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ACADEMIC ACHIEVEMENT OF STUDENTS IN A CHARTER HOMESCHOOL

by

Mary A. Leeds

A dissertation submitted to the faculty of

San Diego State University and the University of San Diego

in Partial Fulfillment

of the Requirements for the Degree

Doctor of Education

Dissertation Committee:

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November 2008

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DEDICATION

This dissertation is dedicated to parents who love their children and to children who return their parents' love by respect and obedience.

ABSTRACT OF THE DISSERTATION

Academic Achievement of Students in a Charter Homeschool by Mary A. Leeds Doctor of Education San Diego State University-University of San Diego, 2008

A recent development in education is the public charter school as a homeschool model. In several states across the nation, a child may enroll in an independent study program of a public charter school and base his or her studies in the home. This model in the realm of education is called charter homeschool. The state of California has over 120 operating charter homeschools, also known as independent study programs or non-classroom based charter schools. The delivery of instruction from non-classroom based programs has begun to challenge traditional definitions of public schooling. The increased state accountability demands of student academic achievement, challenges the viability of sustaining these alternative schooling models.

The purpose of this study was to investigate the academic achievement of students in a charter homeschool. This explanatory mixed methods study analyzed standardized test scores for students 2nd -11th grades over a two year academic term using SPSS. A survey methodology was employed to examine demographic trends, parent perceptions of academic achievement, reasons for choosing a charter home school as well as perceived effectiveness. A focus group interview was conducted with teachers, parents, and an administrator to determine the effectiveness of the charter homeschool as an alternative path of education for students. The following were the key questions guiding the study: How do students in a charter homeschool score on the California standardized tests? How does the average mean of test scores of the charter homeschool students compare to California state averages for public school students? What is the difference in test scores among groups of students who are homeschooled through a charter school (i.e. ethnic groups, grade level, gender, parent education level, parent economic status)? What are parent's, teacher's and an administrator's perceptions of student achievement in the charter homeschool?

Data analysis and findings revealed students in the charter homeschool score the same as or better in English language arts when compared to students in California. Math scores for students in the charter homeschool tend to decline as students move up in grade level and enroll in advanced math courses when compared to students in California. The parent survey and focus interview responses confer charter homeschool students perform above standards. In addition, the survey and interview responses attest the California standardized test scores should not be used as a single method of validating student achievement in the charter homeschool. This study contributed to the limited literature available about charter schools as a homeschool model. In addition, the investigation of student achievement in this alternative schooling method was studied to enlighten policymakers and educators about the growing standardization and increased accountability held for such schools.

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CHAPTER 1

INTRODUCTION

A recent development in education is the public charter school as a homeschool model. In several states across the nation, a child may enroll in an independent study program of a public charter school and base his or her studies in the home. This model of education is called charter homeschool. Charter homeschools are independent schools fashioned by homeschool parents and advocates sponsored by a local district in which the state and local regulations governing schools allow the homeschool to function as a charter school (Huerta & Gonzalez, 2000). They are designed and operated by parents, educators, and community members. Private homeschools are created by leaders and families who perceive the public school system in control of academics and non-conservative in regards to teachings of morals and values (Hill, 2000).

In 1992, the California Charter Schools Act was enacted and shortly after, the development of charter homeschools began (Huerta, Gonzalez, & d'Entremont, 2006). Formerly private homeschool families were attracted to the popularity of the charter homeschool throughout rural areas of California. In the past sixteen years, charter homeschools, also known as independent study programs or non-classroom based charter schools, have quietly gained momentum in the state of California (CA. Department of Education, 2006). In the past ten years, charter homeschools in San Diego County have been approved and sponsored by school districts. The delivery of instruction from non-classroom based programs has begun to challenge traditional definitions of public schooling (Huerta, Gonzalez, & d'Entremont, 2006).

Specific legislation is in place to monitor and review charter school practices every 3-5 years (Klein, 2006). Policymakers demand state and government regulation of student achievement of such schools (Lines, 2001). The accountability structures of charter homeschools have been questioned by public officials (Huerta & Gonzalez, 2000; Pearson, 2002). As charter homeschools also referred to as, non-classroom based charter schools, emerge in the United States, policymakers are required to identify governance and organization

models, review teaching and learning programs, and establish accountability measures of student performance (Huerta, Gonzalez, & d'Entremont, 2006).

One way the efficacy of schools can be determined is by the results of standardized assessments among individual students, students by grade level, schools, districts, counties, and states. Standardized assessment test scores are used to measure school wide performance and growth. An analysis of student standardized assessment results and stakeholders perceptions will be employed as a predictor of the academic performance of students in a charter homeschool in San Diego County.

STATEMENT OF THE PROBLEM

There is limited research about charter homeschool students and their academic achievement. The literature is extensive about the achievement of privately homeschooled students and how they outperform their public school peers on nationally normed standardized tests (Collum, 2005; de Waal & Theron, 2003; Hill, 2000; Lines, 1996). Student achievement based on standardized test scores is used as reliable accountability measures for students in public and private schools as well. Additional research on student achievement in a charter homeschool will aid in the assessment of their efficacy as a growing system in education. Other issues present in homeschooling, specifically charter homeschooling, include parents perceptions of student achievement based on the California standardized test scores and how parents utilize the charter school resources to assist them in homeschooling their children.

PURPOSE OF THE STUDY

The purpose of this study was to determine how students, enrolled in a charter homeschool in San Diego County, achieve based on the analysis of standardized assessment scores, a parent survey, and a focus group interview. The survey and interview provided parent perceptions and views of the California Standardized Test (CST) and their experience in the charter homeschool as a new type of alternative education. Parents and teachers of the charter homeschool provided insight about the successfulness of the homeschool program and student achievement based on the CST.

An explanatory mixed methods approach was used. This method is defined as a two phase mixed methods design in which quantitative data are collected and analyzed, followed by qualitative data used to augment quantitative data (Creswell & Plano-Clark, 2007). The collection of qualitative data (survey and interview) after a quantitative phase (student California standardized test results) was used to build upon the quantitative results. In the quantitative phase of the study, standardized assessment scores were collected and analyzed using the Statistical Program for Social Sciences (SPSS). The dependent variables included scores in Mathematics and English Language Arts among grade levels, 2nd-11th, from the 2006 and 2007 academic terms. The independent variables included, grade level, gender, ethnicity, parent education level, and economic status.

The qualitative phase was conducted to obtain parent perceptions about the CST and student academic achievement in the charter homeschool. The parent survey was created at www.surveymonkey.com . The survey included demographic background information and Likert style questions pertaining to parent perception of the California standardized test. Parents were requested to complete the online survey via email and all emails were kept confidential. A focus group interview of two parents, two teachers, and an administrator was conducted to ascertain stakeholder perceptions of the CST and student achievement in the charter homeschool based on the parent survey results and the analysis of the CST. All names were kept confidential and pseudonyms were used. The following questions guided the research.

Research Questions

- 1. How do students in a charter homeschool score on California Standardized Tests (CST)?
- 2. How does the average mean of CST scores of the charter homeschool students compare to California state averages for public school students?
- 3. What is the difference in CSTs among groups of students who are homeschooled through a charter school (i.e. ethnic groups, grade level, gender, parent education level, parent economic level)?
- 4. What are parent's, teacher's and an administrator's perceptions of student achievement in the charter homeschool?

CHAPTER 2

REVIEW OF THE LITERATURE

INTRODUCTION TO THE REVIEW OF THE LITERATURE

The literature review begins with a description and background of homeschool, its current population, reasons parents choose to homeschool, and student achievement in homeschool. It continues with a background of charter schools, its population, and an explanation of the alternative type of education model, the charter homeschool. In the final section of the literature review, student achievement in charter schools is discussed as a means to compare student achievement between charter schools and a charter homeschool.

The roots of education in America can be traced to parents as teachers in the home (Collum, 2005; Neuman & Aviram, 2003). According to Collum, 2005, in the 1600s, Pilgrims and Puritans taught their children to read and write using the Bible as a primary textbook. The U.S. homeschooling movement arose during the 1960s and 1970s as a reaction against public schools (Collum, 2005). In the late 1980s to early 1990s, states such as Philadelphia, Minnesota and California started a number of schools and called them charters (Buddin & Zimmer, 2005). This type of school allowed local boards to charter a school with parent and teacher approval.

The growth of charter schools is due to the support of innovation and choice in public education which has attracted private and traditional homeschool families. The private and home schooling choices of families are being supported through the assistance of a public school system that can operate free from most local and state regulations governing schools (Huerta & Gonzalez, 2000). The governance of a charter school lies in a board created by the parents and the charter granting agency. Although ultimate authority is the state, the ability of public officials to monitor teaching and learning methods is challenging for charter schools such as charter homeschools. Parents are the immediate authority and instructors of students. An enhanced parent-child relationship and home learning environment play an important role in promoting school readiness (Parker & Lamb, 1999). Charter school advocates hope to provide new options and choices to families (Finn, Manno, & Bierlein, 1996). Parents are able

to provide primary instruction to their children how they deem appropriate in addition to receiving benefits offered through a charter school. Traditional homeschool families are finding their way into public charter schools with the homeschool model primarily for free curriculum, materials, extra-curricular services, instructional support but most importantly, choice.

The charter homeschool model is growing among the public school community and the charter school movement, demanding public accountability (Huerta & Gonzalez, 2000). An analysis of student achievement in a charter homeschool is one way to meet the public demand.

HOMESCHOOL

Background

Throughout colonial America, homeschooling was commonplace (Carper, 2000). The family served as the primary unit and the most important agency in education. Parents upheld the responsibility for teaching their children how to read and provide vocational skills. From the 1600s to the late 1800s, most education took place in homes, with either the parents, private tutors, or usually pastors providing the instruction (Hill, 2000). Efforts by parents, tutors, and older children were combined to provide instruction. The one-room school houses consisted of children mixed with siblings receiving direct instruction by a parent or older sibling. Children's education has been the responsibility of parents throughout history (Neuman & Aviram, 2003).

The origin of homeschooling can be traced to the colonial area, although has proved a contemporary revival and remarkable growth of what was a rare phenomenon over two decades ago (Waal & Theron, 2003). The general public has reached a level of awareness and familiarity to homeschool (Hadderman, 2002a). Homeschool has transpired into a social movement increasing in numbers over the last few decades in this country (Apple, 2000; Klein, 2006). Towards the middle of the 20th century the trend in America renewed parent involvement in their child's education (Cai, Reeves, & Robinson, 2002). It has taken on a political role in defense of the movement. Homeschoolers advocate for a more responsive American education system to serve the needs of its students by becoming more diverse, open, and flexible. Homeschooling has gained legitimacy and has become a constructive viable choice for parents. In addition, it has attracted a new type of population and culture of students making itself more diverse (Davies & Aurini, 2003).

Homeschool Population

The research available about homeschool is limited to students enrolled in private or independent home schools. Homeschooling is a growing movement and has become increasingly prevalent as a choice in the United States. The most recent findings of children being homeschooled in the United States are 1.1 to 1.7 million children (Cai, Reeve, & Robinson, 2002; Duvall et al., 2004; Lines, 2000; Stewart & Neeley, 2006). Among the data for homeschool enrollment gathered for all states, California's totals were 94,739 (Stewart & Neeley, 2006). This alternative school model differs from conventional schools by relying on parents to deliver curriculum and instruction to their children. It is a non-traditional school environment in which parents are generally the educators of their children. Homeschooling is increasing in credibility as a movement and is seen as a viable educational alternative (McDowell, Sanchez, & Jones, 2000; Davies & Aurini, 2003). In a statistical analysis report by the National Center for Education Statistics in spring 2003, approximately 1.1 million students were being homeschooled in the United States. The population increased from the same study conducted in spring 1999, where 850,000 students were being homeschooled (Bielick, Chandler, & Broughman, 2001). The homeschool population data in the U.S. by grade level, ethnicity, gender, household income, and parent education level according to Princiotta, Bielick, and Chapman (2003) is provided in Table 1. As shown in Table 1., 57% of the students being homeschooled were within grades 6 through 12, 20% were 1st-3rd grade students, 15% were 4th-5th grade students and 9% were kindergarten students. The percentage of White, non-Hispanic students being homeschooled was 77%. Black, non-Hispanic students totaled 9%, followed by 5% Hispanic and 8% other. Fifty-two percent of students were male and 48% were female. The family household income of \$25,000 - \$50,000 had the highest percentage of homeschoolers at 29%. Household incomes with less than \$25,000 were 26%, followed by 25% with an income of \$50,000 - \$75,000 and 7% for \$75,000 or more.

Homeschooled students whose parents received a vocational degree or some college education were 31% of the population. A parent who earned a bachelor's degree or had received a high school diploma or less was about 25%, followed by 20% of parents who attained a graduate degree. In summary, homeschooled students in 2003 were more likely to be White, non-Hispanic in middle or high school, to have parents whose household income was between \$25,000 and \$50,000, and whose parents had received a high school diploma or less or had attained a bachelor's degree.

