low-achieving students but harmed the progress of high-achieving students. According to Loveless, there was little research that indicated homogeneous grouping harmed student self-esteem. Instead, he added that homogeneous grouping was better in helping the self-concept of low-ability students than heterogeneous grouping, where they were constantly compared to their high-achieving classmates. He went on to suggest that in order to move students out of low-achieving groups, the teachers had to motivate and push students in these groups. Loveless further suggested that in order to make low-achieving groups as privileged as the high-achieving groups, well-qualified teachers needed to be hired to teach them. He added that low-achieving group students had to be pushed to take more challenging classes to overcome their backwardness to go forward.

In 1971, Durrett and Florence conducted a pilot study to understand the effects of homogeneous and heterogeneous grouping on the psychological functioning of Mexican-American and Anglo preschool children. They found that both homogeneous and heterogeneous grouping had a facilitating effect on children's cognitive growth and

behavior modification. Schullery (2006) also found that heterogeneity had both advantages and disadvantages.

Summary

As can be seen from the first section of the literature review, all the school districts in the United States have a similar concept of EL. Their criteria for identifying and classifying EL are found to be very similar from school district to school district. With similar goals of assessing EL level of proficiency, different states use different assessment tools for testing EL. The choice of a program for EL is based more on the school district's educational goals, availability of resources, and demographics. This often results in the uneven grouping of EL: either all EL are placed in one classroom with very few native English speakers or a few are assigned to classrooms with mostly native English speakers making for an unequal distribution of students. The second section discussed the concept of proficiency in English and revealed its importance in promoting academic achievement in EL. Different strategies, factors, and learning theories on language development were explored in the next section of this literature review. This section of the literature review highlighted the importance of interaction amongst native English speakers and EL. The section after this revealed that the problem of nonachievement amongst EL is still prevalent. It also indicated the need for more research into what schools can do to better their EL performance. The next section of this literature review illustrated the research on the effects of grouping on the language development of EL is inconclusive, limited, and scattered. This study explored the effect of grouping, an otherwise limited area of research, on language development amongst EL. In particular, through this study, the researcher examined whether there is a

significant difference between first-grade EL who constitute a majority (>50%) of the English language mainstream classroom (homogeneous grouping) and first-grade EL who constitute a minority (<50%) of the English language mainstream classrooms (heterogeneous grouping) in the area of English language acquisition as measured by the CELDT. This study also determined perceptions of the teachers of entire English language mainstream EL who were enrolled in first grade for the 2006-2007 school year and maintained enrollment in the same school district for second grade in the fall of 2007-2008 school year at a Unified School District on the advantages and disadvantages of homogeneous and heterogeneous grouping in EL. A study of teachers' perceptions has helped to substantiate that any significant difference in differently grouped EL test scores is not due to the difference in their teacher's perception of grouping.

CHAPTER THREE: METHODOLOGY

Introduction

This chapter presents the purpose of the study, the research questions that guided the study, the null hypotheses, the research design and the type of research methodology applied to the rationale for using this methodology, the sampling procedures and description of the sample, the instrumentation, field test, data collection, and analysis procedures. Through appropriate sampling and data collecting, the effect of homogeneous and heterogeneous grouping on English language mainstream first-grade EL language development based on their CELDT scores was investigated. In addition, perceptions of English language mainstream first-grade teachers of the advantages and disadvantages of homogeneous and heterogeneous grouping in EL were also studied. To explain fully the study process, the chapter has been divided into ten sections.

Statement of Purpose

This study examined whether there is a significant difference in the English language acquisition between first-grade EL who constitute a majority (>50%) of the English language mainstream classroom (homogeneous grouping) and first-grade EL who constitute a minority (<50%) of the English language mainstream classrooms (heterogeneous grouping) as measured by the CELDT. To determine this difference, the CELDT scores of entire English language mainstream English Learners, who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at a Unified School District were used. This study also determined perceptions of the teachers of entire English language mainstream EL, who were enrolled in first grade for the 2006-

2007 school year and who maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at the DISTRICT, on the advantages and disadvantages of homogeneous and heterogeneous grouping in EL. A study of teacher perceptions served to substantiate that any significant difference in differently grouped EL test scores was not due to the difference in their teacher's perception of grouping.

Research Questions

Using the CELDT scores, two research questions guided this study:

1. What is the change in the proficiency in English of homogeneously grouped English language mainstream first-grade EL, as measured by CELDT (a) when teachers have a positive attitude towards homogeneous grouping of English language mainstream first-grade EL, (b) when teachers have a negative attitude towards homogeneous grouping of English language mainstream first-grade EL, and (c) when teachers do not have a preference for one kind of grouping over the other?

2. What is the change in the proficiency in English of heterogeneously grouped English language mainstream first-grade EL (a) when teachers have a positive attitude towards heterogeneous grouping of English language mainstream first-grade EL, (b) when teachers have a negative attitude towards heterogeneous grouping of English language mainstream first-grade EL, and (c) when teachers do not have a preference for one kind of grouping over the other?

Null Hypotheses

H_01 : There is no significant difference in the proficiency in English of first-grade EL who constitute a majority (>50%) of the English language mainstream classroom (homogeneously grouped) and first-grade EL who constitute a minority (<50%) of the

English language mainstream classrooms (heterogeneous grouped) as measured by CELDT.

H₀2: There is no significant difference in the proficiency in English of homogeneously and heterogeneously grouped first-grade EL in any of the six teacher perception subgroups: (a) teachers of homogeneously grouped EL with positive attitude towards homogeneous grouping, (b) teachers of homogeneously grouped EL with negative attitude towards homogeneous grouping, (c) teachers of homogeneously grouped EL with no preferences, (d) teachers of heterogeneously grouped EL with positive attitude towards heterogeneous grouping, (e) teachers of heterogeneously grouped EL with negative attitude towards heterogeneous grouping, and (f) teachers of heterogeneously grouped EL with no preferences.

Research Design

The researcher gathered CELDT scores of the entire English language mainstream EL who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at the DISTRICT. The CELDT is administered annually in the fall of each school year. The first-grade CELDT served as the pretest for this study and the second-grade CELDT served as the posttest. For more specific results, the scores of Charter Schools, nonsectarian public schools that do not follow many of the regulations that apply to traditional public schools (WestEd, 2000), and Special Education Classrooms, that is, classrooms with students with identified learning and physical disabilities (Watson, 2008), first-grade EL were not studied.

A questionnaire was administered to the entire English language mainstream first-grade teachers at the DISTRICT. Based on their responses, teachers were then placed in one of the six teacher groups: (a) teachers of homogeneously grouped EL with more positive attitudes toward homogeneous grouping, (b) teachers of homogeneously grouped EL with more negative attitudes toward homogeneous grouping, and (c) teachers of homogeneously grouped EL with no preference for either of the groupings, (d) teachers of heterogeneously grouped EL with more positive attitudes toward homogeneous grouping, (e) teachers of heterogeneously grouped EL with more negative attitudes toward heterogeneous grouping, and (f) teachers of heterogeneously grouped EL with no preference for either of the groupings. Next, the scores of the homogeneously grouped EL, for each teacher subgroup, were compared with heterogeneously grouped EL in the same teacher subgroup. Table 1, in chapter one, illustrates the six data sets that served as the basis for this study. By comparing student scores within each teacher subgroup, any change in proficiency was attributed to the way students were grouped rather than to differences in teacher perceptions on grouping.

To find the effect of homogeneous and heterogeneous grouping on the language development of English language mainstream first-grade EL in the DISTRICT, the CELDT scores of entire English language mainstream English Learners who were enrolled in first grade for the 2006-2007 school year and maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at the DISTRICT were used. To determine teacher perceptions toward homogenous and heterogeneous grouping from first-grade teachers who were enrolled in the 2006-2007 school year and who maintained enrollment in the same district for second grade in the fall of 2007-2008

school year at the DISTRICT, a questionnaire, developed by the researcher, was used to survey the English language mainstream first-grade teachers' attitude toward grouping.

Rationale for the Design

Based on the literature review, the focus of the research conducted on grouping is mainly on ability grouping. This study instead examined whether there is a significant difference in the English language acquisition between first-grade EL who constitute a majority (>50%) of the English language mainstream classroom (homogeneous grouping) and first-grade EL who constitute a minority (<50%) of the English language mainstream classrooms (heterogeneous grouping) as measured by the CELDT. A mixed methodology was used to analyze the effects of grouping on language development in EL. Mixed methods design helps in utilizing the benefits of both quantitative and qualitative approaches. It also neutralizes inherent biases found in each of the separate methods (Creswell, 2003). Quantitative methodology involves mathematical analysis of data (Mertler & Charles, 2005). The quantitative analysis helped in interpreting the data obtained to determine the relationship or association between EL language development and the type of classroom setting.

Gay and Airasian (2000) suggested that qualitative research provides an insight into people's beliefs and feelings. The qualitative analysis helped in interpreting the data obtained to determine if there was any statistically significant difference between the EL English language development and the corresponding attitudes of their teachers towards grouping. Hence, overall a mixed methodology was used in the study.

Participant Sample and Description

The population is “the group of interest to the researcher . . . and may be virtually any size and cover almost any geographical area” (Gay & Airasian, 2003, p. 102). In this case, it was exceedingly intricate, expensive, and time-consuming to collect data of all English language mainstream first-grade EL in the State of California as well as to survey their teachers in the state. Therefore, a realistic and ample population to conduct the study was narrowed down to all English language mainstream English Learners who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same school district for second grade in the fall of 2007-2008 school year. The same realistic target sample teacher population included the teachers of the entire English language mainstream EL who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same district for second grade in the fall of 2007-2008. The population sample sizes were 324 students and 51 teachers, respectively. Gay and Airasian describe target populations as “the population that a researcher can realistically select” for a study (p. 102).

The ethnic composition of the student population in the year 2006-2007 in California and the DISTRICT are provided in Table 2 (Ed-Data, 2008). The ethnic groups are White, Hispanic, Asian, African American, Filipino, American Indian/Alaskan Native, and Pacific Islanders.

Table 2

Comparison of Ethnicity Data of the Student Population of Unified School District and California in the Year 2006-2007

Districts/ Ethnicity	White	Hispanic	Asian	African American	Filipino	American Indian/ Alaskan Native	Pacific Islander	EL
DISTRICT	33.0%	40.0%	8.0%	8.0%	7.0%	<1.0%	1.0%	20.0%
California	29.4%	48.1%	8.1%	7.6%	2.6%	0.8%	0.6%	25.0%

Note. EL = English Learners.

As can be seen from Table 2, the ethnic composition of the student population in the year 2006-2007 in the State of California and DISTRICT is similar. Both California and the DISTRICT have a large number of Hispanic students: 48.1% and 40%, respectively, who constitute the majority of their student population. White students constitute 33% and 29.4%, respectively; the second major part of their student population. Both California and the DISTRICT also have an almost equal proportion of Asian and African American students: 8% and 7.6%, respectively. Filipino 7% and 2.6%, respectively; American Indian/Alaskan Native less than 1% and 0.8%, respectively; and Pacific Islander students 1% and 0.6%, respectively, constitute the minority part of the student population of both California and the DISTRICT.

Instrumentation

Two instruments were used to collect data: The California English Language Development Test (CELDT) scores for English Learners were utilized to collect quantitative data. A questionnaire, developed by the researcher based on the literature review was administered to teachers to collect qualitative data.

California English Language Development Test (CELDT)³

CELDT is the test required by the California Department of Education (2004) to administer to students who enter the school district from homes where a language other than English is used, as reported on the Home Language Survey. CELDT has met standards for reliability and validity.

Reliability

Reliability coefficients for the CELDT Form C are calculated using the 2003-2004 operational tests (California Department of Education, 2004). This operational test is administered to all students in the State of California whose home language is a language other than English. Reliability coefficients are calculated between 0.85 to 0.90 across all grades and subject areas. These are typical coefficients for assessments of these lengths. These are calculated by finding the correlation between the student scores and the scores that would result if the students were retested with a parallel form of the same test. To maintain reliability year-to-year, each new test form is equated to a previous form. In order to score these, the CELDT coordinators are locally trained on each item to increase the reliability of this scoring procedure (California Department of Education).

Validity

Standard error of measurement is calculated further to know how much the errors of measurement affect students' scores. The range of standard errors for the CELDT Form C is between 17 to 26 points. It is based on the operational test that was administered in 2003-2004. CELDT is also aligned to the state English Language

³ California English Language Development Test and CELDT will be used interchangeably in the dissertation as appropriate.

Development Standards. This increases the content validity of CELDT (California Department of Education, 2004).

CELDT is based strictly on the state English Language Development Standards. It is administered to all identified EL irrespective of their race, culture, and gender (California Department of Education, 2004). This makes this test unbiased. Apart from being unbiased, CELDT is specific, well planned, and makes a proper distinction between EL of different skill levels. For instance, in first grade EL are assessed only on their listening and speaking skills (California Department of Education). CELDT is also based on the requirements set by the California Department of Education.

The high reliability, content validity, unbiased nature and ability to make a proper distinction between a student's different skills made CELDT perfect for measuring English language acquisition between first-grade EL who constitute a majority (>50%) of the English language mainstream classroom (homogeneous grouping) and first-grade EL who constitute a minority (<50%) of the English language mainstream classrooms (heterogeneous grouping).

Questionnaire

According to Fraenkel and Wallen (2003), "In a questionnaire, the subjects respond to the questions by writing, or, more commonly, by marking an answer sheet" (p. 130). No existing questionnaires appeared to be supportive of the objectives of this study. Therefore, a questionnaire developed by the researcher, based on the review of the literature, was used to survey the first-grade teacher attitudes towards grouping (see Appendix E). Table 3 provides a summary of the views and findings of different researchers on the effect of different types of grouping along with the names of the

researchers. The views and findings of different researchers on the effect of different types of grouping are sub-grouped as the views and findings of different researchers on the positive effects of homogeneous grouping, negative effects of homogeneous grouping, positive effects of heterogeneous grouping, and negative effects of heterogeneous grouping.

Attitudes are difficult to assess. They cannot be observed or measured directly (Henerson, Morris, & Fitz-Gibbon, 1987). Social scientists have differences of opinion about the definition of attitude. There is, however, a substantial agreement among them that the positive or negative affect of attitude is an important aspect of the attitude concept (Mueller, 1986). The literature revealed the research findings on the positive and negative affects of heterogeneous and homogeneous grouping (Table 3). These findings were developed as statements in the questionnaire with which the English language mainstream first-grade teachers could either agree or disagree to present their perspective towards grouping. Based on the recommendation of Linstone and Turoff (2002), the statements in the questionnaire were designed to be 35 words or less.

McNamara's (2007) general guidelines for designing questionnaires were followed. The researcher provided a brief explanation of the purpose of the questionnaire as well as the directions for completing the questionnaire followed with conditions of confidentiality. Based on McNamara's (2007) guidelines, the researcher worded the questions so as to avoid predictable and forced choice responses from the teachers. The researcher also asked questions that were comprehensible and generally considered not too private, impractical, or misleading. The researcher tried to avoid the use of strong adjectives, confusing words, slang, cultural-specific or technical words that might be hard

to understand. Care was taken not to include too many questions as that could have dissuaded potential respondents.

