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Multiyear student/teacher relationships and language development in children of Hawaiian descent at Kamehameha schools community based early childhood education program

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ABSTRACT

Multiyear Student/Teacher Relationships and Language Development in Children of Hawaiian Descent at Kamehameha Schools Community Based Early Childhood Education Program

by

Susan Collins

Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
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ABSTRACT

Although numerous studies have documented the connection between early language and academic achievement, there is much less information available about the effects of teacher/student relationships on language development. Based on Vygotsky's theory that all learning takes place in the context of relationships, this quasi-experimental study examined language scores for students in an early education classroom who stayed with the same teacher for 2 years compared with those in a classroom with two different teachers for each of the 2 years. Pre- and posttest scores on the Peabody Picture Vocabulary Test-III (PPVT-III) and language scores on the Developmental Indicators for the Assessment of Learning -3 (DIAL-3) were compared using an independent samples *t* test. Analysis of variance (ANOVA) was used to test for the effects of student gender, family income, maternal education, teacher education, and teacher years of experience. The results revealed no significant difference between the experimental and control groups. Future studies should include examination of possible associations between qualitative aspects of student/teacher relationships and language development. The current study contributes to social change by raising awareness of the importance of relationships in early childhood and by encouraging educators in the development of environments that most effectively support early language development for students from diverse cultural and linguistic backgrounds.

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DEDICATION

This dissertation is dedicated to the memory of my mother, for whom education was always a dream not accomplished, and my father, who continues to believe in and engage in lifelong learning. It is from my parents that I learned to love to read and who fostered in me a compelling thirst for knowledge that has guided me throughout my life. Thank you, Dad, and God bless you, Mother, for always surrounding us with books, discussion, and debate.

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Without the help and support of my family and friends this feat could not have been accomplished. Thank you, Michael, for always being there for me and I promise we will go to see a movie as soon as this is finished. Thank you to all my children and grandchildren for your love and support throughout this process. I hope you will be encouraged to pursue your own academic dreams and know that if you can think it, you can accomplish it. I love you all.

I want to thank my committee members, Dr. Darragh Callahan, Dr. Lorraine Cleeton, and Dr. Irmgard Gruber. You have all been my backbone through this. Thank you for all your comments, suggestions, and guidance.

My co-workers and supervisors at Kamehameha Schools have encouraged me from the first time I mentioned my vision of a PhD, and they continue to support and encourage me. Thank you Wallie, Zijin, and Terry for your support and for providing me with the opportunity to take a sabbatical leave. The experience of visiting other countries to compare early childhood programs was invaluable.

Finally, thank you to all the keiki (children) and `Ohana (families) from whom I have learned so much over the years. It is you who teach me new things every day and who make life so rich and fulfilling with your laughter and joy.

Me Ke Aloha

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CHAPTER 1:

INTRODUCTION TO THE STUDY

On January 8, 2002, President George W. Bush signed into law the No Child Left Behind Act of 2001 (NCLB) designed to "close the achievement gap with accountability, flexibility, and choice, so that no child is left behind" (NCLB, 2001, Sec 1). Part B of Title 1, "Improving the Academic Achievement of the Disadvantaged," addresses the government's approach to improving student reading scores. Included in this subsection is a commitment to strengthen coordination among schools, early literacy programs, and family literacy programs to improve reading achievement for all children. Subpart 2 addresses the enhancement of early language, literacy, and prereading development of preschool age children so that they will have the necessary knowledge and skills for optimal reading development in kindergarten and beyond (Early Reading First, Subpart 2, Sec. 1221). Included in this section is support of age-appropriate development of spoken language, including vocabulary and oral comprehension abilities.

In response to the mandates of NCLB (2001) the State of Hawaii put into place a Kindergarten Readiness Profile to be completed by schools and submitted to the State Department of Education (HSSRA, 2005). Reviews of the classroom assessment scores for 2006- 2007 indicate that many kindergarten children in Hawaii are arriving at school with inadequate communication and language skills. When asked to report the number of children who consistently display the literacy concepts skills and characteristics necessary for success in school life, only 17% of teachers reported that at least three fourths of the children in their kindergarten class met the benchmark (Good Beginnings

Alliance, 2007-2008). Research suggests that oral language development in kindergarten and preschool is predictive of future literacy skills. Thus, it is important that children are provided with opportunities in early childhood to increase language skills (Butler, Marsh, Sheppard, & Sheppard, 1985; Dickinson, McCabe, Anastasopoulos, Peisner-Feinberg, & Poe, 2003; Good, Simmons, & Kame`enui, 2001; Juel, 1988; Nation & Snowling, 2004; Tabors, Snow, & Dickinson, 2001). Chapter 2 of this dissertation will include a more in-depth review of current literature supporting the importance of early language development for the future educational achievements of children.

A review of research on multiyear/looping configurations (completing 2 or more years of schooling with the same teacher) found mostly qualitative research with little in the way of quantitative studies investigating the practice. However, a small number of quantitative studies suggest there may be a significant relationship between a multiyear (MY) teacher student assignment of more than one year and cognitive development. According to Burke (1997), students in schools that support MY relationships between teachers and children are more likely to score higher on standardized tests than those students in traditional classroom rotations. Project Families Are Students and Teachers (F.A.S.T), a pilot project undertaken in partnership with East Cleveland, OH, schools and Cleveland State University, found that students in the MY teacher-student assignments scored substantially higher in reading and mathematics on standardized tests than students in the traditional grade organization (Hampton, Mumford, & Bond, 1997). However, this program supplemented the MY class assignments with parent involvement and educational opportunities making it difficult to distinguish between the potential

effectiveness of either approach. Using class scores as a whole, Wert (2000) found that a looping class scored higher than the non-looping classes in reading and mathematics. Lavender (2005) found that the looping group in his study of preschoolers outperformed the non-looping group in emergent reading skill development and kindergarten readiness, as measured by standardized assessments.

The lack of quantitative research on the effectiveness of MY assignments on educational outcomes, especially for the early childhood population is a gap that can be addressed through this study. In order to promote effective early childhood approaches to language development it is important to investigate the effects of a variety of contexts within which early childhood services are offered. As a leader in the early childhood community in Hawaii, Kamehameha Schools (KS) is in a position to support research that can advance the knowledge of appropriate and effective approaches to building quality early childhood programs. Recognizing any effect that teacher education and experience may have on language development can be used to design policies regarding employment and advancement opportunities for teachers at Kamehameha Schools Community Based Early Childhood Education (KSCBECE). It is also important to acknowledge the potential effects of socio-economic status, along with maternal education, and the possible effect of the gender of students on language development in order that interventions supporting this population of students can be employed. This study will add to the current knowledgebase about the effectiveness of multiyear (MY) versus single-year (SY) environments, in terms of how long-term relationships affect the

language development of children of Hawaiian descent at KSCBECE programs in Hawaii.

Statement of the Problem

Currently, more than 80% of kindergarten teachers in the State of Hawaii report that at least three fourths of all kindergarten children in their classrooms do not meet the benchmark for literacy concepts and skills considered necessary for success in school life (Good Beginnings Alliance, 2007). This problem impacts the future educational outcomes for children, particularly those children who are considered at risk of academic failure due to membership in cultural and economically diverse populations (Au & Blake, 2003; Sumida & Meyer, 2006; Tamura, 2002; Varney & Cushner, 1990). Among possible contributors to this problem in Hawaii are cultural and language differences between home life and school culture (Sumida & Meyer, 2006). Many children of Hawaiian descent speak Hawaii Creole English (HCE) as their primary language and come from marginalized populations (Au & Blake, 2003). The impact of HCE on the educational outcomes for students of Hawaiian descent has been at the center of controversy for many years (Sumida & Meyer, 2006; Tamura, 2002). Growing out of the need to communicate with a diverse population of workers brought to Hawaii to work on the plantations, Hawaii Pidgin English (HPE) was developed as a common language (Da Pidgin Coup, 1999; Tamura, 2002). The dialect used by the second generation of those workers is technically termed HCE and has its own grammatical structure with a syllable-timed rhythm and pure vowels (no diphthongization), and includes a variety of words and meanings from a diverse range of sources (Da Pidgin Coup, 1999).

Children of Hawaiian descent come to kindergarten from a variety of ethnic and cultural backgrounds. The common language of most children of Hawaiian descent and their family members is HCE. Benchmarks for literacy in the schools do not recognize the use of HCE as part of the readiness skills that children bring with them from home. The expectation from the Department of Education (DOE) is that children will speak and learn from a Standard English (SE) perspective. This study endeavors to make a contribution to the body of knowledge considered necessary to address this problem by assessing the possible influence of long-term relationships between children and their peers, children and their teachers, and teachers and the families as a means to raise the language assessment scores of young children of Hawaiian descent.

Background

In 1981, Congress instructed the Office of Education to submit a report on Native Hawaiian education. The Native Hawaiian Educational Assessment Project (NHEAP) was released in 1983 and documented that Native Hawaiians scored below parity with regard to national norms on standardized achievement tests (NCLB, 2001). A 10-year update of findings of NHEAP in 1993 confirmed that many of the same educational needs of Native Hawaiians continued to exist. This report found that Native Hawaiian children begin their school experience lagging behind in terms of readiness factors such as vocabulary test scores and continued to score below national norms on standardized education achievement tests at all grade levels. There are a variety factors contributing to this problem. In 1987 two members of the Hawaii State Board of Education (BOE) overheard teachers in a rural school in Hawaii speaking to their students in HCE and

reported back to the board that HCE was a demonstration of illiteracy and a cause of learning disabilities (Tamura, 2002). The curriculum committee then voted to ban the use of HCE from the classroom. This ruling was met with intense resistance by many Hawaiians and supporters of the Hawaiian community (Tamura, 2002). The intentions of the BOE may have been well meaning; however, banning the use of HCE by children of Hawaiian descent was so vigorously opposed by "linguists, teachers, and other members of the community" that the ruling was overturned (p. 20). Tamura (2002) reported that the decision was then made to support the use of SE in the schools without banning the use of HCE. In 1999 the Hawaii Board of Education Chairman Mitsugi Nakashima implicated HCE in the poor performance of Hawaii students on standardized writing tests (Da Pidgin Coup, 1999; Tamura, 2002). Nakashima (1999) suggested that when children do not think in Standard English it is difficult to read or write in SE. According to the authors of Da Pidgin Coup, this statement led to a period of heated discussion around the State of Hawaii about the effects of this criticism of HCE on the sense of worth and confidence in young children and the impact of this notion on their educational success.

In addition, the current standards for preschool education in the State of Hawaii that are used as a guideline for teachers in KSCBECE programs do not provide a continuum of skills into the kindergarten programs. Curriculum in the kindergarten classrooms is based on a set of standards developed by the DOE and is assessment driven, whereas preschool standards are based on experiential learning and are mainly evaluated through documentation and authentically driven assessment. Although

teachers at KSCBECE speak SE to children in the classroom, HCE is accepted and included in documentation of language development as children move closer to the SE continuum. Children who attend a 2 year program at KSCBECE may be entering the program with minimal speech and language skills in either SE or HCE and potentially will not develop enough language and literacy skills to be considered adequate at entrance to kindergarten. This study will contribute to the body of knowledge needed to address this problem by identifying the language skills that children have when enrolling at KSCBECE at age 3 years through assessment on the Peabody Picture Vocabulary Test-Third Edition (PPVT-III) and Development Indicators for the Assessment of Learning-3 (DIAL-3). Pre- and posttests were administered in both the 3-year-old and 4-year-old classrooms by trained assessors and data analyzed to investigate the possible influence of a 2 year relationship with one teacher versus a traditional 2 year program with two different teachers on the language development of children of Hawaiian descent at KSCBECE.

Research Questions

This quasi-experimental nonequivalent control group design study compared the treatment group (MY) to the comparison group (SY) on student performance on the Peabody Picture Vocabulary Test-Third Edition (PPVT-III) and the language portion of the Developmental Indicators for the Assessment of Learning-3 (DIAL-3). The research questions addressed in this study follow:

1. Is there a significant difference in the PPVT-III scores for students who spend 2 years with the same teacher compared to those who do not?

2. Is there a significant difference in the DIAL-3 scores for students who spend 2 years with the same teacher compared with those who do not?

3. Is there a significant difference in multiyear assignment and single-year classroom assignment language scores on PPVT-III and DIAL-3 expressive and receptive language when controlling for the effects of gender, socio-economic status, and maternal education?

4. Does teacher education and years of experience have an influence on language scores?

Hypothesis

HO1: There will be no difference between receptive language scores as measured by the PPVT-III, and language development as measured by the DIAL-3 for students who stay with one teacher for 2 years and those who have a different teacher for each of the 2 years in the program.

H1: There will be a significant difference between language scores as measured by the PPVT-III, and language development as measured by the DIAL-3 for students who stay with one teacher for 2 years and those who have a different teacher for each of the 2 years in the program.

HO2: There will be no difference between receptive language scores as measured by PPVT-III, and language development as measured by the DIAL-3 for students who stay with the same teacher for 2 years compared with students who have two different teachers for each of the 2 years in the program controlling for effects of gender, SES, and maternal education.

H2: There will be a significant difference between scores as measured by PPVT-III, and language development as measured by the DIAL-3 for students who stay with the same teacher for 2 years compared with students who have two different teachers for each of the 2 years in the program controlling for effects of gender, SES, and maternal education.

HO3: There will be no difference between receptive language scores as measured by PPVT-III, and language development as measured by the DIAL-3 for students who stay with the same teacher for 2 years compared with students who have two different teachers for each of the 2 years in the program controlling for effects teacher education and teacher years of experience.

H3: There will be a significant difference between scores as measured by PPVT-III, and language development as measured by the DIAL-3 for students who stay with the same teacher for 2 years compared with students who have two different teachers for each of the 2 years in the program controlling for effects of teacher education and teacher years of experience.

The nature of the study, specific research questions, hypotheses, and research objectives are included in more detail in chapter 3.

Purpose of the Study

The purpose of this quasi-experimental pretest- posttest control group design is to explore the possible significance of Vygotsky's theory of socio-cultural learning for language development in children of Hawaiian descent. This theory suggests that it is within relationships between children and adults or more competent peers that the

development of social speech is promoted (Vygotsky, 1978). More current research suggests that it is through the complex relationships that children develop with adults that academic skills are enhanced (Burchinal, Peisner-Feinberg, Pianta & Howes, 2002; Paro & Pianta, 2000; Pianta, 2006). In addition, the importance of vocabulary acquisition in the pre-literate period of early childhood has been found to be significant for reading comprehension in third grade and above (Biemiller, 2006; Kurdek & Sinclair, 2000). One way to assess oral language scores is through the use of standardized assessment such as PPVT-III and DIAL-3. The potential influence of student gender, socio-economic status of the family, maternal education, teacher years of experience, and educational background was explored in order to assess the possible impact of these variables on language development in children of Hawaiian descent at KSCBECE programs. If the social and economic future for children of Hawaiian descent is to be enhanced through education and literacy in particular, it is important that teachers recognize how supportive relationships can potentially be influential in the development of oral language in young children. In order to begin to close the achievement gap in academic success that exists between children of Hawaiian descent and children from a variety of other cultures in the State of Hawaii it is necessary to provide opportunities for increasing the language development of this currently marginalized population.

The independent variable for this study is classroom assignment which has two values, multiyear (MY) and single-year (SY) classroom assignment. Multiyear refers to the practice of keeping children together with the same teacher for a period of 2 or more years. The dependent variable is the scores as measured by the PPVT-III and DIAL-3

assessments. The receptive and expressive language scores for the MY group were compared to the language scores for the SY classroom assignment group of students. KSCBECE offers a 2 year center-based program to families of children of Hawaiian descent to the extent allowed by law. The SY 3- year- old classroom enrolls 16 children who are automatically matriculated to a SY 4- year- old classroom with a new teaching team. Four new students are added to each class. The assessments for these four new students were included in the data set. In the MY program eight 3- year- old students matriculate to the 4-year -old classroom with the same teacher and eight new 3-year-old and four new 4-year-old students. The language scores for these new students were included in the data set. The experimental MY assignment group consisted of 40 students from five classrooms. The SY assignment control group consisted of 64 students from four classrooms. Student populations remain fairly stable for the 2 year program and analysis was performed only for those students who complete the 2 year program. At the time of posttest on the PPVT-III the students in the MY program would have completed 2 years with the same teacher. At the time of posttest on the DIAL-3 students in the multiyear classroom were at the beginning of a 2nd year with the same teacher. The children in the control group would have had two different teachers over the course of the 2 year program. Assessment schedules were the same for each group of students regardless of classroom assignment. Teacher years of experience and educational attainment were included in the analysis in order to explore possible effects of these independent variables on language assessment scores. In addition potential relationships

between student gender, maternal educational level, and the socio-economic status of the families of participating students were explored.

Descriptive statistics were used to describe, summarize, and make sense of the data (Johnson & Christensen, 2004). The profile of the student participants included a frequency chart of classroom assignment, the socio-economic status of the family, maternal educational achievement, gender of the student and assessment scores. SPSS output provided descriptive data for the mean, the standard deviation and the standard error of the mean for pre- and posttest for PPVT-III and DIAL-3 scores. The profile for the teacher participants included a frequency chart listing the years of experience and the level of educational attainment for each teacher.

Inferential statistics were employed in order to analyze the possibility of a significant relationship between the independent and dependent variables. In order to test the assumption that the null hypothesis that there is no difference in the scores of children in the groups is true, a *t* test for independent samples was employed using SPSS. An independent *t* test compared the pre-and posttest scores on the PPVT-III and DIAL-3 for the MY and SY groups. Two-way analysis of variance was used to compare the group means on the PPVT-III assessment of the MY and the SY groups controlling for socio-economic status, maternal educational profile, and student gender. Two-way analysis of variance was used to compare the impact of a MY assignment controlling for teacher years of experience and education

Theoretical Framework

According to socio-cultural theory of language development proposed by Lev Vygotsky in the early 20th century, people are products of the social and cultural worlds within which they live and develop. Students from different cultures learn in many different ways and education programs that are most effective for children are those which are culturally compatible with their home and community life (Sumida & Meyer, 2006; Varney & Cushner, 1990). Vygotsky (1986) suggested that it is at home that "the very process of learning how to speak is thoroughly socialized" (p. 56). Consistent with this perspective school curriculum must be relevant to the experiences the child brings to the program in order for optimal learning to take place. Vygotsky expanded upon developmental philosophical foundations of language development by including the necessity of culturally mediated learning. He regarded the acquisition of language as the most significant milestone in children's cognitive development and suggested that cognitive and linguistic skill appears "twice, or in two planes. First it appears on the social plane, and then the psychological plane" (Vygotsky, 1978, p. 163). Children learn through interaction with other children, family members, and teachers and build knowledge through increasingly complex approaches to tasks. Initial communication is developed in interaction with others and is transferred to the individual level through the conscious development of word meaning (Vygotsky, 1986). According to Vygotsky (1978), all new learning is influenced by prior cultural experiences, especially those experiences which occur in the family setting. Rather than development preceding learning, Vygotsky perceived learning as a precedent to development whereby the teacher

or more competent adult or peer scaffold learning through supporting the attainment of new skills laying just beyond the level of independent achievement (1978). In order to support learning and development teachers need to have an intimate knowledge of children's current level of development and provide activities which will expand learning. It is expected that through the building of relationships in a multiyear rotation with the same teacher, language, and literacy skills will be reinforcement as teachers build familiarity with student's current developmental level, family, home, and community life.

Operational Definitions

For purposes of this study the following definitions will be used.

At risk: Students predisposed to underachievement due to various reasons such as social class, ethnicity, and primary language (Au & Blake, 2003).

Early childhood: Refers to student's chronological age from birth to age eight years (Bredekamp & Copple, 1997).

Native Hawaiian: The term Native Hawaiian means any individual who is —

> (A) A citizen of the United States; and
> (B) a descendant of the aboriginal people who, prior to 1778, occupied and exercised sovereignty in the area that now comprises the State of Hawaii, as evidenced by —
>
> (i) Genealogical records;
> (ii) Kupuna (elders) or Kamaaina (long-term community residents) verification; or
> (iii) Certified birth records
>
> (No Child Left Behind, NCLB, 2001).