Grade Level	Year – 2003	
Kindergarten 1 st -3 rd	98,000	
4 th -5 th	214,000 160,000	
4 -5 6 th -8 th	302,000	
9 th -12 th	315,000	
Ethnicity		
White, non-Hispanic	843,000	
Black, non-Hispanic	103,000	
Hispanic	59,000	
Other	91,000	
Gender		
Female	527,000	
Male	569,000	
Family Household Income		
25,000 or <	283,000	
25,000 - 50,000	311,000	
50,000 – 75,000	269,000	
75,000 or >	238,000	
Parent Education Level		
High School Diploma or less	269,000	
Vocational/Technical Degree or Some College	338,000	
Bachelor's Degree	274,000	
Graduate/Professional Degree	215,000	

Table 1. Homeschool Population by Characteristic

Reasons Parents Homeschool

Prevalent reasons parents choose to homeschool include, religious values, academic and pedagogical concerns, general dissatisfaction with the public school and family lifestyle reasons (Bielick, Chandler, & Broughman, 2001; Cai, Reeve, & Robinson, 2002, Collum. 2005). Parents are choosing to educate their children at home, away from the traditional classroom, due to traditional education not meeting the intellectual, cultural, and social needs of students (Jeub, 1994; de Waal & Theron, 2003). Early research indicates home schooling was chosen primarily for moral or religious reasons. Homeschooling in colonial America is described as commonplace and religiously pluralistic (Carper, 2000; Hill, 2000). Today the number one reason parents cite for homeschooling is to give their children a better education than they could get in a public or private school (Klein, 2006; Princiotta, Bielick, & Chapman, 2006). Loss of religious orientation in public schools is also a serious issue to many homeschoolers (Ray, 2001a). Many homeschoolers are suspicious of programs schools offer due to lack of religious integration, curriculum disclaiming beliefs, safety decline, and negative peer socializations (Hill, 2000; Jaycox, 2001; Lines, 2000). Sheehan (2002), characterizes homeschool as a culture of :1) choice for parents, students, and individual communities, 2) complementary alternatives to one size fits all comprehensive school and 3) small, caring, communities of learners. Values and ideals of religion, education, and morality, have been used to break away from public education (Wichers, 2001).

Davies & Aurini (2003) claim homeschooling is making itself a more diverse culture of choice and attracting new recruits. There are a growing number of families who have children with learning disabilities turning to homeschool (Lange & Liu, 1999). Parents do not feel the public school special education system is providing adequate support and services for their children with special needs. Parental efforts for choice and educational rights have initiated a variety of legal issues in the rise of schools such as charter and homeschool. Traditional homeschool families are attracted to rich resources that accompany the public funded form of homeschool (Huerta & Gonzalez, 2000). According to the authors, California requires minimal accountability where the charter school movement is decentralized making this an additional selling point for traditional homeschool families. Collum (2005) argues minority students and those of low socioeconomic levels have consistently been found to be at a disadvantage in the public education system. He adds race and class subordination and the negative affects shown in public school are eradicated through homeschooling. For gifted and talented children, homeschooling can be a sensible alternative for meeting the needs of bright children (Jaycox, 2001; Sheehan, 2002; Staehle, 2000). Homeschooling programs that focus on individualized learning to enhance children's talents and cognitive styles are being executed by the homeschooling movement (Hetzel, Long, & Jackson, 2001; Davies & Aurini, 2003). Parents are able to allocate teaching methods, curricula, and styles (Clements, 2002.).

Homeschooling is taking a positive and productive turn in society. It is perceived as a solution to difficulties such as children's negative experiences in school or parent's negative experiences as children in school or in the family framework (Neuman & Aviram, 2003). The negative experiences parents had in childhood family or school experiences can be compensated through positive experiences of homeschooling (Lines, 2000). For some parents, investing in their children by homeschooling enables them to better deal with their own negative experiences. The time devoted to children supplements the attention the parents would have liked to receive and did not. Parents choose to be completely involved in their children's education through homeschooling (Parker & Lamb, 1999). Parental involvement is all encompassing and a choice of dedication and commitment (Finn, 1998).

According to McDowell (2000), homeschoolers may more and more shape society far out of proportion to their numbers and acceptability to the rest of society. Parents and students do not have to make decisions based on their social environment. They are able to make life affecting choices to suit their homeschool surroundings. With many resources, legal support, and a changing environment, parents are taking on the challenge to offer their children an alternative education. Parents assume control and responsibility for their children's education, learning processes, achievement, and educational success.

Student Achievement in Homeschool

The study of homeschooled student achievement is difficult to obtain. Not all homeschooled students comply with state testing requirements or take assessments to obtain data (Collum, 2005; Lines 2000). The review of literature substantiates homeschoolers do well as a group and usually score above average in subject areas and across grade levels (Collum, 2005; de Waal & Theron, 2003; Duvall, et al, 1997; Lines, 2000). Research studies indicate homeschooled students perform well academically.

Duvall et al. (1997) conducted an exploratory study of students with learning disabilities. The purpose of the study was to determine whether parents, who were not certified as professional educators, provided students with the basic skills that public schools facilitated. Four homeschooled students and four public school students were included in the study and administered pre and post tests. In seven cases, the mean homeschool reading score increased by 3.0 while the public school score decreased by -1.5. In math, the homeschool scores

increased by 10.0 while the public school score increased by 2.0. In written language, the homeschool mean score increased by 3.5 while the public school score increased by 0.8. The results indicated that homeschool students scored higher in reading, math, and written language than their public school counterparts. The median scores were in the 70th-80th percentile constituting mastery of the subject at a proficiency level.

A 1997 study by Brian Ray of the National Home Education Research Institute found that home schooled exceeded public school students on national standardized assessments by 30 to 37 percentile points in reading and math (Ray, 2001b). Ray collected data on 5,402 homeschool K-12 students for the 1994-95 and 1995-96 academic years and public school scores from state websites. Variables used to compare math and reading scores for homeschool and public school students were: race, gender, and parent education level. A study conducted by Rudner (1999) (see Table 2 and Table 3), displays homeschool student achievement by independent variables such as gender, grade level, and parent education level. Homeschool students in grades 1 though 10 scored at a proficient level above the 70th percentile. Males scored higher than females in five out of ten grade levels. Females in grades 4th, 6th, 7th, 9th and 10th scored the same as or better than males. As the research continues to prove homeschoolers achieve as well or better than attending public school, parents will homeschool to maintain their child's interest and motivation in education (de Waal, & Theron, 2003). The number of students being homeschooled will continue to increase. This alternative school movement has influenced parents to withdraw from the traditional public school. For some students, the traditional schools do not supply their moral or emotional needs that homeschool can provide (Neuman & Aviram, 2003). Parents who have college degrees are more likely to homeschool. The percentage of neither parent having a college degree is lower than both or at least one parent who has a college degree. Public schools are not providing what parents expect of schools for students to achieve proficient and advanced academic levels (de Waal & Theron, 2003). Families are leaving public schools because of the high percentage of underachieving schools. Parents who are educated are more involved in their child's education and have high expectations for their success in school (Burns, 1999). They elect to homeschool because curriculum, teaching methods, policy and standards in public schools are not meeting student needs (Lines, 2000).

Grade	1	2	3	4	5	6	7	8	9	10
Males										
Mean	170	195	208	223	243	260	271	285	288	303
Sd	12	15	18	19	23	25	26	30	33	33
N	355	576	749	639	600	597	479	428	294	181
%ile	92	95	85	80	81	81	78	80	73	78
]	Fema	ales	<u>.</u>	<u> </u>	<u>,</u>		
Mean	169	193	207	223	242	260	274	284	293	303
Sd	12	16	17	21	24	25	26	28	26	28
N	345	595	730	634	634	535	469	422	302	206
%ile	91	93	83	80	80	81	80	79	77	78
Difference	1	2	1	0	1	0	-3	1	-5	0

Table 2. Composite Scale Score Mean, StandardDeviation and Corresponding Percentile by Grade andGender

An increasing number of students leaving public schools come from families where the adults in the household have varying levels of education, and/or English proficiency, and sometimes limited literacy in their primary language (Graves, Valles, & Rueda, 2000). These students are in need of differentiated learning skills, strategies and an environment that meet their needs and allow them to succeed. The choice to homeschool affects areas of family life beyond education and requires different practical and ideological preparations than those needed for conventional school education (Newman & Aviram, 2003). Homeschool student's development in socialization has proven just as good as their peers in public schools (de Waal & Theron, 2003).

-1

Table 3. Composite Scale Score Mean, StandardDeviation and Corresponding Percentile by ParentEducation and Student Grade

Grade	1	2	3	4	5	6	7	8	9	10
Both parents have college degrees										
Mean	178	196	212	228	249	268	278	296	306	314
Sd	11	15	15	19	21	22	25	22	24	26
N	367	640	706	567	535	501	420	325	206	137
%ile	98	96	89	85	86	87	83	88	87	86
	,) Dne p	aren	t has	s a co	llege	deg	ree	1	1
Mean	172	194	208	222	242	260	275	285	293	304
Sd	13	15	16	19	22	24	24	25	28	29
N	212	341	477	451	417	361	293	297	212	147
%ile	94	94	85	79	80	81	81	80	77	79
	Ne	ither	. par	ent h	as a	colle	ge de	gree	1	<u> </u>
Mean	161	187	196	212	231	245	260	268	271	288
Sd	10	16	17	19	25	25	28	34	27	33
N	121	191	297	255	285	270	233	231	177	104
%ile	79	87	67	66	68	67	69	66	59	67
Range	17	9	16	14	17	23	18	28	35	26

Parents who have chosen to educate their children at home face challenges of meeting the educational demands the state and federal education laws require. Charter homeschools provide an alternative to the traditional public educational setting. An overview of charter schools, specifically in California, will provide an understanding about the attributes from which the charter homeschool has drawn.

CHARTER SCHOOLS

Background

In 1992, charter schools opened in California promising a way to increase educational achievement for minority students who were poorly served by traditional public schools (Wamba & Ascher, 2003). California became the second state in the nation to enact charter school legislation (Riley, 2000; Smith, 2003; Wamba & Ascher, 2003; Zimmer & Buddin, 2006). Charter schools are waived from many state laws and regulations. The California law gives charter petitioners the right to seek significant autonomy from local board control. Charter law allows innovation and educational alternatives to meet the need of at-risk students which cannot be done under regular statutes or regulations (Finn Jr., Manno, & Bierlein, 1996).

Charter school founders consist of diverse groups of parents, laymen, professionals, and organizations (Riley, 2000). They differ from district run public schools in several important ways. Charter schools form their own school board, are schools of choice, are operated under contract by a variety of parties, and their governance includes schools that are dominated by parents, teachers, and administrators (Bomotti, Ginsberg, & Cobb, 1999; Bulkley & Fisler, 2002). Among charter school models are the programs that act as homeschool types. The draw to the public charter school by homeschoolers is the free curriculum, supplies, and services (East, 2006). Throughout the country there are a number of such programs with the most in California (Lines, 2000). According to Lines, 2000, the state charter law has encouraged the homeschool support in districts, the largest being San Diego. However, an estimated number of participating students for San Diego was not found in the literature.

Similar to charter schools, homeschool charters are independent public schools created through formal agreement with a state or local sponsoring agency (Huerta, 2006). Each school is operated mainly by community members and parents and allowed to operate from most state and local regulations governing schools. Staffing, curriculum, school calendar, resource allocation and school classroom size are determined by the school staff and appointed governing board (Bulkley & Fisler, 2003; Finn, Manno, & Vanourek, 2000).

Charter School Population

In January 2002 there were 2,137 operating charter schools in 37 states and the District of Columbia (Finnigan et al, 2004). In 2006, nearly 3,500 charter schools were operating in 40

states serving over 1,000,000 students (Zimmer & Buddin, 2006). The state with the most charter schools was California which had 349. The most recent findings for California are 200,000 students enrolled in 534 charter schools (Buddin, 2006). In states such as California, the desire for educational choice from charter schools continues to grow, particularly among minorities (Riley, 2000). According to Riley, one-third of public school students nationally are minorities whereas, one-half of charter school students nationally are minorities (2000). Charter school legislation allows for the creation of charter schools tailored to specific populations such as minority parents and students identified as low achievers in the public school system (Finn Jr., Manno, & Bierlein, 1996; Wamba & Ascher, 2003).

In a two year study conducted by Finn Jr., Manno, & Bierlein (1996), data was collected from 35 charter schools, with nearly 8, 400 students in the sample. Sixty-three percent of the sample was minority group members. Eighty-one percent had been enrolled in public schools the previous school year. Students, who were unhappy in their previous public school, were generally satisfied with the charter school based on the education they were receiving, accountability for individualized learning, committed teachers, and family-like atmosphere. Nearly 600 interviews were conducted with local businesses and educational leaders. Teachers expressed particular satisfaction with their freedom to teach, personal accountability, rationale management decisions, school's autonomy, and dedicated colleagues.

Charter school parents offered possible reasons for having chosen a charter school in a questionnaire (see, Wamba & Ascher 2003). More than half of the thousand parents asked, checked small size, followed by higher standards, educational philosophy, greater opportunity for parent involvement, and better teachers. Based on the charter school philosophy, individualized instruction, dedicated educators, and freedom from excessive regulation and control, parents and students are satisfied with the education they are receiving at charter schools (Bulkley & Fisler, 2002). California charter schools are improving the academic performance of students most at risk than non-charter public school (Smith, 2003). Charter schools are beneficial to at-risk students, special populations, low-income and bilingual students (Bulkley & Fisler, 2002; Finn Jr., Manno, & Bierlein, 1996). One growing charter school model is the charter homeschool model. The charter homeschool non-classroom based model is the main factor contributing to the increasing enrollment and growth of charter schools (Huerta, Gonzalez, & d'Entremont, 2006).

Charter homeschools are becoming a more prevalent education choice in the United States. Parents, who do not want their children to attend public schools, seek support through charter homeschools sponsored by a public school district. The influx of traditional homeschooled children contributes to the increasing enrollment in charter homeschools (Huerta & Gonzalez, 2000). California has a compulsory education law allowing children to be educated at home through a public school independent study program (Lines, 2000). This style of school choice has demonstrated dynamic growth over the past five years with 52,000 students enrolled in charter homeschools in California and Alaska (Huerta, Gonzalez, & d'Entremont, 2006). The authors assert this phenomenon has emerged from within a wider charter movement which has increased in enrollment by 40% since 2001. In addition, the charter homeschool population comprises approximately 10% of the charter school population. Charter homeschools currently serve primarily students who were previously homeschooled privately (Lines, 1999). California and Alaska are the only two states currently permitting charter homeschool, whereas, homeschool is prohibited according to charter school laws in other states (Huerta, Gonzalez, & d'Entremont, 2006). The authors include, officials at the California Department of Education estimated there were 93 operating charter homeschools serving over 30,000 students by June 2001. Additionally, the number of these charter models doubled from 1999-2001. When compared to their traditional charter school counterparts, charter homeschool students come from more mobile families, higher socioeconomic status, including higher parent education levels and much lower rates of free and reduced lunch (Budder & Zimmer, 2005). Middle and high school students who are not succeeding in public school are seeking charter homeschool as an alternative to improve (Huerta & Gonzalez, 2002). Enrollment in charter homeschool varies among district boundaries. It is common for students to be enrolled in a charter homeschool who reside within a different district and enroll across district lines (Lines, 1999).