Table 3

Summary of the Effects of Different Types of Grouping from the Literature Review

Views/findings on the effect of different types of grouping	Researcher(s)
Positive affects of homogeneous grouping	
Helps in matching instruction to students' needs	Gamoran (2006)
A new experience is new for all concerned	Cromwell (1999)
Being at a similar level in reading gives students a sense of relief that they are not the only ones struggling with the process	Cromwell (1999)
EL feel comfortable in sharing their ideas	Math.ed.ology (n.d.)
EL engage in more negotiation with each other than they would with native English speakers	Oliver (2002)
Bilingual students' language and culture are validated when they are grouped with other bilingual students, who might not speak the same language as them	Math.ed.ology (n.d.)
Does not harm anybody but can benefit high- ability students if they are given a more challenging curriculum	Loveless (1998)
Helps in building a better self-concept in low-ability students	Loveless (1998)
When students' prior achievement is considered in homogeneous grouping, racial disparities disappear	Loveless (1998)
Negative affects of homogeneous grouping	
Promotes inequality	Oakes, Gamoran, & Page (1992); Slavin (1987)
Eliminates diversity that might foster rich and productive conversations in classrooms	Oakes, Gamoran, & Page (1992)
Decreases quality of instruction	Oakes, Gamoran, & Page (1992)
Teachers in low tracks have to spend more time managing student behavior than on instruction	Oakes (1985)
Increases the gap between the low and high achieving students	Oakes (1985)
Helps only high-ability students	Kulik & Kulik (1982)

(table continues)

Table 3 (continued)

Views/findings on the effect of different types of grouping	Researcher(s)
Positive affects of heterogeneous grouping	
Creates more diverse environments of experiences, Cultures, and ideas	Cooper et al. (1990)
Leads to progress for all students and for the school as a whole, as well as to the attainment of intellectual and academic excellence	Ben-Ari (1997)
Helps in making meaningful interactions take place between second language learners and native language speakers	Cummins (1981); Krashen (1981); Vygotsky (1978)
The feedback provided by native English speakers help EL modify and speak English correctly	Doughty & Varela (1998); Gass & Varonis (1994); Iwashita (2003); Leeman, (2003); Polio & Gass (1998); Swain & Lapkin, (1998)
Classroom interactions improve reading comprehension	Echevarria (1996); Saunders & Goldenberg (1999)
Children with higher cognitive ability become accepted models for imitation. After some time, at a certain level of competence, children's mechanism of imitation becomes self-regulatory	Morrison & Kuhn (1983)
Students benefit greatly in their ability to build vocabulary constantly learning new words	Bikle (2005)
Negative affects of heterogeneous grouping	
Discourages higher achievement in high-ability students	Loveless (1998)
Exclusionary talk, difficult academic material, and struggle to keep pace with the group makes it extremely difficult for students with lower levels of English proficiency to participate in group conversations	Bikle (2005)
Can also be detrimental to the academic success of minority students as they are reluctant to freely express themselves in the class	Cooper et al. (1990)
Slows down the class pace as teachers have to devise two lesson plans for each period, one for the accelerated students and another for those with low skills	Cromwell (1999)
Brighter Hispanic students often face a lot of peer pressure from low-achieving Hispanic students. When there is a lack of academic support at home, they rely heavily on support in school. Any changes that reduce academic demands on the high-achieving Hispanic students makes them most vulnerable. They feel bored and slowed down.	Rosenbaum (1999)
Accelerated students do not want to do extra work without being given an incentive of getting additional rewards. On the other hand, students with low skills struggle to keep up with the high achievers.	Gamoran (2006)
Teachers in fact lower their standards to teach a heterogeneous class	Gamoran & Weinstein (1998)
Ignores inequality among students	Rosenbaum (1999)

SurveyMonkey.com is a professional online survey service that ensures accurate analysis of the data. It also provides for data encryption (to convert computer data and messages into something incomprehensible using a key so that only a holder of the matching key can reconvert them) to ensure confidentiality. Therefore, the researcher employed them to administer the electronic survey. An electronic survey is economical and can easily be downloaded on any statistical analysis software program (Shannon, Johnson, Searcy, & Lott, 2002).

Studies indicate that participants prefer rating scales as they find it most comfortable (Linstone & Turoff, 2002). A Likert 1-5 rating scale that identifies the degree to which the respondent agrees or disagrees with each statement was used in the questionnaire. The answers ranged from 1—*strongly agree* to 5—*strongly disagree*. A 5-point Likert scale was used in order to provide for a neutral response. The questionnaire is provided in Appendix C.

Reliability

An instrument that can give consistent results of accurately measuring what it is supposed to measure can said to be reliable (Fraenkel & Wallen, 2000). To establish the reliability of the questionnaire, the researcher conducted a pilot test with Pilot Unified School District (PUSD) English language mainstream first-grade teachers. PUSD has similar demographics to the subject school district. The following Table 4 provides the information of the ethnic composition of the student population, in the year 2006-2007, in PUSD (Ed-Data, 2008) and the DISTRICT (2006).

As can be seen from Table 4, the ethnic composition of the student population in the year 2006-2007 in the subject school district and pilot test school district is similar.

Both the DISTRICT and PUSD have a large number of Hispanic EL, 40% and 44%, respectively, who constitute a major part of their student population; White students, 33% and 31% respectively, constitute the second major part of their student population; both the DISTRICT and PUSD also have equal proportion of Filipino students, 7% each; Asian 8% and 5%, respectively; American Indian/Alaskan Native, less than 1% and 1% respectively; and Pacific Islanders, 1% each, constitute the minority part of the student population of both the DISTRICT and PUSD.

Table 4

Comparison of Ethnicity Data of the Student Population of Unified School District and Pilot Unified School District in 2006-2007

District/ Ethnicity	White	Hispanic	Asian	African American	Filipino	American Indian/ Alaskan Native	Pacific Islander	EL
DISTRICT	33.0%	40.0%	8.0%	8.0%	7.0%	<1.0%	1.0%	20.0%
PUSD	31.0%	44.0%	5.0%	10.0%	7.0%	1.0%	1.0%	17.0%

Note. PUSD = Pilot Unified School District, EL = English Learners.

The pilot test verified consistency of results. It also helped the researcher in understanding the fact that there might be some teachers who would prefer to complete the questionnaire on paper rather than online. The researcher also learned that sending a reminder email and personally approaching the study participants increased the response rate. Based on the feedback from the pilot test, the researcher revised the procedure of conducting the questionnaire to increase response rates. Apart from emailing the link to the online questionnaire, the researcher also personally visited some of the mainstream first-grade teachers who did not respond to the online questionnaire with paper copies of the questionnaire for their convenience and response preference.

In addition, a Cronbach's alpha was performed on the data and the analysis indicated *t* an alpha of .59. This suggests that the measure has a moderate level of internal consistency. Alpha may increase with a larger sample size (Cronbach, 1951).

Reliability Statistics

Cronbach's Alpha	N of Items
.592	30

Validity

According to Cox and Cox (2008), to establish content validity, “the researcher cross-references the content of the instrument to those elements reported in the literature and supported by experience and determines whether there is a match” (p. 38). The questionnaire survey, developed by the researcher, was based on the literature review done for this study. According to Frankel and Wallen (2000), “A valid instrument is one that measures what it is supposed to measure. . . . It permits (the researcher) to draw warranted, or valid, conclusions about the characteristics of what is being studied” (p. 128). An alignment matrix (Appendix F), researcher developed based on the suggestions of Cox and Cox, was used to check the alignment of the questionnaire with the research questions for this study.

Cox and Cox (2008) further suggested using four or five specialists to review the survey instruments to establish their validity. The researcher field tested the questionnaire with a group of four individuals knowledgeable about questionnaire design and/or effects of grouping. These four individuals included a school psychologist, a district's director of curriculum, and two first-grade teachers from the DISTRICT who did not participate in the actual study. A checklist (Appendix E), developed by Cox and Cox, was used for a

specific and clear input from the individuals who were field tested on the questionnaire. Based on the field test, the researcher then revised the format and content of the questionnaire to ensure its validity. The title was changed so as to relate it to the purpose of the study/questionnaire. The unclear terms in the questionnaire, as pointed out by the field testers, were changed as necessary.

Data Collection Procedures

1. Completed application for Institutional Review Board review of research involving the use of Human Subjects at Argosy University.
2. Received approval from the DISTRICT to obtain and use information on entire English language mainstream English Learners who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at the DISTRICT.
3. Received approval from the DISTRICT to survey the English language mainstream 2006-2007 first-grade teachers' perceptions on grouping of EL.
4. Received data from the DISTRICT of the CELDT scores of entire English language mainstream English Learners who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at the DISTRICT.
5. Received approval from the Pilot Unified School District to survey the English language mainstream first-grade teachers' perceptions on grouping of EL.
6. Conducted the pilot test of the researcher-developed questionnaire on PUSD English language mainstream first-grade teachers.

7. Conducted the field test of the researcher-developed questionnaire on the four specialists in the field of education.

8. Made the necessary changes in the questionnaire based on the feedback from the pilot test and the field test.

9. Emailed the DISTRICT English language mainstream first-grade teachers an invitation, with an explanation of the purpose of the survey as well as the study and detailed directions for completing it.

10. Emailed the survey to the English language mainstream first-grade teachers in the DISTRICT.

11. Collected and analyzed the data and drew conclusions.

Data Analysis

First, the CELDT scores of the entire English language mainstream EL who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at the DISTRICT, were split into two broad categories: (a) scores of EL who constitute a majority (>50%) of the English language mainstream classroom (homogeneous grouping) in first grade, and (b) scores of EL who constitute a minority (<50%) of the English language mainstream classrooms (heterogeneous grouping) in first grade. Next, only the raw data of the differences in the CELDT scores of these students, for the years 2006-2007 and 2007-2008, were collected and tallied in order to get the frequency distribution of these scores. Then the average changes in scores of the EL in CELDT were calculated for each group.

A *t*-test helps in assessing if there is a statistically significant difference between the means of two groups (Ravid, 2000). Using the following equation for *t*-test, the average or the mean of the increase in the scores of these two groups were compared.

$$t = \frac{\text{Mean}_{(\text{participants})} - \text{Mean}_{(\text{comparison})}}{\sqrt{\text{CombinedVariance} \left(\frac{1}{n_{\text{participants}}} + \frac{1}{n_{\text{comparison group}}} \right)}}$$

Where:

$$\text{Variance} = \frac{\text{sum of squares}}{\text{degrees of freedom}} = \frac{SS}{df}$$

$$SS = \sum (\text{scores})^2 - \frac{(\sum (\text{scores}))^2}{n}$$

$$df = n - 1$$

n = number of participants

This helped in finding the difference between their means relative to the variability in their scores. This, in turn, helped in predicting that the difference between the changes in the scores of the given two groups is statistically not significant. Finally, the researcher was able to examine whether there is a significant difference between first-grade EL who constitute a majority (>50%) of the English language mainstream classroom (homogeneous grouping) and first-grade EL who constitute a minority (<50%) of the English language mainstream classrooms (heterogeneous grouping) in the area of English language acquisition as measured by the CELDT. At the same time, all the DISTRICT English language mainstream first-grade teachers were either emailed or personally handed the survey.

Based on their responses, teachers were grouped in one of the six teacher groups: (a) teachers of homogeneously grouped EL with positive attitude towards homogeneous grouping, (b) teachers of homogeneously grouped EL with negative attitude towards homogeneous grouping, (c) teachers of homogeneously grouped EL with no preferences, (d) teachers of heterogeneously grouped EL with positive attitude towards heterogeneous grouping, (e) teachers of heterogeneously grouped EL with negative attitude towards heterogeneous grouping, and (f) teachers of heterogeneously grouped EL with no preferences. Next, scores of the homogeneously grouped students for each teacher subgroup were compared with heterogeneously grouped EL in the same teacher subgroup. Details of the six databases or data sets are provided in Table 1 in chapter one. By comparing student scores within each teacher subgroup, any change in proficiency was attributed to the way students were grouped rather than to differences in teacher perceptions on grouping.

Based on the matrix (Appendix E) used to show the alignment of the questionnaire items with the research questions, teachers' perceptions towards grouping were determined. Teachers who responded *strongly agree* or *agree* to most or all the questions aligned with Research Question 1(a) were deemed to have a positive attitude towards homogeneous grouping of students. These teachers, with a more positive attitude towards homogeneous grouping were also expected to respond *strongly disagree* or *disagree* to most or all the questions aligned with Research Question 1(b). Teachers who had a negative attitude towards homogeneous grouping of students and who responded *strongly agree* or *agree* to most or all the questions aligned with Research Question 1(b) had a positive attitude towards heterogeneous grouping. These teachers, with more

negative attitudes towards homogeneous grouping were also expected to respond *strongly disagree* or *disagree* to most or all the questions aligned with Research Question 1(a) regarding homogeneous grouping.

Teachers who responded *strongly agree* or *agree* to most or all the questions aligned with Research Question 2(a) who had a positive attitude towards heterogeneous grouping of students were expected to *strongly disagree* or *disagree* to most or all the questions aligned with Research Question 2(b). Teachers who had a negative attitude towards heterogeneous grouping of students and who responded *strongly agree* or *agree* mostly or to all the questions aligned with Research Question 2(b) were expected to *strongly disagree* or *disagree* mostly or to all the questions aligned with Research Question 2(a) regarding heterogeneous grouping. Teachers who did not have a preference for one kind of grouping or the other were expected to respond *neutral* to most or all the questions of the questionnaire. Teachers without a preference for one kind of grouping or the other were also not consistent in responding in favor of or against any one kind of grouping.

Confidentiality of Participants and Data

Two types of groups participated in this study. The first group constituted entire English language mainstream EL who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at the DISTRICT. The second group constituted EL first-grade teachers.

The researcher did not make direct contact with any of the EL. The DISTRICT Director of Curriculum, Accountability and Continuous Improvement extracted the

CELDT scores of EL who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same district for the second grade in the fall of 2007-2008 school year. The Director then assigned them a code based on their teacher's identification number assigned by the District. Then the DISTRICT Director of Curriculum, Accountability and Continuous Improvement handed over that data to the researcher with codes instead of the names of the students.

The researcher sent the first-grade teachers of the EL who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same district for the second grade in the fall of 2007-2008 school year at the DISTRICT a letter assuring confidentiality to invite them to participate in the study (see Appendix D). Participation in the study was voluntary and participants could have withdrawn at any stage during the study. "Once the data in a study have been collected, researchers should make sure that no one else (other than perhaps a few key research assistants) has access to the data" (Fraenkel & Wallen, 2003, p. 58). The concern of participants regarding being linked to their responses was eliminated by taking the following precautions: (a) all data collected during the study was stored in a file that was kept locked in a cabinet at the principal investigator's house, to which the principal investigator had the only key; (b) the data papers will be destroyed following the publication of the study; and (c) teachers were assigned codes for their responses instead of names.