Multiyear assignment: Refers to the practice of allowing teachers to keep the same students over a 2 year period and is interchangeably referred to as looping (Grant, Johnson, & Richardson, 1996).

Preschool: For the purposes of this study, preschool will be defined as early childhood care in an organized group facility which provides opportunities for development in a systematic manner.

Assumptions, Limitations, Scope, and Delimitations

Assumptions: It was assumed that relationships between teachers, students, and families would be strengthened over the course of 2 years. It was also assumed that the control and experimental groups of students would be comparable in terms of family and cultural backgrounds.

Limitations: The quality of teacher/child/family relationships was not investigated in this study. The variable program assignment compares the possible impact of length of time that teachers are involved in each child's educational experience. In addition the study is limited by the use of a convenience sample, which decreases the generalizability of the findings.

Scope and Delimitations: The design of this quasi-experimental study is a quantitative model that employed a pretest posttest control group design. The participants in this study are 3 and 4- year- old students of Native Hawaiian descent chosen for participation in preschool through a lottery system of applicants for early childhood services provided by KSCBECE in the State of Hawaii. The pretreatment assessments of student's language development confirmed that the two groups are at least

similar in terms of the dependent variable under investigation (Leedy & Ormrod, 2005). In order to qualify for a teaching position at KSCBECE a 4 year degree in early childhood education or a related degree such as elementary education or psychology is required. State licensing laws require that teachers have at least 16 credits of early childhood education, also a requirement for KSCBECE. A minimum of 2 years of teaching in an early childhood environment is also a requirement. Many members of the teaching staff come to the program with comparable backgrounds in terms of these requirements and this similarity could help to minimize the perceived teacher effect. However, in order to investigate any possible effect of teacher education and years of experience on language scores, this information was gathered and included as variables in the study. As this research was limited to students of Native Hawaiian descent at KSCBECE, the results of the data analysis are not generalizable to the early childhood population at large. A further limitation of this study is the lack of random assignment to classrooms. The classrooms are all located in the same county on the Island of Hawaii but are in different districts. Assignment is based on proximity of the family home to the school and parental choice. In addition, differences in student populations may be influenced by the urban or rural location of the school.

Significance of the Study

The multiyear or looping approach has been used quite extensively with primary school students, gaining popularity as student populations become more diverse and at risk for failure due to instability at home and in communities where resources are minimal (Carter, 2005; Gaustad, 1998; Liu, 1997; Newberg, 1995; Nichols & Nichols,

2001). Much of the current research on the effect of multiyear assignments is qualitative and describes the experiences and perceptions of the study participants rather than presenting empirical evidence of the effectiveness of the intervention (Gaustad, 1998). Although some quantitative work regarding MY assignments in primary and secondary schools exists, there has been little research on the impact of MY assignments on the educational outcomes of preschool children. Kamehameha Schools have traditionally provided SY services to children and only recently have implemented a variety of context including multiyear looping and multiage, multiyear classrooms assignments. In order to provide optimal educational experiences for young children of Hawaiian descent, it is important that KSCBECE has access to empirical evidence of the effectiveness of a variety of contexts on oral language development for this marginalized population.

This study will provide policy makers at Kamehameha Schools with information about a cost-effective approach to programming that could potentially strengthen families and children of Hawaiian descent. Through the development of supportive relationships it is assumed that students will be more successful in academic endeavors, leading to positive social change as the achievement gap is reduced. In addition, because policy makers usually require empirical evidence to support their decisions about funding issues, this study has the potential to influence program policy in ways that most effectively support children in their oral language development. As funding options often are based on high stakes testing of students, the exploration of more effective approaches to language development is critical for future educational opportunities. Young children of Hawaiian descent continue to score below average on standardized test scores for reading

and math (DOE Updates 2006-2007) and the implementation of interventions to support language development can be critical to more successful outcomes. By providing optimal early language experiences for young children perhaps standard scores on language assessments in elementary school will move towards compliance with NCLB guidelines. A review of the literature found no studies that examined the effects of MY or looping educational assignments on the language development of preschool children of Hawaiian descent. This quantitative study of the effectiveness of MY relationships between teachers, students, and families on the language development of preschool children of Hawaiian descent has the potential to fill this gap in the literature.

To support positive educational outcomes for children of Hawaiian descent, KSCBECE has provided preschool education in the State of Hawaii for over 20 years. Beginning in the year 2000, a program for 3-year-old children was added to the SY program for 4-year-olds that was in place. KSCBECE now provides educational services to 3- and 4-year-old children through a variety of contexts that include looping classrooms, non-looping classrooms, and mixed age MY classrooms. This study investigated the possible influence of a 2 year assignment with the same teacher in a multiage MY classroom on the language scores of 4-year-old students. The study was limited to children of Hawaiian descent at KSCBECE programs and included only those classrooms where either a MY, multiage assignment or SY assignment is practiced. Teachers and administrators at KSCBECE are aware of the significance of early childhood education on future developmental outcomes and in an attempt to provide optimal environments for young children offer opportunities for a variety of settings

within which services can be provided. Information about the possible effectiveness of MY assignments on the language development of children of Hawaiian descent is important because this potentially cost-effective approach to increasing language skills in the early years could be implemented with minimal reform in program approach. The DOE reports that over the course of the educational life of a student in Hawaii more Native Hawaiian students are below average than other populations, and fewer children of Hawaiian descent are above average on standardized math and reading assessments (DOE Updates, 2006-2007). Providing children of Hawaiian descent with the tools necessary to excel in education has the potential to lead to a change in the economic and social outcomes of those children. The relationship between early language development and later school achievement is well documented (Burchinal, Peisner-Feinberg, Pianta, & Howes, 2002; Snow, Burns, & Griffin, 1998). Positive educational experiences can help to optimize the successful integration of this marginalized population into the economic and social life of the Islands through higher educational attainment due to early success in school. Through access to higher educational opportunities, community and state colleges, and trade schools, Native Hawaiian children will be more prepared to enter the work force in higher status employment. Integration into the economic and political life of the Islands in potentially powerful positions will provide opportunities for young Hawaiians to effect positive social change in their communities.

The National Association for the Education of Young Children recognizes that positive and supportive relationships during the early years are essential for optimal development (Bredekamp & Copple, 1997). Three important kinds of information are

described by Bredekamp and Copple as important for the implementation of developmentally appropriate quality programming. The first requires that early childhood educators know about the stages of development of young children. The second and third requirements suggest that intimate knowledge of each child's individual strengths, interests, and needs are essential, together with knowledge of the "social and cultural contexts in which children live" (p. 9). Teachers who spend 2 years with students have the opportunity to develop knowledge of individual children and when families are more comfortable and relaxed with a familiar person they may feel more able to share the details of cultural and home life. NAEYC has developed a set of principles to guide educators in their pursuit of quality which include the importance of reflection on cultural perspectives and understanding children as active learners who use culturally transmitted knowledge to construct their own understandings of the world around them. To create a caring community of learners, NAEYC stresses the importance of "consistent, positive relationships with a limited number of adults and other children" (Bredekamp & Copple, 1997, p.16). These principles of practice are guided by the work of Vygotsky and others who recognize the importance of relationships and knowledge of children's cultural background as essential for optimal development.

Language development is an important task for young children, one that has implications for later literacy development (Snow, Tabors, & Dickinson, 2001). Research also suggests that the language development of children in preschool is predictive of later school success (Dickinson, McCabe, Anastasopoulos, Peisner-Feinberg, & Poe, 2003; Good, Simmons, & Kame`enui, 2001; Juel, 1988; Nation &

Snowling, 2004; Snow et al, 1998). Close relationships with teachers are predictive of better language skills for children of color (Burchinal et al, 2002). It is therefore important that early childhood educators and policy makers acknowledge the impact of the context within which services are provided on the language development of students. Teachers who stay with children for 2 years have opportunities to build more stable and connected relationships with children and families which may in turn increase the possibility of building strong foundations for the acquision of language skills (Bulau, 2007; Burchinal et al.; Soundy & Stout, 2002).

CHAPTER 2:

LITERATURE REVIEW

Introduction and Organization of the Review

This literature review will discuss the historical background of multiyear (MY) looping rotation, the socio-cultural perspective of relationship building, the possible effect of a multiyear experience on language development, and the impact of language development on the academic future of young children including those children of Native Hawaiian descent at Kamehameha Schools Community Based Early Childhood Education (KSCBECE) program. As this study investigated the possible benefits of spending 2 years with the same teacher as a strategy to increase the receptive and expressive language skills of the target population, the review is organized in a way that logically presents findings of relevant literature to bring attention to the historical perspectives of MY assignment, the role of relationships in the acquision of language, the benefits of spending more than one year with the same teacher, and the challenges of MY assignments. The study also examined the confounding effects of student gender, socio-economic status, along with maternal education, teacher years of experience and educational attainment on language development. Literature relevant to socio-cultural theories of learning was reviewed in this chapter, and language development from a socio-cultural perspective was examined.

In order to review the relationship of this study to previous research educational and psychological abstracts were searched using the databases available through EBSCOhost, which include ERIC, Academic Search Premier, Sage, Soc INDEX, and

Psyc INFO. Search limitations were set at 20 years and peer-reviewed publications. The most current literature available was given priority in the search; however, literature published prior to 2003 was considered appropriate and used throughout this study. Historical foundations of looping, language development, and early childhood education and development were examined regardless of dates of publication when deemed appropriate. In addition computer searches included peer-reviewed education journals, Walden dissertations, and books both on line and from the researcher's personal library of books on language development, socio-cultural theory, and early childhood education. Searches of the databases were made using the keywords *looping and relationships, academic looping, early childhood education, socio-cultural theory and language learning, multiyear education, and language developmen*t. In a review of the literature on the effects of gender and socio-economic status including maternal education on language development searches were carried out using these keywords: *language development and gender, language development and SES,* and *language development and maternal education*. A review of the literature on teacher experience and teacher educational attainment was conducted in the Academic Search Premier and Sage databases using the keywords *teaching and experience* and *language and development*. Although peer-reviewed journal articles were given the highest priority, secondary sources were used when discussions of the history of looping and early childhood education were reviewed.

Historical Perspective

Through study and discussion about the historical perspectives of the field, early childhood educators have an opportunity to develop insight into how practice can be enhanced and quality of services to families and children can be supported. This is a critical component in the development of quality education experiences for children. In order to understand how early childhood educators can optimize the opportunity for young children to develop strong language skills it can be beneficial to consider an historical perspective.

Overview of Multiyear Assignments

The concept of keeping children and their teacher together over the course of 2 or more years is not a new idea. During the 19th century many children were educated in one room schoolhouses, particularly in rural communities with one teacher for the duration of their schooling. In the mid-19th century, Horace Mann, one-time secretary of the board of education of Massachusetts, advocated for free public schools for all children, paid for by taxes. Mann (1852) believed that an educated citizenship would support success for democracy and that it is the responsibility of government to ensure that the population is educated. He advocated for an education for all children, paid for by the state, sectarian in its approach, and provided by well-trained teachers. According to Mann, education would always be beneficial and worth the investment. Most of these "common schools," a term coined by Mann, were one room school houses that served the population of the local area educating white children in the three Rs with some history and geography. Schools were supported by local communities, and as Mann reported

varied considerably in effectiveness. Public schools did not provide education for the very young children, who stayed home until the age of about 7 or 8 years. When Mann returned from a trip to Prussia he began to advocate for schools that would segregate students into age related grade levels, which was the practice in some parts of Europe at that time. The U. S. Department of Education first discussed the possibility of keeping teachers with the same students for several years in 1913 (Grant, Johnson & Richardson, 1996). Teacher rotation was the term used to describe the practice of multiyear assignments to one teacher, and the benefits described included time savings due to student and teacher beginning a new school year with experience of ground rules and expectations for behavior. It was also suggested that teachers would increase their own teaching skills to meet the demands of several years of curriculum and that inefficient teachers would become more apparent with a 2 year rotation plan. John Dewey (1938/1997) advocated for a renewed examination of traditional methods and progressive ideas about education as providing experiences that lead to growth were introduced. Dewey suggested that rather than an either/or approach to education with traditional methods at one end and progressive methods at the other, it was important for educators to develop a philosophical approach to education that considered the whole child in the context of the social environment. Dewey appreciated the difficulty that educators faced in building a socially responsive educational experience and recognized that it is healthy for society to be involved in struggles and controversy, especially in such an important area as education. He suggested that although it may be easier to follow a traditional path than to develop a new approach based on the individual needs of the students and their

interaction with the social and physical environment, educators must recognize the importance of meeting the needs of children in the context of their community. Dewey recognized the limitations of the traditional European approach to education as advocated by Mann and his followers. He proposed that education must be a personal experience linking the past to the present and based on experiential learning.

Unfortunately, the followers of Dewey and the progressive educational philosophies of his time perhaps did not fully understand the philosophical foundations that this new approach demanded. Dewey (1938/1997) suggested that experiences that do not take into account the social and cultural background of the individual have no educational value. He believed that the progressive movement seemed to be "more in accord with the democratic ideal to which our people are committed than do the procedures of the traditional school" (p. 33). This was in direct contrast to the intentions of Mann and his followers for whom democracy was based on social and cultural hegemony. The debate has continued into the 21st century and as the pendulum has moved back and forth between progressive and traditional approaches in the U. S. there appears to have been little interest in building relationships as an educational practice until recent research began to suggest that social and emotional components in education were important for cognitive growth (Shonkoff & Philips, 2000).

There are some movements in international educational settings that have supported multiyear (MY) grouping and relationship building as important components of educational experiences. Following World War I, Rudolph Steiner (1861 -1925) founded a school for the employees of the Waldorf-Astoria cigarette factory in Stuttgart,

Germany, with a vision of creating a society of young people who would grow to be caring and peaceful adults. By 1935 Waldorf schools had been established in the USA and other European countries. An important aspect of the Waldorf education is looping. From 7 to 14 years, children stay with the same group and the same teacher forming a close-knit group (Edwards, 2002). One of the key elements of Waldorf schools today is described by Easton (1997) as the building of a community of social support for families and children involved in Waldorf education. A Waldorf education continues to support the individual needs of children from diverse backgrounds through the building of relationships based on long-term connections in a looping environment (Easton, 1997).

In 1907 the Casa Dei Bambini was established by Maria Montessori to provide education for children living in the slums of Rome. Based on her work with the "mentally retarded" the methods developed by Montessori provide an environment that gives children choices within a safe, structured environment which "place the ultimate responsibility (and motivation) for learning with the child" (Peters, 2008, p. 70). Montessori schools group children into multiage classrooms. This approach is not standard looping, which keeps children of the same age together with their teacher over the course of 2 or more years, however, some of the philosophical foundations of multiage grouping are similar to those of a looping perspective. Children and teachers are kept together over the course of 3 years in order to "promote adult-child continuity and close peer relationships" (Edwards, 2002, para. 5). The curriculum is highly individualized but structured within sequences of learning and domains.

At the end of World War II, families in the city of Reggio Emilia in Italy built a school to educate their children. Under the leadership of Loris Malaguzzi a system of municipal preschools and infant-toddler centers was developed. Drawing on the philosophical foundations of Dewey, Piaget, and Vygotsky education from a Reggio perspective is seen as developed through close social relationships and knowledge constructed through interaction with others. Multiyear adult-child and peer relationships are fostered through looping and long-term projects are developed which support collaborative work between students, teachers, families, and community members. Teachers view themselves as partners with children and families and consider long-term relationships as a means to understanding the developmental and social history of their students (Berk & Winsler, 1995).

Socio-cultural Perspectives in Early Childhood Education

In recent years there has been increased focus on children's readiness for school with mandates that emphasize the importance of all children being ready for school for successful educational experiences (Goals 2000: Educate American Act, 1994, 2001; No Child Left Behind Act, 2001). Verbal readiness has been found to be the strongest predictor of first through fourth-grade standardized test scores in math and reading and so it behooves educators to reflect on the pre-literacy skills of young children (Kurdek & Sinclair, 2001; Miller et al., 2006).

Prior to the early 20th century, young children were kept at home until the age of 6 or 7, when formal schooling was introduced to them. Learning took place within the confines of the family and immediate community. The invention of the formal education

of children between the ages of 3 and 6 years has been attributed to Fredrick Froebel (1898/2005). The importance of the early years was first recognized by Froebel and his followers and he advocated for and recognized that the young child "should be trained early for outer work, for creative and productive activity" (p.34). John Dewey (1915) influenced by the work of Froebel remarked that "There is no obvious social motive for the acquirement of mere learning, there is no clear social gain in success therat" (p. 11). Dewey recognized that schooling was important for the socialization of children and that education was more than rote learning and memorization. His reflections on the role of education in society were made at a time when society was moving from a home centered agrarian society into an industrial urban landscape. At the beginning of the 20th century children were no longer needed at home to sustain the family and home life. Work in factories had changed the structure of the family group and children needed to be cared for outside of the home. Recognizing that traditional educational methods were out of step with the natural learning that takes place at home and in the community Dewey advocated for an approach that encouraged "buoyant outgoing energy" rather than "passive and inert recipiency and restraint" (p. 11). From Dewey's perspective the young child is seen as an active pupil engaged in learning through interaction with the environment. Traditional Western approaches to education have changed little since the time of Dewey, and continue to be influenced by the No Child Left Behind Act of 2001 which while demanding accountability have given credibility to those who would advocate for assessment-based approaches to learning.

Children in the Native Hawaiian community served by Kamehameha Schools live with traditional and family values that may not be consistent with the values supported in educational contexts developed from a Western perspective. The development of young children, including the development of language, results from a complex interaction between cultural environment and natural development (Bodrova & Leong, 2006). According to Bodrova and Leong (2006), from a Vygotskian perspective, the cultural background of children defines the ways that they are transformed as they develop the higher thinking skills associated with language and literacy. If educators continue to reject the opportunity to appraise new approaches to education that more closely resemble the cultural and familial values of children of Native Hawaiian descent, the question that we must ask ourselves is are we then complicit in "a kind of social injustice that disenfranchises the learners whom we seek to serve" (Sumida & Meyer, 2006, p. 438). Sumida and Meyer (2006) suggested that education must go beyond the western tradition of transmission of knowledge and reflect on the importance of cultural and linguistic diversity as teachers engage children and families in becoming agents of social change. Teaching to the fourth power, as developed by Sumida and Meyer, provides a theoretical framework for teachers to promote social change through an ecological approach of transmission, transaction, transmediation, and transformation. The goal of this work is to support children and families in building intrinsic motivation to become life long learners through culturally relevant approaches to learning.

This work is further supported by the research of Nasir and Hand (2006), who examined how the educational achievements of nondominant students can be reinforced

in positive ways through the lens of a socio-cultural perspective of learning. Nasir and Hand suggested that while research points to the relationships between home and school life as important for learning, they maintain that there is a lack of understanding about how these relationships inter-relate to produce learning outcomes. According to Nasir and Hand, the conceptualization of culture as a static set of customs and practices which individuals carry with them has contributed to this lack of understanding.