Student Achievement in Charter Schools

The need to open up the "black box" to determine charter school efficacy requires gathering student achievement scores of charter schools (Berends et al, 2006). A recent report on charter schools for the U.S. Department of Education provides a comparison of achievement scores between charter and public schools (see Braun, Jenkins, & Craig, 2006). The report found fourth grade charter school students had lower mathematics and reading scores when compared to regular public school fourth graders. However, researchers make the claim about the diversity among charter schools and how it is nearly impossible to initially create fairly randomized design (Berends et al, 2006; Braun, Jenkins, & Craig, 2006; Hadderman, 2002b; Riley, 2000). Researchers have found charter school student achievement results cannot be generalized because it is nearly impossible to keep groups similar over time and students are not representative of students in general. A number of charter schools exist for diverse populations such as language immersion and dropout preventions yet many studies aggregate the achievement results for all students in charter schools (Riley, 2000). According to Riley, results are confounded due to design differences, a variety of curricula, and differing instructional methods.

Upon review of data from the National Assessment of Educational Progress (NAEP), charter school students had the same or lower test scores than traditional public school students in almost every demographic category (Berends, et al., 2006). However, the researchers also caution that the results may be influenced by the lack of rigorous studies of charter achievement in states that have large numbers of charter schools. In addition, the status of the charter school movement finds not enough evidence is available regarding the achievement of students in charter schools over time. Studies which utilize data only from one point in time fail to examine how much progress students and schools are making over time (Berends, et al., 2006). Hill, (2006) argues charter school studies show null or mixed findings; and any differences are not strong due to the difficulties encountered in assessing charter school performance and the limits of charter school research.

Zimmer and Buddin (2006), conducted a study on student achievement in California charter schools. They gathered individual student data from the California Department of Education from 1998-2002. Assessment scores from 8.9 million elementary and 12.4 million secondary students were obtained. Over the five year period, 1.5 percent of both the elementary and secondary were enrolled in a charter school. The data contained 326,000 charter school students. The analysis found test regressions for elementary and secondary public schools and charter students in the state. Test regressions were also conducted for elementary and secondary students by charter school type. On average, students in startup charters with class based instructions have slightly higher test scores than do comparable students in traditional public school. The authors found students in conversion charters with classroom based instruction have test scores similar to those of comparable students in traditional public schools. In contrast, students in conversion schools with some non-classroom based instruction (e.g. distance learning; independent study; homeschooling) have lower average tests scores than do similar students in traditional schools. The research suggests the results will provide policymakers and educators information on performance differences among various types of charter schools.

According to Buddin, 2006, urban leaders have initiated charter schools as a mechanism to improve learning for disadvantaged students. The effects of charter school on urban district student achievement for different demographic groups, suggest average achievement scores in charters are keeping pace but not exceeding those in a traditional public school (Gilmore, 2001). Minority groups are not consistently producing improved test scores above and beyond traditional public school (Abedi, 2006; Slavin & Cheung, 2004). Despite the research that charter schools have not closed the achievement gaps for minorities and has not had the expected outcomes of higher student achievement, charter schools continue to strengthen their programs creating more innovative models (Bulkley, 2001; Bulkley & Fisler, 2003).

A study conducted by Collum, 2005, investigated factors determining parental motivations to homeschool and the determinants of student achievement. Collum distributed 330 parent surveys to a charter homeschool in southern California. A total of 235 parents completed the survey. A total of 175 student achievement scores were used in the study. Multiple regression models were used in an analysis of parental motivations using 13 independent variables (i.e. race, gender, number of year's homeschooling, educational level). A second analysis of student achievement using 21 independent variables was conducted (i.e. grade level, gender, ethnicity,). Collum found minority families were more likely to be motivated to homeschool due to dissatisfaction with public schools than white families. A second finding determined older homeschoolers were more likely to be motivated to homeschool by their attraction to the charter homeschool. The terms, older homeschoolers, were not clearly defined whether it was parents who had been homeschooling for a longer period of time or the terms referred to older students who are homeschooled as compared to younger students who are homeschooled. Collum's findings for student achievement in reading were based on the parent's educational attainment and view of public schools. Students whose parents had higher educational levels and who were more critical of the public schools did better in reading. For math achievement, parent's educational level and student grade level determined positive effects in math achievement. An interesting finding was parents who were attracted to the charter homeschool for academic and pedagogical reasons had children with lower math achievement.

Accountability

Homeschooling through a charter school requires state education laws be met (Collum, 2005). The California Department of Education has prompted states to begin creating new policies that explicitly define charter homeschool models and their accountability under public legislation (Huerta, Gonzalez, & d'Entremont, 2006). Student performance and quality of the program is complex (Gilmore, 2001). Parents choose from a variety of homeschooling methods and individualize instruction posing challenges in validating students work (Clements, 2002). Combined with the quality of the program is the accountability challenge in determining whether the charter homeschool authorizer or the student's resident district is responsible for funding a student's education (Finnigan, 2004). The ability of states to address important policy issues, standards, and accountability has rendered governance arduous due to the rapid expansion of charter homeschools (Huerta, Gonzalez, & d'Entremont, 2006). According to Huerta, Gonzalez, & d'Entremont, 2006, legislations has addressed this by crediting traditional seat time attendance to apportionment based on time value of student work. In this context, a certified teacher weighs the objectives of assignments, students submit work by a specified due date, and the teacher evaluates and calculates the time value of the completed work.

State academic standards need to be met through curriculum, instruction, and assessment. The certificated educator, parent, and student of the charter homeschool maintain ongoing collaboration with the belief that they provide good models in exploring ways to individualize instruction and assessment towards academic success of the student (Fager & Brewster, 2000). The certificated educator of the charter homeschool evaluates and verifies the instruction by parents (Huerta & Gonzalez, 2002). Parents, who enroll their children in a

charter homeschool, seek the support and guidance of certificated educators to ensure accountability and validation for their children's progress (Dansby-Giles, 2002).

Parents are often more involved in charter schools than in district run public schools (Bulkley & Fisler, 2002). The primary distinction between charter schools and charter homeschool is who delivers instruction (Huerta, Gonzalez, & d'Entremount, 2006). How and where the instruction is delivered is determined by the parent and certificated educator who assists the homeschool parent. Lessons created with assistance from curriculum packages or in consultation with charter school teachers, are delivered directly to students by their parents (Lines, 2000). The learning style of the student drives the experiential learning and teaching strategies the parent and credentialed teacher create such as project based assignments, handson lessons, use of traditional text books and workbooks, etc. Parents as teachers, evolves into experiential, discovery, and inquiry styles (Pena, 2000; Wichers, 2001). Setting instructional and grade level benchmarks and goals based on state standards, guide the teacher and parent during the academic year. As a homeschool parent, a role of an authoritative educational figure emerges. Students typically receive instruction outside the precincts of a traditional school location. However, some charter homeschool students may participate in teacher or professional directed lessons at school resource centers. Some attractive possibilities include the opportunity to participate in group activities such as band or choir or provide families access to such a resource (Lines, 2000).

Parents learn teaching strategies by consulting with credentialed teachers (Eley, 2002). Teachers serve as education consultants or coordinators and the parent's role is to serve as the child's primary instructor (Huerta, Gonzalez, & d'Entremont, 2006). The credentialed teacher encourages the parent to create organizational structured daily schedules for schooling. Creating order within the learning environment improves teaching strategies (Clements, 2002). Selecting yearly subject areas and content provides long range goals to be achieved (Dansby-Giles, 2002). Parents are responsible for instruction and evaluation of their children's progress through the curriculum they use. Some parents face the challenge of adapting to new ideas and ways of learning after being educated in a traditional educational system of textbooks, desks, and lectures (Clements, 2002).

Unlike public schools, the primary role of the teacher is to act as an educational consultant and allow the parent to serve as the primary teacher to students (Cai, Reeve, &

Robinson, 2002). The educational consultants provide support and equip parents to better instruct their children. Charter homeschool proponents are those who desire to remain within the public system under a new set of guidelines that allow for a greater degree of choice and privatization (Huerta, Gonzalez, & d'Entremont, 2006). Parents practice their right to choose a form of education deemed appropriate for their children. Homeschool families seek support and resources from charter schools that provide curriculum, state funding, and assistance by certificated educators (East, 2006; Epstein, 1995). Through the offerings of materials and support by a public school, private schooling choices of families are being reinforced (Carper, 2000).

The charter homeschool movement has become a prominent infrastructure and innovation for parents seeking a better educational opportunity for their children (Finn, 1998; Huerta & Gonzalez, 2002). The basic operation of a charter homeschool is described by East (2006). Parents complete an enrollment contract stating policies of the charter school and the requirements that the parents, students, and the credentialed teacher must legally meet. East describes how the charter homeschool provides resources and instructional materials to parents and the teacher provides the parent with expected assignments to complete. Parents agree to meet with the teacher on a bi-weekly or monthly basis to provide homework the student has completed. According to East, (2006), a growing number of homeschoolers value the expertise of professional educators and are readily accepting help, advice, and testing assistance offered by school districts. East describes the charter homeschool as an alternative providing homeschooling parents a vast domain of contemporary learning resources such as free curriculum, assistance from certificated educators, and often reimbursement for academic classes.

Charter homeschools are expected to promote educational choice for parents, provide novel educational innovations, freedom among organizational and administrative structures, and most importantly, new results oriented accountability programs (Huerta & Gonzalez, 2002). Given the move toward standardization and accountability in state initiatives, dissatisfaction with public education is likely to continue and possibly increase attracting more families to charter homeschools (Collum, 2005; May, 2006).

According to Bulkley & Fisler (2002), charter homeschools create a combination of autonomy, innovation, and accountability to facilitate:

- 1. Choice for parents
- 2. Improved student achievement
- 3. High parental and student satisfaction
- 4. High teacher satisfaction and empowerment
- 5. Positive effects on the broader system of public education
- 6. Positive or neutral effects on educational equity

Choice allows parents to choose their curriculum, create a daily routine and schedule, and plan activities for their children following instructional minutes provided by the state for each subject area. Student achievement is improved as instruction is one on one and individualized. Parent and student are able to experience the growth and progress in the student allowing high parental and student satisfaction. Credentialed educators who serve as consultants to the parent and student are able to provide expertise and resources promoting teacher satisfaction due to individualized interaction. The positive effects on the broader system of public education include parent participation, student motivation, and improved schools. Positive effects on educational equity refer to the individualized instruction for students of different needs and backgrounds.

Reasons for parent satisfaction and student success are related to high student expectations and the school's curriculum, minimal bureaucracy, dedicated teachers, and family-like atmosphere (Finn Jr., Manno, & Bierlein, 1996). Parents perceive homeschooling to have a positive impact on their families in terms of family flexibility, socialization, and problems confronted in the public schools (McDowell, 2000). There is evidence of much parent involvement, and parents say they feel welcome in charter schools and that the schools are responsive to their concerns (Finn Jr., Manno, & Bierlein, 1996). Parents are able to assume control of their children's education. They are able to implement beliefs, values, and personal norms by homeschooling.

Charter homeschools are expected to generate new teaching and learning methodologies, new educational innovations and promote new organizational and administrative structures (Huerta, Gonzalez, & d'Entremont, 2006). Within the charter homeschool model, traditional homeschool families collaborate with certificated educators using both independent study and on-line methods for delivering instruction (Finn Jr., Manno, & Bierlein, 1996). As state legislators, school boards, and the public at large become more receptive, homeschoolers are gaining access to more resources.

Conclusion

A review of homeschool, charter school, and the accountability of charter homeschool support the study for student academic achievement in a charter homeschool. As the number of homeschooled students increase so should the attention of the nation's lawmakers (Mc Dowell, 2000). Policymakers and educators should be aware of the diversity of this growing alternative choice to educate students. School and parent cooperation and partnerships between public schools and homeschools appear to be a viable compromise for the success of charter homeschools. Both parents and education department's main goal should be to provide children with the best education.

School based support is essential as such programs require budgetary authorizations by sponsoring districts. Policymakers and educators have the ability to assist and define these prominent and innovative schooling models within the public system (Huerta, Gonzalez, & d'Entremont, 2006). The authors note charter homeschool has prompted debate as a developing school choice movement and the demands for public accountability among policymakers, educators, and parents. According to Huerta and Gonzalez (2002), the daily operation of charter homeschools have been challenged within the context of increased state accountability demands. In an attempt to increase accountability, legislatures have adopted state policy changes concerning public oversight of charter homeschools, specifically in California (Huerta & Gonzalez, 2002). As charter homeschools continue to emerge in California, it is likely the charter homeschool practices will be monitored more closely by legislators. As charter homeschools expand to other states, policymakers will need to identify the governance and organizational models employed by charter homeschools (Lines, 2000).