Role of the Researcher

The researcher was the author of the questions that she planned to ask all English language mainstream first-grade teachers in the DISTRICT to analyze their perceptions on grouping. The researcher was also responsible to get approval from the DISTRICT to

survey the English language mainstream first-grade teachers to get their perceptions on the topic. The researcher was also responsible to email or personally invite the English language mainstream first-grade teachers to participate in the survey.

Prior to the data collection, the researcher obtained permission from the DISTRICT to collect the information on the EL population in different English language mainstream first grades. Then she collected data of the EL population's CELDT scores. The researcher also took every precaution so the data were safe and remained unchanged or modified in anyway. The researcher was the only person who looked at the findings from which she drew conclusions.

CHAPTER FOUR: FINDINGS

Introduction

This chapter presents an analysis of the data collected for the study of the effects of student grouping on language development of English Learners. It includes a restatement of the purpose of the study, the null hypotheses, research questions, research design, participant sample, instrumentation, pilot and field tests, and the data collection procedures. The chapter concludes with the summary of the findings in relation to the null hypotheses and corresponding research questions.

Purpose of the Study

This study examined whether there is a significant difference in the English language acquisition between first-grade EL, who constitute a majority (>50%) of the English language mainstream classroom (homogeneous grouping), and first-grade EL, who constitute a minority (<50%) of the English language mainstream classrooms (heterogeneous grouping), as measured by the CELDT. To determine this difference, the CELDT scores of the entire English language mainstream English Learners who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at a Unified School District were used. The study also determined perceptions of teachers of the entire English language mainstream EL, who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at the DISTRICT, on the advantages and disadvantages of homogeneous and heterogeneous grouping of EL. A study of teacher perceptions helped

substantiate that the non significant difference in differently grouped EL test scores were not due to the difference in teacher perceptions of groupings.

Null Hypotheses

H₀1: There is no significant difference in the proficiency in English of first-grade EL who constitute a majority (>50%) of the English language mainstream classroom (homogeneously grouped) and first-grade EL who constitute a minority (<50%) of the English language mainstream classrooms (heterogeneous grouped) as measured by CELDT.

H₀2: There is no significant difference in the proficiency in English of homogeneously and heterogeneously grouped first-grade EL in any of the six teacher perception subgroups: (a) teachers of homogeneously grouped EL with positive attitude towards homogeneous grouping, (b) teachers of homogeneously grouped EL with negative attitude towards homogeneous grouping, (c) teachers of homogeneously grouped EL with no preferences, (d) teachers of heterogeneously grouped EL with positive attitude towards heterogeneous grouping, (e) teachers of heterogeneously grouped EL with negative attitude towards heterogeneous grouping, and (f) teachers of heterogeneously grouped EL with no preferences.

Research Questions

Using the CELDT scores, two research questions guided this study:

1. What is the change in the proficiency in English of homogeneously grouped English language mainstream first-grade EL, as measured by CELDT (a) when teachers have a positive attitude towards homogeneous grouping of English language mainstream first-grade EL, (b) when teachers have a negative attitude towards homogeneous

grouping of English language mainstream first-grade EL, and (c) when teachers do not have a preference for one kind of grouping over the other?

2. What is the change in the proficiency in English of heterogeneously grouped English language mainstream first-grade EL (a) when teachers have a positive attitude towards heterogeneous grouping of English language mainstream first-grade EL, (b) when teachers have a negative attitude towards heterogeneous grouping of English language mainstream first-grade EL, and (c) when teachers do not have a preference for one kind of grouping over the other?

Research Design

The researcher gathered CELDT scores of the entire English language mainstream EL who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at the DISTRICT. The CELDT is administered annually in the fall of each school year. The first-grade CELDT serviced the pretest for this study and the second-grade CELDT serviced the posttest. For more specific results, the scores of Charter Schools, nonsectarian public schools that do not follow many of the regulations that apply to traditional public schools (WestEd, 2000), and Special Education Classrooms, that is, classrooms with students with identified learning and physical disabilities (Watson, 2008), first-grade EL were not studied.

A questionnaire was given to all the English language mainstream first-grade teachers at the DISTRICT. Based on their responses, teachers were placed in one of six teacher perception subgroups: (a) teachers of homogeneously grouped EL with more positive attitudes toward homogeneous grouping, (b) teachers of homogeneously grouped

EL with more negative attitudes toward homogeneous grouping, (c) teachers of homogeneously grouped EL with no preference for either of the groupings, (d) teachers of heterogeneously grouped EL with more positive attitudes toward homogeneous grouping, (e) teachers of heterogeneously grouped EL with more negative attitudes toward heterogeneous grouping, and (f) teachers of heterogeneously grouped EL with no preference for either of the groupings.

Next, the scores of the homogeneously grouped EL, for each teacher subgroup, were compared with heterogeneously grouped EL in the same teacher subgroup. Table 1, in chapter one, illustrates the six data sets that served as the basis for this study. By comparing student scores within each teacher subgroup, any change in proficiency can be attributed to the way students are grouped rather than to differences in teacher perceptions on grouping.

To find the effect of homogeneous and heterogeneous grouping on the language development of English language mainstream first-grade EL in the DISTRICT, the CELDT scores of entire English language mainstream English Learners who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at the DISTRICT were used. To determine teacher perceptions toward homogenous and heterogeneous grouping from first-grade teachers who were enrolled in the 2006-2007 school year and who maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at the DISTRICT, an electronic as well as a paper form of the same questionnaire, developed by the researcher, was used to survey the English language mainstream first-grade teacher attitudes towards groupings.

Participant Sample

The population for this study included 324 English language mainstream English Learners who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same school district for second grade in the fall of 2007-2008 school year. The population also included 51 teachers who taught these students. The school district used in the study was reflective of the state average with respect to size, ethnicity, and percentage of English Learners. Table 5 shows the frequency distribution as well as the percentage of students in the DISTRICT in both homogeneous and heterogeneous groupings.

Table 5

Student Group from the Unified School District

Group	Frequency	Percent
Homogenous	123	38.0
Heterogeneous	201	62.0
Total	324	100.0

Instrumentation

Two instruments were used to collect data. The California English Language Development Test (CELDT) scores for English Learners were utilized to collect quantitative data. A questionnaire, developed by the researcher based on the literature review, was administered to teachers to collect qualitative data.

California English Language Development Test (CELDT)

CELDT is the test that is required by the California Department of Education (2004) to administer to students who enter the school district from homes where a

language other than English is used, as reported on the Home Language Survey. The reliability coefficients for the CELDT are calculated between 0.85 to 0.90 across all grades and subject areas. The range of standard errors for the CELDT is between 17 to 26 points. It is based on the operational test that was administered in 2003-2004 (California Department of Education).

Questionnaire

According to Fraenkel and Wallen (2003), "In a questionnaire, the subjects respond to the questions by writing, or, more commonly, by marking an answer sheet" (p. 130). No existing questionnaires met the objectives of this study. Therefore, a questionnaire developed by the researcher, based on the review of the literature, was used to survey the first-grade teacher attitudes towards grouping (see Appendix E). Table 3 in chapter three provides a summary of the views and findings of different researchers on the effect of different types of grouping along with the names of the researchers. The views and findings of different researchers on the effect of different types of grouping are subgrouped as the views and findings of different researchers on the positive effects of homogeneous grouping, negative effects of homogeneous grouping, positive effects of heterogeneous grouping, and negative effects of heterogeneous grouping.

A Likert 1-5 rating scale that identifies the degree to which the respondent agrees or disagrees with each statement was used in the questionnaire. The answers ranged from 1—*strongly agree* to 5—*strongly disagree*. A 5-point Likert scale was used in order to provide for a neutral response. The questionnaire is provided in Appendix C. The researcher employed SurveyMonkey.com to administer the electronic survey.

To establish the reliability of the questionnaire, the researcher pilot tested it with Pilot Unified School District (PUSD) English language mainstream first-grade teachers. PUSD has similar demographics to the subject school district (see Table 4). Based on the feedback, the researcher revised the format and content of the questionnaire to ensure its reliability.

The researcher developed an alignment matrix (Appendix F), based on the suggestions of Cox and Cox (2008), which was used to check the alignment of the questionnaire with the research questions for this study. Necessary changes were made to the questionnaire based on the feedback from the pilot and field test study participants.

Pilot and Field Test

An instrument that can give consistent results of accurately measuring what it is supposed to measure can said to be reliable (Fraenkel & Wallen, 2000). The researcher conducted a pilot test administering the questionnaire to the first-grade teachers at PUSD for the purpose of establishing the reliability of the questionnaire. Only four teachers responded to the questionnaire. To increase the response rate, the researcher then emailed and requested the second-grade teachers at her district and was able to get three more teachers to respond to the questionnaire. The researcher also approached the three second-grade teachers at her school for their responses. The researcher got their responses to a paper questionnaire as they were reluctant to do it online. Later, the researcher sent another email to the second-grade teachers at her district as well as PUSD to thank them for their responses and remind them of the benefit of the study. As a result, six more teachers responded to the questionnaire.

The pilot test verified consistency of results. It also helped the researcher to know that some teachers prefer answering questionnaires on paper rather than online. The researcher also learned that sending a reminder email and personally approaching prospective study participants can increase response rates. Table 6 provides the data of the responses of the teachers on the pilot questionnaire.

As can be seen from Table 6, the responses of Teachers 1, 3, 14, and 15 indicate that these teachers have a positive attitude towards homogeneous grouping. Teachers 2, 4, and 6 have a negative attitude towards homogeneous grouping. Teachers 1 and 14 are the teachers with a negative attitude towards heterogeneous grouping. Teachers 2, 4, 6, 7, and 12 have a positive attitude towards heterogeneous grouping. Teachers 5, 8, 9, 10, and 13 share a neutral attitude as they have a positive attitude to both homogeneous and heterogeneous grouping. Teacher 11 also has a neutral attitude towards both homogeneous and heterogeneous grouping; however, unlike teachers 5, 8, 9, 10, and 13, this teacher has a more neutral attitude towards both kinds of groupings. Table 5 also indicates that some questions got some extremely different responses from the teachers with similar attitudes towards grouping. Similarly, some questions got similar answers from teachers with a difference in attitudes towards grouping. For instance, original question 9 received mostly neutral responses from the teachers. Some teachers, with a positive attitude towards homogeneous grouping, disagreed with it even when it indicated a positive point of homogeneous grouping. Hence, this question 9 was eliminated. The original question 17 had four teachers with a positive attitude towards heterogeneous grouping, and agreed with it even when it indicated negative points of heterogeneous grouping. On a closer observation, and also based on feedback from a field test expert,

the researcher found that three points were being raised in the same question, so she split the question into three separate questions.

Table 6

Data of the Responses of the Teachers on the Pilot Questionnaire

Ques. No.	Type of question	Teacher responses by code number 1-15														
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	N HO	n	n	n	sa	n	a	d	d	n	sa	a	a	d	a	d
2	N HO	d	n	d	sa	sd	n	d	sd	n	n	a	a	d	d	d
3	P HO	a	sa	n	a	a	a	n	sa	a	sd	a	n	sa	n	a
4	P HO	a	a	n	a	d	a	n	sa	a	n	a	d	sa	d	a
5	P HO	d	sa	n	n	sd	a	a	sa	n	n	d	d	a	n	n
6	N HO	d	d	d	d	d	d	sd	sd	sa	n	sa	d	n	d	d
7	N HO	d	sd	d	d	sd	d	sd	sd	a	a	n	d	sd	n	sd
8	P HO	a	sa	a	a	sa	a	d	sa	d	d	a	a	sa	d	a
9	P HO	n	a	n	d	d	d	d	sa	n	d	sd	n	n	n	n
10	N HO	d	sd	d	d	sd	d	d	d	n	a	d	d	sd	n	d
11	N HO	n	sd	d	n	d	d	a	sd	n	d	n	a	sd	a	a
12	P HO	a	sa	a	n	a	n	a	sa	n	sd	n	d	sa	d	n
13	P HO	a	sa	a	d	a	d	a	n	n	d	d	n	sa	d	d
14	P HO/ N HE	a	sa	n	d	a	n	d	a	a	d	a	d	sa	d	a
15	P HO	n	sa	a	d	a	a	a	sa	n	sd	n	a	a	d	d
16	P HE	a	d	a	sa	a	a	sa	sa	a	a	a	a	a	a	a
17	N HE	a	sa	n	a	a	a	d	a	a	d	a	d	sa	a	a
18	P HE	a	a	n	a	a	n	sa	sa	a	a	sa	a	a	a	d
19	N HE	d	a	d	d	n	d	a	d	n	d	a	d	a	d	d
20	P HE	a	a	n	a	n	sa	a	a	a	a	a	n	a	n	d
21	N HE	d	a	n	d	a	d	d	d	d	d	n	d	n	d	a
22	P HE	n	n	a	a	n	a	a	sa	a	sa	n	a	a	n	d
23	N HE	a	a	d	d	a	d	a	sd	d	d	sa	d	n	a	d
24	P HE	a	a	a	sa	a	a	a	sa	a	sa	sa	a	n	n	a
25	N HE	d	a	d	d	n	sd	n	d	n	d	a	d	n	n	n
26	P HE	a	n	a	sa	a	a	a	sa	a	a	a	a	a	a	a
27	N HE	d	sa	d	d	d	d	d	d	n	sd	a	d	d	n	a
28	P HE	n	n	a	a	a	a	a	sa	a	sa	a	a	a	n	n
29	N HE	a	a	d	d	a	d	a	sd	n	sd	a	d	n	d	a
30	N HE	a	sa	n	a	a	sa	a	sd	n	d	a	a	a	a	a

Note. a = agree; sa = strongly agree; n = neutral; d = disagree; sd = strongly disagree; PHO = positive point of homogeneous grouping; N HO = negative point of homogeneous grouping; P HE = positive point of heterogeneous grouping; N HE = negative point of heterogeneous grouping.

The researcher also field tested the questionnaire with a group of four individuals who were knowledgeable about the questionnaire design and/or effects of grouping.

These four individuals included a school psychologist, a district's director of curriculum, and two first-grade teachers from the DISTRICT who did not participate in the actual study. Assessment A checklist (Appendix E), developed by Cox and Cox (2008), was used for a specific and clear input from the individuals who field tested the questionnaire. Based on the field test, the researcher revised the format and content of the questionnaire to ensure its validity. The title of the questionnaire was changed from the original to reflect the purpose of the questionnaire. Original questions 1, 7, 23, and 29 were modified and original questions 13, 18, and 25 were eliminated. Question 22 was split into three questions.

Data Analysis

For the purpose of this study, both quantitative and qualitative data were collected. The DISTRICT Director of Curriculum, Accountability and Continuous Improvement extracted the CELDT scores of English language mainstream EL who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same district for the second grade in the fall of 2007-2008 school year. The Director then assigned them a code based on their teacher's identification number assigned by the DISTRICT. Then, the DISTRICT Director of Curriculum, Accountability and Continuous Improvement provided the researcher the data with codes instead of the names of the students.