Prior to 1778, when Captain Cook first arrived in the Hawaiian Islands, the culture and society of the population was based on a set of values that defined the self-identity of the people (Kanahele, 1986). These guidelines provided clear rules about what were appropriate relationships and behaviors. However, these values were not static, and cultural changes occurred in the Hawaiian society just as they do in all societies (Nasir & Hand, 2006). From a socio-cultural perspective, culture is perceived as an ongoing response to the environment which is developed as populations interact reciprocally. From this point of view, knowledge is co-constructed as culture is "produced and reproduced in moments as people "do" life" (Nasir & Hand, 2006, p. 450). Individual and group differences among and between people and communities existed in Hawaii prior to 1778 which precludes us from making generalizations about Hawaiian culture as it existed in pre-contact Hawaii. Kanahele (1986) suggested that even when a community of people acknowledges the same values, individual differences will be evident as personal and family values. This construct must be kept in mind as we discuss the importance of building relationships with children and families through knowledge of their own personal and familial values as well as the social and cultural values of the

communities. As the world of the Hawaiian people began to change drastically with the introduction of western influences, the values of old Hawaii became diluted (Kanahele, 1986). The influence of the missionaries further weakened the respect of the Hawaiian people for their own culture and ideas about the uncivilized and lazy savage became internalized for many of the remaining Hawaiians. Kanahele suggested that just as we may relive nightmares of our childhood, so modern Hawaiians "consciously or subconsciously, to one degree or another, continue to feel and fear those burdens of inferiority, negation, and rejection that oppressed our forefathers" (p. 27). No where is this more evident than in the educational system that tends to reject spontaneous learning and relies almost exclusively on scientific concepts and assessment (Gallimore & Tharp, 1990). In a review of Vygotsky's work on the development of scientific concepts and discourse, Panofsky, John-Steiner, and Blackwell (1990) suggested that children build scientific concepts in educational settings based on concrete and previously acquired knowledge. This knowledge comes directly from the child's experiences in family and community settings where a set of values and guidelines for behavior are internalized. According to Vygotsky the development of the child takes place in the family and community during the early years and has specific content relative to the historical setting (Davydov & Kerr, 1995). Early educational settings contribute to the psychological development of young children, which according socio-cultural theory is directly related to the social interactions that the student brings to the setting (Berk & Winsler, 1995). The complex diversity of the social settings of Hawaiian children with profound influences from Asian, Polynesian, and Western cultural values provides a challenge for

teachers who are committed to the development of students who arrive in school with a variety of social, cultural, and linguistic foundations. It is important that the educational community reflect on and investigate a variety of contexts which will allow teachers to more thoroughly appreciate this diversity, and provide support for successful learning experiences for all children. Providing teachers and students with the opportunity to stay together for more than one school year in a multiyear setting may have the potential for relationship building leading to stronger connections within which learning can be supported.

The Effects of Confounding Variables on Language Development

Language Development and Gender

There is some evidence that suggests there may be a relationship between language development and gender (Locke, Ginsborg & Peers, 2002; Resnick & Goldfield, 1992; Westerlund & Lagerberg, 2008). In a study of economic status and language development, Locke et al. (2002) found that girls' receptive language abilities were significantly better than those of boys. Resnick and Goldfield (1992) in their earlier study of lexical development determined that infant girls maintained a higher comprehension score than boys throughout the first 2 years of life.

In a more recent study Westerlund and Lagerberg (2008) conducted in Sweden, female gender was significantly associated with expressive vocabulary. Their study underscored the importance of reading to young children as a factor that influences oral language development and findings suggest that girls are read to more often and have a richer vocabulary than do the boys. The authors pointed out that the data were self-

reported by mothers and cause and effect cannot be determined by the study. However, the importance of communication with young children and frequent reading should be emphasized as avenues to increasing oral language skills.

When asked about perceptions about language development, parents in a study in the North of England reported that they believed gender was a factor in language development and that girls were more verbal than boys (Marshall, Goldbart & Phillips, 2007) and the same perception was reported by pre-school teachers in the Locke et al. (2002) study. As development in all domains is complex and influenced by a variety of factors, it is important to note that the effects of gender on language development may have more complicated cause and effect issues that are not readily apparent.

Language Development and Socio-Economic Status

Socio-economic status (SES) can be determined by a variety of factors, including low income and maternal educational attainment. Hoff (2003) suggests that although environment influences vocabulary development it may be the specific differences in the language experiences that affect the rate of vocabulary development in young children. This study looked at the ways in which maternal speech mediates the relation between SES and child vocabulary development. Exposure to a richer vocabulary and style of language appears to support vocabulary development in young children regardless of other aspects of SES, thus supporting the idea that teachers may have an impact on language development through the use of rich language experiences. Burchinal et al. (2002) found that higher education levels of parents supported higher academic skills in young children.

Low maternal education is just one of several risk factors that children from marginalized populations face (Stanton-Chapman, Chapman, Kaiser, & Hancock, 2004). In their study of low income children, girl's language scores were affected as risk factors increased at a higher rate than the language scores of boys. In addition, findings from a study by Rouse and Fantuzzo (2009) also suggest that low maternal educational levels combined with poverty contribute in unique ways to the academic failure of young children. Risk factors for children of Hawaiian descent may include low-income, family unemployment, and exposure to drugs and violence in addition to low maternal education level. When low maternal education co-occurs with low income, this combination of factors is more predictive of academic outcomes than poverty itself. Building relationships with families, providing guidance along with parenting and literacy opportunities can support changes in family circumstances leading to stronger language skills and increased opportunities for academic success.

Language Development and Teacher Training and Experience

According to Hamre and Pianta (2005), if experience in early learning environments can be affected by the interactions between teachers and children, it is imperative that educators and policy makers support practice that could potentially alter the trajectories for students at risk for failure. Hamre and Pianta suggest that it is not only positive relationships with students that moderate the risk of failure; it is also the quality of the instructional support that is important. However, a review of seven studies by Early et al. (2007) found that there is little and contradictory evidence that educational attainment is a predictor of increasing classroom quality or maximizing children's

academic gains. None of the seven studies reviewed indicated an association between the highest degree and receptive language skills. The complexity of the relationships between teacher interactions with students and the academic achievement appear to be more closely related to relationship interactions than either years of experience or educational attainment (La Paro & Pianta, 2000; Ostrosky, Gaffney & Thomas, 2006; Pianta, et al. 2005). According to Pianta et al. (2005) global quality as assessed by Early Childhood Environmental Rating Scale – Revised (ECERS-R) and Classroom Assessment Scoring System (CLASS) was lower when the classroom was composed of a majority of children below the poverty line, teachers did not have graduate level degree training in early childhood, and teachers expressed more traditional beliefs about children in which child-adult interactions were understood from an adult-centered perspective.

Pianta et al. (2005) have defined three broad domains of supportive interactions that define high quality teaching. Regardless of educational attainment and years of experience, quality teaching requires that teachers interact with and support emerging language through modeling and encouragement. These authors suggest that even though many teachers fulfill the No Child Left Behind (NCLB) definition of highly qualified teachers through full state certification, a bachelor's degree and competence and knowledge of the subject area, there continues to be a lack of connection between teachers and the students that is necessary for high quality classroom experiences. Although Pianta et al. found that global quality as assessed by the ECERS-R and the CLASS was significantly related to teachers with BA degrees and early childhood training, these researchers propose that it may be that the experience and educational

attainment of teachers reflect an understanding of children's developmental needs and comfort in providing child-centered environments that lead to higher quality instructional settings.

The Role of Relationships in Early Childhood Education

Relationships with Children

Dickinson and Tabors (2002) remind us that the relationships teachers have with the children in their care and the kinds of conversations that they have are predictive of later language and literacy achievements. A multiyear (MY) approach allows teachers and children to stay together for two or more years providing opportunities for teachers, children, and families to build strong relationships (Burke, 1997; Flanagan, 2006; Grant, Johnson & Richardson, 1996; Liu, 1997; Olaiya, 2001). Relationships between adults and children are an important component of early childhood programs, one that builds security, self-confidence, and learning opportunities for young children, all skills necessary for maximum learning (Chirichello & Chirichello, 2001; Keyser, 2006; Soundy & Stout, 2002). According to Pianta (2006), the "relationships between children and adults are the primary medium through which literacy is acquired" (p. 149). Pianta perceived literacy as a behavioral system within which many processes are organized. Included in this system is the ability to use oral language to communicate thoughts and ideas. The literacy system is supported through the relationships and interactions young children have with others. When teachers organize an environment where children feel safe and secure and they provide an appropriately stimulating instructional curriculum maximum learning can take place (Pianta, 2006). The National Association for the

Education of Young Children (NAEYC) recognized the importance of relationships for learning and development when they included support for programs that encourage teachers to build relationships with children and families through recognition and sensitivity to individual and cultural diversity in the revised edition of Developmentally Appropriate Practice in Early Childhood Programs (1997). This edition challenges those in the field of early education to recognize that in order for programs to be developmentally appropriate they must also recognize the role of cultural and linguistic diversity in the development of young children. Using the work of Uri Bronfenbrenner as a foundation for their position on the importance of inclusive relationships, NAEYC (1997) advocates for the recognition of the interrelationship of the various aspects of children's lives and the importance of the social context within which early development occurs. Responsive adults who nurture positive relationships with children are instrumental in developing communities of learners, a context which is believed to be critical for optimal development (Jacoby, 1995).

Knowledge of the cultural background and social practices of the families provides guidance for teachers about the types of activities that are considered developmentally appropriate (NAEYC, 1997). It is possible that teachers who have the opportunity to spend 2 years with children can build a knowledge base of approaches that work best with the community of learners that develops in the classroom throughout that extended period of time. In a 2 year looping arrangement teachers can build on previous knowledge of students, have less time devoted to assessments, and provide smooth transitions between grade levels (Jacoby, 1995).

In a time when families are struggling with fractured relationships and the pressures of economic and social tension, schools can be a safety net for children (Newberg, 1995). Newberg suggests that children who come to school with minimal support from home, those who are from families living with the multiple pressures of poverty, and those for whom family relationships may be disorganized, can benefit from the connections that are established when teachers are invested in long-term relationships with students. This shift in the role that teachers have traditionally performed, especially in public education in the United States, requires support for perspectives of education that take into account the importance of the social and emotional aspects of the educational process as well as the emphasis on academic learning. No Child Left Behind Act (2001) provides validation for the building of small learning communities in Title V – Promoting Informed Parental Choice and Innovative Programs, Part D, Subpart 4, Sec. 5441. Smaller communities of learners allow for the building of relationships on all levels so that children, especially those from fractured and struggling families and communities can have a foundation from which to advance in all areas of learning. This philosophical approach mirrors that of the Waldorf School's practice. Based on the work of Rudolf Steiner who lived at the turn of the 19th century, Waldorf education builds on the thesis that it is through the organization of communities of learners that children are given the opportunity to grow and develop as individuals with a sense of responsibility towards others in the community (Easton, 1997). This sense of responsibility is developed through the focused attention and personal contact with each child in preparation for learning and the building of relationships between staff and children

through the use of looping, the practice of staying with the same teacher and group of students for multiple years. Although the philosophical foundations of the Waldorf movement may not be consistent with "our pluralistic society and our "separation of church and state tradition" (Easton, 1997, p. 92) in the public school system, further examination of the importance of relationships and community learning in Waldorf could perhaps enhance the goals of No Child Left Behind Act (2001). The development of a community of learners and taking responsibility for student's performance over an extended period of time will require a shift in the ways that teachers perceive their roles (Newberg, 1995). According to Newberg, teachers tend to view their role from the perspective of the grade they teach or the subjects they teach. This perspective is one that has developed throughout the 20th century as lives have become more fragmented. The division of labor is now more apparent in society, and the numbers of students attending school has increased requiring teachers to become more specialized and take on larger groups of children. Teachers work with a group of students for a short period of time with specific learning goals in mind and then pass them on to the next teacher. If learning takes place in the context of relationships as suggested by Vygotsky, Dewey, and the creators of educational approaches such as Reggio Emilia, Waldorf, and Montessori, providing opportunities for students and teachers to spend more time together could be an approach that is financially practical, easy to implement, and may have significance for academic development (Grant, Johnson, & Richardson 1996).

Relationships with Families

It is in the home, and particularly with the primary care-giver, that children are first exposed to the language that will be their foremost tool for communication and it is in the home that children are supported in their continuing development. The advantages of MY educational opportunities include the formation of relationships, not only between teachers and children, but also between teachers and families, children and their peers and the parents of the children with each other (Grant, Johnson, & Richardson, 1996; Hedge & Cassidy, 2004; Nichols & Nichols, 2001). Looping provides teachers with opportunities to create meaningful relationships with families and to develop communication systems which promote positive interactions (Nichols & Nichols, 2001). Research conducted by Nichols and Nichols measured parent attitudes towards the school and teacher using a 5-point Likert-type instrument developed by the researchers. Findings suggest that parents of students who loop are more responsive and positive towards the teachers and school. These researchers propose that building relationships with parents who may have had less than positive experiences in their own schooling may encourage parent involvement and discussions between teachers and family members. The Nichols and Nichols (2001) study has some limitations as parents were invited to enroll children in looping classrooms and those parents may have had more confidence in the school than those who did not participate. In addition, families who were in the looping program were committed to spending 2 years at the same school, suggesting that these families may have been more stable than those who chose not to participate. Teachers who are committed to spending longer periods of time with a group of children

may also be more motivated to develop deeper understanding of the expectations that parents and families have for their children's education and to build learning strategies congruent with the learning styles of the families (Souto-Manning & Swick, 2006).

No Child Left Behind Act (2001) Title I — Improving the Academic Achievement of the Disadvantaged seeks to ensure that all children have the opportunity for an educational experience that will allow them to be proficient on standardized assessments through the provision of high-quality educational environments that increase the amount and quality of instructional time and afford parents substantial and meaningful opportunities to be involved in their children's education. However, Souto-Manning and Swick (2006) argued that the traditional paradigm of parent involvement focuses on established practices such as reading to children at home, and being involved in parent committees at school. These authors suggest that this narrow definition of parent involvement excludes other more culturally appropriate involvement by families that do not hold to the same middle class values that are supported in the educational system. The definition of parent involvement currently promoted by this traditional approach only serves to further marginalize children from these families. Through an examination and reflection on the approach to parent involvement in our schools, teachers have the capacity to empower families through recognition of the strengths they bring to the classroom and the "active role they already play in their children's education" (Souto-Manning & Swick, 2006, p.190). Unfortunately, there are indications that perceptions of parent involvement differ between teachers and parents which can affect the interactions between educators and family members (Souto-Manning & Swick,

2006; Sy, 2006). The concept of parent involvement differs among cultural groups and beliefs about what constitute appropriate involvement in the school life of children are not always consistent between teachers and parents. These differences in cultural practices and beliefs affect the relationships that develop between families and teachers and there continues to be debate about the effectiveness of parent involvement in building relationships between families and teachers because of these differences (Souto-Manning & Swick, 2006). The ways that teachers support relationships and encourage partnerships between parents and themselves affects the amount and quality of the involvement. It is important that teachers who seek to build relationships with families actively investigate the perceptions of involvement that families bring with them in order to build strategies that will encourage families to become involved in ways that are comfortable and effective (Knopf & Swick, 2006). For example, Asian American parents often use indirect involvement strategies in their child's educational achievements (Sy, 2006). Families raised with traditional Asian values tend to become involved in children's work through indirect methods such as preparing a place for homework to be done, and setting aside time for children to do homework before engaging in other after school activities. The family background of parents also influences the style of engagement with schools. When raised in an environment that respects the role of teachers as solely responsible for the education of young children, parents are resistant to interfering with those perceived roles (Souto-Manning & Swick, 2006).

The relationship between early language development and parent involvement is well documented for elementary school children; however less research has been

conducted in this area for early childhood education (Arnold, Zeljo, Doctoroff, & Ortiz, 2008; Nichols & Nichols, 2001). According to Arnold et al. although parent involvement is regarded as critical to academic success, there is little empirical evidence to support this thesis. There is, however, theoretical and indirect evidence supporting parent involvement as an important component of early academic success. Involved parents are more likely to build relationships with teachers and communicate with them about the activities and learning that is going on in the classroom (Nichols & Nichols, 2001). Support can then be provided at home which complements learning at school. In the early childhood community, parents are often regarded as partners in their children's educational experiences and preschool has traditionally been inviting to parent participation. Participation by family members is an important component of the Head Start Program and parents are encouraged to become involved in all aspects of the program. However, the rhetoric of parents as partners may not always be consistent with the reality of the relationships between parents and teachers. The ways in which teachers communicate their support of parent involvement in both overt and covert ways contributes to the comfort level of the parent in pursing involvement activities (Arnold et al., 2008). According to research conducted by McGrath (2007), there appears to be little evidence of the existence of true partnerships between mothers and teachers in full-time child care centers. In a review of the literature on the subject of partnerships between mothers and teachers, McGrath found that most studies focused on either parents or teachers perceptions of partnership rather than viewing the relationships between each other. Indeed, there was little evidence of partnership between mothers and teachers

found in this researcher's study. Parent/teacher interactions are based on power relationships that involve trust on the part of the mothers that the teachers are looking out for the best interests of their children. Building trust in partnerships such as those between parents and teachers involves collaboration and the exchange of ideas with "respect and appreciation for a multiplicity of perspectives" (Souto-Manning & Swick, 2006, p. 191). It is clear that mothers and teachers have very different perceptions of the needs of individual children. McGrath (2007) suggested that parents, and in this study, the mothers in particular, had to come to the center with trust that the teachers would take good care of their children in their absence. The vulnerability of the mothers in establishing this trust lay in the inability to control their children's environment while they were away. Teachers therefore had a more powerful position in this sense. The incongruence in the power structure between parents and teachers often lay in the social status of teachers which was sometimes lower than that of parents in terms of economic and status positions in the work forces. This tension between parents and teachers was evident in the interactions McGrath documented at drop off and pick up times at the center. Trust in the teachers appeared to be more evident when teachers shared information about children that was congruent with the mother's own perceptions of their children. In order for teachers to know and share information that is a true reflection of the children in their care, it is important that teachers know and appreciate the differences that children bring to the center. This knowledge can be developed through the building of relationships both with the parents and the children. Unless and until teachers take the

time to build relationships based on interactive communication, the differing perspectives will continue to be an issue.

Throughout most of the 20th century teachers had been perceived as the providers of information about the best practices for supporting development of children and as such were, and to some extent continue to be in a position of power as the more knowledgeable partner (McGrath, 2007). This paradigm is based on the premise that teachers have knowledge about the developmental needs of young children that they can share with parents through parent education. The education community assumed that knowledge about the development of children would provide families with the tools necessary to support education efforts and raise children to be successful participants in society. With the move from at home care by mothers to child care for more affluent families , the interaction between the educational community and the parents of young children has changed to include more interactive sharing of information. Until teachers build relationships by taking the time to understand the perspective of parents, the needs of individual children and the social and cultural lives that children bring with them to the center, true partnerships cannot be developed.

Research indicates that parental involvement in the education of young children is an important aspect of academic achievement and families who build relationships with teachers are often more comfortable being involved in their child's education (Mann, 2006; Knopf & Swick, 2007). Each individual in a family brings to the school a difference and diverse personality and approach to interactions in the classroom. Teachers can build relationships when they listen carefully to families, use culturally

sensitive approaches, and provide a safe environment for those family members who approach school with tentative and often uncomfortable feelings. Nichols & Nichols (2001) found that parents of children who were in looping classrooms demonstrated significantly more positive responses about their attitudes toward the school environment and student motivation.

Language Development in Children of Hawaiian Descent

On January 8, 2002 President Bush signed into law the No Child Left Behind Act of 2001 (NCLB, 2001), reauthorizing the Elementary and Secondary Education Act (Public Law 107-110). Title I, Improving the Academic Achievement of the Disadvantaged provides direction for promoting school -wide reform and ensuring the access of children to effective, scientifically based instruction strategies and challenging academic content. In Section 7203 (NCLB, 2001) the federal government authorizes the development of innovative educational programs to assist Native Hawaiians. The NCLB Act of 2001 recognizes the disparity between the education achievements of children of Native Hawaiian descent and children from less diverse communities both in Hawaii and the Continental United States. Families in Hawaii are a diverse mix of the cultural ancestry that the demand for farm labor brought into the Islands in the 19th and early 20th century. As a result of the differences in language among the people of Hawaii, the workers brought to the Island to work on the plantations communicated in Pidgin English a mixture of Asian, European, and Hawaiian languages. From these origins, Hawaii Creole English (HCE) developed. The blending of cultures through intermarriage has also supported the development of a "local culture" that results in a mixture of diversity

that is unique to the Hawaiian Islands. HCE is the language of the local culture and according the Da Pidgin Coup (1999) reflects the historical significance of a social structure developed to help diverse populations work together. As such, the unique aspects that this language brings to the educational setting should be honored and respected from a strength based perspective rather than rejected and discriminated against. The use of standardized assessments developed from a western perspective places children from local families who speak HCE at risk of marginalization. Although accepted with more tolerance today there continues to be a negative connotation surrounding the use of HCE in educational settings. The use of HCE is regarded as a sign of low status among Standard English (SE) speakers, and yet it provides a sense of community and social status for those for whom this dialect is their primary mode of communication (Da Pidgin Coup, 1999). The use of HCE in educational settings has been the focus of discussion among the people of Hawaii for many years.