Parental choice in education continues to expand influencing schools such as charter homeschools to provide a variety of educational options for families. The charter homeschools must have attractive programs and be sensitive to parent's hopes and wishes for the child. Parent and teacher conferences, classes, individualized programs, and creating new and creative programs contribute to student success. Establishing criteria for charter homeschools to attract parents and students is essential. Current charter homeschools have responded by providing additional services and increasing support (Lines, 1999). Dedicated teachers who spend time advising and helping homeschool families and are sensitive to the individual wishes of families will assist in marketing the homeschool. Teachers who offer charismatic leadership and are good, solid teachers will enhance the programs. It seems more likely that charter homeschool ideas will influence public practices and curriculum. Public educators will attract homeschool students if they are sensitive to their needs, preferences, and goals. Choice in education is likely to continue and possibly increase given the move toward standardization and accountability in state initiatives such as California. The charter school movement continues to advance with the common precepts of the charter homeschool (Lines, 1999). Lines notes, charter homeschools create new educational innovations. As accountability is beginning to be addressed in the charter homeschool movement, it is critical public officials monitor student achievement of these students.

According to de Waal and Theron (2003), homeschooled students are not disadvantaged academically. There is a need to address the mixed results that frame charter school research and to improve methodological rigor. It is necessary to form a framework for the standardization of analyses of the current knowledge bases. With the increasing move toward standardization and accountability in public education, parents are committed and have chosen homeschooling because it is an available option and choice. In a study that analyzed whether California charters met the achievement growth targets set by the Californian academic performance index, charter homeschools outperformed classroom based charters and traditional schools (Huerta, Gonzalez, & d'Entremont, 2006). Homeschool will not replace mainstream education but the increasing numbers indicate homeschool deserves more research. Using standardized test scores as outcome measures is one way charter schools qualify for inclusion in the public education system. Parent and student satisfaction is the impetus behind the fact that many charter homeschools have student waiting lists (Finn Jr., Manno, & Bierlein, 1996). In order for such schools to maintain operating status, legislators and policymakers must hold students, parents, and educators accountable for the success of student achievement.

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

INTRODUCTION TO THE RESEARCH DESIGN AND METHODOLOGY

California is targeted as the state with the most charter schools serving over 200,000 students (Buddin, 2006). San Diego is the fastest growing county sponsoring charter homeschools (Lines, 2000). The intent of this study was to contribute to the current research concerning student achievement in a charter homeschool. The following questions guided the research:

- 1. How do students in a charter homeschool score on California Standardized Tests (CST)?
- 2. How does the average mean of CST scores of the charter homeschool students compare to California state averages for public school students?
- 3. What are the differences in CST's among groups of students who are homeschooled through a charter school (i.e. ethnic groups, gender, grade level, parent education level, parent economic status)?
- 4. What are parents, teachers, and an administrator's perceptions of student achievement in the charter homeschool?

Research Design

This study used a mixed methods approach to research student achievement in a charter homeschool. The mixed methods explanatory design consisted of two distinct phases; quantitative followed by qualitative (Creswell & Plano Clark, 2007). In this design, quantitative data were collected and analyzed first. The qualitative data were collected and analyzed second to help elaborate on the quantitative results obtained in the first phase. In addition, the triangulation design involved the concurrent, but separate, collection and analysis of quantitative and qualitative data to directly compare and contrast the results with qualitative findings (Creswell & Plano Clark, 2007).

Quantitative analysis using the Statistical Program for Social Sciences (SPSS) aided in the analysis of standardized assessment scores. The California standardized test scores obtained from May 2006 and 2007 for the dependent variables Mathematics and English language arts among grade levels, 2nd-11th were analyzed. The analysis of independent variables included, grade level, gender, ethnicity, and parent education and economic status.

Both methodologies were helpful in providing descriptive and comparative data for this study which employed a naturalistic approach coupled with experimental measurement and analysis (Creswell & Plano Clark, 2007). The use of qualitative questions fell within the naturalistic frame of research utilizing strategies of discovery and emergent evaluation (Guba & Lincoln, 1987). A basic qualitative study was used to investigate participant perception and engagement in narrative inquiry (Seidman, 1998). An online survey data instrument was created at www.surveymonkey.com Parents were requested to complete the Likert style survey via email and all emails were kept confidential. The purpose of the survey was to obtain parent perceptions of student academic achievement in the charter homeschool based on the California standardized test scores.

Qualitative analysis was used for responses from a focus group interview. The interview was conducted to reflect on stakeholder experience and to make meaning through language (Siedman, 1998). A focus group interview of two parents, two teachers, and an administrator was conducted to ascertain stakeholder perceptions of student achievement in the charter homeschool. All names were kept confidential and pseudonyms were used. The interview allowed for a natural setting and sufficient avenue of inquiry using a variety of methods to observe normal occurrences and arrive at a reasonable interpretation of the data collected (Guba & Lincoln, 1987; Seidman, 1998). The triangulation of the quantitative survey results converged with the qualitative focus group findings provided a better understanding of student achievement in a charter homeschool (Creswell & Plano Clark, 2007). The subsequent sections of this chapter provide information regarding participants, population, and data collection. The research questions and how they were analyzed are discussed in the data analyses section.

PARTICIPANTS

Sample Population Description

Students were enrolled in a charter homeschool in San Diego County. The charter homeschool consisted of three campuses in the East, Central, and South areas of San Diego. A

sample population of 182 students who took the California standardized test in English language arts and Math in 2006 and 2007 was studied. Students in Pre-kindergarten, kindergarten, first grade and twelfth grade were not included in the sample population because these students did not take the standardized assessments. The standardized scores were collected from school records and analyzed. The focus group interview participants included two teachers, two parents, and an administrator. The interview participants were chosen from the two larger campuses. One teacher and one parent from the south and one parent and one teacher from the east campus were selected based on the length of time they had been with the charter homeschool and all four participants were members of the charter advisory committee. The administrator was selected based on the availability of administrators during the time the interview was conducted. Pseudonyms were used and all names were kept confidential. The online parent survey was emailed to the parents of the students who had a registered email with the school.

DATA COLLECTION

California Standardized Test (CST)

The data collected was secondary and pre-existing data. The California Standardized Tests (CSTs) were administered to students in spring, 2006 and spring, 2007. The data released from the state was nationally normed by percentile scores. Total scores per grade level were published on the California Department of Education website for all operating public schools. Individual student scores in the areas in Mathematics and English Language Arts were collected from school records. Students who were administered the tests in second through eleventh grades were studied. Student names and assessment scores were coded to ensure confidentiality and data was recorded in the SPSS program (see Appendix A).

Demographics

Student data from the charter homeschool was collected from school records. Student information was coded for confidentiality. Students were grouped by gender, ethnicity, and parent education level. Based on the student's eligibility for the National School Free Lunch Program, parent's economic status was used as another group to compare standardized test scores. Demographics were gathered so inferences could be made about a particular attitude or

perception of an entire population (Babbie, 1990). Table 4 describes the characteristics and the total number of students for each group for English Language Arts in 2007.

Gender	Year – 2007	
Female Male	208 195	
Ethnicity		
White, non-Hispanic Hispanic	215 120	
Parent Education Level		
High School Graduate Some College College Graduate	113 104 93	
Family Economic Status		
Economically Disadvantaged Not Economically Disadvantaged	160 244	

Table 4. Charter Homeschool Group Demographics

Parent Survey

The parent survey was an online data instrument created at www.surveymonkey.com . The survey asked three demographic questions followed by nine questions relating to parent perception of CST scores and student achievement. Survey questions were brief using a five point Likert Scale (1= Strongly Agree to 5= Strongly Disagree). Parents were invited to complete the survey online (see Appendix B & C) for approximately five minutes. All correspondence for the survey was communicated through email. All emails were kept confidential. Survey's are used to generalize from a sample to a population so that inferences can be made about a particular attitude or perception of an entire population (Babbie, 1990) The purpose of the survey was to obtain parents perceptions of student academic achievement in the charter homeschool and compare these results to the standardized assessment scores. The survey, though quantitative in nature, was used as a way to explain any observable effects and comparisons to the focus group interview responses.

Focus Group Interview

The voices of participants were directly heard through the interview. It was determined participant views from interview responses and standardized instruments converged and were triangulated by using a mixed methods approach. Upon meeting with the focus group, the researcher presented a brief introduction to the study. All participants had been with the homeschool since its inception in 2004. Ann had been homeschooling two children in grades 5th and 7th. Bea had been homeschooling two children in grades 2nd and 5th. Ceecee consulted parents and students grades K-12. Dee taught middle and high school classes. Eli was from the south campus and had been an administrator for the homeschool since its inception in 2004. Participants were invited to participate in the focus group interview and complete the consent to be interviewed form (see Appendix D). The interview questions were open-ended and allowed participants to speak freely (see Appendix E). The recorded time of the interviews was approximately forty five minutes. Follow up with each participant was conducted for verification or modifications of responses. The interview was audio recorded. Field notes were recorded as the interview was taking place. The interview was conducted in an office at the charter homeschool after school hours during the winter break. A glossary of terms was created for unfamiliar terms mentioned in the interview responses (see Appendix F).

Data Analysis

The analysis of student achievement based on results from the California Standardized Tests (question1) and comparisons of student test scores among groups of students who are homeschooled through a charter school (question 3) were reviewed and analyzed through descriptive statistics using SPSS. The range, mean, and standard deviation were calculated to determine significant differences and similarities among student achievement scores and demographic groups. The average mean of standardized assessment scores from the charter school and how they compared to California state averages for public school (question 2) were analyzed using secondary data obtained from the California Department of Education website assessment and results section for all public schools. A simple mean comparison across grade levels for math and English scores were performed. Emerging themes, implications and recommendations for future studies of the same population or groups of the same population were determined. The survey responses were calculated by percentages. The responses and

comments were coded and examined for significant categories, (Creswell, 1998), about parent perception among CSTs and student achievement. To determine parent's, educator's and an administrator's perceptions of student achievement in the charter homeschool (question 4) the focus group interview strategy with open-ended questions, (Seidman, 1998), was used (see Appendix E). The researcher transcribed the responses and produced a printed copy for the interviewees to review them. They were asked to add, delete, or change anything they wished and return it to the researcher within a few days. Revisions were made if necessary. Interview responses were coded for categories and themes (Creswell, 1998; Morgan, 1997). In coding, initial categories of information from the interview were formed. Within each category, data that showed possibilities on a continuum of the data were discovered (Creswell, 1998).

The data analysis described each of the participants and quotes from the interview. The focus group participants were selected based on their involvement in the charter homeschool. All participants were directly involved in the development and creation of the charter school. All participants represented the main resource centers of the charter school. In addition, the participants were members of the charter advisory council which met on a monthly basis to discuss school business and improvements for the school. The interview assisted in gathering opinions and perceptions and gained an understanding about student achievement in homeschool from a participant's perspective. The interview responses were reviewed line by line, labeled, and categorized. The researcher reviewed data and transcripts. As data was analyzed, it was used to raise issues that focus on themes and incidents reported across all data sources Criteria for the interview themes were based on the literature and what researchers have found to be underlying parent perceptions for choosing homeschool, specifically charter homeschools (Huerta, Gonzalez, & d'Entremont, 2006; Finn Jr., Manno, & Bierlein, 1996; McDowell, 2000). The requirement of parental involvement with their children clearly defined the theme of family. The theme of flexibility emerged based on the multiple literature references of choice parents have in homeschooling. According to the literature, homeschool parents need support in curriculum and resources to assist them in preparing their students for standardized assessments such as the CST. Therefore, the theme of support was developed. The data was coded by the number of occurrences the three terms, family, flexibility, and support were found in the interview transcriptions. The themes were used to compare how they related to the survey responses and to indicate if these themes had any affect on CST scores.

Triangulation of data, (Creswell & Plano Clark, 2007), was instituted to strengthen reliability and ensure validity of results for standardized test scores, survey results, and focus group responses.

CHAPTER 4

FINDINGS

INTRODUCTION TO THE FINDINGS

The purpose of this study was to investigate student achievement in a charter homeschool. The methodology employed to gather data while addressing the research questions was threefold: analysis of test scores, a survey administered to parents, and a focus group interview. Data gathered from this study included student test scores over a two year term, results from an online parent survey, and transcriptions from a focus group interview conducted with 2 parents, 2 teachers, and 1 administrator. The data analysis was explanatory and consisted of two phases: (1) the analysis of pre-existing quantitative data using student test scores (2) the responses to the survey and the analysis of the interview responses. The analysis of the interview provided in-depth descriptions, and anecdotal support to uncover common themes compared to the analysis of test scores and surveys. The following sections discuss the findings and analyses for test scores, the online parent survey, and the responses from the focus group interview.

CST Test Score Results

Student progress in meeting California content standards is measured by the California's standardized testing (CST) and reporting program each year. The content standards describe what all students should know at each grade level. There are five levels of performance standards (Advanced, Proficient, Basic, Below Basic, and Far Below Basic). The state goal is for all California students to score at the proficient level or above. Performance standards are based on scale scores. Scales scores take into account differences in the difficulty of test forms and are useful for reporting changes over time.

A scale score of 350 (Proficient) in 2006 is comparable to a scale score of 350 in 2007, Performance of students by grade level are compared year to year as well as compared to performance of students within a school, district, and the state by the percentage of how many students scored proficient or above (California Department of

Education, 2006). However, these students are different groups of students each testing term and the percentage of students who score proficient or above does not reflect how the same groups of students per grade level and gender may have improved or declined in scores from one year to the next (see Appendix A). This section of the study attempts to compare the mean scale scores for the same group of students per grade level over two testing terms. Research question 1, how do students in a charter homeschool score on the California Standardized Tests is presented in the following section.

Figure 1 indicated a comparison of the same students in primary grades $(2^{nd}-6^{th})$ who were administered the CST in 2006 and in 2007 for the charter homeschool being studied based on the mean of the scale score. The groups of students in 2007 were one grade level older than in 2006. The grade level on the left of the slant indicates the grade level for 2006 and the grade level on the right of the slant indicates the same group of students in the next grade level. The subjects scored are in English Language Arts (ELA) and Math. In ELA for 2006, the $2^{nd}/3^{rd}$ group's mean score was 337 and scored 346 in 2007. Students improved by nine points and were four points from proficient. A total of nineteen students were tested. The $3^{rd}/4^{th}$ group's mean score was 345 in 2006 and 357 in 2007. Students improved by twelve points and scored proficient. A total of seventeen students were tested. The $4^{th}/5^{th}$ group's mean score was 352 in 2006 and 345 in 2007. Student scores decreased by seven points and scored proficient for 2006 and basic, five points from proficient, for 2007. A total of fourteen students were tested. The $5^{th}/6^{th}$ group's mean score was 344 in 2006 and scored 349 in 2007.