The researcher then split the CELDT scores of the entire English language mainstream EL who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at the DISTRICT into two broad categories: (a) scores of EL who constituted

a majority (>50%) of the English language mainstream classroom (homogeneous grouping) in first grade, and (b) scores of EL who constituted a minority (<50%) of the English language mainstream classrooms (heterogeneous grouping) in first grade. It was found that some classrooms had EL who constituted exactly 50% of the total class population; these EL were also grouped with EL who were considered as being homogeneously grouped in English language mainstream classrooms.

The raw data of the differences in the CELDT scores of these students for the years 2006-2007 and 2007-2008 were entered into SPSS 15.0 for analysis. Then, the average increase or decrease in scores of the EL in CELDT was calculated for each group. The average or the mean of the increase in the scores of these two groups was then compared. A professional statistician was hired to do the calculations and analysis.

Qualitative data were collected by asking all the DISTRICT English language mainstream first-grade teachers to respond to the survey link emailed to them. Based on the number of EL in their classrooms, they were categorized into two broad categories as teachers of either homogeneously grouped EL or heterogeneously grouped EL. Teacher perceptions towards grouping were determined based on the matrix (Appendix E) used to show the alignment of the questionnaire items with the research questions.

Teachers who responded *strongly agree* or *agree* to all or most of the questions aligned with Research Question 1(a) were deemed to have a positive attitude towards homogeneous grouping of students. These teachers with more positive attitudes towards homogeneous grouping were also expected to respond *strongly disagree* or *disagree* to all or most of the questions aligned with Research Question 1(b). Teachers who had a negative attitude towards homogeneous grouping of students and who responded *strongly*

agree or *agree* to all or most of the questions aligned with Research Question 1(b) had a positive attitude towards heterogeneous grouping. These teachers with also more negative attitudes towards homogeneous grouping were also expected to respond *strongly disagree* or *disagree* to all or most of the questions aligned with Research Question 1(a) regarding homogeneous grouping.

Teachers who responded *strongly agree* or *agree* mostly or to all the questions aligned with Research Question 2(a) were deemed to have a positive attitude towards heterogeneous grouping of students. These teachers with a more positive attitude towards heterogeneous grouping were expected to *strongly disagree* or *disagree* to all or most of the questions aligned with Research Question 2(b). Teachers who had a negative attitude towards heterogeneous grouping of students and who responded *strongly agree* or *agree* to all or most of the questions aligned with Research Question 2(b) were expected to *strongly disagree* or *disagree* mostly or to all the questions aligned with Research Question 2(a) regarding heterogeneous grouping. Teachers who did not have a preference for one type of grouping or other were expected to respond *neutral* to most or all the questions in the questionnaire. The teachers without a preference for one type of grouping or other were also inconsistent in responding in favor of or against any one grouping.

Teachers were grouped in one of the six teacher perception subgroups:

(a) teachers of homogeneously grouped EL with a positive attitude towards homogeneous grouping, (b) teachers of homogeneously grouped EL with a negative attitude towards homogeneous grouping, (c) teachers of homogeneously grouped EL with no preferences, (d) teachers of heterogeneously grouped EL with a positive attitude towards heterogeneous grouping, (e) teachers of heterogeneously grouped EL with a negative

attitude towards heterogeneous grouping, and (f) teachers of heterogeneously grouped EL with no preferences. Next, scores of the homogeneously grouped students for each teacher subgroup were compared with heterogeneously grouped EL in the same teacher subgroup. Details of the six databases are provided in Table 1 in chapter one. By comparing student scores within each teacher subgroup, any change in proficiency was attributed to the way students were grouped rather than to differences in teacher perceptions on grouping. Results of these quantitative and qualitative findings are discussed under each of the two null hypotheses. Means and standard deviations for 2006 and 2007 test scores and proficiency level for the group as a whole (all students) are presented in Table 7. Note that the analysis of the student scores only includes the students whose test scores were available.

Table 7

Descriptive Statistics for the Entire Sample

Test type	<i>N</i>	Min.	Max.	Mean	<i>SD</i>
CELDT 2006 score	276	180	549	421.82	60.99
CELDT 2006 proficiency	276	1	5	2.91	0.95
CELDT 2007 score	274	305	581	460.81	45.16
CELDT 2007 proficiency	274	1	5	2.85	0.93
Score change	270	-69.00	298.00	39.0741	51.25

Findings Reported by Null Hypotheses

Null Hypothesis 1

According to Null Hypothesis 1, there is no significant difference in the proficiency in English of first-grade EL who constitute a majority (>50%) of the English language mainstream classroom (homogeneously grouped) and first-grade EL who constitute a minority (<50%) of the English language mainstream classrooms (heterogeneously grouped) as measured by CELDT. This hypothesis required comparing the change in proficiency in English of homogeneously and heterogeneously grouped EL.

Change in Proficiency in English of Homogeneously Grouped English Learners

Table 8 shows the change in the CELDT scores from first grade (2006-2007) to second grade (2007-2008) of 116 EL who constituted a majority (>50%) of the English language mainstream classroom (homogeneous grouping) in first grade and maintained enrollment in the same district in second grade. It includes the school codes, teacher codes, number of EL in the classroom of that teacher, and total number of students in that classroom. These EL were enrolled in first grade for the 2006-2007 school year and who also maintained enrollment in the same district for second grade in the fall of 2007-2008 school year. The EL who were in an English language mainstream classroom with equal number of native English speakers were also included in this group.

Based on the data in Table 8, the mean of the increase in the scores was calculated for homogeneously grouped EL who were enrolled in first grade in 2006-2007 and who maintained their enrollment in 2007-2008 in the DISTRICT. The mean increase was 34.18 ($SD = 48.83$).

Table 8

Change in California English Language Development Test Scores of All Homogeneously Grouped First-Grade English Learners

Teacher code	Total number of EL	EL who maintain enrollment	Total No. of students	Percent of total EL	Change in CELDT scores of EL	
					Raw scores from second grade (2007-2008) and first grade (2006-2007)	The difference in scores
A	9	7	18	50	386-234,480-549,489-490,497-491, 435-356, 436-416,455-471	152, -69,-1,6,79,20,-16
B	10	9	20	50	423-366,428-328,524-510,451-416, 500-464, 399-403,478-419, 458-411, 411-448	57,100,14,35,36,-4,58,47,-37
C	10	9	20	50	413-338,470-472,461-444,453-438,442-476, 525-483,483-477, 523-422, 448-411	75,-2,17,15,-34, 42,6,101,37
D	10	6	20	50	409-407,439-442,432-390,366-211, 442-412, 466-424	2,-3,42,155,30,42
E	11	11	21	52	441-362,482-434,533-417,499-428, 399-416, 498-450,419-428, 531-531, 412-347, 377-423, 438-424	79,48,116,71,-17,48,-9,0,65,-46,14
F	11	5	20	55	431-483,543-500,455-444, 495-428, 315-180	-52,43,15,67,135
G	10	8	17	59	460-241,476-422,503-407,522-433, 534-366, 371-384,522-470, 457-411	219,54,96,89,68,-13,52,46
H	11	10	18	61	497-477,393-411,506-424,445-413, 427-451, 461-419, 463-464, 379-308, 518-451,409-352	20,18,82,32,-24,42,-1, 71,67, 57
I	11	10	18	61	565-466,484-476,478-531,498-422, 415-375, 396-226,416-428, 560-466, 420-400,404-365	99,8,-53,76,40,70,-12,94,20,39
J	12	11	19	63	484-458,365-315,393-373,519-391, 498-483, 443-425,423-382, 425-453, 305-345,539-452, 431-403	26,50,20,128,15,18,41,28,-40,87,28
K	12	11	19	63	481-477,427-444,453-435,451-427, 449-427, 456-448,484-407, 399-399, 433-361,505-470, 436-374	4,17,18,24,22,8,77,0,72,3 5,62
L	8	8	8	100	503-487,454-457,537-530,375-339, 485-439, 456-433, 471-447, 486-458	16,-3,7,36,46,23,24,26
M	10	7	10	100	449-405,345-404,435-424,411-413, 403-365, 470-487,363-333	44,59,11,2,38,-17,30
Total	145	116	245			3,644

Note. CELDT = California English Language Development Test, EL = English Learners.

Table 9

Descriptive Statistics for the Homogenous Group Only

Variable	<i>N</i>	Min.	Max.	Mean	<i>SD</i>
CELDT 2006 score	105	180	549	417.53	65.11
CELDT 2006 proficiency	105	1	5	2.86	1.05
CELDT 2007 score	103	305	543	451.53	49.91
CELDT 2007 proficiency	103	1	5	2.69	.98
Score change	102	-69.00	219.00	34.18	48.83

Note. CELDT = California English Language Development Test.

Change in Proficiency in English of Heterogeneously Grouped English Learners

Table 10 shows the change in the CELDT scores from first grade (2006-2007) to second grade (2007-2008) of 157 EL who constituted a minority (<50%) of the English language mainstream classroom (heterogeneous grouping) in first grade and who maintained enrollment in the same district in second grade. It includes the school codes, teacher codes, number of EL in the classroom of that teacher and total number of students in that classroom. These EL were enrolled in first grade for the 2006-2007 school year and who also maintained enrollment in the same district for second grade in the fall of 2007-2008 school year.

Based on the data in Table 10, the mean of the increase in the scores was calculated for heterogeneously grouped EL who were enrolled in first grade in 2006-2007 and who maintained their enrollment in 2007-2008 in the DISTRICT. The average change for this group was 42.04 (*SD* = 52.59). The means and standard deviations can be found in the following Table 11.

Table 10

Change in California English Language Development Test Scores of All Heterogeneously Grouped First-Grade English Learners

Teacher code	Total No. of EL	EL maintain enrollment	Total No. of students	Percent of EL	Change in CELDT scores of EL	
					Raw scores from first grade (2006-2007) to second grade (2007-2008)	The difference in scores
a	2	1	20	10	468-411	57
b	2	2	20	10	474-411, 482-463	64, 19
c	2	2	20	10	456-401, 401-403	55, 2
d	2	2	20	10	471-415, 476-490	56, -14
e	3	2	20	15	499-496, 496-413	3, 83
f	3	3	20	15	420-447, 464-498, 479-416	-27, -37, 63
g	3	1	19	16	513-458	55
h	3	3	19	16	517-444, 443-416, 473-395	73, 27, 78
i	4	4	20	20	420-336, 466-470, 480-470, 509-424	84, -4, 10, 85
j	4	1	20	20	466-453	13
k	4	4	19	21	495-399, 505-435, 498-436, 454-458	96, 70, 65, -4
l	4	3	19	21	483-388, 490-445, 501-439	95, 45, 62
m	4	3	19	21	471-470, 541-498, 455-408	1, 47, 43
n	5	5	20	25	461-408, 469-413, 479-453, 440-498, 383-390	53, 56, 24, -58, -7
o	5	5	20	25	516-438, 472-437, 473-381, 498-447, 472-417	78, 35, 92, 51, 55
p	5	3	19	26	465-407, 519-487, 493-366	58, 32, 127
q	5	5	19	26	522-442, 456-407, 518-453, 463-428, 467-416	80, 48, 65, 35, 51
r	5	2	19	26	461-180, 478-180	281, 298
s	5	5	19	26	473-467, 480-423, 487-358, 502-467, 537-444	6, 57, 129, 35, 93
t	6	5	21	29	461-386, 437-416, 495-428, 571-470, 415-447	75, 21, 67, 101, -32
u	6	5	20	30	485-477, 480-433, 469-396, 450-360, 490-490	8, 47, 73, 90, 0
v	6	6	20	30	499-497, 484-458, 550-477, 500-477, 480-442, 440-437	2, 26, 73, 23, 38, 3
w	6	4	20	30	469-450, 465-459, 433-399, 414-362	19, 52, 34, 6
x	6	5	19	32	415-425, 465-458, 456-428, 452-437, 490-425	10, 7, 28, 15, 65
y	6	6	18	33	456-436, 437-453, 525-500, 402-402, 468-453, 482-498	20, -16, 25, 0, 15, 16
z	7	7	21	33	496-459, 403-366, 446-394, 475-511, 488-434, 485-466, 437-436	37, 37, 52, -36, 54, 19, 1

(table continues)

Table 10 (continued)

Teacher code	Total No. of EL	EL maintain enrollment	Total No. of students	Percent of EL	Change in CELDT scores of EL	
					Raw scores from first grade (2006-2007) to second grade (2007-2008)	The difference in scores
aa	7	7	20	35	478-450, 479-442, 463-450, 514-549, 449-444, 506-487, 369-248	28, 37, 13, -35, 5, 19, 121
bb	7	5	20	35	392-382, 465-442, 551-498, 476-401, 457-416	10, 23, 53, 75, 41
cc	7	5	20	35	422-411, 475-442, 444-434, 465-388, 465-428	11, 33, 10, 77, 37
dd	7	5	20	35	456-453, 535-457, 525-433, 490-408, 473-407	3, 78, 93, 82, 66
ee	7	4	20	35	486-450, 438-354, 406-413, 440-453	36, 84, -7, -13
ff	7	5	20	35	440-392, 518-430, 440-211, 400-400, 396-442	48, 88, 229, 0, -46
gg	7	6	18	39	448-453, 509-511, 474-442, 501-487, 526-498, 548-459	-5, -2, 32, 14, 28, 89
hh	8	6	20	40	385-369, 438-374, 450-489, 478-422, 420-433, 445-433	16, 64, -39, 56, -13, 12
ii	7	5	17	41	380-363, 457-423, 406-355, 447-403, 454-340	17, 34, 51, 44, 114
jj	8	7	19	42	399-424, 429-442, 496-450, 419-411, 491-470, 437-315, 581-459	75, -13, 46, 8, 21, 122, 122
kk	9	8	20	45	467-487, 459-382, 402-180, 445-408, 450-411, 468-439, 426-449, 382-378	-20, 77, 222, 37, 39, 29, 23, 4
	195	157	724			6700

Note. CELDT = California English Language Development Test, EL = English Learners.

Table 11

Descriptive Statistics for the Heterogeneous Group Only

Variable	N	Min.	Max.	Mean	SD
CELDT 2006 score	171	180	549	424.44	58.36
CELDT 2006 proficiency	171	1	5	2.95	.89
CELDT 2007 score	171	369	581	466.39	41.19
CELDT 2007 proficiency	171	1	5	2.94	.89
Score change	168	-58.00	298.00	42.04	52.59

Note. CELDT = California English Language Development Test.

Results of the t-test for Independent Samples

In the *t*-test for independent samples, the means of the increase in the scores of homogeneous and heterogeneous groups of EL in the DISTRICT were compared. The results of the *t*-test revealed there were no significant differences in the average change in scores of first-grade students in homogenous ($M = 34.18$) and those in heterogeneous groups ($M = 42.04$), $t(268) = -1.22$, $p > .05$. These scores did not differ significantly, and as such, the null hypothesis cannot be rejected.