On a national level there was much debate during the early part of the 20th century about the use of non -standard English dialects and there was an expectation that patriotic Americans would speak "in a singular fashion" (Tamura, 2002, p. 19). These expectations were reflected in the requirement that students at the University of Hawaii (UH) would be required to pass SE tests before graduation and those who failed to pass the test would be dropped from the university. Correct speech was also required of students in grades four through eleven in the public schools and failure to use "correct" discourse would result in the student being held back (p. 19). These policies were later discontinued because of their ineffectiveness. Da Pidgin Coup, a group of University of

Hawaii faculty and students in the Department of Second Language Studies published a position paper on the subject of Pidgin and SE recommending that language awareness classes be added to teacher training programs, that language awareness programs be offered to students, and research on the relationship between Pidgin and school success be developed. It was the hope of this group of linguists that research such as this would bring ideas about how best to build on the language that children bring with them to school ensuring success for all children of Hawaii. When the home language of children is appreciated in school it helps to ease transition into a formal education setting, creates positive attitudes towards school, and promotes academic achievement (Da Pidgin Coup, 1999). Supporting the home language is one way that teachers can begin to develop positive relationships with young students that will foster cultural understanding in order to support literacy and oral language.

As early as 1976, Gallimore and Tharp suggested that nonstandard varieties of English were implicated in the "academic difficulties of minority culture youth" (p. 38). These two researchers at Kamehameha Schools Early Education Project (KEEP) completed a five year study of the ways in which students in the KEEP elementary school (K-3) develop SE skills. Two research instruments were developed to measure competence of SE (the SERT) and HCE (the HCERT) and the oral language competency of children of Hawaiian descent was assessed. The conclusions developed from this study suggest that it is the number of oral language opportunities and activities that are important for the development of SE rather than teacher directed training of students. Although HCE speaking children tended to perform below their ability in oral language

skills on standardized tests, young HCE speakers tended to have difficulty with the same features for English as SE speakers, and the definition of teacher skills and curriculum materials and training for teachers would be an important next step for research supporting the acquision of oral language skills by HCE speakers.

When teachers accept the developmental skills that children bring with them to school, they are in a stronger position to build relationships with students and families and to support emerging language. In agreement with the findings of the KEEP program linguists at Da Pidgin Coup group at the University of Hawaii Manoa (UH Manoa) recommend that building on the home language of children using the strengths that they come to school with is the most productive approach to educational success among children for whom HCE is their first language. According to Da Pidgin Coup denigrating HCE at school will not make it go away and will only encourage students and teachers to create a "counter-productive educational atmosphere" (p. 10). Children bring their socio-cultural experience with them to school and it is through language that cognitive development is cultivated (Vygotsky, 1986). Language skills form the basis through which all formal educational experiences transpire.

Benefits of Multiyear Student/Teacher Relationships

Academic and Social Benefits

Advocates of looping suggest that relationships are the foundation of educational achievement and teachers who spend more than one year with their students can support learning more effectively (Fleischer, 2006; Hume, 2007). The teacher who loops with a class brings with them knowledge of individual student's approach to learning and level

of development, curriculum materials already covered or ready to be presented, and familiarity with family members and cultural backgrounds (Chirichello & Chirichello, 2001; Little & Dacus, 1999; O'Neil, 2004). Prior knowledge of students and families allows teachers to move forward more effectively and efficiently providing more instruction time over the course of the 2 year loop (Fleisher, 2006; Gaustad, 1998; Grant, Johnson & Richardson, 1996). Students have more time to acquire basic skills without the use of retention as a strategy for catching up, and the summer months can provide an opportunity to work on building skills in preparation for the second year (Aina, 2001; Bracey, 1999). Shy students have time to develop self-confidence, and to build peer and teacher relationships and those children who need the stability of a safety net can develop a sense of community (Aina, 2001; Burke, 1997; Hitz, Sonners, & Jenlink, 2007). In addition, the secure environment established over time provides a safe place for children to stretch their learning, to take risks, and to try new approaches and challenges (Chirichello & Chirichello, 2001; Fleischer, 2006; O'Neil, 2004; Wert, 2000). This environment may in fact serve as a protective buffer for students who may be at risk for academic failure due to the effects of poverty (Lavender, 2006).

Although most studies of the effectiveness of looping on academic achievement have been qualitative in nature, there have been a small number of studies that use a quantitative design. Two studies reported in Connections: the Journal of the Georgia Council of Teachers of English Kelley (2004) and Carothers (2004) each demonstrated a direct and positive correlation between looping and reading scores for elementary school children. The first study which matched a sample of non-looping and looping student's

test scores on the Standardized Test for the Assessment of Reading by Renaissance Learning (STAR) reading software assessment program, found a significant difference in reading comprehension scores (Kelley, 2004). STAR reading software is a computerized student reading assessment program administered to the students by the teacher. It is designed to provide detailed reports of student's reading levels and is nationally-normed. The acronym STAR was initially developed from Standardized Test for the Assessment of Reading by Renaissance Learning. However, with the addition of other STAR assessments that acronym is no longer used and the tests are simply called STAR. Gain scores of the looping and non-looping groups were compared using beginning of the year third grade STAR reading scores and comparing them to the end of the year third grade STAR reading scores. Students in the control group were selected from eight third- grade classes by matching them as closely as possible to the experimental group and thereby keeping teacher effects to a minimum. The experimental looping group was determined by the number of returning students willing to participate in the looping experiment. The number of students in the control group was then matched to the number in the experimental looping group. The analysis of variance of the STAR test yielded a probability of p=0.02, with the experimental group gaining an average of 14 months, while the non-looping control group's average gain was 8 months. Limitations of this study included the small sample size of 16 students in each of the groups and the inexperience of the researcher (Kelley, 2004). The second study was designed as an action research study of looping students in the researcher's classroom (Carothers, 2004). The control group consisted of a matched sample group selected from the remaining eight

third grade classrooms. Students were matched based on STAR reading test scores, gender, and race. Pre- and posttest score were compared and analyzed using an ANOVA in JMPIN (2000). The analysis of variance of the STAR reading achievement test yielded a probability of $p = 0.01$, indicating a significant difference in reading achievement between the two groups. Although this research supports previous findings that looping has a positive effect on student test scores, there are limitations in the selection and size of the sample and the experience of the researcher. However, both of these research studies indicate that there is a need to further investigate the perceived benefits of looping on language development and provide some indications of positive results from a quantitative perspective.

In 1993 East Cleveland, Ohio Schools and Cleveland State University teamed to pilot Families Are Students and Teachers (F.A.S.T). Between the years of 1993 and 1996, students retained the same teachers for 3 years, parents monitored the class assignments, and workshops designed to help parents help with homework were developed. The research generated by Project F.A.S.T indicated that even when both looping and non-looping groups were taught by the same teacher, students in the looping groups scored substantially higher on reading and mathematics standardized tests than did the students in non-looping classrooms (Hampton et al., 1997). However, Project F.A.S.T. included strong components related to parental involvement and support in the model and separating out the effects of this aspect is difficult.

The mean, percentage increase, and correlation coefficient from pretest and posttest scores on the Comprehensive Test of Basic Skills (CTBS) at Robeson

Elementary Center in Birdsboro, Pennsylvania were found to be higher for looping than for non-looping classes (Wert, 2000). As a result of the implementation of a looping program for all students in the Attleboro, Massachusetts school district, the superintendent of schools indicated that student attendance increased, retention rates decreased, discipline suspensions declined, special education referrals decreased and staff attendance improved (Grant, Johnson, & Richardson, 1996). Chirichello & Chirichello (2001) suggest those children with behavior issues, and those who are shy and non responsive benefit from 2 years with the same teacher. Their study assessed parent and student views on looping through a survey conducted at the beginning of the looping period and then again at the end of the 2 years. Questions designed to measure parent's perception of their child's confidence, security, and anxiety levels suggested that these traits were increased over the course of 2 years with the same teacher and that looping would meet their child's individual needs through more in depth knowledge of each child. According to Fleisher (2006), children are more likely to be comfortable taking risks in learning when they have a 2 year relationship with their teacher. Little and Dacus (1999) report that teachers at Linden Elementary School in Oakridge Tennessee found that looping provided students with confidence and strong peer relationships. Relationships with parents were also strengthened as trust was built over the course of the 2 year period.

Challenges of a Multiyear Program Assignment

Looping is a strategy that can be implemented with little cost to the school; however there is some resistance from teachers, administration, and parents to the idea of

spending 2 or more years with the same teacher. The most reported fear of parents is that their child will be in a class with an ineffective teacher for 2 or more years (Nichols & Nichols, 2001). Research also indicates that inappropriate matches, or personality conflicts between teacher and student, or teacher and family, can cause problems (Burke, 1997). However, according to Burke, this mismatch can occur in any situation and can usually be addressed through moving the student to another classroom. Ineffective teachers are exposed in a looping situation and in order to be successful high quality teaching must be stressed throughout the school. Wynne and Walberg (1994) recommend persistent grouping of students and teachers as a way to help young children learn that relationships are built through tolerance and understanding over the course of a period of time. To stay with a relationship and work out the uncomfortable issues can help students to develop relationship building skills necessary for optimal functioning in a changing and diverse world. These researchers also propose that ineffective teachers will be exposed when required to stay with students for a considerable length of time and will in time become more successful or will move out of the field. For these teachers, Gaustad (1998) suggests that when care is taken to support educators in learning new strategies and grade level curricula, implementing looping as an educational reform can be successful.

Summary

This literature review has examined a variety of studies that pertain to the effects of relationship building on language development. A search of the literature discovered many studies involving the ways in which language development is supported in early

childhood by parents and teachers with some emphasis on the cultural environment in particular. In order to more fully understand the relationship between language development and environment it may be important to consider the strength of the relationships between the various aspects of the child's environment and pedagogical approaches that can most effectively support learning. Vygotsky's socio-cultural theory has only recently been introduced to educational contexts in the United States and Western European countries and at present appears to have had minimal impact on pedagogy in most educational settings (Davydov & Kerr, 1995). Philosophical differences between the theories of Vygotsky and his followers and the propensity of the traditional academic approach supported by NCLB (2001) may have hindered attempts to construct a theory of education that bests supports learning for all children. Although the early childhood community has embraced constructivist learning in many settings, the push down affect of NCLB has encouraged the rote-learning and memorization approach evident today in many preschool settings. Gallimore and Tharp (1990) suggest that until a union of neo-Vygotskian theory and scientific principles of learning is reached the reform of education will be hampered. This either/or approach continues to be evident in the literature, confirming Dewey's concerns in 1938 that educational theory is "marked by opposition between the idea that education is development from within and that it is formation from without" (p. 17).

The historical perspective of educational opportunities in the Hawaiian Islands for those children for whom SE is a second language has been examined. The cultural and linguistic diversity that makes the Hawaiian Islands so unique brings a special challenge

for educators who struggle with meeting the demands of accountability through NCLB and standardized assessments based on Western cultural perspectives. In particular a review of the unique aspects of language development for children of Hawaiian descent has been conducted. The use of HCE by family and community members in Hawaii has been a topic of conversation in political and educational settings for over 50 years and yet no consensus has been reached about the optimum approach to supporting the development of SE for children in this state. Further investigation into more effective teaching methods for language development in children of Hawaiian descent is warranted.

Several quantitative studies of the effectiveness of MY relationships on academic achievement have been conducted in recent years (Carothers, 2004; Kelley, 2004; Hampton, Mumford, & Bond, 1997; Wert, 2000; Lavender, 2005), although most studies of this subject at this time are qualitative in nature. Wert (2000) suggests that the stability of a 2 year relationship with a teacher can help students to score higher on standardized achievement tests. The results of second and third grade scores on the Comprehensive Test of Basic Skills (CTBS) at Robeson Elementary Center in Birdsboro, Pennsylvania revealed that the looping class scored higher than the non-looping classes in all of the tested subject areas. Hampton, Mumford, and Bond (1997) reported substantially higher reading and mathematics achievement sores on standardized tests for students in multiyear relationships with teachers in East Cleveland, Ohio. This quantitative study demonstrated that even when students were taught by the same teacher, those students in looping environments scored higher on the standardized tests. The lack

of quantitative work in this area is a gap that needs to be addressed through further research.

In order to support social change through increased educational opportunities for children of Hawaiian descent, educators must find the balance between accepting the cultural diversity that children bring with them to the early education classroom and supporting practice that will provide the maximum opportunity to be successful in a changing and increasingly challenging academic climate. When seeking support from policy makers and funding organizations, the current economic challenges demand accountability through quantitative evidence. Research that provides statistical verification of theory is a necessary component of generating support for funding programs and changing educational contexts. As more research continues to be generated that stresses the importance of the social context of learning environments, quantitative studies such as this one can be critical in terms of supporting policy change. Until educational opportunities for children from a variety of cultural and linguistic backgrounds are more effectively supported, the United States will not be in a position to claim the highest standards of education for its population. The impact of educational policy has profound implications, not just for the children of Hawaii, but for all children in local, national, and global settings.

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CHAPTER 3:

RESEARCH METHOD

This quasi-experimental nonequivalent control group design study compared the treatment group (multiyear assignment) to the comparison group (single-year assignment) on student performance on the Peabody Picture Vocabulary Test-Third Edition (PPVT-III) and the language portion of the Developmental Indicators for the Assessment of Learning-3 (DIAL-3). The research questions addressed in this study follow:

1. Is there a significant difference in the PPVT-III scores for students who spend 2 years with the same teacher compared to those who do not?
2. Is there a significant difference in the DIAL-3 scores for students who spend 2 years with the same teacher compared with those who do not?
3. Is there a significant difference in multiyear assignment and single-year classroom assignment language scores on PPVT-III and DIAL-3 expressive and receptive language when controlling for the effects of gender, socio-economic status, and maternal education?
4. Does teacher education and years of experience have an influence on language scores?

Hypothesis

HO1: There will be no difference between receptive language scores as measured by the PPVT-III, and language development as measured by the DIAL-3 for students who stay with one teacher for 2 years and those who have a different teacher for each of the 2 years in the program.

H1: There will be a significant difference between language scores as measured by the PPVT-III, and language development as measured by the DIAL-3 for students who stay with one teacher for 2 years and those who have a different teacher for each of the 2 years in the program.

HO2: There will be no difference between receptive language scores as measured by PPVT-III, and language development as measured by the DIAL-3 for students who stay with the same teacher for 2 years compared with students who have two different teachers for each of the 2 years in the program controlling for effects of gender, SES, and maternal education.

H2: There will be a significant difference between scores as measured by PPVT-III, and language development as measured by the DIAL-3 for students who stay with the same teacher for 2 years compared with students who have two different teachers for each of the 2 years in the program controlling for effects of gender, SES, and maternal education.

HO3: There will be no difference between receptive language scores as measured by PPVT-III, and language development as measured by the DIAL-3 for students who stay with the same teacher for 2 years compared with students who have two different teachers for each of the 2 years in the program controlling for effects teacher education and teacher years of experience.

H3: There will be a significant difference between scores as measured by PPVT-III, and language development as measured by the DIAL-3 for students who stay with the same teacher for 2 years compared with students who have two different teachers for each of the 2 years in the program controlling for effects of teacher education and teacher years of experience.

Research Design

This study used a quantitative design from a post-positivism perspective. According to Creswell (2003), the study of human behavior cannot be "positive" about claims but can only determine the probability of effects or outcomes (p. 7). Absolute truth can never be found, however the assumptions of a post-positivist approach require commitment to the examination of causes that influence outcomes, the reduction of ideas into "small discrete sets of ideas to test" and the development of numeric measures of observations (p. 7). Following these assumptions, this study design allowed the researcher to explore differences in receptive and expressive language scores on standardized assessments for students who remained with the same teacher for 2 years compared with those students who spent 2 years with two different teachers at Kamehameha Schools Community Based Early Childhood Education (KSCBECE) programs in the State of Hawaii. The quasi-experimental pretest posttest design was chosen due to the availability of a convenience sample of students in multiyear (MY) and single-year (SY) classrooms at KSCBECE. All students in KSCBECE programs are tested for receptive and expressive language development pre- and post entry into the program. These data are collected for research purposes and to confirm that students are consistently supported in their language development. The availability of these quantitative data was a consideration in the development of this study. It is often difficult for researchers to assign students and teachers at random to control and experimental groups due to district limitations and school policy. At KSCBECE programs in Hawaii County, students are randomly assigned to classrooms in their particular district from enrollment lists that are generated in the admissions office in Honolulu. In order to qualify for the program, families must verify Hawaiian ancestry and students are selected by

lottery based on descent to the extent allowable by law. This enrollment process limits the ability to generalize results of the study to populations other than those students at KSCBECE. Families must fill out applications for program admission one year prior to enrollment which tends to limit students to families who have the necessary resources and foresight to complete the rather complex application process.

A qualitative approach was considered but rejected by the researcher based on the propensity of trustees and other policy makers at Kamehameha Schools to rely on quantitative results which demonstrate empirical evidence of educational advantages when making decisions about program design. Although the researcher agrees that qualitative evidence is important and recognizes that this paradigm is an integral part of the day to day operations of KSCBECE it was decided that future research can be developed based on the empirical evidence from this study extending the results into either purely qualitative or a mixed model research design.

Population and Sample

Participants consisted of a nonrandom convenience sample of forty 3- year- old students enrolled in a 2 year multiyear rotation at KSCBECE and sixty-four 3- year- old students enrolled in single-year assignment classrooms at a different site both of which are in the State of Hawaii for a total sample of n=104. The population from which this sample was drawn consisted of applicants of Hawaiian descent born in the year 2004 in the State of Hawaii. All eligible children who applied for the program were entered into a lottery, and 1,439 students were chosen by a computer program to participate in classrooms throughout the state. Students were assigned to programs based on district of enrollment or family request. Assignment to classrooms at each program site was by systematic sampling from the enrollment lists provided by the admissions

department located in a central office. Classroom teachers did not have a choice of MY or SY configurations as assignments were based on perceived program needs according to the district. Teachers were assigned to classrooms by program directors and were only minimally involved in decisions about program configuration. Classrooms in the MY programs were all at the same physical site for the 2 year program. SY assignment classrooms were at two different sites for each of the 2 years. All students enrolled as 3-year-olds were provided the opportunity to participate in 2 years of program services and only those children who attended for 2 years were included in the sample for purposes of this study.

Kamehameha Schools (KS) is a private co-educational college-preparatory institution in Hawaii that operates three campuses statewide: Kapalama Oahu, Pukalani (Maui), and Kea`au (Hawaii). KS serves over 6,500 students from preschool through the 12 grades. The school was established in 1887 under the terms of the last will and testament of Bernice Pauahi Bishop, a direct descendant of Kamehameha the Great and last of the House of Kamehameha. Princess Pauahi established a trust currently called the Bernice Pauahi Bishop Estate, the largest private landowner in the state of Hawaii. Income from the trust is used to operate the schools. The early childhood division of KS operates 77 classrooms at 32 preschool sites in the State of Hawaii and serves more than 1,400 young children.

Access to the data was requested from the research department at KS through the submission of a data agreement form between KS and the researcher. A file review was conducted at each preschool site and data were collected for language scores on PPVT-III and DIAL-3 assessments, maternal education, family income, gender of students, and MY or SY classroom assignment. Data were deidentified and recorded on a spread sheet for use in this

study only and was kept in a secure location at the researcher's home office for the duration of the research project. Data analysis was conducted using SPSS. In order to add additional data to this study, teacher experience defined as number of years teaching preschool and teacher educational level and type of degree was included in the analysis. A request was made for information from the teachers and was deidentified prior to use in the research. Teachers were asked to sign an agreement to participate in the study and were given the opportunity to decline. Students participated in the study through an agreement with KS research and review department and permission to participate in assessments and educational research was included in general admission packets which all parents sign prior to beginning the program.

Instrumentation

Two language assessment instruments were used in this study. Each participant was assessed using the Peabody Picture Vocabulary Test-Third Edition (PPVT-III) pre- and post entry each program year. The PPVT-III was administered by independent trained assessors hired by Kamehameha Schools Community Based Early Childhood Education Program (KSCBECE). Developmental Indicators for the Assessment of Learning-3 (DIAL-3) was administered by the child's teacher or assistant teacher both of whom were trained and certified through the DIAL-3 system at the beginning of the program year. Each DIAL-3 assessment takes approximately 30 minutes to administer; however, only the language portion of this assessment which takes approximately 10 minutes to administer was used in this study.