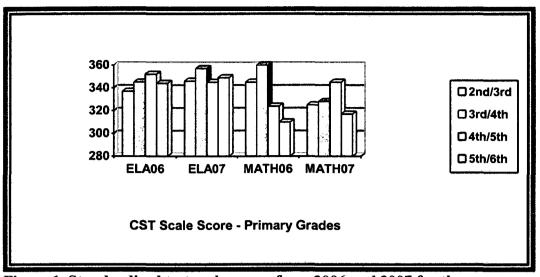


Figure 1. Standardized test scale scores from 2006 and 2007 for the same group of students in primary grades.

Students improved five points and were one point away from proficient. A total of thirty students were tested. An analysis of this data determines homeschooled students grades 2nd through 6th score five points within or better to the mandated state requirement of proficient when compared over a two year testing period. This reveals teachers, parents, and students dedicated additional time to standards and test preparation. Not only did three of the groups improve over a two year period, the 3rd, 4th, and 5th grade groups of 2007 did better than the 3rd, 4th, and 5th grade groups of 2006. A total of eighty students at the elementary level tested for both years comprised 40% of students who tested.

An analysis of groups who did improve, include the 2nd grade group who took the CST for the first time in 2006. These students had never experienced a standardized test. This group may have not been familiar with test taking skills and strategies or exposure to standardized tests. Interestingly, this same group improved the next year and scored close to proficient along with the other groups. As 3rd graders, the students had a year to practice test taking skills and were familiar with the test format. The 4th/5th grade group declined in score from 2006 to 2007 by seven points, yet remained within five points from proficient. One explanation may be due to the fact the fourth grade standardized assessment includes a writing component. The additional scores in writing may have helped boost the 4th grade scores closer to proficient as is the case for the 4th grade group

in 2007 who scored above proficient. Overall, the ELA scores are adequate to determine students have an understanding and good grasp at reading and language conventions. Students are familiar with the test format and perform well. Even though parents and teachers may be using different curriculum students score according to state standards in English language arts.

In Mathematics for 2006, the $2^{nd}/3^{rd}$ group's mean score was 345 and 325 in 2007. Student scores declined by twenty points and scored basic for both testing terms. The $3^{rd}/4^{th}$ group's mean score was 360 in 2006 and 328 in 2007. Student scores declined thirty-two points. In 2006, the $4^{th}/5^{th}$ group's mean score was 324 and 345 in 2007. Student scores increased by twenty-one points scored five points from proficient and at the basic level both terms. The $5^{th}/6^{th}$ group's mean score was 310 in 2006 and 317 in 2007. Student scores improved by seven points and scored basic for both years.

The data analysis for math scores at the elementary level indicated second grade students scored close to proficient and higher than they did the following year as 3rd grade students. This may be due to the fact the second grade math test is administered orally and students have the advantage to aurally understand math information before calculating the test questions. However, the following year the same group of students scored significantly lower. An explanation for these scores can be based on the requirement for students to complete the testing independently which was a different format than the previous year. In addition, the math skills tested at this level require memorization in basic multiplication, division, and fraction concepts. Memorization of basic math facts can be difficult to retain and may not be mastered over an eighth month school term prior to testing. The 2006 3rd grade group scored ten points above proficient although scored basic the following year. One reason students may have scored significantly lower may be the students did not place a big emphasis on preparing for math considering how well they did the previous year. Another possible reason could be the 4th grade math assessment was more challenging than expected. The 4th grade group in 2006 (total = 324) scored almost the same as the fourth grade group in 2007 (total = 328). The fourth grade concepts such as multiplying and dividing fractions and decimals may have been too difficult considering third grade students attempt to memorize basic multiplication and division facts. The 4th/5th and 5th/6th groups improved from 2006 to

2007. Scores were not proficient although it is evident teachers, parents, and students, emphasized the improvement of scores for both these groups over the two years.

Figure 2 indicated a comparison of the same students in middle and high school grades (6^{th} -11th) who were administered the CST in 2006 and in 2007. In ELA for 2006, 6^{th} grade students mean score was 353 at proficient. In 2007 the same group of students, now in 7th grade, scored eight points lower, with a mean score of 345, five points from proficient. A total of twenty-one students were tested. The 7th/8th group's mean score was 365 in 2006 and 360 in 2007. The five point difference did not affect the achievement level of proficient. A total of eighteen students were tested. The 8th/9th group's mean score was 357 in 2006 and 353. The four point difference did not affect the achievement level of proficient. A total of twenty-four students were tested. The 9th/10th group's mean score was 345 in 2006 and 320 in 2007.

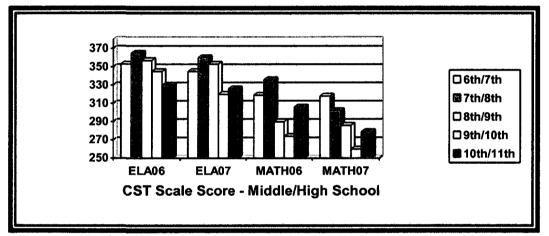


Figure 2. California standardized test scale scores from 2006 and 2007 for the same group of students in middle/high school grades.

The $10^{\text{th}}/11^{\text{th}}$ group's mean score was 330 in 2006 and 326 in 2007. Both years indicated basic levels of performance. A total of eighteen students were tested. An analysis of the $6^{\text{th}}/7^{\text{th}}$ ELA scores determines students were close to proficient. The standardized test at these levels includes more challenging comprehension questions and extensive reading passages. The $8^{\text{th}}/9^{\text{th}}$ group scored at proficient. It is evident students prepared for the assessment and were fluent readers with a good understanding of reading comprehension questions. The $9^{\text{th}}/10^{\text{th}}$ groups scored lower in 2007 than 2006. One indicator is the students in 10^{th} grade have a minimum of four assessment administered. In addition to the ELA and the Mathematics course these students are enrolled in, a

World History and Physical Science assessment is administered. In addition, these students are required to take the end of year course exam for other subjects they are enrolled in. Students may have up to six assessments they are required to be administered. The demand to perform at a proficient level for multiple assessments is certain to affect scores. The 10th/11th group scored basic for both years with almost the same score for both years. As mentioned, the assessments in high school are extensive and the material covered is challenging. Students at this level are also preparing and taking additional assessments for college such as PSAT and SAT. Overall, the charter homeschool middle and high school students scored almost the same over a two year period. This indicates a consistency of group performance with room for improvement.

In Mathematics the $6^{th}/7^{th}$ group's mean score was 319 in 2006 and 318 in 2007. There was one point difference between the two years and in both years the group scored at the basic level. A total of twenty-one students were tested. The $7^{th}/8^{th}$ group's mean score was 336 in 2006 and 302 in 2007. Both years indicated basic levels of performance. A total of eighteen students were tested. The $8^{th}/9^{th}$ group's mean score was 290 in 2006 and 286 in 2007. The difference in points was four points and the level of performance was below basic. Twenty-two students tested in 2006 and 260 in 2007. Twenty-two students tested in 2006 and 260 in 2007. Twenty-two students tested in 2006 and 260 in 2007. Twenty-two students tested in 2006 and 260 in 2007. Twenty-two students tested in 2006 and 260 in 2007. Twenty-two students tested in 2006 and seventeen tested in 2007. Students scored below basic for both terms. The $10^{th}/11^{th}$ group's mean score was 306 in 2006 and 279 in 2007. Eleven students tested in 2006 and ten tested in 2007. The first score fell under the basic level of performance.

The decline in high school math scores may have attributed to the more complex mathematics subjects high school students are required to learn such as Algebra 1, Geometry, Algebra 2, Integrated Mathematics, and Summative High School Math. Another difference in the high school grades were the number of students who took math tests. There was one less student testing in math for the $8^{th}/9^{th}$ group in 2007. There were three less students testing in math for the $9^{th}/10^{th}$ group in 2007. There was one less student testing in 2007. There was one less student testing in math for the $10^{th}/11^{th}$ group in 2007. There was one less student testing in math for the student testing scores indicate the students may have been absent the day the math test was administered or the student was not enrolled in a math course and was not required to take a math assessment.

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In order to address research question two, what is the difference in CSTs among groups of students who are homeschooled through a charter school (i.e. ethnic groups, grade level, gender, parent education level, parent income level), the subsequent tables and following analysis of data are presented. The state of California calculates total school performance based on the percentages of students for each grade level scoring at or above the proficient level. The following table (see Table 5) provided the percentages of students scoring at or above proficient for the same group of students tested for 2006 and 2007. The total number of student scores studied was 182. The percentages in the 2006 row were from the grade level to the left of the slant as indicated in the column heading. For example, the $2^{nd}/3^{rd}$ grade column percentage in 2006 was an actual percentage for that group in second grade. The $2^{nd}/3^{rd}$ grade column percentage in 2007 was an actual percentage for the same group of students in third grade. The 2007 group of second grade students had a percentage because it was the first time this new group of 2^{nd} grade students was administered the CST.

 Table 5. Percent of Students at or Above Proficient for Same Group of Students

 ELA

CST Year	NA/2 nd	2 nd /3 rd	$3^{rd}/4^{th}$	$4^{\text{th}}/5^{\text{th}}$	5 th /6 th	6 th /7 th	7 th /8 th	8 th /9th	9 th /10 th	10 th /11 th
2006		38%	41%	43%	47%	48%	72%	54%	41%	33%
2007	35%	37%	53%	50%	57%	53%	72%	46%	27%	33%

The 2007 $2^{nd}/3^{rd}$, $9^{th}/10^{th}$, and $10^{th}/11^{th}$, grade group's percentages were significantly below 50%. However, the percentages for the $2^{nd}/3^{rd}$ and $10^{th}/11^{th}$ groups were the same or almost the same as the prior grade level year. The table indicates 6 out of 10 groups scored the same as or better than the year before. It is evident the increase in percentage for students scoring at or above proficient increased over a two year period. This result demonstrates students are being better prepared for the standardized assessment. Fewer students scored at or above proficient in the $8^{th}/9^{th}$ grade group by less than 10%. This may be because students are now in high school and high school courses are more demanding and challenging. Another significant difference was the scores for the $9^{th}/10^{th}$ grade group. In 2006, 9 out of 22 students scored at or above proficient and the next year 6 out of 22 scored at or above proficient for a decline of 14%. The minimal difference in the number of students scoring at or above proficient considerably changed the percentage. In addition, overall scores for the group was much lower as indicated in Figure 2. It is worth noting two groups had a 1% difference and one group had a 2% difference to conclude the groups were close in scoring at or above proficient when compared as the same group from 2006-2007. As the state mandate is for all students to score at or above proficient, this demand for teachers, students, and parents is challenging. It is evident the majority of students at the charter homeschool strive for proficient scores.

Table 6 displayed percentages of students at or above proficient for different groups per grade level in ELA for 2006 and 2007. Different groups denote total students tested. The total number of students tested in 2006, English Language Arts was 333 out of a total enrollment of 364. In 2007, 244 students tested in English Language Arts out of a total enrollment of 424. More students were enrolled in the charter homeschool in 2007. Interestingly, fewer students tested in English Language Arts in 2007 than 2006. This suggests more kindergarten, first, and twelfth grade students made up the total enrollment than the prior year and these grades are not required to test.

Table 6. Percent of Students at or Above Proficient for Different Group per GradeLevel - ELA

CST Year	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11th
2006	33%	47%	38%	45%	43%	60%	61%	34%	31%	26%
2007	38%	32%	55%	34%	48%	47%	54%	47%	37%	34%

In addition, there were more 2^{nd} through 11^{th} grade students who tested in 2006 than 2007. When these percentages were compared to the percentages in Table 5, it was determined less groups scored at or above proficient in 2006 across grade levels. For 2007, the same number of groups scored at or above proficient in Table 6 than 5. Additionally, the other four groups who scored higher for 2006 in Table 6 were within one to three percent of the groups for 2006 in Table 5 with the exception of the 10^{th} grade group who scored 10% higher than the 2007, $9^{th}/10^{th}$ group in Table 5. One determination from Table 5 when compared to Table 6 is the percentages in scores for 2006 for each grade level are different. This is because the percentages in Table 5 are only students who were administered the assessment in 2006 and 2007. Table 6 percentages include all students who tested in 2006 and 2007. This may include students who did not test in one or the other year or who may have left the charter homeschool in 2007. Comparison of Table 5 and 6 allow an analysis that charter homeschool students score almost the same as or better for the same group of students rather than different groups per grade level.

Table 7 displayed percentages of students in the state of California who scored at or above proficient for different groups per grade level in ELA for 2006 and 2007.

Table 7. Percent of CA. Students at or Above Proficient for Different Group perGradeLevel-ELA

CST Year	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th
2006	46%	36%	49%	43%	41%	43%	41%	43%	37%	36%
2007	48%	37%	51%	45%	42%	46%	41%	41%	38%	37%

When these percentages were compared to the percentages in Table 5, it was determined 6 out of 10 groups in Table 5 did the same or better than students in CA for 2006. The 11th grade group had a 3% difference than the 10th/11th group and the 4th grade group had an 8% difference than the 3rd/4th group. For 2007, 7 out of 10 groups in Table 5 scored the same or better than students in CA. The 9th grade group scored 14% higher than the 9th/10th group in Table 5 and the 10th grade group scored 5% higher than the 10th/11th group. It can be determined the majority of students in the charter homeschool score the same or better than students in California in English Language Arts. Other data revealed is scores for the charter homeschool students in the high school levels tend to decline across grade levels and are lower when compared to students tested in California. This is an indication students in the charter homeschool need additional resources and assistance to prepare for the standardized test to be able to reach the proficient level. It is important to note the comparison of charter homeschool to all students being administered the CST in California is not an adequate comparison. Schools of similar demographics would justify a reasonable evaluation of student achievement.