Table 12

t-Test for Independent Samples Comparing California English Language Development Test Scores for First-Grade Homogeneous and Heterogeneous Grouped Students

Group	<i>N</i>	Mean	<i>SD</i>	<i>t</i>	<i>p</i>
Homogenous	102	34.18	48.83	1.22	.22
Heterogeneous	168	42.04	52.59		

Null Hypothesis 2

According to Null Hypothesis 2, there is no significant difference in the proficiency in English of homogeneously and heterogeneously grouped first-grade EL in any of the six-teacher perception subgroups: (a) teachers of homogeneously grouped EL with a positive attitude towards homogeneous grouping, (b) teachers of homogeneously grouped EL with a negative attitude towards homogeneous grouping, (c) teachers of homogeneously grouped EL with no preferences, (d) teachers of heterogeneously grouped EL with a positive attitude towards heterogeneous grouping, (e) teachers of heterogeneously grouped EL with a negative attitude towards heterogeneous grouping, and (f) teachers of heterogeneously grouped EL with no preferences.

Table 13 presents the responses of the teachers of homogeneously grouped English Learners on the questionnaire. Teachers B and C had a positive attitude towards both kinds of groupings and hence were categorized as teachers with no/same preference or neutral attitude towards grouping of EL. Similarly, teacher I had a neutral to positive attitude towards both kinds of groupings, and hence was categorized as the teacher with a neutral attitude. Teacher H showed a neutral attitude towards homogeneous grouping and a more positive attitude towards heterogeneous grouping. Teacher H was still categorized as a teacher with a neutral attitude based on the group of students, that is, homogeneous. Teacher E had a more positive attitude towards homogeneous grouping and a more negative attitude towards heterogeneous grouping. Hence, teacher E was categorized as a teacher with a positive attitude towards homogeneous grouping, which is the group the teacher taught at the time. Teacher J was also categorized as a teacher with a positive attitude towards homogeneous grouping based on the response. Teacher J had a neutral to positive attitude towards homogeneous grouping and a more negative attitude towards heterogeneous grouping. Both Teachers F and G were categorized as teachers with a negative attitude towards homogeneous grouping. Both teachers F and G had a more negative attitude towards homogeneous grouping and a more positive attitude towards heterogeneous grouping.

Table 13

Data of the Responses of the Teachers of Homogeneously Grouped English Learners, on the Questionnaire

Question No.	Type of question	Teacher responses by codes B-K								
		B	C	E	F	G	H	I	J	K
1	N HO	sa	sa	d	sa	sa	a	a	d	sa
2	P HO	sa	n	a	n	d	n	a	a	n
3	N HO	d	d	sd	a	a	a	d	d	a
4	P HO	d	a	a	d	d	d	a	n	n
5	N HO	d	d	sd	n	d	a	n	n	n
6	P HO	a	a	n	n	d	a	n	n	a
7	N HO	sd	d	sd	a	d	d	n	sd	n
8	P HO	sa	sa	a	sa	d	a	n	a	n
9	N HO	n	a	a	a	d	n	n	n	n
10	P HO	a	a	a	a	d	n	a	n	n
11	N HO/PHE	d	d	sd	a	sa	d	n	d	n
12	P HO/NHE	n	d	d	sd	n	d	a	a	d
13	P HO	d	sd	a	sd	n	a	n	n	d
14	P HE	a	sa	a	sa	sa	a	a	n	sa
15	N HE	d	d	a	a	d	d	a	a	d
16	N HE	n	a	d	a	a	n	sa	a	d
17	N HE	d	d	n	n	d	d	n	a	d
18	N HE	a	a	a	d	d	d	a	n	d
19	P HE	a	sa	d	sa	sa	n	n	a	a
20	N HE	d	sd	d	d	sd	d	d	sd	d
21	P HE	n	a	d	n	sa	a	n	d	a
22	N HE	a	sa	n	a	d	d	n	n	d
23	P HE	n	sa	n	a	a	n	n	d	a
24	P HE	a	sa	a	sa	sa	a	a	n	sa
25	N HE	d	a	a	a	sd	n	a	a	n
26	P HE	a	sa	d	a	sa	a	a	n	sa
27	N HE	sd	d	n	n	sd	a	d	n	n
28	P HE	a	n	d	a	sa	a	n	d	sa
29	N HE	d	d	n	d	d	n	n	d	d
30	P HE	n	n	d	a	sa	a	n	d	sa
31	N HE	n	a	a	d	d	a	n	a	n
32	P HE	n	n	d	a	sa	a	n	n	a

Note. a = agree; sa = strongly agree; n = neutral; d = disagree; sd = strongly disagree; PHO = positive point of homogeneous grouping; N HO = negative point of homogeneous grouping; P HE = positive point of heterogeneous grouping; N HE = negative point of heterogeneous grouping.

Table 14 presents the responses of the teachers of heterogeneously grouped English Learners on the questionnaire. The codes for the teachers of heterogeneously grouped EL were changed from upper case alphabets to lower case alphabets to distinguish them from the teachers of homogeneously grouped EL. The number of

teachers exceeded the number of alphabets hence, the lower case alphabets were doubled to give codes to the rest of the teachers. The codes of the teachers of heterogeneously grouped EL have been italicized to distinguish their codes from the codes used for their responses on the questionnaire. Teachers *b* and *d* were categorized as ones with a neutral attitude towards heterogeneous grouping. Both teacher *b* and teacher *d* had a more positive attitude towards homogeneous grouping and neutral attitude towards heterogeneous grouping. Similarly, teacher *h*, teacher *l*, and teacher *jj* were also categorized as teachers with a neutral attitude towards heterogeneous grouping. Teacher *h*, teacher *l*, and teacher *jj* had a more positive attitude towards both kinds of grouping. Both teacher *r* and teacher *ff* had more neutral attitude towards both kinds of grouping. Hence teacher *r* and teacher *ff* were also categorized as teachers with neutral attitude towards heterogeneous grouping. Teacher *j* had a more negative attitude towards homogeneous grouping and more a positive attitude towards heterogeneous grouping. Hence teacher *j* was categorized as a teacher with a positive attitude towards heterogeneous grouping. Teacher *m* and teacher *z* had more positive attitudes towards homogeneous grouping and more negative attitudes towards heterogeneous grouping. Therefore, teacher *m* and teacher *z* were categorized as teachers with a more negative attitude towards heterogeneous grouping.

Table 14 Data of the Responses of the Teachers of Heterogeneously Grouped English Learners on the Questionnaire

Qu. no.	Type of question	Codes for teachers who responded to the questionnaire/teachers' responses to the questions																						
		b	d	h	i	j	l	m	n	p	q	r	s	t	v	x	z	aa	bb	ff	gg	hh	ii	jj
1	N HO	n	a	n	a	sa	a	a	n	a	a	n	sa	a	d	sa	a	sa	n	n	a	a	sa	n
2	P HO	a	a	a	a	a	a	a	a	n	n	a	a	a	a	sa	a	a	n	a	a	sa	a	a
3	N HO	d	d	d	d	sa	n	d	d	a	d	d	n	d	d	d	d	d	n	a	n	a	d	
4	P HO	a	a	a	a	d	n	a	d	d	a	a	a	d	n	d	a	n	d	n	d	a	a	a
5	N HO	d	a	d	n	a	a	d	n	sd	sd	n	n	d	a	d	d	sa	d	a	sd	d	d	d
6	P HO	a	n	d	n	d	n	d	n	d	n	n	n	n	d	a	a	a	n	a	a	n	d	n
7	N HO	d	d	d	sd	n	n	d	n	d	d	n	d	d	sd	sd	d	a	d	d	sd	a	d	sd
8	P HO	a	a	a	sa	n	a	sa	n	d	n	n	a	d	a	sa	a	a	n	a	d	a	d	a
9	N HO	a	n	n	d	d	n	a	n	d	d	n	d	d	d	n	a	n	n	a	d	n	sd	n
10	P HO	a	a	n	a	d	n	a	n	n	n	a	d	a	n	a	a	n	n	n	n	n	d	a
11	N HO/P HE	n	d	d	d	sa	a	d	d	sd	sd	n	n	d	a	d	d	n	d	a	d	d	d	a
12	P HO/N HE	d	a	n	n	a	n	d	d	d	a	a	a	d	d	n	sa	a	d	a	n	d	a	sa
13	P HO	n	a	a	a	d	d	a	a	n	n	n	n	n	a	d	a	d	n	a	n	n	n	n
14	P HE	d	a	a	a	sa	a	a	a	a	a	n	sa	a	a	a	a	a	a	a	sa	a	sa	a
15	N HE	a	n	a	d	n	n	a	d	d	a	n	n	d	d	d	d	d	d	n	a	d	d	d
16	N HE	a	a	a	a	d	a	a	n	a	sa	sa	a	d	a	n	a	d	n	a	a	d	a	n
17	N HE	n	n	d	d	d	d	a	d	d	a	n	d	d	d	d	a	d	d	n	d	d	d	sa
18	N HE	a	n	n	a	d	n	a	d	d	a	a	d	d	d	n	a	d	d	n	d	d	d	n
19	P HE	a	n	a	n	sa	a	n	n	a	a	a	sa	a	a	a	a	a	n	a	sa	a	sa	a
20	N HE	n	d	sd	d	sd	d	n	n	d	n	n	sd	d	sd	d	n	d	d	n	sd	d	sd	d
21	P HE	n	n	sd	a	sa	a	n	n	a	a	n	sa	a	a	n	a	a	n	n	sa	a	sa	a
22	N HE	d	d	d	d	sd	a	a	n	d	d	a	sd	d	a	a	n	d	a	n	d	a	d	d
23	P HE	n	n	n	n	sa	a	d	n	a	a	a	sa	n	a	n	d	n	a	n	sa	n	sa	n
24	P HE	n	a	a	a	a	a	a	a	a	a	a	sa	a	a	a	a	a	a	a	sa	a	sa	n
25	N HE	a	a	a	d	sd	a	a	d	n	d	a	n	d	a	d	a	d	d	a	a	a	d	n
26	P HE	a	n	a	a	sa	a	d	a	a	a	n	sa	a	a	a	a	a	a	a	sa	a	sa	a
27	N HE	n	d	d	d	sd	n	d	d	d	d	sd	d	sa	sd	d	d	n	a	sd	n	d	a	
28	P HE	a	a	n	n	sa	a	a	n	a	a	d	sa	a	n	a	a	a	a	a	sa	a	sa	a
29	N HE	n	d	d	d	d	d	d	n	d	d	n	sd	d	a	d	sa	d	d	a	sd	d	sd	d
30	P HE	n	n	n	n	sa	a	d	n	a	a	n	n	n	n	n	d	a	n	n	a	n	a	a
31	N HE	a	n	a	a	a	n	a	n	d	d	a	n	d	sa	n	a	d	d	a	a	n	d	n
32	P HE	n	n	n	n	sa	a	d	n	a	a	n	n	a	d	n	d	n	n	n	a	n	a	a

Note. a = agree; sa =strongly agree; n = neutral; d = disagree; sd = strongly disagree; PHO =positive point of homogeneous grouping; N HO = negative point of homogeneous grouping; P HE = positive point of heterogeneous grouping; N HE = negative point of heterogeneous grouping.

Teachers *l, p, t, v, x, aa, bb, gg, hh, and ii* had a more neutral attitude towards homogeneous grouping and a more positive attitude towards heterogeneous grouping. Hence teachers *l, p, t, v, x, aa, bb, gg, hh, and ii* were categorized as teachers with a positive attitude towards heterogeneous grouping. Teacher *q* and teacher *s* had a more positive to neutral attitude towards homogeneous grouping and a more positive attitude towards heterogeneous grouping. Therefore, teacher *q* and teacher *s* were categorized as teachers with a more positive attitude towards heterogeneous grouping. Teacher *n* had a more neutral attitude towards homogeneous grouping and a more neutral to positive attitude towards heterogeneous grouping. Teacher *n* was categorized as the one with a positive attitude towards heterogeneous grouping because of the teacher's very low inclination towards negative heterogeneous statements.

Research Questions 1 and 2 specifically addressed this hypothesis:

Research Question 1. What is the change in the proficiency in English of homogeneously grouped English language mainstream first-grade EL, as measured by CELDT (a) when teachers have a positive attitude towards homogeneous grouping of English language mainstream first-grade EL, (b) when teachers have a negative attitude towards homogeneous grouping of English language mainstream first-grade EL, and (c) when teachers do not have a preference for one kind of grouping over the other?

Table 15 shows the mean change in proficiency in English of homogeneously grouped EL, as measured by CELDT, who had teachers with a positive attitude towards homogeneous grouping. The mean of the change in the CELDT scores of homogeneously grouped EL, who had teachers with a positive attitude towards homogeneous grouping, was 32.46. A paired samples *t*-test was used to compare the 2006-2007 CELDT scores to

2007-2008 scores for homogeneously grouped EL students in classrooms with teachers who had positive attitudes toward homogenous groupings. The 2006-2007 ($M = 415.45$) and the 2007-2008 test scores ($M = 447.91$) differed significantly, $t(21) = -3.252$, $p < .05$.

Table 15

Paired t-Test for California English Language Development Test Scores of Homogeneously Grouped First-Grade English Learners When Teachers have a Positive Attitude Towards Homogeneous Grouping

Test year	Mean	<i>N</i>	<i>SD</i>	<i>t</i>	<i>P</i>
CELDT 2006 score	415.45	22	49.192	-3.252	.004
CELDT 2007 score	447.91	22	61.353		

Note. CELDT = California English Language Development Test.

Table 16 shows the change in proficiency in English of homogeneously grouped EL, as measured by CELDT, who had teachers with a negative attitude towards homogeneous grouping. The mean of the change in the CELDT scores of homogeneously grouped EL, who had teachers with a negative attitude towards homogeneous grouping, was 70.38. A paired samples t -test was used to compare the 2006-2007 CELDT scores to 2007-2008 scores for homogeneously grouped EL students in classrooms with teachers who had negative attitudes toward homogenous grouping. The 2006-2007 ($M = 397.62$) and the 2007-2008 test scores ($M = 468.00$) differed significantly, $t(12) = -3.469$, $p < .05$.

Table 16

Paired t-Test for Change in California English Language Development Test Scores of Homogeneously Grouped First-Grade English Learners when Teachers have a Negative Attitude Towards Homogeneous Grouping

Test year	Mean	<i>N</i>	<i>SD</i>	<i>t</i>	<i>p</i>
CELDT 2006 scores	397.62	13	91.865	-3.469	.005
CELDT 2007 scores	468.00	13	66.063		

Note. CELDT = California English Language Development Test.

Table 17 shows the change in proficiency in English of homogeneously grouped EL, as measured by CELDT, who had teachers who did not prefer any one kind of grouping over the other. The mean of the change in the CELDT scores of homogeneously grouped EL, who had teachers who did not prefer any one kind of grouping over the other, was 31.857. A paired samples *t*-test was used to compare the 2006-2007 CELDT scores to 2007-2008 scores for homogeneously grouped EL students in classrooms with teachers who had neutral attitudes toward homogenous groupings. The 2006-2007 ($M = 424.86$) and the 2007-2008 test scores ($M = 456.71$) differed significantly, $t(27) = -4.442, p < .05$.