Peabody Picture Vocabulary Test-Third Edition (PPVT-III)

The Peabody Picture Vocabulary Test-Third Edition (PPVT-III) is a norm-referenced measure of receptive vocabulary and a screening test of verbal ability appropriate for use with

individuals who are ages 2.6 years through 90+. This assessment uses two parallel forms for reliable testing and re-testing and was administered to individual students by a trained assessor. Internal consistency for Alpha is .92 to .98 (median: .95) and for test-retest is .91 to .94 (median: .92). The PPVT-III correlates with measures of oral language and has an average correlation of .69 with the Oral and Written Language Scales (OWLS) Listening Comprehension scale and .74 with OWLS Oral Expression scale. The correlations with measures of verbal ability are: .91 Wechsler Intelligence Scale for Children – Third Edition (WISC-III-VIQ), .89 Kaufman Adolescent and Adult Intelligence Test (KAIT Crystallized IQ), and .81 Kaufman Brief Intelligence Test (K-BIT Vocabulary). In the PPVT-III assessment children are independently tested for receptive language by looking at four pictures and pointing to the one that is requested by the tester. The sequence of words progresses from easy to more complex, but the test is only continued to the limit of the child's ability. No reading or writing is required of students and according to the developer of the assessment many of the illustrations have been assessed for gender and ethnic balance. This test of receptive language was chosen by KSCBECE because it can be administered to very young children and is appropriate for children for whom English is a second language, although a review of the literature found no indication that the PPVT-III has been normed for use with children of Hawaiian descent for whom HCE is a formative language experience. This third edition of the test was developed after some concerns were expressed that the revised edition of PPVT developed in 1981 indicated a bias against children from lower income, culturally diverse backgrounds (Qi, Kaiser, Milan & Hancock, 2006). This led to the development of the third edition which was standardized on a more nationally representative sample than the earlier versions and which included updated content and developmentally

appropriate norms. The normative sample included 2,725 persons selected to match the data of the 1994 U.S. Census. While only individuals who were determined to speak and understand English were included in the test, the sample was stratified with each age group by gender, race/ethnicity, geographic region, and SES based on maternal education. As an assessment of receptive vocabulary achievement and verbal ability, the PPVT-III is useful and requires no oral or written responses and no reading by the students. The PPVT-III is one of a few established assessment tools available and is relatively easy to conduct, taking about 10-15 minutes compared with 30-40 minutes required by other instruments. Because the PPVT-III has a national norm, KS does not have to identify a comparison group which can be a challenge. The diversity of the students at KSCBECE includes many of the cultural and ethnic groups included in the national norm. However, despite the limitations of this assessment for use with children of Hawaiian descent, the research department at KSCBECE believes that when used with a variety of other assessments such as the Work Sampling System (WSS), the Social Skills Rating System (SSRS) and the DIAL-3, the PPVT-III can provide teachers and administrators with valuable information about the language development of these students.

Developmental Indicators for the Assessment of Learning-3 (DIAL-3)

The Developmental Indicators for the Assessment of Learning-3 (DIAL-3) provides standard deviation and percentile cutoff points by chronological age at 2-month intervals for total and area scores. For the purposes of this study, the scores for the language portion of the assessment were employed. The language portion assesses the child's use of receptive and expressive language and was standardized for English and Spanish speakers based on data from a stratified sample of children ages 3-6 years consisting of 1,560 English speaking children and

605 Spanish speaking children. Although this assessment was revised to be more culturally sensitive for the range of diversity among students in the United States, there has not been a review of the sensitivity of this assessment to the language of children of Hawaiian descent who may come to school using HCE as their primary communication mode. Items on the DIAL-3 assess skills known to be predictive of learning problems and screening results are used to identify children who may be in need of further assessment. Early childhood educators can be trained to use and score the DIAL-3 and as the time necessary for the screening is about 30 minutes, it can easily be implemented by classroom teaching staff. Extensive bias reviews of the DIAL, DIAL-R, and DIAL-3 support this test's appropriateness for children from various socioeconomic, cultural, and ethnic backgrounds. Internal consistency for language is rated at .77. Test-retest for language 3.6 years to 4.5 years rated at .85 and for children 4.6 years to 5.10 years rated at .78. Validity has been tested through correlation studies with DIAL-R; Early Screening Profiles (ESP); Battelle Developmental Inventory Screening Test (BDIST); Bracken Basic Concept Scale, Screening Test, Form A; Brigance Preschool Screen; Differential Ability Scales (DAS); Peabody Picture Vocabulary Test-Third Edition (PPVT-III); and Social Skills Rating System (SSRS)

Data Collection and Analysis

The dependent variables in this study were receptive language scores as assessed by the Peabody Picture Vocabulary Test-Third Edition (PPVT-III) and receptive and expressive language scores as assessed by the Developmental Indicators for the Assessment of Learning- 3 (DIAL-3) assessment tool. The independent variable was MY and SY group assignment and the attribute independent variables were socio-economic status, maternal education, and student

gender. Teacher years of experience and educational attainment were included as independent variables. Descriptive statistics were used to describe, summarize and make sense of the data (Johnson & Christensen, 2004). The mean, standard deviation and the range of language scores for the PPVT-III were compared between the experimental (MY) and control (SY) groups on both the pre- and posttest scores. The profile of the student participants and groups indicate the mean chronological age of each group, socio-economic status for each group, the educational profile of the maternal educational achievement for each group, and student gender for each group at the end of the second year of the study. Teacher experience and education was included in a separate profile. An independent *t* test was employed in order to compare the pre-and posttest scores on the PPVT-III and the posttest language scores on the DIAL-3. Inferential statistics were employed in order to analyze the possible relationship between the independent and dependent variables. In order to test the assumption that the null hypothesis that there will be no difference in the scores of children in the groups is true, a *t* test for independent samples was employed using SPSS. Two- way analysis of variance was used to compare the group means on the PPVT-III assessment of the multiyear and the single-year groups controlling for socio-economic status, maternal educational achievement, and gender. In order to determine the impact of teacher education and teacher years of experience on receptive language as assessed by the PPVT-III and DIAL-R assessments a two-way analysis of variance was performed using SPSS.

Pilot Study

In 2008 the researcher designed and completed a pilot study using data from looping (MY) and non-looping (SY) classrooms at KSCBECE. The purpose of the pilot study was to test

the design of the larger study proposed for this dissertation. The pilot study investigated the possible impact of a 2 year looping rotation on the receptive language scores of preschool children of Hawaiian descent at Kamehameha Schools (KS) using PPVT-III scores from the student participants. Using a socio-cultural foundation derived from the work of L.S. Vygotsky, this quasi-experimental non-equivalent control group design examined the pre- and posttest scores of children in looping and non-looping classrooms at KSCBECE Programs in the State of Hawaii. Receptive language development was assessed using the PPVT-III scores at entry into the 3-year-old program in looping and non-looping programs and at exit from the 4-year-old programs for the same cohort of students. While the results of this study demonstrated no significant difference in the mean difference between pre- and posttest scores of children in both groups, there were significant differences in the mean scores of the looping and non-looping students at entry and exit from the program. These results suggest that there are initial differences in the receptive language scores of young children entering the non-looping program when compared to the higher scores of children entering the looping program. The current study further investigated any possible influence of environmental factors such as socio-economic status, maternal education, and gender on the language assessment scores from the PPVT-III and DIAL-3 assessment tools. Also included in the current study was the possible influence of teacher years of experience and educational attainment on language scores.

The pilot study used test scores from classrooms located on two different islands in the State of Hawaii. It was determined that a more practical approach would be to compare test scores from classrooms within the same district on the Island of Hawaii. There may be differences between families in terms of urban or rural environments and life styles for both sets

of data, however, by comparing student scores on one island, the results could possibly be more useful to KSCBECE program policy review and may possibly demonstrate a more even distribution of family characteristics than did the pilot study.

Protection of Participant's Rights

The current study involved the collection of data from two different programs configurations at KSCBECE. The students involved in the study were preschoolers who were assessed for language development at entry to and exit from the program. These scores were recorded and kept in confidential files at the program sites. A data agreement form was submitted to the research department at KSCBECE to request access to the data by means of a file review at the site. Information from teachers was requested and permission to use data in the study was sought from individual teaching staff. Teacher identity was protected, confidentiality explained to teachers, and the opportunity to decline to participate was offered. The researcher completed an Institutional Review Board application prior to collection of data. The Board reviewed and approved the research study. Data collection did not begin until approval was received from the Institutional Review Board at Walden University. In order to protect the privacy of participants, all information collected from the student files and teacher reports was deidentified and recorded on a spreadsheet. The data were kept in a secure location at the researcher's home office and were identified by a coding system know only to the researcher.

Summary

An investigation into the possible effects of MY classroom assignments on the language development of young children at KSCBECE could be a potential support for the development of effective programming for this population. The design of the research was limited by the quasi-

experimental status of the research plan and as such results from the study cannot be generalized to the overall preschool population in the State of Hawaii. The sampling frame consisted of all students chosen by lottery to participate in each of the programs available in the West Hawaii Region of the Island of Hawaii. Each student was assigned to classrooms through the use of simple random sampling at each program site. Students could not be assigned overall through simple random sampling because of the distance involved between program sites. Students and families were offered the opportunity to participate in a program within their access, or were given the opportunity to choose the location which best served their individual needs. For example, a family who lived close to a site, but found employment in a district closer to a different site was given the choice to participate in either location. All information was deidentified at the site of collection and confidentiality maintained through the use of a coding system known only to the researcher.

CHAPTER 4:

RESULTS

In response to the mandates of NCLB (2001) the State of Hawaii put into place the Hawaii State School Readiness Assessment (HSSRA) to be completed by schools and submitted to the State Department of Education (HSSRA, 2005). Reviews of the classroom assessment scores for 2006- 2007 indicated that many kindergarten children in Hawaii came to school with inadequate communication and language skills. As research suggests that oral language development in kindergarten and preschool is predictive of future literacy skills it is important that teachers recognize this and provide optimal environments for language learning (Butler, Marsh, Sheppard, & Sheppard, 1985; Dickinson, McCabe, Anastasopoulos, Peisner-Feinberg, & Poe, 2003; Good, Simmons, & Kame`enui, 2001; Juel, 1988; Nation & Snowling, 2004; Tabors, Snow, & Dickinson, 2001). According to Vygotsky's theory of socio-cultural development (1986), all new learning is influenced by prior cultural experiences, especially those experiences which occur in the family setting. Recognizing this diversity of prior experience and building relationships with children and families could potentially result in a more positive education experience for these children (Chirichello & Chirichello, 2001; Keyser, 2006; Soundy & Stout, 2002). In terms of social change, successful academic achievement can provide opportunities for children of Hawaiian descent to increase earning power, to participate more fully in the process of self-government, and to assume leadership positions on local, state, and national levels (Sumida & Meyer, 2006). This study adds to the current knowledge base about the effectiveness of multiyear (MY) versus single-year

(SY) environments, particularly in the way that long-term relationships affect the language development of children of Hawaiian descent at KSCBECE programs in Hawaii.

The purpose of this chapter is to present the results of the statistical analyses of this study. The group of MY students and SY assignment students is described through the reporting of frequency counts and mean scores of language assessments. The profile of the teacher participants is presented through frequency counts of both years of experience and educational attainment. Participant profiles summarize the descriptive information. A group profile summarizes mean scores of all continuous variables. The means of several variables are compared through the use of *t* tests and two-way analysis of variance which investigated the effects of group assignment, gender, SES and maternal education on PPVT-III and DIAL-3 scores.

Research Questions

The following questions were formulated to address the issue of possible receptive and expressive language differences between groups of students assignment to either a MY program or a SY program configuration. The research questions addressed in this study follow:

1. Is there a significant difference in the PPVT-III scores for students who spend 2 years with the same teacher compared to those who do not?

2. Is there a significant difference in the DIAL-3 scores for students who spend 2 years with the same teacher compared with those who do not?

3. Is there a significant difference in MY assignment and SY classroom assignment language scores on PPVT-III and DIAL-3 expressive and receptive language when controlling for the effects of gender, socio-economic status, and maternal education?

4. Does Teacher education and years of experience have a possible influence on language scores?

Hypothesis

HO1: There will be no difference between receptive language scores as measured by the PPVT-III, and language development as measured by the DIAL-3 for students who stay with one teacher for 2 years and those who have a different teacher for each of the 2-years in the program.

H1: There will be a significant difference between language scores as measured by the PPVT-III, and language development as measured by the DIAL-3 for students who stay with one teacher for 2 years and those who have a different teacher for each of the 2 years in the program.

HO2: There will be no difference between receptive language scores as measured by PPVT-III, and language development as measured by the DIAL-3 for students who stay with the same teacher for 2 years compared with students who have two different teachers for each of the 2 years in the program controlling for effects of gender, SES, and maternal education.

H2: There will be a significant difference between scores as measured by PPVT-III, and language development as measured by the DIAL-3 for students who stay with the same teacher for 2 years compared with students who have two different teachers for

each of the 2 years in the program controlling for effects of gender, SES, and maternal education.

HO3: There will be no difference between receptive language scores as measured by PPVT-III, and language development as measured by the DIAL-3 for students who stay with the same teacher for 2 years compared with students who have two different teachers for each of the 2 years in the program controlling for effects teacher education and teacher years of experience.

H3: There will be a significant difference between scores as measured by PPVT-III, and language development as measured by the DIAL-3 for students who stay with the same teacher for 2 years compared with students who have two different teachers for each of the 2 years in the program controlling for effects of teacher education and teacher years of experience.

Data Collection

The following archival data sources were collected for use in this study:

1. Fall 2007 – The Peabody Picture Vocabulary Test – Third Edition (PPVT-III) was administered to all 3-year-old students at KSCBECE by independent testers trained and hired for the position of tester by the school.

2. Spring 2008 – The Peabody Picture Vocabulary Test – Third Edition (PPVT-III) was administered by the same group of testers as a posttest for the same group of students.

3. Fall 2008 – The Peabody Picture Vocabulary Test –Third Edition (PPVT-III) was administered to all 4-year-old students at KSCBECE by independent testers trained and hired for the position of tester by the school.

4. Spring 2009 – The Peabody Picture Vocabulary Test – Third edition (PPVT –III) was administered by the same group of testers as a posttest for the same group of students.

5. Fall 2008 – The Developmental Indicators for the Assessment of Learning- Third Edition (DIAL-3) was administered to all 4-year-old students by the teachers.

In addition teachers included in the study were asked to complete an agreement to participate and survey of years of experience and educational level and return to researcher.

Data Analysis

The profile of the student participants and groups indicated the mean chronological age of each group, socio-economic status for each group, the maternal educational achievement for each group, and gender for each group at the end of the 2nd year of the study. Teacher experience and education was included in a separate profile. The mean and standard deviation for the Peabody Picture Vocabulary Test-III (PPVT-III) were computed for the experimental (MY) and control (SY) groups on both the pre- and posttest scores. In order to test the assumption that there was no significant difference between the scores of children in the groups a *t* test for independent samples was

employed using SPSS. An independent *t* test was employed in order to compare the scores on the posttest language portion of the DIAL-3. Two- way analysis of variance (ANOVA) was used to compare the group means on the PPVT-III assessment of the MY and the SY groups controlling for socio-economic status, educational profile of maternal educational achievement, and gender. In order to determine the impact of teacher education and teacher years of experience on receptive language as assessed by the PPVT-III and DIAL-R assessments ANOVA was performed using SPSS.

Results

Description of Sample

The participants were students who spent 2 years with the same teacher, a multiyear assignment (MY) and those students who spent each of the 2 years of the program with a different teacher, single-year assignment (SY). The proposed sample size of 104 student participants was reduced due to student attrition rates and transfers of several students from one program site to another. The final total of eligible participants was 87 students. Of these (36, or 41%) were assigned to the MY group and (51, or 58%) were assigned to the SY assignment group. Teacher participants were described as the lead teachers in all classrooms in the West Hawaii Region of Kamehameha Schools Community Based Early Childhood Education (KSCBECE). Eleven of 13 teachers completed the agreement of participation and survey. Table 1 presents the student participant profiles.

Table 1

Student Participant Profiles (N=87)

Characteristic	MY (*n*=36)		SY (*n*=51)	
	n	*%*	*n*	*%*
Gender				
Male	19	52.8	25	49.0
Female	17	47.2	26	51.0
SES				
$<19999	1	2.8	4	7.8
$20000-29999	3	8.3	5	9.8
$30000-39999	8	22.2	4	7.8
$40000-49999	5	13.9	6	11.8
$>50000	19	52.8	32	62.7
Maternal Education				
<High School	1	2.8	3	5.9
High School	26	72.2	36	70.6
Associate's Degree	6	16.7	6	11.8
Bachelor's Degree	2	5.6	5	9.8
Master's Degree	1	2.8	1	2.0

Note. SES is measured by annual income level.

Specific categorical information was collected and frequency counts of the student participants was created for each item and reported in Table 1 by group status. Table 1 includes the number of student participants in each group and the percentage of that subgroup represented. There were slightly more males than females in the MY group, compared with slightly less males in the SY group. The majority of students in both groups were from families earning more than $50,000 per year, indicating that these

groups of students were not from families that would be considered low income. Over 70% of both groups had mothers who had obtained a High School Diploma as their highest level of educational achievement.

Table 2 presents the demographic information collected from the participating teachers.

Table 2

Teacher Participant Profiles

Characteristic	MY (*n*=5)		SY (*n*=6)	
	n	%	*n*	%
Years of Experience				
<5	1	20	-	-
6-10	2	40	3	50
11-20	1	20	2	33
21-30	-	-	1	17
31-40	1	20	-	-
Educational level				
Bachelor's	2	40	5	83
Master's	3	60	1	17

The information collected from teachers and presented in Table 2 indicated that (3, or 60%) of teachers in the MY program had a master's degree and one teacher in that program had more than 30 years of experience. For teachers in the SY program (5, or 83%) had a bachelor's degree and only one teacher had more than 20 years experience.

For both groups of teachers, the majority were working with between 6 and 10 years of experience.

Figure 1 presents the gender distributions for both the experimental (MY) and control group (SY). Overall the students groups were fairly consistent in terms of gender with slightly more males (19, or 53%) compared to females (17, or 47%) in the MY group and slightly fewer males (25, or 49%) compared to females (26, or 51%) in the SY group. As there is some evidence that suggests there may be a relationship between language development and gender with girls having slightly higher scores on standardized language assessments, this difference between groups could potentially affect the results of this particular study (Locke, Ginsborg & Peers, 2002; Resnick & Goldfield, 1992; Westerlund & Lagerberg, 2008). There is a possibility that language scores could be higher for the SY group based on the larger percentage of female students in that group.

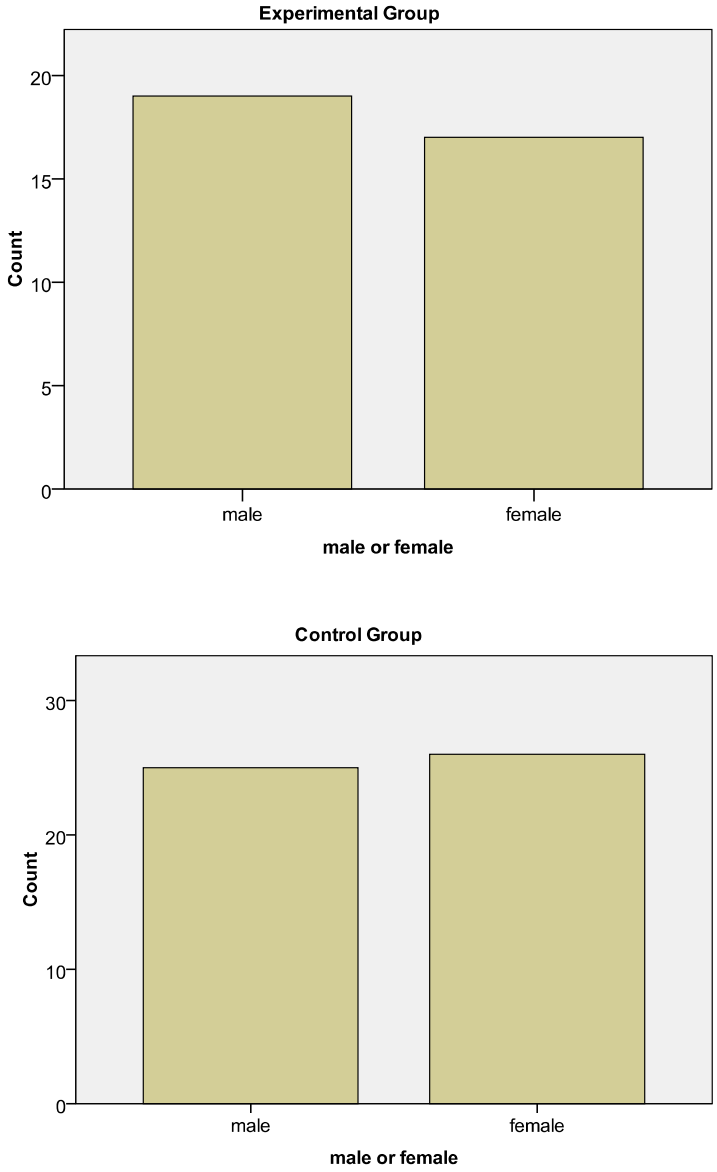

Figure 1. Student gender distributions of experimental and control group

Figure 2 presents the socio-economic status of the experimental group (MY) and control group (SY) based on annual income.