Table 8 displayed percentages of students at or above proficient for the same group of charter homeschool students in mathematics. In 2006, 298 students were tested in mathematics and 366 tested in 2007. The percentages in the 2006 row represented the

group of students as the prior grade level year. For example, the $2^{nd}/3^{rd}$ grade group column in 2006 was 2^{nd} grade as indicated to the left of the slant and 3^{rd} graders in 2007 as indicated on the right of the slant. Three out of 9 groups scored the same or better in 2007 than 2006. Second grade in 2007 was not included in the comparison because this group of students did not take the assessment the prior year. The remaining groups had differences of 11% or less. As mentioned earlier, the 8th through 11th grade were administered mathematics assessments depending on the course they were enrolled in for the school year. It is also important to note the percentages in 2006 and 2007 for grades 8th through 11th may be low because fewer students were administered the assessment than the English Language Arts assessment. For examples, 7 out of the 18 students in the 10th/11th group in 2006 did not take a mathematics assessment in 2007. Eight of the 18 students were not the same students over the two years. Consequently, this affected the percentages for the number of students scoring proficient.

 Table 8. Percent of Students at or Above Proficient for Same Group of Students

 Math

CST Year	2 nd	$2^{nd}/3^{rd}$	$3^{rd}/4^{th}$	$4^{\text{th}}/5^{\text{th}}$	5 th /6 th	6 th /7 th	7 th /8 th	8 th /9 th	9 th /10 th	$10^{\text{th}}/11^{\text{th}}$
2006		42%	41%	36%	21%	33%	44%	10%	10%	27%
2007	51%	37%	35%	43%	23%	33%	33%	5%	0%	20%

Tables 9 and 10 displayed percentages at or above proficient based on the mathematics course students were tested in. State standard in mathematics for 8th grade is Algebra I and courses in succession by level for the high school years. It is assumed 8th graders took Algebra I, 9th graders took Geometry, 10th graders took Algebra II, and 11th graders took Summative Math.

Table 8 did not display percentages per math course because the same student's math score, regardless of which math course the student was enrolled in was being compared from 2006 to 2007. Students were enrolled in different mathematics courses each year. The total number of students tested in 2006 was 298 out of a total enrollment of 364. In 2007, the total number of students tested was 366 out of a total enrollment of 424. Table 9 provided percentages of students at or above proficient for different groups

per grade level in the mathematics course they were enrolled in. Table 10 provided percentages of students at or above proficient for California students. However, 8th graders who were not enrolled in Algebra I were administered a General Mathematics assessment. The grade level did not apply because students may have been in any high school grade level not enrolled in a math course or had been enrolled in a math course out of succession. When these percentages were compared to the percentages in Table 8 for 2006, determined the 2nd/3rd, 3rd/4th, and 4th/5th group scored higher than the 3rd, 4th, and 5th groups in Table 9. The 5th/6th and 6th/7th groups scored lower in Table 8 than Table 9. The percentages in the 8th through 11th were difficult to compare due to the variety of math courses enrolled in. It should be noted there were higher percentages in Table 8 than Table 9.

 Table 9. Percent of Students at or Above Proficient for Different Group per Grade

 Level - Math

CST Year	2 nd	3 rd	4 th	5 th	6 th	7 th	General Math	Algebral	Geometry	Algebra2	Summative HS Math
2006	39%	37%	28%	19%	32%	38%	4%	10%	5%	13%	0%
2007	51%	41%	36%	16%	26%	26%	14%	5%	14%	8%	0%

In 2007, the $4^{th}/5^{th}$ and $6^{th}/7^{th}$ group (see Table 8) scored a higher percentage than the 5th and 7th group in Table 9. The $3^{rd}/4^{th}$ group and 4^{th} grade group had a difference of 1%, the 5th/6th grade group had a difference of 3%, and the $2^{nd}/3^{rd}$ and 3^{rd} grade group had a difference of 4%. The 7th/8th grade group from Table 8 took General Math or Algebra 1. Thirty-three percent scored at or above proficient. This percentage was higher than the percentages combined for General Math and Algebra 1 from Table 9. The percentages, when combined, for higher math courses in 9th through 11th groups were higher than the percentages combined for the leveled math courses in Table 9.

It can be determined when scores are compared for the same group of students to students of different groups in mathematics, more groups of students score at or above proficient. It is evident additional support is needed for the charter homeschool students for all groups in mathematics in order to achieve at or above proficient. The 2nd grade group in 2007 was the only group to have more than 50% of students scoring at or above

proficient. This indicates this group of students understood the assessment format and standards required to score well. Other revealing data for the low percentages in the high school levels may be due to the low number of students who were administered the assessment. Only one student was administered the Summative Math assessment in 2006 and only two in 2007. The percentages for at or above proficient were weighted on two students. This is not significant enough to justify a comparison of student achievement to other groups of students of other schools. The other numbers of students administered the assessment for mathematic leveled courses ranged from 8 to 66. Comparing these small numbers to other schools who administer the assessment to over hundreds of students in a single subject does not substantiate a rational analysis.

Research question three, how does the average mean CST scores of the charter homeschool students compare to California state averages for public school students was addressed by examining Table 8 and Table 10. Table 10 displayed percentages of students in the state of California who scored at or above proficient for different groups per grade level in Math for 2006 and 2007. When these percentages were compared to the percentages in Table 8, all group percentages for California students scored higher for both years 2006 and 2007.

 Table 10. Percent of CA. Students at or Above Proficient for Different Group per

 Grade Level - Math

CST Year	2 nd	3 rd	4 th	5 th	6 th	7 th	General Math	Algebral	Geometry	Algebra2	Summative HS Math
2006	58%	57%	54%	48%	42%	41%	22%	23%	26%	25%	46%
2007	59%	58%	57%	49%	42%	39%	21%	23%	24%	27%	48%

This can be attributed to the high number of students tested in California which includes all types of school's, specifically, the high performing school's percentages for California students. Student achievement needs to be analyzed by similar schools of similar populations to obtain an adequate evaluation. Another interesting finding between Table 8 and 10 was the decrease in percentages across grade levels from the elementary to the high school levels. This finding suggests as the mathematics level increases, the more difficult the course and assessment questions become. It is evident the charter homeschool students additional support and assessment preparation in order to raise scores and obtain percentages to match or exceed all students in California.

Research question three, what is the difference in CST scores among groups of students who are homeschooled through a charter school, was addressed by the analysis of Tables 11-14. These tables provided percentages of students at or above proficient for English Language Arts in 2007. The groups of students included economic status, ethnicity, gender, and parent education level. The asterisk indicated there were fewer than ten students tested for that grade level, therefore no percentage were calculated. Table 11 indicated the percentages for economically disadvantaged groups were lower than the percentages for not economically disadvantaged. The lowest percentage was 9% for 3rd grade in the economically disadvantaged row.

Economic Status	2^{nd}	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10th	11 th
Economically	27%	9%	*	21%	47%	33%	39%	44%	32%	32%
Disadvantaged										
Not Economically	42%	42%	60%	44%	48%	53%	65%	50%	42%	37%
Disadvantaged										

Table 11. Percent of Students at or Above Proficient – Economic Status

The highest percentage was 65% for the not economically disadvantaged group for 8th grade. An analysis of this data reveals the economically disadvantaged group scored lower than students who are not economically disadvantaged. Students of economic hardship score lower because they lack educational resources needed in the home. Students who are in need of tutoring services cannot obtain them due to lack of funds in the family. It is likely the parent who is employed full time has a higher education level than the parent who is homeschooling which can be a factor in lower student assessment scores. Interestingly, 6th, 9th, and 11th grades percentages for economically disadvantaged were close to the percentages for not economically disadvantaged. The 6th and 9th grade groups were close to 50% at or above proficient and the 11th grade groups scored in the upper thirty percentile. This indicates groups of students who are economically disadvantaged are capable of achieving the same as students who are not economically disadvantaged.

Table 12 displayed information for the percentages of students at or above proficient for the two main ethnic groups attending the charter homeschool. Ethnicities such as Black, American Indian/Alaskan Native, Asian, Filipino, Japanese, Pacific Islander, Other Pacific Islander, and Vietnamese were other groups included in the assessment results but did not include percentages for students at or above proficient due to less than ten students tested for each grade level.

Ethnicity	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th
Hispanic ($N = 120$)	*	*	*	*	50%	25%	46%	48%	19%	21%
White (not Hispanic) (N = 215)	48%	36%	72%	44%	42%	59%	52%	55%	52%	43%

Table 12. Percent of Students at or Above Proficient – Ethnicity

One-hundred twenty seven Hispanic and two-hundred fifteen White (not Hispanic) student results were included in the above percentages. Fewer than ten Hispanic students were tested in 2nd through 5th grade and do not include percentages. For grades 6 through 11, the lowest percentage was 21%, for the 11th grade Hispanic group. The highest percentage was 72% for the 4th grade White group. Five out of the six groups with percentages in both rows were higher for the White group than the Hispanic group.

An analysis of this data reveals there are few students who are homeschooled in the elementary grades. One reason may be parents do not feel confident in the English language to provide instruction to their children. Parents send their children to a public school or school where students can receive instruction from a certificated educator. As indicated the percentages for Hispanic homeschooled students begin in middle school. Students in 2nd through 5th grade attend school to receive a functional comprehension of academic subjects. The percentages in 6th, 8th, and 9th for Hispanics are close to that of the White (not Hispanic) group. The drastic decline in scores for 10th and 11th indicate the high school courses are more demanding especially if a student is a non-native English speaker. Table 13 included percentages at or above proficient for females and males who took the English Language Arts CST in 2007. The lowest percentage was 20% for 3rd grade males. The highest percentage was 73% for 4th grade females. Eight out of ten groups scored higher percentages for females. The 2nd grade group percentage was the same for both genders.

Gender	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th
Female ($N = 208$)	38%	47%	73%	31%	55%	50%	68%	52%	38%	40%
Male (N = 195)	38%	20%	39%	38%	40%	45%	37%	42%	35%	28%

Table 13. Percent of Students at or Above Proficient - Gender

The above table indicates females in the charter homeschool score better than males in English Language Arts. It is interesting the female groups for 3rd, 4th, 8th, and 11th scored significantly higher than the male groups for these grade levels. This reveals females have a better grasp at reading comprehension, vocabulary and literary strategies in test taking. It is also worth noting thirteen fewer males made up the population of test takers than females. This may attribute to the lower percentages for males.

Table 14 provided percentages at or above grade level for parent education level. Categories included: not a high school graduate, high school graduate, some college, college graduate, and graduate/post graduate. As Table 14 indicated, there were several grade level groups without percentages. As mentioned earlier, at least ten students in each grade level needed to test for a result to be included.

 Table 14. Percent for Students at or Above Proficient – Parent Education Level

Parent Education Level	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th
High School Graduate	*	23%	*	*	41%	33%	50%	45%	17%	*
Some College	43%	*	*	*	36%	45%	50%	58%	*	25%
College Graduate	27%	*	*	36%	*	*	*	*	54%	*

The categories for not a high school graduate and graduate/post-graduate did not have at least ten students testing in any given grade level. These results were not included in Table 14. However, there were 35 students across grade levels whose parents were not high school graduate and 40 students across grade levels whose parents were graduate/post-graduate. The total number of students for high school graduate was 113, for some college 104, and 93 for college graduate. There were a total of 17 students whose parents declined to state their education level. The lowest percentage was 17% for the 10th grade group in the high school graduate category. The highest percentage was 58% for the 9th grade group in the some college category. The some college group had the highest average (42.8%), followed by the college graduate group (39%), and the high school graduate group (34.8%).

An analysis of the data indicates parents who were not high school graduates were least likely to homeschool their children. One explanation may for this may be because parents do not feel capable or confident in instructing their own children. Ironically, the parents who are post graduates or college graduates are least likely to homeschool their children. One explanation for this may be the parent who is a college graduate has a high paying profession and can manage to send their children to a private school or they live in an affluent area where the schools are high performing and both parents and children are satisfied with the schools they are attending. Table 14 reveals the middle through high school levels students whose parents are high school graduates or have some college experience are more likely to homeschool. One reason may be because parents are not satisfied with their local public middle and high school or they did have a good experience in middle or high school themselves and desire an alternative for their own children.

Summary of California Standardized Test Scores

The above figures and tables provided data for students of a charter homeschool. The data revealed students in the charter homeschool did the same or better when scores were compared for the same group of students over a two year period in English Language Arts for all grade levels. Students also scored the same or better at the elementary and middle school levels in mathematics when compared for the same group. Student achievement scores for mathematics declined at the high school levels. One explanation for this was because the high school courses were difficult as the mathematics courses became more advanced and challenging. Charter homeschool students scored the same or better in English Language Arts when compared to the students in the state of California. Student scores in mathematics declined across grade levels in the high school years. A comparison of charter homeschool student scores to the entire student population of California was not an adequate comparison due to the vast differences in schools in California such as total enrollment and demographics.

Student achievement for demographic groups were analyzed and revealed charter homeschool students who were not economically disadvantaged scored higher than students who were economically disadvantaged. There were more groups of students who were not economically disadvantaged that scored close to, at or above 50% proficient. Students who were economically disadvantaged chose charter homeschool for free resources and support. The data indicated females scored higher than males in English Language Arts. Females had a better understanding of test taking skills and the assessment content. The difference in total number of students assessed may have contributed to the lower male percentages. The final table provided data for parent education level. It was found students whose parents did not have a high school diploma were least likely to homeschool. These parents may not have felt confident or capable of instructing their own children. Parents who had some college or post graduate degree were also least likely to homechool their children. These parents may have had a high paying profession to pay for private school or live in an affluent area where the schools are satisfactory for their children.