Table 17

Paired t-Test for Change in California English Language Development Test Scores of Homogeneously Grouped First-Grade English Learners when Teachers have a Neutral Attitude

Test year	Mean	<i>N</i>	<i>SD</i>	<i>t</i>	<i>p</i>
CELDT 2006 score	424.86	28	49.857	-4.442	.000
CELDT 2007 score	456.71	28	42.028		

Note. CELDT = California English Language Development Test.

Research Question 2. What is the change in the proficiency in English of heterogeneously grouped English language mainstream first-grade EL (a) when teachers have a positive attitude towards heterogeneous grouping of English language mainstream first-grade EL, (b) when teachers have a negative attitude towards heterogeneous grouping of English language mainstream first-grade EL, and (c) when teachers do not have a preference for one kind of grouping over the other?

Table 18 shows the change in proficiency in English of heterogeneously grouped EL, as measured by CELDT, who had teachers with a positive attitude towards heterogeneous groupings. The mean of the change in the CELDT scores of heterogeneously grouped EL, who had teachers with a positive attitude towards heterogeneous grouping, was 38.79. A paired samples *t*-test was used to compare the 2006-2007 CELDT scores to 2007-2008 scores for heterogeneously grouped EL students in classrooms with teachers who had positive attitudes toward heterogeneous groupings. The 2006-2007 ($M = 430.88$) and the 2007-2008 test scores ($M = 469.68$) differed significantly, $t(76) = -7.960$, $p < .05$.

Table 18

Paired t-Test for Change in California English Language Development Test Scores of Heterogeneously Grouped First-Grade English Learners when Teachers have a Positive Attitude Towards Heterogeneous Grouping

Test year	Mean	<i>N</i>	<i>SD</i>	<i>t</i>	<i>p</i>
CELDT 2006 score	430.88	77	52.839	-7.960	.000
CELDT 2007 score	469.68	77	44.898		

Note. CELDT = California English Language Development Test.

Table 19 shows the change in proficiency in English of heterogeneously grouped EL, as measured by CELDT, who had teachers with a negative attitude towards heterogeneous groupings. The mean of the change in the CELDT scores of heterogeneously grouped EL, who had teachers with a negative attitude towards heterogeneous grouping, was 25.50. A paired samples *t*-test was used to compare the 2006-2007 CELDT scores to 2007-2008 scores for heterogeneously grouped EL students in classrooms with teachers who had negative attitudes toward heterogeneous groupings. The 2006-2007 ($M = 444.20$) and the 2007-2008 test scores ($M = 469.70$) differed significantly, $t(9) = -2.780$, $p < .05$.

Table 19

Paired t-Test for Change in California English Language Development Test Scores of Heterogeneously Grouped First-Grade English Learners when Teachers have a Negative Attitude Towards Heterogeneous Grouping

Test year	Mean	<i>N</i>	<i>SD</i>	<i>t</i>	<i>p</i>
CELDT 2006 score	444.20	10	45.745	-2.780	.021
CELDT 2007 score	469.70	10	37.521		

Note. CELDT = California English Language Development Test.

Table 20 shows the change in proficiency in English of heterogeneously grouped EL, as measured by CELDT, who had teachers who had neutral attitudes toward heterogeneous grouping. The mean of the change in the CELDT scores of heterogeneously grouped EL, who had teachers who did not prefer any one kind of grouping over the other, was 68.09. A paired samples *t*-test was used to compare the 2006-2007 CELDT scores to 2007-2008 scores for heterogeneously grouped EL students in classrooms with teachers who had neutral attitudes toward heterogeneous groupings.

The 2006-2007 ($M = 397.23$) and the 2007-2008 test scores ($M = 465.32$) differed significantly, $t(21) = 91.477$, $p < .003$.

Table 20

Paired t-Test for Change in California English Language Development Test Scores of Heterogeneously Grouped First-Grade English Learners when Teachers Do Not have a Neutral Attitude

Test year	Mean	<i>N</i>	<i>SD</i>	<i>t</i>	<i>p</i>
CELDT 2006 scores	397.23	22	91.477	91.477	.021
CELDT 2007 scores	465.32	22	45.118		

Note. CELDT = California English Language Development Test.

Results of the t-Test for Independent Samples

In the *t*-test for independent samples, the mean change in scores of homogeneous and heterogeneous grouped students of teachers with positive attitudes was compared (see Table 21). The results of the *t*-test revealed no significant differences in average change scores between homogenous ($M = 32.45$) and heterogeneous grouped ($M = 38.79$) students in classrooms with positive attitude teachers, $t(97) = -.600$, $p > .05$. The difference between the change in scores of homogeneous and heterogeneous grouped students of teachers with positive attitudes was 6.33, but the scores did not differ significantly, and as such, the null hypothesis cannot be rejected.

Table 21

t-Test for Independent Samples: California English Language Development Test Change Scores for Homogeneous and Heterogeneous Grouped Students Who have Teachers with Positive Attitudes

Group	<i>N</i>	Mean	<i>SD</i>	<i>t</i>	<i>p</i>
Homogenous	22	32.45	46.80	-.600	.55
Heterogeneous	77	38.79	42.76		

Using a *t*-test for independent samples, the mean change in scores of homogeneous and heterogeneous grouped students of teachers with negative attitudes was compared (see Table 22). The results of the *t*-test revealed no significant differences in average change scores between homogenous ($M = 70.38$) and heterogeneous grouped ($M = 25.50$) students in classrooms with negative attitude teachers, $t(21) = 1.82, p > .05$. The difference between the two change scores was 44.88, but the scores did not differ significantly, and as such, the null hypothesis cannot be rejected.

Table 22

t-Test for Independent Samples: California English Language Development Test Change Scores for Homogeneous and Heterogeneous Grouped Students Who have Teachers with Negative Attitudes

Group	<i>N</i>	Mean	<i>SD</i>	<i>t</i>	<i>p</i>
Homogenous	13	70.38	73.15	1.82	.08
Heterogeneous	10	25.50	29.00		

In a final *t*-test for independent samples, the mean change scores of homogeneous and heterogeneous grouped students of teachers with neutral attitudes were compared (Table 23). The results of the *t*-test revealed no significant differences in average change scores between homogenous ($M = 31.85$) and heterogeneous grouped ($M = 68.09$) students in classrooms with neutral attitude teachers, $t(48) = -1.86, p > .05$. The difference between the two change scores was 36.23, but the scores did not differ significantly, and as such, the null hypothesis cannot be rejected.

Table 23

t-Test for Independent Samples: California English Language Development Test Change Scores for Homogeneous and Heterogeneous Grouped Students Who have Teachers with Neutral Attitudes

Group	<i>N</i>	Mean	<i>SD</i>	<i>t</i>	<i>p</i>
Homogenous	28	31.85	37.94	-1.86	.06
Heterogeneous	22	68.09	93.75		

Summary

This chapter presented the results of the study. The analysis of the quantitative data of the difference in the English language acquisition between homogeneously and heterogeneously grouped first-grade English Learners, as measured by the California English Language Development Test, indicated no significant difference between the scores of these two groups. The analysis of the qualitative data also substantiated the findings of no significant difference in differently grouped English Learners' test scores as the difference in teacher perceptions of groupings did not result in a significant difference in test scores.

The following chapter concludes the dissertation. It contains a summary of the study, a discussion of the results, limitations, and implications, as well as recommendations for further studies.

CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary of the Study

Under the federal NCLB Act, each school's English Learners population must demonstrate improvement and success in both English proficiency and academic achievement. This has pushed the importance of increasing the performance of EL (Jepsen & Alth, 2005). California schools have more than 40% of the EL in the United States (Macias, 2000). EL education is, therefore, a major concern in California. Despite all the efforts made to improve their performance, California schools lag significantly behind other states in terms of student achievement (Loeb et al., 2007). The problem is that, "even schools doing well overall are not as successful with their EL" (Gandara & Rumberger, 2007, p. 3).

A review of literature revealed that the problem of nonachievement amongst EL is still prevalent. It also indicated the need for more research into what schools can do to better their EL performance. Based on this fact, the literature review explored different strategies, factors, and learning theories of language development. It revealed the importance of EL interaction with native English speakers to improve their language skills. Factors such as school district's educational goals, availability of resources, and demographics were found to guide the placement of EL in a classroom (Mora, 1998). The research on the effects of uneven grouping based on the given factors guiding the placement of EL in a classroom on the language development of EL was found to be inconclusive, limited, and scattered.

This study explored the effects of grouping, an otherwise limited area of research, on language development amongst EL. In particular, the study added to the area of

research by determining that there is not a significant difference in the English language acquisition between first-grade EL who constitute a majority (>50%) of the English language mainstream classrooms (homogeneous grouping) and first-grade EL who constitute a minority (<50%) of the English language mainstream classrooms (heterogeneous grouping) as measured by the CELDT. The study determined perceptions of the teachers of entire English language mainstream EL who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at a USD on the advantages and disadvantages of homogeneous and heterogeneous grouping in EL. A study of teacher perceptions substantiated the findings with no significant differences in differently grouped English Learners CELDT test scores as the difference in teachers' perceptions of groupings did not result in a significant difference in test scores.

The study used a mixed methodology. The quantitative analysis helped in interpreting the data obtained to determine that there is no statistically significant difference between EL language development and the type of grouping. The researcher gathered California English Language Development Test scores of the entire English language mainstream EL who were enrolled in first grade for the 2006-2007 school year and who maintained enrollment in the same school district for second grade in the fall of 2007-2008 school year at a Unified School District. The CELDT is administered annually in the fall. The first-grade CELDT served as the pretest for this study and the second-grade CELDT served as the posttest. USD has the policy of maintaining reasonably equal class sizes within each grade level throughout the district by the use of inter-school district transportation. Uniformity of class sizes helped in controlling the effect of class

size on EL language development. For more specific results, the scores of Charter Schools, nonsectarian public schools that do not follow many of the regulations that apply to traditional public schools (WestEd, 2000) and Special Education Classrooms, classrooms with students with identified learning and physical disabilities (Watson, 2008), first-grade EL were not studied. An English language mainstream classroom is defined as one in which students who are either native English speakers or who have acquired reasonable fluency in English are placed (California Department of Education, 2006).

The qualitative analysis helped in interpreting the data obtained to determine that the change in the CELDT scores of EL also did not occur due to the corresponding attitudes of their teachers towards grouping. A survey questionnaire was given to all the English language mainstream first-grade teachers at the DISTRICT. Based on their responses, teachers were grouped in one of six teacher groups: (a) teachers of homogeneously grouped EL with more positive attitudes toward homogeneous grouping, (b) teachers of homogeneously grouped EL with more negative attitudes toward homogeneous grouping, (c) teachers of homogeneously grouped EL with no preference for either of the groupings, (d) teachers of heterogeneously grouped EL with more positive attitudes toward homogeneous grouping, (e) teachers of heterogeneously grouped EL with more negative attitudes toward heterogeneous grouping, and (f) teachers of heterogeneously grouped EL with no preference for either of the groupings.

The scores of the homogeneously grouped students for each teacher subgroup were compared with heterogeneously grouped EL in the same teacher subgroup. Table 1, in chapter one, illustrated the six data sets that served as the basis for this study. By

comparing student scores within each teacher subgroup, any change in proficiency was attributed to the way students were grouped rather than to differences in teacher perceptions on grouping.

Implications and Conclusions

This study served to illustrate that there is no significant effect of grouping of EL on their language development. It revealed that the placement of first-grade EL in different proportions in the English language mainstream classrooms does not affect their English language development. It also appears that the placement of EL in mainstream classroom does not make a difference in the language development of EL whether the EL are grouped all by themselves or with more knowledgeable peers, that is, native English speakers.

The pedagogical justification given for ability grouping is that it makes it easier for the teacher to address a bigger group of students' needs at the same time (Glass, 2002). In contrast, the sociological justification given for rejection of ability grouping is that it perpetuates and creates disadvantages for the economically disadvantaged and minority students by exposing them to inferior curricula (Glass). These justifications were not supported by research (Glass). This study proves that it does not make a difference if EL students are placed in large proportion in one classroom versus a much smaller proportion in another classroom. The study, therefore, partially rejects the justification given in favor of ability grouping for English language development. The justification for ability grouping found in the research that it has a positive effect on students learning by making it easier for the teachers to address a bigger group of students' needs at the same time was not supported by this study.

This study may validate the language desegregation of schools. It is evident from the study that the clustering of EL students in mainstream classrooms is not necessary since having less number of EL as compared to having large number of EL did not make a difference in the language acquisition of EL in these classrooms. This further justifies California Education Code 44253.1 (California Department of Education, 2006) that has mandated for *all* teachers in California to get special training and appropriate authorization in English language development to address the needs of EL, irrespective of the number of EL in their classrooms.

This study also rationalizes the uneven grouping of EL done by the districts because of the lack of resources as it proves that it does not affect their language development. It further revalidates Harlen and Malcolm's (1999) contention that grouping does not necessarily affect student achievement. It also sustains Curriculum Development and Supplemental Materials Commission (1999) recommendation that educators only use grouping as a tool and an aid to instruction flexibility to ensure that *all* students achieve the necessary learning standards.

A study of teacher perceptions helped substantiate that the lack of significant difference in differently grouped EL test scores was also not due to the differences in their teacher perception of grouping. This rejects in part Allan's (1991) contention that a difference in student test scores in differently grouped classrooms in the studies reviewed by Kulik and Kulik (1982) and Slavin (1987) may have been as a result of teacher biases or expectations, particularly related to grouping, rather than the way students were grouped. This study does not fully reject Allan's argument since it only focused on the

grouping based on students' language status as English Learners and not their academic abilities.

This study also illustrated that the perception of teachers on grouping does not influence language development among EL. It did not support the views presented by Trigwell et al. (1999) on the effect of teachers' perceptions of learning and teaching on teacher approaches to teaching that affect their students' approach to learning and their learning outcomes.

Limitations

The student study participant population was limited to a specific school district, so broad-scope generalizations may not be valid to other populations. The study was limited to students enrolled at a Unified School District, California, during the school year 2007-2008. The actual implementation of ESL programs varies across states, districts, schools, and even classrooms; therefore, the findings may make it hard to apply on one group of students to another group of students.

According to Collier (1995), when students are exposed to a new language, their self-esteem, their school's instructional and administrative program structure, and their community or regional social pattern influences their language acquisition. Students' interactions with the members of the community help students learn any language. These members include family members, peers, teachers, people students meet in their day-to-day life and have watched them in films, in television series, and in the news media. Therefore, it may be impossible to control for all confounding variables that may have an influence on student success while a student is in school or at home.

In contrast to only 13 classrooms in the DISTRICT that had homogeneously grouped students, there were 37 classrooms in the DISTRICT that had heterogeneously grouped students. This could have resulted in the lack of significance between the average changes in the scores of homogeneously and heterogeneously grouped students.