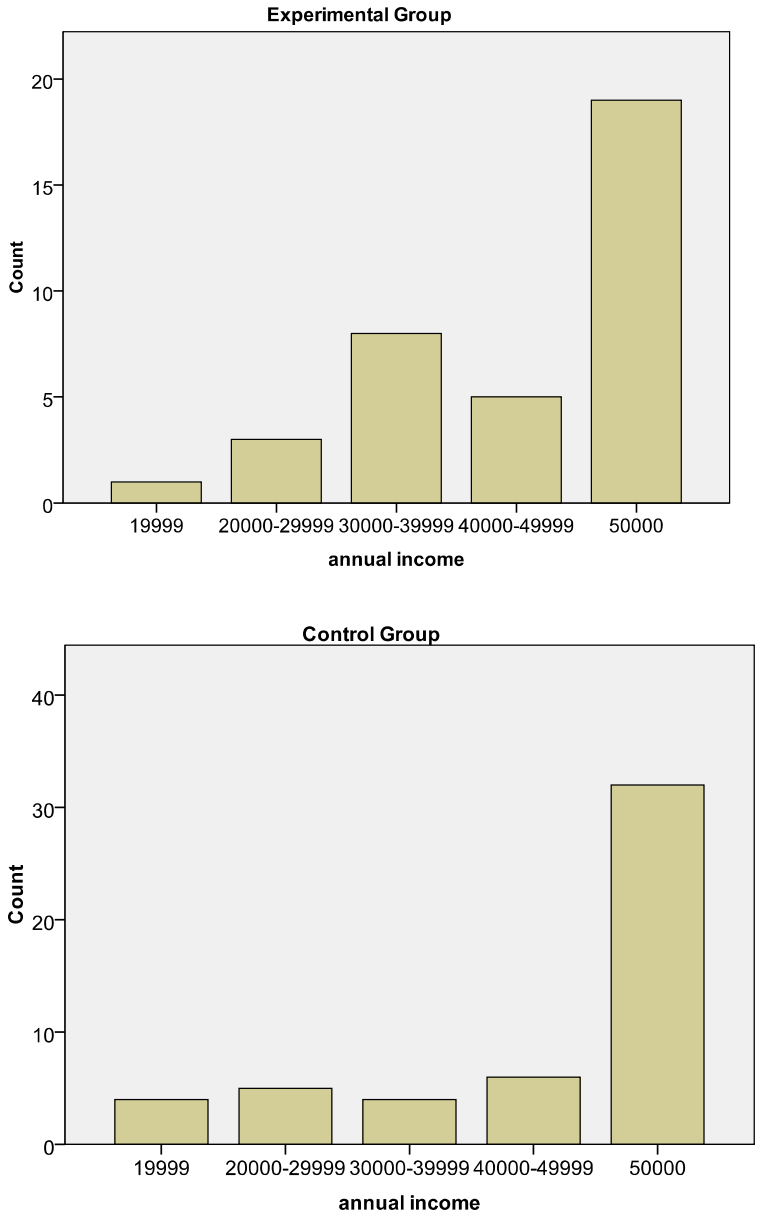

Figure 2. Socio-Economic Status of Experimental and Control Groups

According to the socio-economic status statistics as measured by income the highest percentage of student participants in both groups were from families earning over $50,000 per year (19, or 52%) of the MY group and (32, or 62%) of the SY families reported incomes in the highest bracket. Of the families in the MY program (4, or 11%) reported incomes of less than $30,000 per annum compared with SY program families (9, or 17%). These demographics suggest that there was greater diversity of SES for families in the more urban areas where SY programs are located as more families report incomes in the highest earning bracket and a larger percentage report earnings in the lowest income brackets. These differences in SES as measured by income may possibly have had some affect on the results of this study. Research suggests that low income girl's language scores were affected as risk factors increased at a higher rate than the language scores of boys (Stanton-Chapman, Chapman, Kaiser, & Hancock, 2004). Therefore, the higher percentage of girls in the SY group could possibly be mediated by the diversity of income including more families in the lower income brackets than for the MY group. It is interesting to note that the majority of families chosen by lottery to participate in program services in the West Hawaii Region of KSCBECE were generally in the higher income bracket. These findings may possibly generate further investigation into the reasons why lower income families are not as well represented. In order to test for the effect of income and group assignment on language scores a two-way analysis of variance (ANOVA) was performed and the results reported later in the chapter.

Figure 3 presents the maternal educational level for the experimental (MY) and control (SY) groups.

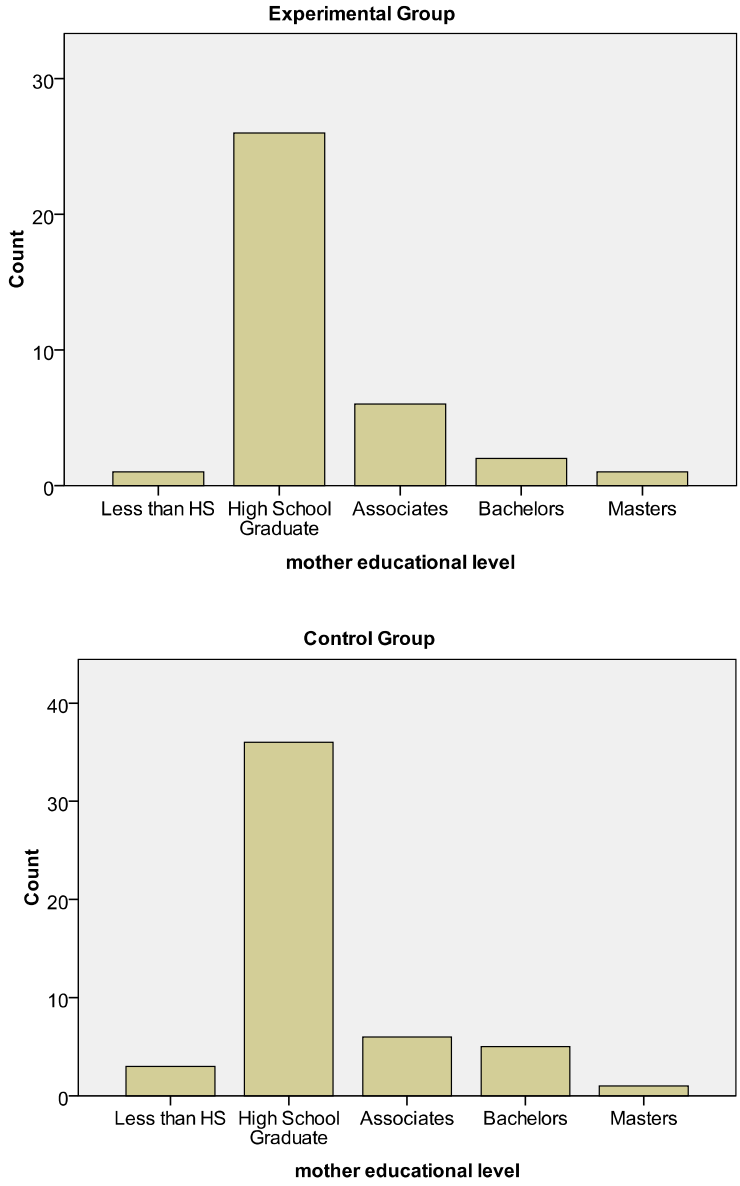

Figure 3. Maternal Educational Level of Experimental and Control Groups

Maternal education statistics were fairly consistent for both groups. A high school diploma was the highest educational level reached by the majority of mothers, MY (27, or 75%) and SY (29, or 70%). Results of a study by Hoff (2003) suggests that although environment influences vocabulary development it may be the specific differences in the language experiences that affect the rate of vocabulary development in young children and that exposure to a richer vocabulary and style of language appears to support vocabulary development regardless of other aspects of SES. Burchinal et al. (2002) found that higher education levels of parents supported higher academic skills in young children. A study of language performance of low-income African American and European American preschool children on the PPVT-III carried out by Qi, Kaiser, Milan and Hancock in 2006 suggested that maternal education level was uniquely associated with children's language performance. The results of this study of low-income preschool students suggested that the vocabulary development of children who live in poverty is correlated to parental education. It is interesting to note in the demographics of the current study that although the highest level of maternal education gained for the majority of participant families is high school graduate, the majority of families also report income in the highest bracket of $50,000 and higher. In order to test the interactive effect of maternal education and group assignment on language scores, a two-way ANOVA was performed and the results reported later in this chapter.

In order to examine the null hypothesis that there is no difference between scores on the PPVT-III for students in MY programs compared to those in SY settings in the

first year of the program an independent samples *t* test was performed. Table 3 presents the results of these statistical tests.

Table 3

Mean Difference of Pretest and Posttest Scores on PPVT-III P-3

	P-3 Pretest *M (SD)*	P-3 Posttest *M (SD)*
MY	93.67 (13.60)	101.90 (9.68)
SY	96.38 (12.43)	102.47 (13.32)

Note. P-3 is the first year of the 2-year program cycle.

For the pretest scores Levene's test for equal variance is non-significant, $p = 0.99$ and therefore we can establish that the assumption of homogeneity of variances is met. The two-tailed value of $p = 0.46$ for the pretest indicates that there is no significant difference between the means of these two samples at $p = < 0.05$. For the posttest scores Levene's test for equal variance is non significant at $p = 0.18$ indicating that again the assumption of homogeneity of variances is met. The two tailed value of $p = 0.87$ for the posttest indicates once again that there is no significant difference between the means of these two samples at $p = < 0.05$. On average the SY group had higher scores than the MY group on the PPVT-III for both the pre- and posttest. This difference was not significant at $t\ (53) = -0.74$, $p > 0.05$ for the pretest scores and $t\ (56) = -0.18$, $p = > 0.05$ for the posttest scores.

Table 4 presents the mean difference between pre- and posttest scores on the PPVT-III for the students in the second year of the program.

Table 4

Mean Difference of Pretest and Posttest Scores on PPVT-III P-4

	P-4 Pretest *M (SD)*	P-4 Posttest *M (SD)*
MY	100.00 (13.47)	106.00 (12.80)
SY	100.13 (12.22)	104.24 (10.31)

Note. P-4 is the second year of the 2-year program cycle.

On average the MY group had higher scores on the posttest than the SY group. In both pre- and posttest the standard deviation indicated that there was less variability around the mean scores for the SY group. Both groups lost some ground over the course of the summer break but began the second year of the program at the population mean of 100.00 for the MY group and 100.13 for the SY group. For the pretest scores Levene's test for equal variance is non-significant, $p = 0.96$ and therefore we can establish that the assumption of homogeneity of variances is met. The two-tailed value of $p = 0.97$ for the pretest indicates that there is no significant difference between the means of these two samples at $p < 0.05$. For the posttest scores Levene's test for equal variance is non significant at $p = 0.33$ indicating that again the assumption of homogeneity of variances is met. The two tailed value of $p = 0.59$ for the posttest indicates once again that there is

no significant difference between the means of these two samples at $p < 0.05$. Although significance was not met, on average the MY group had higher scores than the SY group on the PPVT-III on the posttest. Table 5 presents the mean differences between the pretest score at the beginning of the 2 year program and the posttest score at the end of the 2 year program.

Table 5

Mean Difference of Pre- and Posttest Scores on PPVT-III P-3 and P-4

	P-3 Pretest	P-4 Posttest
	M (SD)	*M (SD)*
MY	93.66 (13.60)	106.00 (12.80)
SY	96.38 (12.43)	104.24 (10.31)

On average, the MY group made more gains over the course of the 2 year program than did the SY group. Beginning with a lower mean score than the SY group, the MY group ended with a higher mean score. The higher standard deviation for both beginning and ending scores on the MY group scores indicates that there is greater variation around the mean for that group. As indicated in the previous paragraphs and Table 3 and Table 4, the difference between the scores for both groups on the pre- and posttests do not reach significance at the $p < 0.05$ level.

Table 6 presents the mean difference between the group scores on DIAL-3 assessment during the second year of the program.

Table 6

Mean Difference between MY and SY Groups on DIAL-3 Scores

MY DIAL-3 Scores	SY DIAL-3 Scores
16.80 (3.72)	14.71 (3.67)

In order to test the possible effect of a MY assignment compared to a SY assignment on DIAL-3 scores an independent *t* test was conducted on posttest scores only as pretest scores for this assessment were not available Levene's test for equal variance was not significant at 0.85 and therefore it can be assumed that homogeneity of variances is met. On average the students in the MY group performed better than the SY group on the DIAL-3. However, this difference was not significant $t\ (54) = 2.02$, $p > 0.05$.

In order to test the null hypothesis that there was no difference between receptive language scores as measured by PPVT-III, and language development as measured by the DIAL-3 for students who stay with the same teacher for 2 years compared with students who have two different teachers for each of the 2 years in the program controlling for effects of gender, SES, and maternal education a two-way ANOVA was performed on each variable. Table 7 presents the mean and standard deviation on PPVT-III P-4 scores for groups by gender.

Table 7

Mean Difference of PPVT-III P-4 Scores by Gender

	Male *M (SD)*	Female *M (SD)*
MY	108.20 (12.21)	103.25 (13.81)
SY	102.50 (12.83)	105.57 (7.97)

Note. P-4 is the second year of the 2-year program cycle

Overall male students had a slightly higher mean score $M = 105.35$ compared with female students $M = 104.41$. However, male students in the MY program had the highest mean score of all students both male and female in both programs. There was no significant effect of gender on the PPVT-III post scores, $F(1, 51) = 0.08$, $p = > .05$. The combined effect of gender and class group on PPVT-III scores while not significant had a higher ratio $F(1, 51) = 1.53$, $p = > .05$ than either of the variables alone.

Table 8 presents the mean scores for DIAL-3 on P-4 posttest controlling for the effects of gender.

Table 8

Mean Difference of DIAL-3 P-4 Scores by Gender

	Male *M (SD)*	Female *M (SD)*
MY	17.09 (4.06)	16.44 (3.47)
SY	13.87 (4.24)	15.40 (3.08)

Note. P-4 is the second year of the 2-year program cycle.

When controlling for the effects of gender on DIAL-3 scores there was a significant effect of class group and gender on the DIAL-3 language scores across groups $F\,(1, 52) = 0.04$, $p = < .05$. This finding suggests that students in the MY group performed significantly better on the DIAL-3 than did students in the SY group when taking the gender of the student into account. In particular, the male students in the MY group performed at a significantly higher level than did the male students in the SY group.

Table 9 presents the mean scores for PPVT-III controlling for the effect of group assignment and SES measured by income.

Table 9

Mean Difference of PPVT-III P-4 Scores by SES

	<19 *M*	20 - 29 *M*	30 – 39 *M*	40 -49 *M*	>50 *M*
MY	99.00	107.50	99.40	94.00	111.44
SY	103.33	99.75	108.67	105.33	106.33

Note. P-4 is the second year of the 2 year program cycle
Income measured in thousands of dollars

In order to determine the impact of MY assignments and SES on PPVT-III scores an ANOVA was performed. This test was performed to investigate any possible effect of SES as measured by income on language scores for students in both the MY and SY assignment group. There was a non-significant effect of SES as measured by income on the language scores, F (4, 67) =.62, p = > 0.05. The interactive effect of SES and group assignment was also non-significant at F (4, 72) = 1.18, p = > 0.05.

Table 10 presents the mean scores for DIAL-3 when controlling for SES as measured by income.

Table 10

Mean Difference of DIAL – 3 P-4 Scores by SES

	< 19	20–29	30-39	40–49	> 50
MY	19.00	15.67	15.80	13.50	18.22
SY	15.00	13.75	13.67	13.33	15.17

Note. P-4 is the second year of the 2-year program cycle
Income measured in thousands of dollars

In order to determine any effects of multiyear relationships on DIAL-3 scores when controlling for the effects of SES as measured by income a two-way ANOVA was performed. The effect of SES on DIAL-3 scores was not significant, F (4, 1.20) = .32, p = > .05 and the combined effect of SES and group assignment was also found to be non-significant at F (4, 0.19) = .94, p = > .05.

Table 11 present the mean PPVT-III scores when controlling for the effects of maternal education.

Table 11

Mean Difference of PPVT-III P-4 Scores by Maternal Education

	< HS	HS	AS	BS	MA
	Mean	Mean	Mean	Mean	Mean
MY	99.00	102.90	114.25	102.50	118.00
SY	117.00	102.12	109.20	106.25	114.00

Note. P-4 is the second year of the 2-year program cycle

In order to investigate the possible effects of maternal education on the PPVT-III scores at KSCBECE a two-way ANOVA was performed. Although the mean scores for both groups of students were the highest for families for whom maternal education was a master's degree, the overall scores failed to demonstrate significance, F (4, 73) =.50, p = > .05.

Table 12 presents the mean scores for the effect of maternal education on DIAL-3 scores.

Table 12

Mean Difference of DIAL-3 P-4 Scores by Maternal Education

	< HS	HS	AS	BS	MA
	Mean	Mean	Mean	Mean	Mean
MY	19.00	17.00	16.60	14.50	18.00
SY	19.00	13.88	15.00	17.00	22.00

Note. P-4 is the second year of the 2 year program

The effect of the interaction between maternal education and classroom assignment on the DIAL-3 language scores of the students was also failed to demonstrate significance. In this test F (4, 46) = 1.07, p = >.05. It is interesting to note that the mean score for the families with less than high school education were compatible with the mean scores for families with a maternal education level of master's degree. However, there was only one family in each of the groups who had less than high school and one family in each of the groups with a master's degree.

In order to test the null hypotheses of no difference between receptive language scores as measured by PPVT-III, and language development as measured by the DIAL-3 for students who stay with the same teacher for 2 years compared with students who have two different teachers for each of the 2 years in the program controlling for effects teacher education and teacher years of experience a final analysis was performed. The analysis begins with a graph showing teacher educational level by group in Figure 4.