Parent Survey Results

The purpose of the survey was to determine parent perceptions about student achievement based on the California Standardized Test scores (CSTs). This explanatory study used quantitative and qualitative research methodology to analyze responses from the survey instrument used to collect data (Creswell & Plano Clark, 2007). Data collection produced findings in several areas concerning parent perception of student achievement based on the CSTs. The survey was emailed to parents who registered with the charter homeschool at the start of the current school year. The survey was designed for the purpose of generalizing from a sample to a population so that inferences could be made about the attitudes and beliefs of the participants (Babbie, 1992).

The survey was emailed to 277 parents. Of the 277 surveys emailed, 13 emails were identified as undeliverable, disabled, or addressee unknown. Two addressees replied to the researcher via email stating they were no longer with the charter homeschool and wished to be removed from the mailing list. One addressee replied and stated the survey could not be opened. Two addressees replied they were no longer with the charter homeschool and inquired whether they should participate. Sixty five out of 277 responded for a response rate of 24%. There were 58 out of 65 or 89.2% completed surveys. The survey consisted of twelve Likert style questions (see Appendix C) with a comment section added after each question. The first three questions requested demographic information i.e. number of children in the household, number of year's homeschooling, and grade levels of homeschooled children (see Tables 15-17). It can be determined from Table 15 approximately 85% parents had one to three children. Approximately 15% had more than three children. Table 15 indicates parents with less than three children are more likely to homeschool. Parents with four children or more are least likely to homeschool. It seems reasonable parents with fewer children could instruct their children more efficiently as parents would have more time to provide individualized instruction. However, families of four children or more may find that homeschool is beneficial to the family economically and for other reasons. For example, a family with six children in the household attending school is quite a task to manage each morning in preparation for school. Not to mention the cost of clothing, school supplies, transportation and food expenses. Homeschooling six children may not seem reasonable, however, is probable. Table 16 displayed information regarding the number of years students had been homeschooled. The percentages ranged from 1.5 % for homeschooling 6 to 7 years to 16.9 % for homeschooling 4 to 5 years. The table also revealed, though the percentages were low, there were parents who homeschooled their children from kindergarten to the high school years. The majority of the percentages fell within three to six years of homeschooling.

	N = 65	%
1	7	10.8
2	29	44.6
3	19	29.2
4	9	13.8
5	0	0.0
6	1	1.5
7-9	0	0.0

Table 15. Number of Children in Homeschool Household

This indicated if parents homechooled since kindergarten they would continue up to the beginning of middle school. Interestingly, the percentages were low for 6-7, 8-9, and 9 or more years yet significantly higher for homeschooling 7 to 8 years. Again, this indicated parents homeschooled up to middle school. Parents were more likely to homeschool at least four to five years. Another finding was about 23% of families had been homeschooling 1 to two years. This implies homeschooling is developing and growing. Table 17 provided information regarding the grade levels of students being homeschooled. The data revealed the grade with the highest number of students being homeschooled was fourth grade, followed by eighth grade. Kindergarten, sixth, and twelfth grade had an equal number of students at these levels.

	N = 65	%
0-1	8	12.3
1-2	7	10.8
2-3	5	7.7
3-4	7	10.8
4-5	11	16.9
5-6	9	13.8
6-7	1	1.5
7-8	8	12.3
8-9	3	4.6
9 or more	6	9.2

Table 16. Number of Years Homeschooling

Parents may hold educators accountable for this and desire to provide instruction to their own child/children. Another reason may be class size. From kindergarten through third grade the student to teacher ratio is 1:20. Beginning in fourth grade through high school, the minimum class size can be 36-40 students. This would be a vast change for a third grade student entering fourth grade. Parents may not want to expose their children to a larger class environment. An explanation for 8th grade having a high percentage of homeschoolers is the academic challenge students have at this level. If a student is enrolled in two to three years of middle school, the third year is typically the more challenging because students need to be prepared for high school courses. Eighth grade students, who are not making the grades academically, will homeschool to avoid failing and repeating eighth grade. It is evident more students are homeschooled from kindergarten through 5th grade. This indicates parents are more confident homeschooling at the elementary levels than middle and high school. Table 18 provided the results of the survey responses for questions, 4 through 12. The responses were calculated as percentages ranging from Strongly Agree to Strongly Disagree. Several comments accompanied parent responses for each questions 4 through 12.

	N = 65	%
Kindergarten	11	16.9
1 st grade	6	9.2
2 nd grade	6	9.2
3 rd grade	10	15.4
4th grade	13	20.0
5 th grade	10	15.4
6 th grade	11	16.9
7 th grade	8	12.3
8 th grade	12	18.5
9 th grade	9	13.8
10 th grade	6	9.2
11 th grade	8	12.3
12 th grade	11	16.9

 Table 17. Grade Level of Homeschooled Children

Question 4 and 5 asked parent perception of how students in the charter homeschool score on CST based on state standards. Similar questions were purposely asked in the order as shown to determine how the percentages would differ. For question 4, about 47% of parents perceived students do score above state standards as long as students received individualized instruction and test preparation. Parents also commented students were held more accountable in the charter homeschool providing more reason to agree students score above state standards. However, about 38% of parents had no opinion how students scored compared to state standards. These parents provided comments such as "don't participate", and "not sure". This is an indication parents were not aware of the importance standardized testing participation for the accountability of the charter homeschool. Parents who were not sure how students performed probably did not research the published testing results.

Questions	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree
Q4. students score above standards based on CST	8.6	37.9	37.9	15.5	0.0
Q5. students score below standards based on CST	0.0	28.6	39.7	41.4	10.3
Q6. students score higher than students in public school on CST	10.3	41.4	39.7	8.6	0.0
Q7. students score lower than students in public school on CST	0.0	3.4	34.5	53.4	8.6
Q8. parents do a good job preparing students for CST	12.1	37.9	37.9	12.1	0.0
Q9. teachers provide resources to parents and students for CST	17.2	56.9	20.7	5.2	0.0
Q10. parents would like more assistance preparing students for CST	6.9	34.5	31.0	25.9	1.7
Q11. CST is an essential valid form of student achievement in charter homeschool	3.5	28.1	15.8	31.6	21.1
Q12. you use your child's CST scores to guide instruction	5.2	41.4	12.1	20.7	20.7

Table 18. Parent Perception of Student Achievement and CST

*Percentages may not equal 100% due to incomplete survey responses

The 15.5% of parents that disagreed was based on comments parents did not teach to the test, were subject driven, and instructed based on student interest. Therefore, standardized test scores were affected for those who did not score above state standards. For question 5, data revealed 51.7% of parents did not agree the charter homeschool students scored below state standards. The percentage in the no opinion column was 39.7%. Again, this percentage indicates parents did not find the CST as reliable information for student achievement. Another interesting finding was more parents agreed students scored below standards based on the CST whereas fewer parents had disagreed students scored above standards based on the CST from question 5. One explanation based on the comments were parents did not teach to the test and did not have students participate in the standardized testing so student scores were affected. This explains parents did not realize the importance of testing as accountability for the charter homeschool. Parents may not realize the state requires the charter homeschool participation in testing. Those parents who do not participate must complete a waiver which affects the participation requirement of the charter homeschool. A number of parents commented student scores depended on the individual child. This was a recurring theme throughout the survey comments. Parents are adamant to individualize instruction whether this follows the state standards or not.

Question 6 asked parents if students in the charter homeschool scored higher than public school students on the CST. About 51.7% of parents strongly agreed/agreed, 8.6% did not agree, and 39.7% had no opinion. This data indicates parents believe they are providing better instruction to their children than they would receive in a public school. It can be assumed the parents who disagreed based their decision by comparing California student scores to the charter homeschool which indicate charter homeschool students do not perform higher than California students. The "no opinion" percentage remains consistent with the percentages from the previous questions. Those parents who had no opinion most likely did not have their children participate in the standardized tests or do not believe the CST is an accountable method of students achievement and success.

Question 7 asked parents if students score lower than public school students on CST. 62% strongly disagreed/disagreed, 3.4% agreed, and 34.5% had no opinion. It is interesting more parents disagreed students score lower than public schools students and

fewer parents agreed students scored higher than public school students (Question 6). Logical reasoning would indicate the same percentage of parents agree students score higher than public school students and disagree students score lower than public school students. However, it can be assumed more parents did not agree students scored lower than public school students because it depends on the district and school the charter homeschool students are being compared to. As mentioned, parents may be comparing the charter homeschool scores to California students which indicate charter homeschool students do score lower.

Question 8 asked parents if they perceived themselves as doing a good job preparing students for CST. Approximately 50% of parents strongly agreed/agreed, 38% had no opinion, and 12.1% disagreed. This data revealed parents believed they were providing adequate instruction to prepare their children for the standardized tests. Based on the comments it can be determined parents believed it was the responsibility of the parent to prepare children in a homeschool not the school. Most parents chose the charter homeschool to be informed of what the state requires. The comments that provided statements such as "some do, some don't" and "don't know" indicated parents did not collaborate among each other regarding CST. The recurring theme of individualization was reflected in this question as in the above questions. One parent commented their personal goal was not based on test scores. A parent with a personal goal for instruction must have a personal goal for their child's success indicating the test scores were not a useful source for achievement.

Question 9 asked parents if they perceived teachers in the charter homeschool provided resources to prepare for CST. This question provided the highest response for strongly agreed/agreed of 74.1% out of all questions. While 20.7% had no opinion, only 5.2% did not agree. With such a high rate of agreement, it was expected the comments would support the data. However, very few comments were included. One parent was satisfied with the support they received from the charter homeschool to prepare students for the CST. Another parent commented classes, the test preparation booklets, and the option for parents to choose testing in the morning or afternoon were helpful. The testing schedule supports the flexibility homeschool parents seek in a charter homeschool. It is evident parents agree the charter homeschool is striving for high test scores by providing

additional resources above the curriculum parents use to instruct their children. It is also evident the charter homeschool is sensitive to parents schedules allowing an option for testing times. It is likely the charter homeschool is flexible for testing to encourage more participation.

Question 10 asked parents if they needed more assistance preparing students for CST. About 45% strongly agreed/agreed, 31% had no opinion, and 27% disagreed. Based on the published CST results the charter homeschool students are below the state requirement of proficient, it is expected parents would request and need more assistance to better prepare students for the CST. The charter homeschool will need to revise their classes and curriculum options to address standardized testing items. Offering test preparation workshops or tutoring sessions would also benefit the students for CST. For those parents who disagreed or had no opinion, the comments included statements such as "I'd rather not see the testing done at all" or "I don't think parents in the charter homeschool want to have kids tested at all". These statements indicate even though parents are not in favor of testing, they participate to support the charter homeschool. These statements could determine new policies for the students in the charter homeschool or public schools in general. It would take much lobbying from parents to eliminate standardized testing from the school system.

Question 11 asked parents if the perceived the CST to be an essential and valid form of student achievement. About 58% strongly disagreed/disagreed, 31.6% strongly agreed/agreed, and 15.8% had no opinion. This question provided parent feedback in support parents did not recognize the CST as a valid form of student achievement. An overall generalization from the parent statements was the CST did not measure or reflect the subject matter and learning acquired outside of the standards. Parents believed CST was a measure of what students who have been taught a certain body of material retained. Other comments referred to the CST as a way for the state to control schools. Parents viewed CST as a measure the state has deemed important for a particular area of learning to compare the progress of students across the state.

Homeschool parents want to be the educators of their children and control their children's exposure to curriculum and subject matter. If a student was not taught specific material covered on the test they would not do well. Parents did not agree teaching to the

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test was beneficial for students. They viewed CST as an interference of the learning process. Another comment expressed their child had test anxiety and the test scores did not reflect the true ability of the child. From the above comments, it is clear parents agree homeschool is intended to allow students to learn at their own level and at their own pace. A test showing growth and improvement and learning style would be more beneficial for parents. An alternative assessment or test would better measure the complete body of knowledge based on what parents teach their children.

The last question of the survey asked parents if they used their child/children's CST score to guide their instruction. About 47% parents strongly agreed/agreed, 41.4% strongly disagreed/disagreed, and 12.1% had no opinion. Even though the majority of parents disagreed the CST was a valid form of student achievement from question 11, more parents responded they use their child's CST score to guide their instruction. However, the percentage that parents do not use their child's CST score to guide instruction was close to those that do. The comments supported parents do not use their child's CST score to guide instruction. Several parents commented the CST was irrelevant because the tests did not measure what students learned in all subjects. Another concern was test scores were not immediate and the results arrived beyond the school year. Parents also stated the testing environment was not familiar to homeschool students because most students were used to a one on one type of environment throughout the school year. Students who were not used to a group testing environment could have affected scores if students were not completely on task and engaged on the testing items. The theme of individualization appeared in a number of comments. Parents were able to determine how their children were performing on a daily basis. Homeschool parents used their child's interests to guide the direction of instruction and assessment. It is evident parents want to determine their child's performance based on their evaluation and not one required by the state. An important factor in homeschool is developing the love of learning and establishing a logical systematic process of developing a flow of learning that the student can absorb. Parents choose homeschool to create a positive experience. Parents can establish progress based on their own assignments and tests. The CST tests a different curriculum, methodology and emphasis than parents teach.

Summary of the Parent Survey

The survey provided parent perceptions of student achievement based on the California Standardized Test. Parents were more likely to have two children in the homeschool household, homeschool three to six years and the grade levels of students varied between kindergarten and twelfth grade. Parents from the charter homeschool agreed students score above standards on the CST and outperform public school students. There was agreement among parents they provided adequate instruction to their children to prepare them for the CST. The resources and guidance the charter homeschool provided to parents for CST was sufficient. However, parents would like to receive more assistance and guidance to assist students in testing. Parents were not in favor of the CST as a valid form of student achievement. Parents refer to curriculum, grades, and other tests to assess the progress of their students. However, the majority of parent responses indicated parents did use the CST scores to guide their instruction.