Future Directions

Based on the limitations of this study to draw broad-scope generalizations, the study should be replicated with other larger student populations. This might also help to eliminate or confirm the doubt that the lack of significance in the difference between the changes in scores of homogeneously and heterogeneously grouped students could have been due to a small sample size. The study did not consider how EL were actually grouped for English Language Development (ELD) instruction in the mainstream classrooms. Another possible area for further research, therefore, would be to find the effect of grouping of EL by CELDT level during ELD instruction on their English language acquisition. This study also did not include students with gifted talents and learning and physical disabilities. The study can be carried out to find the effect of groupings on students with gifted talents and learning and physical disabilities. The additional suggestions for future research based on the limitations of the study would be to carry out studies using other grade level students as well. Another recommendation for future research projects that could develop out of the findings of this study would be to compare the performance of EL in a bilingual classroom versus in a mainstream classroom with ongoing English as a Second Language program. It can also be interesting to find the results if studies are done over time for a period of three or more years.

Concluding Remarks

It is clear that the placement of English Learners in different proportions in the English language mainstream classrooms does not affect their English language development. One cannot assume that because some teachers and some parents complain or think the students will not do better if they are placed in different proportions, the students should not be placed in different proportions based on their language abilities. At the same time, it would be equally incorrect to assume that the limitations of this study had no effect on the outcomes of the study. It will be advisable to spread as much awareness as possible amongst the teachers as well as the parents about the non-effect of the placement of English Learners in different proportions in mainstream classrooms. It will give a whole new meaning to the way students are grouped at different schools in different proportions.

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APPENDIX A

Protection of Human Subjects

- If any change occurs in the procedure, sample size, research subject, or other element of the project impacts subjects, the IRB must be notified in writing with the appropriate form (see ancillary forms).
- Please allow 30 days for processing Exempt and Expedited Forms, and 60 days processing for Regular.

IRB contact:

Date Logged In:

Date Approved:

Date Expires:

Section A, Exempt Status: Read and complete the following: If the answer is yes to any of the following, the research does not qualify for exempt status and must be checked either Expedited or Regular based on risk vs. benefit ratio to subjects (If the project does not qualify for exempt status, proceed to Section B for Expedited or Regular Status.)

- Any research with minors or students, except where it only involves the observation of public behavior when investigator(s) do(es) not participate in the activities being observed. Y___ N__x__**
- Research involving prisoners, fetuses, pregnant women, in vitro fertilization, or any protected groups. Y_____ N__x__**
- Research involving intellectually, mentally, or physically challenged members of protected groups. Y_____ N__x__**
- Research involving subject deception of any kind. Y_____ N__x__**

Note: Exempt status must be approved by IRB and does not mean exempt from use of informed consent.

Please complete Section A below:

1. Study Site and Participants:

The researcher plans to gather CELDT scores of the entire English language mainstream English Learners, who were enrolled in first grade for the 2006-2007 school year and maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at a Unified School District (DISTRICT). For more specific results, the scores of Charter Schools, nonsectarian public schools that do not follow many of the regulations that apply to traditional public schools (WestEd, 2004), and Special Education Classrooms, classrooms with students with identified learning and physical disabilities (Watson, 2008), first-grade EL will not be studied.

The total enrollment at DISTRICT is approximately 15,000. The student population reflects a very diverse community. In 2006-2007 school year: 33% White, 40% Hispanic, 8% Asian, 8% African American, 7% Filipino, <1% American Indian, and 1% Pacific Islander were enrolled at USD. Approximately 20% of the students at Unified School District are classified as English Learners (EL). The most common languages spoken by students at home other than English are Spanish, Punjabi, Arabic, Cantonese, Tagalog, and Vietnamese.

This study also seeks to determine perceptions of the teachers of the entire English language mainstream English Learners, who were enrolled in first grade for the 2006-2007 school year and maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at a Unified School District (USD), on the advantages and disadvantages of homogeneous and heterogeneous grouping in EL. For this, a survey questionnaire will be given to all the English language mainstream first-grade teachers at USD.

2. Brief but detailed summary of the Project (attach extra page if needed).

The purpose of this study is to determine whether there is a significant difference in the English language acquisition between first-grade EL who constitute a majority (>50%) of the English language mainstream classroom (homogeneous grouping) and first-grade EL who constitute a minority (<50%) of the English language mainstream classrooms (heterogeneous grouping) as measured by the CELDT. To determine this, the CELDT scores of entire English language mainstream English Learners, who were enrolled in first grade for the 2006-2007 school year and maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at a Unified School District (USD), will be used.

This study also seeks to determine perceptions of the teachers of the entire English language mainstream English Learners, who were enrolled in first grade for the 2006-2007 school year and maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at a Unified School District (USD), on the advantages and disadvantages of homogeneous and heterogeneous grouping in EL. A study of the teachers' perceptions may help in substantiating that a difference in student test scores is or is not as a result of their teacher perceptions of grouping but rather the way students are grouped. A survey questionnaire will be given to all the English language mainstream first-grade teachers at USD. Based on their responses, teachers will be grouped in one of the three teacher groups: (a) teachers with more positive attitude towards homogeneous grouping, (b) teachers with more positive attitude towards heterogeneous grouping, and (c) teachers with no preference for either of the groupings

Next, the scores of the heterogeneously grouped students, for each teacher subgroup, will be compared with homogeneously grouped EL in the same teacher subgroup. Table 1, taken from chapter one of the dissertation proposal, illustrates the six data sets that will serve as the basis for this study. By comparing student scores within each teacher

subgroup, any change in proficiency can be attributed to the way students are grouped rather than to differences in teacher perceptions on grouping.

Table A1

The Subgroups of English Learners and Teacher Perceptions

CELDT scores of homogeneously grouped EL		
CELDT scores of homogeneously grouped EL with teachers with more positive attitude towards homogeneous grouping.	CELDT scores of homogeneously grouped EL with teachers with more negative attitude towards homogeneous grouping.	CELDT scores of homogeneously grouped EL with teachers with no preferences.
CELDT scores of heterogeneously grouped EL		
CELDT scores of heterogeneously grouped EL with teachers with more positive attitude towards heterogeneous grouping.	CELDT scores of heterogeneously grouped EL with teachers with more negative attitude towards heterogeneous grouping.	CELDT scores of heterogeneously grouped EL with teachers with no preferences.

3. Describe the nature of the involvement of human subjects in the project (personal interview, mailed questionnaire, observation, etc.). (Attach copy of any instrument, chart or questionnaire that will be used with subjects).

After receiving IRB approval, the researcher will give a survey questionnaire to all the English language mainstream first-grade teachers at USD. Communication will be via e-mail.

- 4. Attach a copy of the letter of informed consent.**
- 5. Describe how confidentiality will be maintained: Be specific, if using secondary documents, audio/video tapes, etc.**

Two types of groups will participate in this study. All the English language mainstream EL who were enrolled in first grade for the 2006-2007 school year and who have maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at the DISTRICT and their first-grade teachers.

The researcher will not make direct contact with any of the EL. The DISTRICT Director of Curriculum, Accountability and Continuous Improvement is going to extract the CELDT scores of EL who were enrolled in first grade for the 2006-2007 school year and

who maintained enrollment in the same district for the second grade in the fall of 2007-2008 school year. She is then going to assign them a code based on their teacher's identification number assigned by the district. Then the DISTRICT Director of Curriculum, Accountability and Continuous Improvement is going to hand over that data to the researcher with codes instead of the names of the students.

The researcher will send the first-grade teachers of the EL who were enrolled in first grade for the 2006-2007 school year and who have maintained enrollment in the same district for the second grade in the fall of 2007-2008 school year at the DISTRICT a letter assuring confidentiality to invite them to participate in the study (Appendix D). Participation in the study is voluntary and participants can withdraw at any stage during the study. "Once the data in a study have been collected, researchers should make sure that no one else (other than perhaps a few key research assistants) has access to the data" (Fraenkel & Wallen, 2003, p. 58). The concern of participants regarding being linked to their responses will be eliminated by taking the following precautions: (a) all data collected during the study will be stored in a file that will be kept locked in a cabinet at the principal investigator's house, to which the principal investigator has the only key; (b) the data papers will be destroyed following the publication of the study; and (c) teachers will be assigned codes for their responses instead of names.

6. Describe the exempt category(s) of the project

7. Signatures and date of review: _____

Principal Investigator / Date /

Dissertation Committee Chair/Date /

Attach any other forms, tests, institutional permission slips, etc, relative to this study. Failure to do so will result in delayed processing of the approval form.

Section B: Expedited or Regular Review Status

Research with minors, prisoners, mentally/emotionally/physically challenged persons, pregnant women, fetuses, in vitro fertilization, and/or individual or group studies where the investigator manipulates the subjects/ behavior or the subject is exposed to stressful or invasive experiences do(es) not qualify for expedited status.

1. Requested Review (see instructions) Expedited x Regular _____

2. Purpose of the Study:

The purpose of this study is to determine whether there is a significant difference in the English language acquisition between first-grade EL who constitute a majority (>50%) of the English language mainstream classroom (homogeneous grouping) and first-grade EL who constitute a minority (<50%) of the English language mainstream classrooms (heterogeneous grouping) as measured by the CELDT.

This study also seeks to determine perceptions of the teachers of the entire English language mainstream English Learners, who were enrolled in first grade for the 2006-2007 school year and maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at a Unified School District (USD), on the advantages and disadvantages of homogeneous and heterogeneous grouping in EL. A study of the teacher perceptions may help in substantiating that a difference in students' test scores is or is not as a result of teacher perceptions of grouping but rather the way students are grouped.

3. Summary of the Study. Methodology (Be Specific-attach extra page if needed).

The purpose of this study is to determine whether there is a significant difference in the English language acquisition between first-grade EL who constitute a majority (>50%) of the English language mainstream classroom (homogeneous grouping) and first-grade EL who constitute a minority (<50%) of the English language mainstream classrooms (heterogeneous grouping) as measured by the CELDT.

To determine this, the CELDT scores of the entire English language mainstream English Learners, who were enrolled in first grade for the 2006-2007 school year and maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at a Unified School District (DISTRICT) will be used. This study also seeks to determine the perceptions of the teachers of entire English language mainstream English Learners, who were enrolled in first grade for the 2006-2007 school year and maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at a Unified School District (DISTRICT) on the advantages and disadvantages of homogeneous and heterogeneous grouping in EL. A study of teacher perceptions may help in substantiating that a difference in students' test scores is or is not as a result of teacher perception of grouping rather the way students are grouped.

A survey questionnaire will be given to all the English language mainstream first-grade teachers at DISTRICT. Based on their responses, teachers will be grouped in one of the three teacher groups: (a) teachers with more positive attitude towards homogeneous grouping, (b) teachers with more positive attitude towards heterogeneous grouping, and (c) teachers with no preference for either of the groupings. Next, the scores of the homogeneously grouped students, for each teacher subgroup, will be compared with heterogeneously grouped EL in the same teacher subgroup. The aforementioned Table A1 illustrates the six data sets that will serve as the basis for this study. By comparing student scores within each teacher subgroup, any change in proficiency can be attributed to the way students are grouped rather than to differences in teacher perceptions on grouping.

3. Participant Demographics:

- a. Anticipated Sample Size:** Approximately 324 students and 51 teachers
- b. Special Ethnic Groups (describe):** White, Hispanics, Asians, African American, Filipino, American Indian/Alaskan Native, Pacific Islander
- c. Institutionalized: N Protected Group (describe):** Not Applicable
- d. Age group:** 6-7yrs for students and 23-65yrs for teachers

e. General State of Health: Normal (Special Education classroom students and their teachers will not be included in the study)

f. Other details to describe sample group. English language mainstream first-grade EL who were enrolled in first grade for the 2006-2007 school year and maintained enrollment in the same district for second grade in the fall of 2007-2008 school year at a Unified School District (USD), and their teachers in USD constitute the sample group for this study.

5. Will deception be used in the study? Y N (please describe)

No.

6. Will audio or videotapes be used in the study? Y N (please explain)

No.

7. Confidentiality protection issues (pertains to audio and video as well as written documents.)

a. What precautions will be taken to insure the privacy and anonymity of the participants? (i.e., closed doors, private rooms, handling of materials where participants' identity could be discovered, etc.).

All data collected during the study will be stored on compact disks that will be kept locked in a cabinet at the Argosy San Francisco Bay Area Campus, to which the principal investigator has the only key; and the disks will be destroyed following the publication of the study.

b. What specific precautions will be taken to safeguard and protect participant's confidentiality while handling the data (audio/video/paper) both in researcher's possession and in reporting the findings? (i.e., coding, removal of identifying data).

There are two kinds of participants in this study. All the English language mainstream EL who were enrolled in first grade for the 2006-2007 school year and maintained enrollment in the same district for the second grade in the fall of 2007-2008 school year at a Unified School District (USD) and their first-grade teachers.

The researcher will not make direct contact with any of the EL. The DISTRICT Director of Curriculum, Accountability and Continuous Improvement is going to extract the CELDT scores of EL who were enrolled in first grade for the 2006-2007 school year and maintained enrollment in the same district for the second grade in the fall of 2007-2008 school year. The Director is then going to assign them a code based on their teacher's identification number assigned by the district. Then the DISTRICT Director of Curriculum, Accountability and Continuous Improvement is going to hand over that data to the researcher with codes instead of the names of the students.

The researcher will send the first-grade teachers of the EL who were enrolled in first grade for the 2006-2007 school year and who have maintained enrollment in the same district for the second grade in the fall of 2007-2008 school year at the DISTRICT a letter assuring confidentiality to invite them to participate in the study (Appendix D). Participation in the study is voluntary and participants can withdraw at any stage during the study. "Once the data in a study have been collected, researchers should make sure that no one else (other than perhaps a few key research assistants) has access to the data" (Fraenkel & Wallen, 2003, p. 58). The concern of participants regarding being linked to their responses will be eliminated by taking the following precautions: (a) all data collected during the study will be stored on compact disks that will be kept locked in a cabinet at the Argosy San Francisco Bay Area Campus, to which the principal investigator has the only key; and (b) the disks will be destroyed following the publication of the study.

c. Describe procedures where confidentiality may be broken by law (e.g., child abuse, suicidal intent).

Not applicable.

8. Review by institutions outside of Argosy University/campus Y N (Attach copies of permission letters, IRB approvals, and any other relevant documents).

Yes.

9. Informed Consent and Assent (Attach copies of all relevant forms). If consent is not necessary (e.g., an anonymous interview), describe how the candidate will inform all subjects of the elements of consent (see instructions).

The researcher will send the first-grade teachers of the EL who were enrolled in first grade for the 2006-2007 school year and who have maintained enrollment in the same district for the second grade in the fall of 2007-2008 school year at the DISTRICT a letter assuring confidentiality to invite them to participate in the study (Appendix D). Participation in the study is voluntary and participants can withdraw at any stage during the study. "Once the data in a study have been collected, researchers should make sure that no one else (other than perhaps a few key research assistants) has access to the data" (Fraenkel & Wallen, 2003, p. 58). The concern of participants regarding being linked to their responses will be eliminated by taking the following precautions: (a) all data collected during the study will be stored on compact disks that will be kept locked in a cabinet at the Argosy San Francisco Bay Area Campus, to which the principal investigator has the only key; and (b) the disks will be destroyed following the publication of the study.