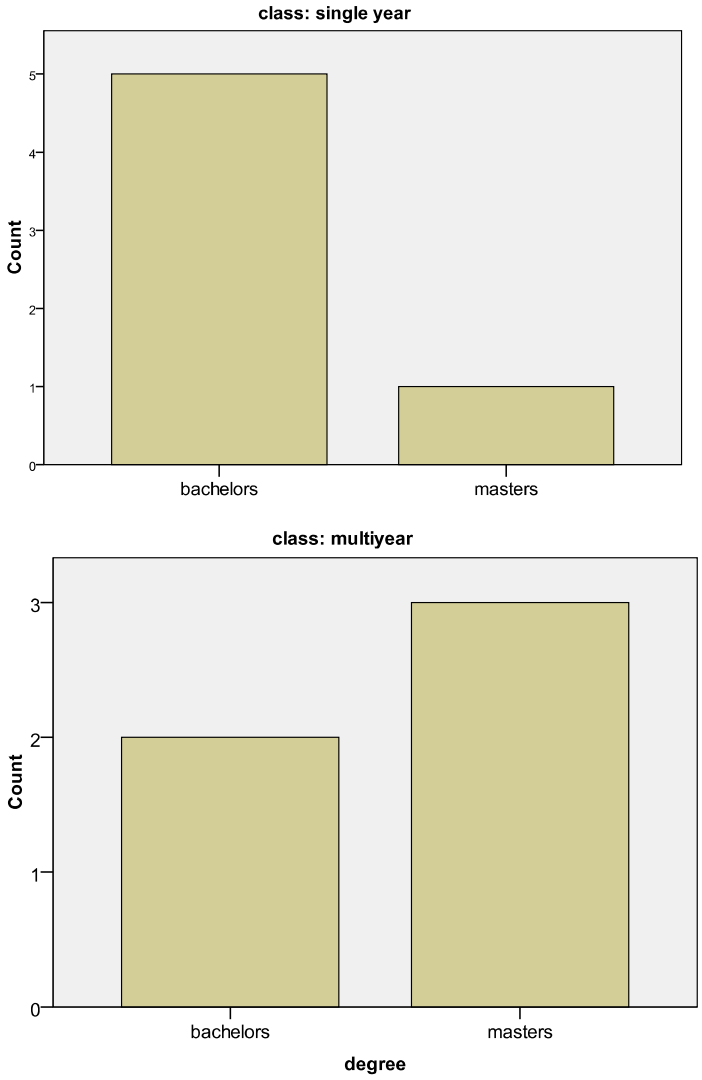

Figure 4. Teacher Educational Level Multiyear and Single-year Groups

As seen in Figure 4, the MY teachers had a range from 2 years to 39 years of experience *M* = 15.8 *(SD* = 14.50*)* Teachers in the MY program had a higher percentage of master's degree (3, or 60) compared to the teachers in the SY program (1, or 17). SY teachers had a minimum of 10 years experience and maximum 25 years with *M*= 16.17, *SD (*6.34*).*

Table 13 presents the data for teacher educational level

Table 13

Mean Difference in PPVT-III Scores Controlling for Teacher Education

	Bachelor's	Master's
	M (SD)	*M (SD)*
	104.24 (10.31)	106.00 (12.80)

Levene's test was not significant, suggesting the two groups had equal error variances. The independent samples *t* test failed to reveal a significant difference between student scores after controlling for the effects of teacher education, $t(53) = -.55$, $p > .05$. As there was no significant difference between scores when controlling for teacher educational level the null hypothesis that there is no difference between scores when teachers have a higher level of teaching degree cannot be rejected and there is no evidence that in this study higher teaching credentials lead to higher scores for children in either MY or SY assignment groups. However, on average, students in classrooms with a teacher with a master's degree had a slightly higher mean score than those in classroom with a teacher who had a bachelor's degree.

Table 14

Mean Difference in DIAL-3 Scores Controlling for Teacher Education

Bachelor's	Master's
M (SD)	*M (SD)*
14.72 (3.67)	16.80 (3.72)

On average, students in classrooms with a teacher with a master's degree had a slightly higher mean score than those in classroom with a teacher who had a bachelor's degree. However, it is important to note that only one teacher in the SY group and three teachers in the MY group had a master's degree.

Figure 5 shows the years of experience for teachers in this study.

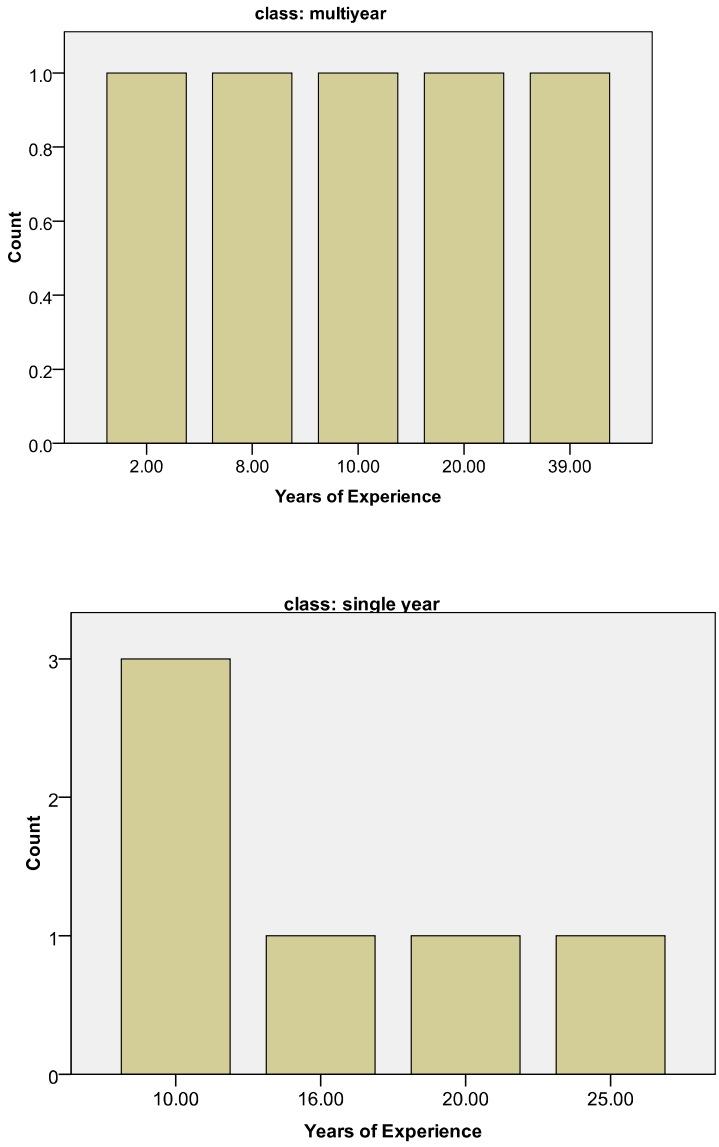

Figure 5. Multiyear and Single-year Teacher Years of Experience

Using a cut-off point of the mean years of experience > = 15, Levene's test for homogeneity of variances was non significant, suggesting that the two groups had equal error variances. There was very little difference between means, M= 105.07, SD = 12.14, and SE = 2.36 for the PPVT-III P-4 post scores for teachers with 15 years or more of experience and M = 104.57, SD = 10.22, SE = 1.93 for the teachers with less than 15 years experience. The results of an independent t test suggested that there was a non-significant difference between mean scores for the two groups of students measured by teacher years of experience , $t(53) = .17$, $p = > .05$. Again, as there was no significant difference in scores between the MY and SY programs, there is no evidence that the years of experience had an effect on assessment scores in this study and the null hypothesis of no difference between scores failed to be rejected.

Summary

The findings from this study indicated that for every test of significance except one there was no significant difference between scores for students enrolled in multiyear (MY) programs compared to those enrolled in single-year (SY) programs. There is however, a significant effect of multiyear assignment on the scores for the DIAL-3 assessment for male students. As this assessment was performed by the teaching staff in the classroom setting and the test was administered in the second year of the program, perhaps a higher level of comfort was achieved in the test situation. Overall, the null hypothesis of no difference between scores on standardized language assessments failed to be rejected and there was no statistical evidence that spending 2 years with the same teacher leads to higher scores than spending each of the 2 years with different teachers at

KSCBECE for PPVT-III assessment scores. Although the findings failed to reach significance at the $p = .05$ level there were some differences in scores between the two groups. The students in the MY group made more gains both throughout the individual years of the program and over the 2 year course of the program. The MY group began the study with slightly lower scores on PPVT-III and ended with higher scores, demonstrating more gains than the SY group. The overall gain from pretest P-3 to posttest P-4 was 12.34 for the MY group, compared to overall gains of 7.86 for the SY group. Although these mean gain scores did not reach significance, the lower beginning scores of the MY group and higher ending scores of that group would bear some further research. When controlling for the effects of student gender, SES, and maternal education on the PPVT-III, no significant effects were found. The majority of mothers involved in both programs reported an educational level of high school diploma. Although prior studies have found a relationship between academic risk and maternal education (Beitchman et al., 2008; Qi, Kaiser, Milan & Hancock, 2006; Westerlund & Lagerberg, 2007) it may be that the higher income reported by the majority of families in the current study had the potential to ameliorate the risk for lower scores on the PPVT-III and DIAL-3 assessments. Qi, Kaiser, Milan, and Hancock (2006) and Rouse and Fantuzzo (2009) argued that it is the combination of low maternal educational level and low income that increases the risk of academic failure for young children. Future research at KSCBECE could investigate the possible effects of maternal education and income level both as individual and co-variables on the language development of children of Hawaiian descent.

Although the findings did not support the predictions of this study that a teacher's years of experience and educational level would have an effect on student scores, the design of the study did not allow for the comparison of individual teacher characteristics to be analyzed and compared directly with the scores of children in their particular classrooms. Earlier studies have found that the complexity of teacher relationships with children and the quality of teacher instruction are predictive of academic achievement (Dickinson &Tabors, 2002; Pianta, 2006) however a review of studies by Early et al. (2007) found there is little and contradictory evidence that teacher education attainment is a predictor of increasing classroom quality or maximizing children's academic gains. Pianta et al. (2005) suggested that when global quality is assessed by Early Childhood Environmental Rating Scale-Revised (ECER-R), classroom quality was lower in a classroom composed of a majority of children from families living below the poverty line, and that had teachers without a BA level training. However, the current study does not include these demographics as most children enrolled do not live in families with incomes below poverty and all teachers at KSCBECE must have at least a BA level degree in education or a related field. Further studies would be necessary in order to more fully understand the effects of teacher years of experience and educational level on assessment scores in classrooms at KSCBECE.

In chapter 5 the results are interpreted, the social change implications of this study are addressed, and recommendations for future study are made.

CHAPTER 5:

SUMMARY, CONCLUSION, AND RECOMMENDATIONS

Overview

In response to the mandates of NCLB (2001) the State of Hawaii put into place a Kindergarten Readiness Profile to be completed by schools and submitted to the State Department of Education (HSSRA, 2005). Reviews of the classroom assessment scores for 2006- 2007 indicated that many kindergarten children in Hawaii are arriving at school with inadequate communication and language skills for successful academic achievement. There are numerous studies that suggest there is a relationship between early language and later academic achievement (Butler, Marsh, Sheppard, & Sheppard, 1985; Dickinson, McCabe, Anastasopoulos, Peisner-Feinberg, & Poe, 2003; Good, Simmons, & Kame`enui, 2001; Juel, 1988; Nation & Snowling, 2004; Tabors, Snow, & Dickinson, 2001). In particular, children of Hawaiian descent are at risk for academic failure due to socio-economic, language, and cultural differences between traditional and western approaches to the educational process (Au & Blake, 2003; Sumida & Meyer, 2006). This study investigated the possible effectiveness of a 2 year relationship with teachers on language scores compared with the language scores of students enrolled in a program that offers two different teachers for each of the program years. The research method used a quasi-experimental pretest posttest design to compare scores on the Peabody Picture Vocabulary Test – Third Edition (PPVT-III) and the Developmental Indicators for the Assessment of Learning- 3 (DIAL-3) assessments for students in a multiyear configuration (MY) and single-year configuration (SY) at Kamehameha

Schools Community Based Early Childhood Education (KSCBECE) in West Hawaii. Data was collected from each of the sites and entered in SPSS. In order to test the hypothesis of no difference between scores for MY and SY groups, an independent *t* test was performed on posttest scores for PPVT-III. The mean gain score for the MY group from first year pretest to second year posttest on the PPVT-III was 12.34 and for the SY group 7.86. Although the mean gain for the MY program was higher than that of the SY program these findings did not reach significance at $p < .05$. Therefore, the null hypothesis of no difference between group scores could not be rejected and the prediction that 2 year relationships with one teacher would significantly increase scores was not established. Posttest only scores were analyzed for the DIAL-3 assessment as pretest scores were not available. The scores for the groups on the DIAL-3 language portion of post test assessment indicate that again the MY group had a slightly higher mean (M=16.80, SD = 3.72, SE = .65) compared with the SY assignment group mean of (M = 14.71, SD = 3.67, SE =.53). These findings also failed to establish significance and the null hypothesis of no difference between DIAL-3 scores for the MY and SY groups could not be rejected. In addition, when controlling for the effects of SES measured by income, and maternal education, no significant effects were detected and the null hypothesis of no difference between scores could not be rejected. When a two-way analysis of variance (ANOVA) was performed to control for the effect of gender and class assignment on DIAL-3 scores, significance at $p < .05$ was determined. It appears that a two-year relationship may support significantly higher scores of male students on DIAL-3 in the second year of the program. As teaching staff administers this assessment in the

classroom setting, there may possibly be a higher level of comfort for the students, particularly male students.

A descriptive analysis of the teaching staff in both programs was developed through the use of a survey. Teacher qualifications at KSCBECE require at least a bachelor's degree in education or a related field and 2 years experience. There were some differences between the groups in terms of both education and experience with the MY group having a larger percentage of teachers with a master degree (3, or 60%) compared to (1, or17%) in the SY configuration. Using PPVT-III posttest scores, an independent samples *t* test failed to reveal a significant difference between student scores after controlling for the effects of teacher education t (53) = -.55, $p > .05$. The majority of teachers in both programs had between 6 and 10 years experience, with a range of between 2 and 39 years. In order to examine the possible effects of teacher years of experience on PPVT-III post test scores, a cut-off point of 15 or less years of experience was used. There was very little difference between scores M = 105.07, SD = 12.14, and SE = 2.36 for scores of students with teachers who had more than 15 years of experience and M = 104.57, SD = 10.22, SE = 1.93 for students with teachers who had 15 or less years of experience. The results of an independent *t* test suggested that there is a non-significant difference between mean scores for the two groups, t (53) = .17, p = > .05.

This study was designed to provide policy makers at Kamehameha Schools with information about the possible cost-effectiveness of an approach to programming that could potentially strengthen the language development of children of Hawaiian descent. Through the development of supportive relationships it is assumed that students will be

more successful in academic endeavors, leading to positive social change as the achievement gap is reduced. In addition, because policy makers usually require empirical evidence to support their decisions about funding issues, this study has the potential to influence program policy in ways that most effectively support children in their oral language development. Many children of Hawaiian descent speak Hawaii Creole English (HCE) as their primary language and come from marginalized populations (Au & Blake, 2003). For many years, educators in the State of Hawaii have struggled to understand the impact of these differences on the educational achievement, or lack thereof, of the people of Hawaii. The current study seeks to contribute to the body of knowledge needed to address this problem by assessing the possible influence of an early childhood context which supports long-term relationships between children and their peers, children and their teachers, and teachers and the families of the students on the language development of children of Hawaiian descent.

Interpretation of Findings

There is a growing interest in the effectiveness of building relationships with students and families through multiyear and looping configurations. The National Association for the Education of Young Children recognizes that positive and supportive relationships during the early years are essential for optimal development (Bredekamp & Copple, 1997). These principles of practice are guided by the work of Vygotsky and others who recognize the importance of relationships and knowledge of children's cultural background as essential for optimal development. A review of the literature in chapter 2 found mostly qualitative research on the impact of long-term relationships on

language and development, although some quantitative support has been garnered for the impact of stable and connected relationships on the acquision of language skills (Bulau, 2007; Burchinal et al., 2002; Soundy & Stout, 2002). The assumption of this study is that children who spend 2 years with the same teacher and peers will be provided with maximum opportunities to develop language skills due to the knowledge that teachers will acquire about individual children and family background.

Although the findings in this study failed to meet the standard for significance at the $p = < .05$ level, there were differences detected between groups. It appeared that there is a positive relationship between multiyear programs and PPVT-III and DIAL-3 language scores. On average, the students in MY groups made more gains over the course of the 2 years than did students in SY groups. Various factors may have affected the outcome of the study. Children may be affected by environmental factors which could impact scores (Thurman & McGrath, 2008). Not feeling well on the day of the test, failing to get a good night sleep before the test, anxiety and discomfort with the test setting or the tester could all affect the way that a student performs on the assessment. These factors were not taken into account in this study. Thurman and McGrath (2008) suggest that assessment of children cannot rely entirely on standardized assessment. Performance assessed only through the use of norm-referenced may not fully measure a student's level of achievement. It is necessary to recognize the effect of the environment and provide a natural setting in which to collect information about performance. While these authors recognize that accountability is important and norm-referenced assessment should be included they suggest that building a picture of the student through observation

in the natural environment is more likely to provide "more thorough and ecologically valid profiles of children's functioning (p. 11). Although authentic assessment and documentation is used in classrooms at KSCBECE, that information was not collected and used for comparison in this study. Therefore, it is important that further investigation of the developmental level of children at KSCBECE is supplemented by a variety of other assessment tools in addition to the norm-referenced tools used in this study.

Research Findings

This quasi-experimental nonequivalent control group design study compared the treatment group (MY) to the comparison group (SY) on student performance on the Peabody Picture Vocabulary Test-Third Edition (PPVT-III) and the language portion of the Developmental Indicators for the Assessment of Learning-3 (DIAL-3). The research design was from a post-positivism perspective following the assumptions that although absolute truth can never be found there must be a commitment to the examination of causes that influence outcomes through the reduction of ideas into small sets of ideas to test, and the development of numeric measures of observations (Creswell, 2003). The groups in this study were students enrolled in two different program configurations. One group of students spent 2 years with the same teacher at the same site, and the control group of students spent 2 years with two different teachers at two different sites. The dependent variables were the standard scores on the PPVT-III and the DIAL-3 assessments given to all students at KSCBECE pre and post the 3-year-old and 4-year-old classes. The findings suggest that although mean scores did increase for both groups, it is not certain if spending 2 years with the same teacher at KSCBECE improves the

language scores any more than enrollment in the control group. Program quality at KSCBECE is consistent between programs and teacher experience and years of education are similar. Each of the programs has access to the same resources and support systems and the study found that families in both programs are similar in terms of income and maternal education. None of the families involved in the study were found to be at risk of failure due to poverty, and this equality of SES may have an impact on the lack of significance between scores.

Marital status of families was not investigated, one area that could be explored in the future. Students enrolled in the MY program are in a mixed age group, and some research suggests that there may be a disadvantage to this configuration as introducing "five or more students in the 2nd year can be disruptive enough to reduce benefits of looping for the original students" (Simel, 1998, p. 332). This study did not investigate the mean score for all children in the mixed age multiyear program as only students who had been with the same teacher for 2 years were included. Future studies could be developed to look more closely at this phenomenon and the possible effects of adding new children to an existing looping group.

Implications for Social Change

Much of the research on multiyear relationships between students and teachers has focused on the social and emotional impact of building relationships in academic settings (Ostrosky, Gaffney, & Thomas, 2006). It has been suggested that a stable environment with ongoing, long-term relationships and continuity of instruction support effective learning (Chirichello & Chirichello, 2001; Keyser, 2006; Soundy & Stout,

2002). Awareness of teacher expectations, an informed view of each child's abilities and personality, and some knowledge of the child's home and family circumstances are all aspects of a quality learning environment (Meisels & Shonkoff, 1990; O'Connor & McCartney, 2007). The implications of research findings on the relationship between educational approaches and achievement are important for the future of children of Hawaiian descent and will affect social change in the lives of those children. Education is the foundation of a democratic society which provides equal opportunities for growth and advancement through access to knowledge and skills necessary for individual development (Martinez Aleman, 2001). A review of the philosophical approach of John Dewey (1916/1944) reveals that a major misunderstanding of his ideas lay in the misinterpretation of this concept of individuality. Dewey suggested that the support of individuality through educational opportunities is different from the concept of individualism which defines individual needs and economic self-interest as the driving force behind democracy. According to Dewey the concept of individualism drives the growth of capitalism and turns away from the development of individuality in society. The political forces that support the education system then serve to reinforce the structure of class organization rather than to support the growth of individuals. In the system based on individualism, children of Hawaiian descent struggle to succeed in a structure of education that does not meet the unique needs of the population (Sumida & Meyer, 2006). Current educational policy based on standardized assessment, rote learning, memorization, and culturally irrelevant curriculum content may contribute to school

failure for students who are not be able to benefit from traditional academically driven approaches (Ostrosky, Gaffney, & Thomas, 2006).