10. If informed consent, written consent is required, describe the manner in which consent or assent was obtained for each category.

a. Adult Participants (18 years and older – written consent required).

Written consent will be obtained.

b. Child Participants (under 18 – parent or guardian consent required).

Not applicable.

c. Child Participants (under 7 years old- child assent required).

Not applicable.

d. Institutionalized Participants (parent or guardian or conservator).

Not applicable.

11. Describe any possible physical, psychological, social, legal, economic or other risks to participants (Attach another page if needed).

a. If there are any potential risks, describe the precautions taken to minimize risk to participants.

To complete the questionnaire will take approximately 20 minutes. As participants are completing the questionnaire, they will be engaging in self-reflection regarding their professional beliefs regarding grouping of English Learners with native English speakers. Based on how successful or frustrated teachers have been in their professional experiences, it may be uncomfortable and/or upsetting for some of the participating teachers. There is a possibility that some teachers may regard this process as constructive and informative while others might regard this as negative and time consuming.

b. Describe procedures implemented for correcting harm caused by participating in the study (e.g., follow up calls, referral to appropriate agencies).

The researcher will send the first-grade teachers of the EL who were enrolled in first grade for the 2006-2007 school year and who have maintained enrollment in the same district for the second grade in the fall of 2007-2008 school year at the DISTRICT a letter assuring confidentiality to invite them to participate in the study (Appendix D). Participation in the study is voluntary and participants can withdraw at any stage during the study. "Once the data in a study have been collected, researchers should make sure that no one else (other than perhaps a few key research assistants) has access to the data" (Fraenkel & Wallen, 2003, p. 58). The concern of participants regarding being linked to their responses will be eliminated by taking the following precautions: (a) all data collected during the study will be stored on compact disks that will be kept locked in a cabinet at the Argosy San Francisco Bay Area Campus, to which the principal investigator has the only key; and (b) the disks will be destroyed following the publication of the study.

12. Potential benefit of the study:

a. Assess the potential benefit(s) of the study for the participants:

The pedagogical justification given for ability grouping is that it makes it easier for the teacher to address a bigger group of students' needs at the same time

(Glass, 2002). In contrast, the sociological justification given for rejection of ability grouping is that it perpetuates and creates disadvantages for poor and minority students by exposing them to inferior curricula (Glass). Again, Glass suggests these justifications are not supported by research. According to the researcher, this study may help in justifying the selection or rejection of ability grouping for language development.

b. Assess the potential benefits(s) to the professional audience in the study:

Every year, the state as well as the federal government allocates to districts millions of dollars on programs such as: English as a Second Language Program, Content-based English as a Second Language Program, and Sheltered English Instruction. These dollars are spent in giving special training to teachers and paying these teachers special stipends and providing extra money for buying materials (U.S. Department of Education, 2004). This study, according to the researcher, may also help in providing direction for most effective use of these dollars.

As the primary investigator, I attest that all of the information on this form is accurate, and that every effort has been made to provide the reviewers with complete information related to the nature and procedures to be followed in the research project. Additional forms will be immediately filed with the IRB to report any: change in subject(s), selection process, change of primary investigator, change in faculty dissertation chair, adverse incidents, and final completion date of project. I also attest to abide by any other governmental regulations that apply to this study, particularly as applies to research work conducted in countries other than the United States.

Signature Primary Investigator

Date

Signature Advisor or Committee Chair

Date

APPENDIX B

Unified School District's Board Policy

Students**BP 5145.13****RESEARCH ON STUDENTS**

Research on students of this district beyond the conventional testing program (both district-wide and for the purposes of evaluation of the individual student) shall not be carried on except under at least the following circumstances.

1. The research design has been presented to and approved by the superintendent and/or designee.
2. All research instruments, including but not limited to questionnaires, surveys, and interview forms, have been submitted to and approved by the superintendent and/or designee.
3. Adequate care has been taken to protect individual students under policy and regulation 5125/5125.1 – Student Records; Confidentiality, and other provisions of law.
4. A final copy of all research reports, theses, dissertations and/or surveys including analyses and conclusions, shall be presented to the superintendent and/or designee for the use of the district and the district shall have the right to utilize the research in the best interests of the children of the district.
5. The Governing Board shall have the right to refuse publication rights if the Board of Trustees, in its judgment, believes that the research was not carried out according to the highest standards of research, that the analysis and/or conclusion presents a biased or incorrect position, that the research was not carried out according to the approved research design, or that publication of the research study will present an immediate danger to the educational program.

Legal Reference:

EDUCATION CODE
 35172 Promotional activities (particularly 35172(a)
 concerning research)

**** Adopted: 6/9/98

APPENDIX C

Institutional Permission Letter

Sheila Harrison, Ed.D.
Assistant Superintendent for Educational Services

(**) ***_**

email: sjharrison@**.net**

Date: October 7, 2008

To: Seema Sabharwal

Re: Permission to conduct research for a Doctorate of Education Degree entitled:
Effect of Homogeneous and Heterogeneous Grouping on English Language
Learners

USD*Schools supports your endeavors to improve the quality of education through your study.

By complying with Board Policy 5145.13, your research is approved with the understanding that the District also requires that you comply with all other laws such as child abuse reporting and student confidentiality.

Positive parent permission is required for the study.

Your research is welcome and we are looking forward to hearing of the results of this worthwhile study.

Permission to conduct research: Sheila Harrison, October 7, 2008

Agreement of compliance with policy & the above statements:

_____ Date:

Please sign and return this document to Education Services.

* The real name of the district has been removed for confidentiality purpose.

APPENDIX D

Questionnaire Consent Form

Questionnaire Consent Form

Seema Sabharwal, a doctoral candidate at the San Francisco Bay Area campus of Argosy University, is conducting a study of the effect of the homogeneous and heterogeneous grouping of English learners (EL) on their English language development. Participation in the study involves filling out a questionnaire, in which you will be asked about your beliefs and values you hold regarding the homogeneous and heterogeneous groupings of English learners. Responding to the questionnaire should take approximately 15-20 minutes.

Reflecting on experiences and beliefs in teaching may be upsetting for some. You are, therefore, free to refuse to answer any of the questions, and you may discontinue your participation in the study at any time if you so desire. Seema Sabharwal, the researcher, will be available to discuss any concerns you may have and to facilitate referrals to supervisors or consultants if such a need should arise. She may be contacted at (***) ***-****. You can also contact her chief advisor Dr. Barbara Cole at (***) ***-****.

All information you contribute will be held in strict confidence within the limits of the law. To maintain confidentiality of the participants and their responses, all data collected during the study will be encrypted (to convert computer data and messages into something incomprehensible using a key, so that only a holder of the matching key, the researcher, can reconvert them).

No direct benefit, either monetary or resulting from the experience itself, is offered or guaranteed. You may find it interesting, helpful, and/or thought provoking to reflect on your experiences. In addition, the information generated by this study will benefit the field of education by adding to our store of knowledge regarding the effect of homogeneous and heterogeneous grouping of English learners (EL) on their English language development.

Signature _____

Date _____

(PLEASE RETURN THIS FORM ALONG WITH YOUR COMPLETED QUESTIONNAIRE)

APPENDIX E

Questionnaire

Your name: _____

Does having more or less English Learners in a classroom matters?

Directions: Below is a list of different opinions and findings on the effect of homogeneous and heterogeneous grouping of English Learners on their performance. Your opinion on these statements is important for finding a new way to improve our students' performance. Read each statement and decide how strongly you disagree or agree with it. Circle the number that comes closest to your general belief, that is, give your overall impression rather than allowing one or two isolated incidents (good or bad) to affect how you answer the question. Naturally, you will agree with some of these statements and disagree with others. Your *anonymity is guaranteed* so please answer as you really feel. Also please make sure you answer all questions.

Rate 1 if you **strongly agree** with the statement.

Rate 2 if you **agree** without strong feelings with the given statement.

Rate 3 if you have **no opinion** on the given statement.

Rate 4 if you **disagree** without strong feelings with the given statement.

Rate 5 if you **strongly disagree** with the given statement.

Grouping Definitions: (pertaining to this study)

Homogeneous grouping – when EL constitute a majority (>50%) of the English language mainstream classrooms.

Heterogeneous grouping – when EL constitute a minority (<50%) of the English language mainstream classrooms.

Please circle only ONE number per statement to show your level of agreement.

(Statements)	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. Homogeneous grouping takes away diversity that might increase chances of rich and productive conversations between English Learners and native English speakers.	1	2	3	4	5

(Statements)	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
2. In a Homogeneous group, being at a similar level in reading gives students a sense of relief that they are not the only ones struggling with the process.	1	2	3	4	5
3. Homogeneous grouping promotes inequality.	1	2	3	4	5
4. In a Homogeneous group, EL feel more comfortable in sharing their ideas.	1	2	3	4	5
5. Homogeneous group teachers with lower-performing students have to spend more time managing student behavior rather than on instruction.	1	2	3	4	5
6. In a Homogeneous group, bilingual students' language and culture are validated when they are grouped with other bilingual students who might not speak the same language as they do.	1	2	3	4	5
7. Homogeneous grouping helps only high-ability students.	1	2	3	4	5
8. Homogeneous groups help in matching instruction to students' needs.	1	2	3	4	5
9. Homogeneous grouping increases the gap between the low- and high-achieving students.	1	2	3	4	5
10. Homogeneous grouping helps in building a better self-concept in low-ability students.	1	2	3	4	5
11. In a Homogeneous group, EL engage in more interaction with each other than they would in a Heterogeneous group.	1	2	3	4	5

<i>(Statements)</i>	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
12. Homogeneous grouping decreases quality of instruction. The content taught in Heterogeneous grouping is more rigorous than in Homogeneous grouping.	1	2	3	4	5
13. Homogeneous grouping does not harm anybody but can benefit high-ability students if they are given a more challenging curriculum.	1	2	3	4	5
14. Heterogeneous grouping helps in making meaningful interactions take place between second language learners and native language speakers.	1	2	3	4	5
15. In a Heterogeneous group, exclusionary (social exclusion, especially from the mainstream society) talk, makes it extremely difficult for students with lower levels of English proficiency to participate in group conversations.	1	2	3	4	5
16. In a Heterogeneous group difficult academic material makes it extremely difficult for students with lower levels of English proficiency to participate in group conversations.	1	2	3	4	5
17. Heterogeneous grouping can be detrimental to the academic success of minority students as they are reluctant to freely express themselves in the classroom.	1	2	3	4	5
18. In a Heterogeneous group the struggle to keep pace with the group makes it hard for EL to participate in group conversations.	1	2	3	4	5

(Statements)	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
19. In a Heterogeneous group, children with higher cognitive ability become accepted models for imitation that promotes language development in EL.	1	2	3	4	5
20. Heterogeneous grouping discourages higher achievement in high-ability students.	1	2	3	4	5
21. Heterogeneous grouping leads to progress for all students.	1	2	3	4	5
22. Heterogeneous grouping slows down the class pace as teachers have to devise two lesson plans for each period, one for the accelerated students and another for those with low skills.	1	2	3	4	5
23. Heterogeneous grouping leads to progress for the school as a whole.	1	2	3	4	5
24. Heterogeneous grouping creates more diverse environments of experiences, cultures, and ideas.	1	2	3	4	5
25. In a Heterogeneous group teachers do not get enough time to address to the needs of all students.	1	2	3	4	5
26. In a Heterogeneous group, students benefit greatly in their ability to build vocabulary by constantly learning new words.	1	2	3	4	5
27. In a Heterogeneous group, accelerated students do not want to do extra work without being given an incentive of getting additional rewards.	1	2	3	4	5

(Statements)	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
28. In a Heterogeneous group, classroom interactions with other students improve reading comprehension.	1	2	3	4	5
29. Teachers lower their teaching standards to teach a Heterogeneous class in order to accommodate all students of unequal performance levels.	1	2	3	4	5
30. Heterogeneous grouping leads to the attainment of intellectual excellence.	1	2	3	4	5
31. In a Heterogeneous group, students with low skills struggle to keep up with the high achievers.	1	2	3	4	5
32. Heterogeneous grouping leads to the attainment of academic excellence.	1	2	3	4	5

**Thank you for your time. Please return the survey to the researcher,
Seema Sabharwal.**

APPENDIX F

Matrix for Aligning the Questionnaire with Research Questions

Matrix for Aligning the Questionnaire with Research Questions

Research Questions from the Questionnaire						
	RQ1a	RQ1b	RQ1c	RQ2a	RQ2b	RQ2c
1		X	X			
2	X		X			
3		X	X			
4	X		X			
5		X	X			
6	X		X			
7		X	X			
8	X		X			
9		X	X			
10	X		X			
11	X		X		X	X
12		X	X	X		X
13	X		X			
14				X		X
15					X	X
16				X		X
17					X	X
18				X		X
19					X	X
20				X		X
21					X	X
22				X		X
23					X	X
24				X		X
25					X	X
26				X		X
27					X	X
28				X		X
29					X	X
30				X		X
31					X	X
32				X		X
	7	6	13	11	10	21

APPENDIX G

Checklist for Evaluating the Questionnaire®

(Source: Copyright © 2008 by Corwin Press. All rights reserved. Reprinted from *Your Opinion, Please! How to Build the Best Questionnaire in the Field of Education*, by James Cox and Keni Brayton Cox.)

Evaluation Checklist for the Questionnaire

1. General

- _____ the form is pleasant to look at
- _____ the spacing is appropriate
- _____ scales or choice alternatives are reprinted on carry-over pages or are repeated enough to be visible at every scroll of the screen
- _____ the questionnaire is appropriately titled
- _____ the form takes 20 minutes or less to complete
- _____ the use of font sizes, underlining, bold print, and the like is done well
- _____ the first question is engaging, answerable by all, and simple

2. Questionnaire Content

- _____ the questionnaire is based on the research questions
- _____ “fuzzy” terms in the questions have been clarified/operationalized
- _____ an alignment check was done
- _____ unnecessary items have been eliminated

3. Introduction

_____ the questionnaire is introduced well, either by a separate letter or as part of the questionnaire itself.

_____ if you were to read the introduction, you would want to complete the questionnaire

_____ the introduction addressed...

_____ the purpose of the form

_____ the importance of completing the form

_____ the time it will take to complete the questionnaire

_____ confidentiality

_____ what will be done with the results

4. Directions

_____ the directions are written simply

_____ there is a different set of directions for each format change

_____ significant points have been emphasized (but not overemphasized)

_____ respondents know what to do with a completed questionnaire

5. Quality of Items

The 12 criteria down the left side are the screens to determine the quality of each item.

Identify the questionnaire items across the top and place a check mark in each box where

the questionnaire item meets the criterion.