It has been suggested that when children enter an academic setting that is not representative of their cultural background, language, and ethnicity, persistent gaps in achievement result (Lutkus, Rampey, & Donahue, 2006). According to Risko and Walker-Dalhouse (2007) some researchers are finding success at reversing the trend of a widening achievement gap through the use of culturally responsive approaches to instruction. In order to optimize learning for a culturally diverse student population approaches which are based on active learning and a knowledge and understanding of the context of the community and family background of the student is necessary (Callins, 2006; Fleer & Raban, 2007; Quiocho & Rios, 2000; Sumida & Meyer, 2006). If the educational community acknowledges the philosophical approach to education first articulated by Dewey in the late 19th and early 20th century as support for the unique aspects that each individual brings to a democratic society it will lead to changes in approaches which in turn will lead to social change for children of Hawaiian descent. Through knowledge and appreciation for the cultural background of students at KSCBECE, teachers have the opportunity to build relationships within which knowledge can be co-constructed changing the educational outcomes for these children (Callins, 2006; Fleer & Raban, 2007; Skinner, Bryant, Coffman & Campbell, 1998).

The social change implications inherent in building relationships between teachers and students in Hawaii go far beyond language scores on standardized assessments. The allegation by the Hawaii Board of Education Chairman Mitsugi

Nakashima in 1999 that poor performance on standardized tests is linked to the use of HCE by students led to heated discussion in the State of Hawaii about the effects of this criticism on the sense of worth and confidence in young children (Da Pigeon Coup, 1999). The building of relationships allows teachers to develop deeper understandings of student learning styles and allows time to form communities of learners within which cooperative learning, positive self-esteem, and motivation for life long learning can be developed (Au & Blake, 2003; Sumida & Meyer, 2006). From a Vygotskian perspective, learning is situated in the context of everyday life (Vygotsky, 1978). Current educational approaches based on individualism in contrast to individual achievement remove the context of everyday life from the equation. When children are given the opportunity to engage in work that connects them to "their cultural roots in order to affirm their identity" teachers, students, and families become agents of social change (Sumida & Meyer, 2006, p.438). Children who have the opportunity to move forward into the next level of their educational experience with a sense of stability, knowledge of ways in which to build trusting relationships, greater confidence, and stronger life skills will come with a stronger foundation to meet the challenges of an educational system which may not be congruent with family and community experiences. Opportunities for employment and earning power will increase, higher education opportunities will be available, and stable and secure families will promote healthier living and intergenerational change. Without a change in perception from a cultural deficit perspective to a strength based perspective, the prospects of social change through educational success will continue to

move slowly despite the best effort of educators to promote language and literacy (Kana`iaupuni, 2005)..

Recommendations for Action

Kamehameha Schools Strategic Plan, 2000-2015 mission statement states: "To fulfill Pauahi's desire to create educational opportunities in perpetuity to improve the capability and well-being of people of Hawaiian ancestry." This mission statement holds social change as the vision for the people of Hawaiian ancestry and the commitment is to perpetuity. The first goal of the Strategic Plan is to support greater access to quality educational programs and services from prenatal period through pre-kindergarten. In order to meet this commitment to quality early childhood education policy makers will need access to research that provides empirical evidence for programming decisions. A comparison of language assessment scores from KSCBECE programs around the State, from classrooms with a diverse range of configurations may provide support for effective approaches to building language skills. Further research will be necessary in order to discover trends, patterns, and impacts of a variety of variables on the development of language in young children of Hawaiian descent. Follow-up studies of the students as they move into the educational system in their communities may possibly provide more information about the effects of long-term relationships on future academic achievement. These are areas that should be of great concern for the people of Hawaii as the contributions and talents of a large segment of the population remains unavailable and the unexplored potential of many individuals continues to lie dormant.

Early relationships between children and adults have been implicated in the development of numerous skills important for later growth and development (Ostrosky, Gaffney, & Thomas, 2006). In order to fully participate in the political, economic, and collective development of society participants must be connected in meaningful ways to the infrastructure of that society. Children who are disenfranchised from mainstream society through marginalization and cultural identification are consistently viewed as underachieving (Au & Blake, 2003). Moving from a deficit based approach to a strength based perspective has the potential to influence the Native Hawaiian community to regard their contribution to society as valid and significant for the future of the Islands (Kana`iapuni, 2005). According to Sumida and Meyer (2006) it will be necessary to look at innovative practices which will connect children of Hawaiian descent to positive educational success. Recognizing that knowledge is co-constructed between student and teacher can affect the trajectory of a child's educational achievement (Skinner et al., 1998). In order to connect learning to the child's cultural and community background, teachers need to build awareness of the student's prior knowledge as a foundation for building new knowledge and skills (Au & Blake, 2003). These researchers suggest that one way to support this connection is to look at the ways that teachers are trained and recruited. Building recruitment strategies to encourage Native Hawaiians to enter the teaching field has the potential to create positive classroom environments for children of Hawaiian descent (Au & Blake, 2003). About 27% of public school students in the State of Hawaii are Native Hawaiians, although only 9% of teachers are of Hawaiian ancestry (Office of Accountability and School Instructional Support/Planning and Evaluation

Group, 2008). In a review of research studies on minority group teachers Quiocho and Rios (2000) suggest that these teachers tend to have an approach to teaching that more closely matches the lives of culturally diverse student populations as they have lived with inequality in their own lives. Quiocho and Rios propose that along with culturally relevant curriculum, the addition of teachers from culturally relevant populations can increase the opportunities for success in children who are currently marginalized in the education system.

In order to increase the opportunities for children of Hawaiian descent to build trajectories of success in early childhood, several strategies are suggested. Curriculum that is based on culturally relevant topics, strong connections between family, community, and school, and the recruitment and hiring of teachers and staff that is of Hawaiian descent are just three of the approaches that could contribute to higher success rates. As knowledge of family, home, and community settings is important to supporting successful academic outcomes for students from diverse cultural backgrounds, it is hoped that other areas of development in addition to oral language development can be supported through multiyear relationships. Fleer (2006) suggests that cultural practices of indigenous people are very different from the western perspective and although her research has been conducted in Australia, there are many similarities between the cultural diversity of the Aboriginal families and families of Hawaiian descent. The importance of building relationships in order to learn about the cultural landscape of the children and families in early childhood settings in order to provide an environment that most effectively supports learning should not be minimized. Fleer, 2006 suggests that it is

only through building a deeper understanding of the home and community life of the child that true connections can be built.

Recommendations for Further Study

The potential of long-term relationships on students of Hawaiian descent at KSCBECE is an area that has not yet received extensive attention from administrators and research analysts at Kamehameha Schools (KS). Work is in progress to track KSCBECE students up to the 3rd grade in the Department of Education (DOE). This long-term research study designed to study the impact of early childhood education on later academic outcomes has the potential to provide more information about any effects of multiyear relationships as a strategy to improve outcomes for children of Hawaiian descent. The West Hawaii study presented in this work has a small sample size. The students and families are located in similar geographic areas on the Island of Hawaii and as the local economy and family connections encompass the area within which the programs are located, there is not a lot of diversity within and between groups in this study. Although the contexts within which the programs are administered are different, there is similar content, materials, and support in both areas. The research currently in progress to track the long-term achievement of children of Hawaiian descent at KSCBECE uses a broader and more diverse sample which reaches families in all areas of the State of Hawaii. Broadening the scope of the current study to include a larger sample size and more sites could possibly demonstrate different results. A comparison of looping programs in other parts of the state with single-year program assignments

throughout the state could have the potential of adding further information to that which has been gathered through this study.

As early oral language has been linked to future academic success it is important that children of Hawaiian descent are provided with opportunities for language development (Butler, Marsh, Sheppard, & Sheppard, 1985; Dickinson, McCabe, Anastasopoulos, Peisner-Feinberg, & Poe, 2003; Good, Simmons, & Kame`enui, 2001; Juel, 1988; Nation & Snowling, 2004; Tabors, Snow, & Dickinson, 2001). However, although the current study examined oral language scores as a dependent variable, there are other variables that have the potential to be affected by the impact of long-term relationships. The long-term effect of relationship building on social and emotional development and the possible impact of greater self-confidence and awareness on later academic achievement is an area that warrants further study. The concern that adding additional students to the 2nd year of a looping configuration resulting in a multiage group is an area that should be addressed in future studies. According to Simel (1998) the introduction of five or more students in a second year can be "disruptive enough to reduce benefits of looping for the original students" (p. 332). At KSCBECE programs in West Hawaii, the configuration of the MY program is not a true looping design. The eight original 3-year-olds are joined in the second year of the program by eight new 3-year-old and four new 4-year-old students. As research suggests that the benefits of a multiyear relationship with teachers are based on stability and persistence (Nichols, 2001; Rasmussen, 1998; Wynn, 1994) the disruption of the additional students into a group of students for whom the classroom has been a stable influence may be overwhelming.

Another element of the multiyear classroom which supports learning achievement is the added time for more instruction as students come to the classroom with prior knowledge of routines, rules, and expectations for behavior (Grant et al, 1996; Lincoln, 2000; Nichols, 1997). Teachers who must take time early in the year to teach a new group of students the rules, routines, and expectations for behavior in the classroom cannot fully take advantage of this benefit. This current study looked at the mean scores for the students in MY programs who completed 2 years with the same teacher and did not examine the mean scores for the whole group. Further examination of the group scores as a whole is warranted to investigate the possibility that teachers who have a mixed age group may be teaching to the mean.

The concern of the educational community in Hawaii that students are not meeting acceptable standards for reading and language arts in compliance with No Child Left Behind (2001) at third grade needs further examination of any possible relationship between the use of Hawaii Creole English (HCE) and standardized language scores. Strategies to improve the abilities of early childhood educators to build Standard English (SE) as a second language for children of Hawaiian descent who use HCE in their daily lives can be explored through further research. The possible impact of teacher educational attainment and years of experience on language development should be investigated using a wider range of educational degrees as control variables.

Building research designs using qualitative and mixed method approaches can bring new perspectives to the study of how relationships impact language development. These research designs can also be used to investigate potential relationships between

social and emotional development and language development. Although empirical evidence is often necessary to garner the support of policy makers for the implementation of pilot programs such as looping, the perspectives revealed through a qualitative approach can often be revealing and provide convincing arguments to implement new ideas.

In conclusion, there is no longer any discussion necessary about the potential impact of academic failure on the lives of people of Hawaiian descent. When educational opportunities are denied because of incongruence between cultural and linguistic foundations every effort must be made to discover effective ways to bridge these differences in order to effect social change. KSCBECE is committed to the perpetuation and integration of the practice of Hawaiian cultural knowledge in the schools and communities of Hawaii. It is in the interest of the larger community of learners in the state to increase access to and support successful integration of students of Hawaiian descent into the educational institutions in our communities. Until all the children of Hawaii have equal access to educational opportunities, the potential of many bright and untapped human resources will be neglected and unfulfilled.

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APPENDIX A

LETTER TO TEACHER PARTICIPANTS

The Impact of Multi Year Classroom Assignment on Language Development in Children of Hawaiian descent at Kamehameha School Community Based Early Childhood Education (KSCBECE) West Hawaii

You are invited to participate in a research study about multiyear classroom assignments. I am carrying out a study for my dissertation in early childhood education and you were chosen as a possible participant because you are a teacher in either a 4-year-old classroom or a multiyear classroom at KSCBECE West Hawaii. Please read this form and ask any questions you may have before completing the very short survey. Susan Collins, a classroom teacher with KSCBECE West Hawaii is conducting this study. The researcher does not have any current or prior students who are part of this study.

Background Information:

The purpose of this study is to examine the possible impact of multiyear assignments on language development for students in the West Hawaii Region of KSCBECE. I will compare standardized test results from students who spend 2-years with the same teacher and students who spend 2-years with two separate teachers. Only those children who have completed a 2-year program will be included in the study. In addition I will include teacher years of experience at KSCBECE and teacher educational attainment in the statistical review.

Procedure:

If you agree to be included in the statistics which measure years of experience and educational attainment you will be asked to complete a very short survey which will take less than two minutes to complete. The survey will be sent to you by USPS, a stamped addressed envelope will be included, and you will return the survey to me in the mail.

Voluntary Nature of the Study:

Your participation in the study is voluntary. Your decision whether or not to participate will not affect your current or futures relations with KSCBECE. If you decide to participate and later change your mind, feel free to do so.

Risks and Benefits of Being in the Study:

The risk connected with participating in this study is minimal or non existent. The benefits of participating in this study will help me with reporting the statistical data regarding any possible effects of length of experience and educational attainment on the language development of the students at KSCBECE West Hawaii Region.

If you experience any discomfort during your participation in the study, you may end your participation at any time.

Compensation:

Compensation will not be provided for your participation in this study.

Confidentiality:

The records of this study will be kept private. If any part of this study may be published,

I will not include any information that will make it possible to identify you. Research records will be kept in a locked file in my home office, and I will be the only person with access to the records.

Contacts and Questions:

The person conducting this study is Susan Collins. My faculty advisor is Dr. Darragh Callahan. She may be contacted at Darragh.callahan@waldenu.edu. You may contact me at scollins@hawaii.rr.com or 329-5051. The Research Participant Advocate at Walden University is Leilani Endicott. You may contact her at 1-800-925-3368, extension 1210, if you have questions about your participation in this study. Walden University's approval number for this study is **07-02-09-0299247** and it expires on **July 1, 2010.**

You will receive a copy of this form from me.

Statement of Consent:

I have read the above information. I have asked questions and received answers. I consent to participate in the study.

Printed Name of Participant _____

Participant Signature_____

Signature of Investigator _____

APPENDIX B

DATA USE AGREEMENT

This Data Use Agreement ("Agreement"), effective as of January 18, 2009 ("Effective Date"), is entered into by and between Susan Collins ("Data Recipient") and Kamehameha Schools Community Based Early Childhood Education ("Data Provider"). The purpose of this Agreement is to provide Data Recipient with access to a Limited Data Set ("LDS") for use in research in accord with the HIPAA and FERPA Regulations.

1. Definitions. Unless otherwise specified in this Agreement, all capitalized terms used in this Agreement not otherwise defined have the meaning established for purposes of the "HIPAA Regulations" codified at Title 45 parts 160 through 164 of the United States Code of Federal Regulations, as amended from time to time.

2. Preparation of the LDS. Kamehameha Schools Community Based Early Childhood Education shall prepare and furnish to Data Recipient a LDS in accord with any applicable HIPAA or FERPA Regulations

3. Data Fields in the LDS. No direct identifiers such as names may be included in the Limited Data Set (LDS). A file review of West Hawaii files will be conducted by the researcher. No direct identifiers will be included in the limited data set. The researchers will prepare a spread sheet to include a code known only to the researcher. Language scores, maternal education level, socio-economic status and student gender will be included in the spread sheet. All data will be considered confidential and will be used solely for the completion of this study. All confidential data will be destroyed upon completion of the study. In preparing the LDS, Kamehameha Schools Community Based Early Childhood Education shall include the **data fields specified as follows**, which are the minimum necessary to accomplish the research:

Kamehameha Schools Community Based Early Childhood Education Program West Hawaii

2007 – 2008 and 2008-2009 school years

- PPVT-III receptive language scores
- EVT expressive language scores
- Dial-3 language scores

- Maternal educational level
- Student gender
- Socio-economic status measured by income

4. Responsibilities of Data Recipient. Data Recipient agrees to:

    a. Use or disclose the LDS only as permitted by this Agreement or as required by law;

    b. Use appropriate safeguards to prevent use or disclosure of the LDS other than as permitted by this Agreement or required by law;

    c. Report to Data Provider any use or disclosure of the LDS of which it becomes aware that is not permitted by this Agreement or required by law;

    d. Require any of its subcontractors or agents that receive or have access to the LDS to agree to the same restrictions and conditions on the use and/or disclosure of the LDS that apply to Data Recipient under this Agreement; and

    e. Not use the information in the LDS to identify or contact the individuals who are data subjects.

5. Permitted Uses and Disclosures of the LDS. Data Recipient may use and/or disclose the LDS for its research on the effectiveness of multiyear multi-age vs. single-year single age programs on language development for children of Hawaiian descent at Kamehameha Schools.

6. Term and Termination.

    a. Term. The term of this Agreement shall commence as of the Effective Date and shall continue for so long as Data Recipient retains the LDS, unless sooner terminated as set forth in this Agreement.

    b. Termination by Data Recipient. Data Recipient may terminate this agreement at any time by notifying the Data Provider and returning or destroying the LDS.

    c. Termination by Data Provider. Data Provider may terminate this agreement at any time by providing thirty (30) days prior written notice to Data Recipient.

d. For Breach. Data Provider shall provide written notice to Data Recipient within ten (10) days of any determination that Data Recipient has breached a material term of this Agreement. Data Provider shall afford Data Recipient an opportunity to cure said alleged material breach upon mutually agreeable terms. Failure to agree on mutually agreeable terms for cure within thirty (30) days shall be grounds for the immediate termination of this Agreement by Data Provider.

e. Effect of Termination. Sections 1, 4, 5, 6(e) and 7 of this Agreement shall survive any termination of this Agreement under subsections c or d.

7. Miscellaneous.

a. Change in Law. The parties agree to negotiate in good faith to amend this Agreement to comport with changes in federal law that materially alter either or both parties' obligations under this Agreement. Provided however, that if the parties are unable to agree to mutually acceptable amendment(s) by the compliance date of the change in applicable law or regulations, either Party may terminate this Agreement as provided in section 6.

b. Construction of Terms. The terms of this Agreement shall be construed to give effect to applicable federal interpretative guidance regarding the HIPAA Regulations.

c. No Third Party Beneficiaries. Nothing in this Agreement shall confer upon any person other than the parties and their respective successors or assigns, any rights, remedies, obligations, or liabilities whatsoever.

d. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

e. Headings. The headings and other captions in this Agreement are for convenience and reference only and shall not be used in interpreting, construing or enforcing any of the provisions of this Agreement.

IN WITNESS WHEREOF, each of the undersigned has caused this Agreement to be duly executed in its name and on its behalf.

DATA PROVIDER **DATA RECIPIENT**

Signed: _____ Signed: _____

Print Name: _____ Print Name: _____

Print Title: _____ Print Title: _____

APPENDIX C

LETTER OF COOPERATION

Kamehameha Schools Community Based Early Childhood Education
West Hawaii Region
Kailua Kona, Hawaii 96740
808 334-0599

June 24, 2009

Dear Ms. Collins,

Based on my review of your research proposal, I give permission for you to conduct the study entitled Multiyear Student/Teacher Relationships and Language Development in Children of Hawaiian Descent at Kamehameha Schools Community Based Early Childhood Education Program within the Kamehameha Schools Community Based Early Childhood Education Program West Hawaii Division. As part of this study, I authorize you to collect demographic information from teachers in this division. Data will be coded to prevent identification of specific teaching staff and will include teacher years of experience and educational level. Individuals' participation will be voluntary and at their own discretion. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University IRB.

Sincerely,

Wallie Kimura-Nobriga (or Colleen Fratinado)
KSCBECE West Hawaii Education Coordinator
8708 334-0599

APPENDIX D

TEACHER SURVEY

Teacher Survey Kamehameha Schools
West Hawaii Region
July 2009

Please complete and return this short survey in the enclosed self-addressed stamped envelop

Name: _____

Site: _____

Room # _____

Years of experience teaching preschool _____

Highest Educational level achieved _____

Degree major _____

If you have any questions I can be reached at 808 329-5051 or sucollin@ksbe.edu.

Mahalo

Susan Collins

CURRICULUM VITAE

Education:

PhD Education Walden University Minneapolis, MN

MA Education Concordia University St. Paul MN 2004

Building Bridges: The Design and Delivery of Adult Learning Events 1999

BA Sociology University of Hawaii at Hilo 1999

AA Family Relations/Child Development Mendocino College 1993

Professional Employment:

Hawaii Community College

2004- Present
PACE program instructor in early childhood education

Kamehameha Schools

Teacher Community Based Early Childhood Education
1999 – Present

Hawaii County Office of Economic Opportunity Head Start

Site Manager
1994-1999
Inclusion Teacher
1991-1994
Family Educator
1988-1991

Migrant Head Start Ukiah California

Teacher/Director
1982-1987

Professional Development:

Board member Hawaii Association for the Education of Young Children
1998-Present

Workshop presenter at local and state early childhood conferences in the State of Hawaii
1998-Present