Focus Group Interview Results

The focus group was conducted to ascertain parent perception of student achievement in the charter homeschool based on the California Standardized Test. The interview method was selected to interview several people in a short period of time. The informal setting allowed the parents to feel comfortable, interact, and provide in-depth responses to the questions. This allowed for triangulation of the data results from the CST scores and the parent survey. The focus group interview consisted of two parents, two teachers and an administrator. The criteria for parent and teacher selection was determined by which parents, teachers, and administrator had been with the current charter homeschool the longest and whether the participant's were available during the school's winter break. Participant's were invited to participate and upon agreeing were given the consent to participate form (See Appendix D). Pseudonyms were used to identify each participant (Ann, Bea, Ceecee, Dee, and Eli). Ann and Bea were parents. Ceecee and Dee were teachers. Eli was the administrator. The group was given a copy of the questions (See Appendix E) and allowed to review the questions for a few minutes prior to the interview. The interview was audio recorded and transcribed and coded for themes.

The first set of questions asked about participant experience and background with the charter homeschool, what they did prior to attending the charter homeschool, reasons they homeschool, why they chose a charter homeschool, grades they teach, their present experience with the homeschool and do they utilize tutors to assist in instruction.

Ann heard about homeschool through friends and relatives who had been homeschooling and their children were doing well academically. Prior to attending the charter homeschool she was part of another charter homeschool. The staff and most of the parents left the previous district and started the current charter school under a new district.

Bea also had heard about homeschool through friends and where she worked at a homeschool center. She was captivated by the whole idea and saw how friend's children were doing so well. Prior to attending the charter school, she attended a prior charter and was there about a semester before coming to the current charter school.

Ceecee heard about homeschool through a friend who was homeschooling her children through a private homeschool. She wanted to homeschool her own children, but because she had to work she figured the next best thing was to work for a homeschool and learn from veteran homeschool parents. She worked for a previous charter school prior to the staff and most parents leaving that school to start the current charter homeschool.

Dee worked for an East County school district and job shared a 1st and 5th grade contract but left because it was stressful. She taught three small groups of 8th, 11th, and 12th grades once a week in the current charter school.

Eli heard about homeschool through a colleague who was substituting for a teacher who had pursued a job for a new charter homeschool. Eli left the classroom after seven years and worked as a home school consultant for two years for a charter homeschool. That charter school left the district and started a new charter homeschool offering Eli an administrative position. Eli oversees six staff and about 120 students.

Three themes emerged from the analysis of the interviews. The first theme centered on the family. The second described the role of flexibility in the charter homeschool. Support emerged from the responses as the third theme. The following analysis and excerpts are from the participant's responses supporting the themes that developed from the interview transcriptions.

Family

Ann described how her interest in homeschool began when she saw the closeness of her friends with their children. "I belonged to a Bible group of six years. My friends had teenagers and they had really close relationships with their teenagers and they attested to the fact that they felt the family being able to spend so much time together was the reason that their teenagers were really close to them. I would have to say it's still for having our family close together being the primary influence for our kids."

Bea also commented on the theme of family. "The initial, seeing the results of other family and friends who have homeschooled their children and just how well academically inclined they had done. I really like the charter homeschool promotes and organizes family oriented events. We sit around a kitchen table and the ambiance is really family style and the kids really feed off of each other."

Ceecee added her perceptions about the role of family in homeschool. "Parents are the primary educators of their children who will have the most influence and who need to have the most influence on their children."

Dee viewed the benefits of homeschooling within her own family as well. "I believe the parent is the number one teacher in their child's life and should receive support to do so through the charter homeschool. I see the benefits with my grandchildren."

Eli also commented it is the unity of the family that makes homeschooling successful and beneficial to students.

An analysis of the theme of family indicated the participants agreed the family was an influential factor for students in the homeschool to thrive. Participant responses suggested through homeschooling, a family closeness develops that lasts throughout the years even as the children grow older. Parent involvement must be present for students to benefit from homeschool. The interaction of family members in a homeschool environment produces benefits beyond just academics.

Flexibility

The second theme that emerged from the interview was flexibility. Bea began the responses stating the charter homeschool's flexibility had allowed her to choose her own educational model. She stated, "I really like the flexibility of not being tied to a structured system. I can choose an educational model based on my children's strengths and weaknesses."

Ceecee described flexibility within the work schedule. Her comments included, "There is more flexibility in hours, vacations, and my work schedule than when I worked at a traditional public school. I enjoy not having a regular classroom and meeting with parents and students throughout the day."

Eli concurred with Ceecee by stating overseeing a small staff allowed for flexibility in the work schedule and scheduling time off. In addition, it was less challenging overseeing a small staff than a large number of teachers as in regular public school.

Ann commented about flexibility in reference to the curriculum program by stating "the school is so flexible in allowing parents to choose their curriculum from different programs and tailor their homeschool schedule."

Bea also agreed the curriculum choices allow for flexibility instead of having to stick to one mandated curriculum for each subjects. I addition, the flexibility of scheduling the homeschool day produces more from her children.

Dee referenced flexibility towards the group of students she taught. She stated, "I have an open door policy and allow my students to meet with me, call me, or email me whenever they need to when I'm not teaching a class. I even provide my cell phone number so they can call me for help if needed."

The theme of flexibility that radiated through the responses demonstrated the satisfaction the participants had towards the charter homeschool. The charter homeschool provided parents, teachers, and students, flexibility as a means for success and to benefit all stakeholders. This generates a comfortable environment. An atmosphere of trust and loyalty surfaces allowing those involved to accomplish their goals within the existence of flexibility.

Support

The third theme that emerged from the interview was support. Ann began her response to the question, why did you choose a charter homeschool? "Financially, it offers curriculum and help and professional support for free. It is supported by the state."

Bea commented, "It's wonderful to be among people that support you. It's really nice to have an Educational Partner, someone that has balanced me out, because sometimes I'm a little too intense. It's really good to have someone to get feedback from about whether you should pull back or whether you should push harder in any particular area." The teachers and administrator provided comments alluding to the support they provide the parents and students.

Ceecee stated, "I research for parents and recommend tutors, study hall, provide ideas for core themes or topics based on grade level and standard".

Dee remarked, "We are finding the need is in math so we are using different math programs. One student in online course, one is in a modified math curriculum, and one will be referred to special education because she is more than two grade levels below." The administrator's comments were similar to the teachers.

Eli commented, "I assist the teachers in researching additional assistance for their parents. I collaborate with administrators from other sites and the director to enhance the program, add classes, and outside teaching opportunities for the students and their parents who require assistance. Three teachers are new to the charter homeschool model, so I am providing a lot of teaching strategies, training, resources, a lot of online resources, and training in curriculum for all subjects."

The theme of support conveyed through the responses validated once again the satisfaction the stakeholders had for the charter homeschool. The teachers support the parents and students. The administrator supports the teachers and parents. The parents support the homeschool. It is evident the support among all is truly to benefit the students and to construct productive and successful students.

Parent Perception of California Standardized Test

Questions 8 through 15 pertained to participant perceptions of the CSTs in order to triangulate the data with responses from the parent survey and test scores. These

questions elicited longer responses from each participant and provided sufficient data to compare to the survey results. Question 8 asked participants to provide their views about CST. Ann began the dialogue, "Well, being an educator myself, even though it's been a little while, I don't think testing has changed too much. The holistic approach was just starting to come into the arena and think we've backed away from that and we are down to just the standards math, reading and writing. I really did like the holistic approach personally because I really do believe that even though it's a harder way to assess, I liked the fact that it did test the whole child in area content. I've never been one to withdraw my kids from state testing as I know many homeschoolers do. Maybe not many homeschoolers, but I know that there are families out there that do choose so, they don't really want their children labeled. I do see that behind that it does help the state to assess where kids are overall with other children. I'm supportive in that sense. I try not to put a huge emphasis on it, however, because I know that it is an aid for me and for the teachers to see really where our kids are in comparison to other kids in the state. Having the standards to follow, a printout of the state standards is a really nice guide for me. I don't expect my kids to do their best on a one day testing or a few days of testing because I do realize it's pretty intense. I really emphasize that to them, not to worry too much. As they continue on in life, state standards testing are going to be everywhere. So there is that fine balance. That is the benefit with homeschooling, is that we do get to see overall. The state testing is helpful. However, I really believe also in portfolios, I think portfolios are really good. I like to keep that at home myself just to see how my kids have progressed. I'm a big advocate of portfolios. I do believe that state testing can be fixed up a little bit. What the answer is yet I don't know. I know that portfolios are something that is there but it is harder to assess. Again, I'm very open to the state testing. I think that it is a good just a measurement, just a tool, for the current time of where our kids are but again I think it needs to come up to par with just the times that we are in and what the kids are learning."

Bea provided responded with her views about CST as well. "I found the state testing is; I can use it to get an idea of how my kids are performing and just to make sure that they are where they should be. Although, I'm not real crazy about it, the thing that I found is when I'm working with my kids on a day in, day out, basis, I know what their weaknesses are and where they are doing well. I've chosen certain, we follow, the Well Trained Mind, The Guide to Classical Education. They'll make recommendations of certain curriculums that they have found to be good curriculum. Yet, when I use those, sometimes they have an educational philosophy that isn't quite in line with our state standards. So, I can work with my son in math and know that within his curriculum, he is doing really well and over the long term, this is an excellent curriculum to use but when it comes time to prepare him for the state exam, I don't want him to look like a dummy so sometimes I find myself trying to tutor him in areas that we are not at and yet there might be parts in his curriculum where he is hitting materials that the kids aren't even hitting in their classrooms and it's all in how the scope and sequence is set up. That is the one thing that I have found a little bit frustrating. We are trying to use a benchmark that doesn't necessary follow the model or the educational philosophy that we are using throughout the year. But I understand you have to have some sort of program for accountability in when you are talking about millions of students, but we work with it.

Ceecee concurred with the parents, "I have my indifferences about CST. I don't think it accurately measures where students are. I support the school and that it is one way to hold the charter homeschool accountable for achievement but if there are students not at grade level, they still have to take the grade level test. That's a waste of time. Their scores are pre-determined as far below basic if they are not even at grade level standards. Then there are students with special education needs. Special education students are not at grade level but they still have to take the grade level tests. If they receive modifications for the test, which they can, this bumps their score far below basic. I don't agree with basing school performance on standards test. If the state wants to assess a school, they need to walk into our doors and observe first hand the successfulness of our program."

Dee was not as straightforward as Ceecee. "CST is just one instrument to many different types of instruments we could be using. I think it's important we have testing but I struggle with the idea it's the only test we use to determine what our annual yearly progress as a school is going to be. I question that and don't see why we don't use more instruments. That's my own feeling with society we judge people based on such a small percentage of who they are."

Eli provided comments and views about CST as well. "CST is only one way to measure student achievement or success of a school. With so many philosophies of homeschooling, the CST cannot accurately measure how the students are doing overall. I would like to see an assessment of growth year to year for each student, or students in the same curriculum. The school offers a progressive assessment that starts a student with grade level math/reading problems. The assessment adjusts itself as the student answers questions correctly or incorrectly. It places the student at his/her instructional level providing immediate feedback and results. Parents do not have to wait until the student passes to the next grade level as they do with CST."

Based on the responses from participants it can be determined the participants support the school by complying with the requirement of participating in the CST. All participants agreed the CST is just one measurement of student achievement. There are many other relying factors that need to be taken into consideration to determine the progress of a school, but most importantly the individual student. The CST provides a measurement of achievement of English language arts and mathematics which are only two subjects from a variety of subjects students study throughout the year. The responses also elicited comments the CST assesses benchmarks that may not align to the educational philosophies the teachers or parents may be following in homeschool. However, participants understand and support CST participation to benefit the school.

Question 9 asked participants why their children/students participate in CST. Although overall views were not in favor of CST, each participant supported their children or students they oversee in taking the CST. Ann began the dialogue by stating, "The biggest reason we participate is for kids to have the experience in testing because kids will have testing for the rest of their lives, and in support of school for their accountability. It's a good tool for me where they are overall. They get excited to see where they are overall even though sometimes it is tough for my daughter the hours of testing. It's an experience. That puts them solely with no help around, they rely upon their ability, and any prior knowledge that they have.

Bea expressed views similar to Ann, "I understand it's tied to school funding. I feel like the school has done so much for us. You cant' get everything for free. I think everybody has to really do their part. My son loves testing, and my daughter is excited

about testing for the first time. I'm not crazy about it. I keep my mouth shut and let them think it's a wonderful thing."

Ceecee supported students taking the CST. "The charter homeschool location I am at has a high percentage of testers. I think it's because most come from a public school or another school they have had standardized tests and are used to it. I let them know testing is one way the school can show accountability as a whole because the school is so flexible in allowing parents to choose their curriculum from different programs and tailor their homeschool schedule. I emphasize the need to test and use the results as a guide for strengths and weaknesses."

Dee's brief interjection included, "I wish we could have it be more positive. The school does a positive job but just to get the people to realize. Who knows, someday, maybe?" Eli's response correlated to Dee's and reflected the need to get parents to have their students participate in testing. "We need to brainstorm ways to get more involvement and buy-in to testing as a school. Providing teachers with information to give to parents about the importance of testing for the school to receive its funding is essential. Organizing the proctors, groups and sessions to make the environment as comfortable as possible for the students is a challenge. Providing enough advance tools, resources, practices, and test taking strategies for parents and students draws more participation."

An analysis of the responses from question 9 indicated parents support CST because the students enjoy testing and get excited about the testing. All participants support CST because it is a requirement from the state to show school accountability. Participants view the CST as a tool to show individual strengths and weaknesses in certain academic skills. The support for the school and its staff is an overall result of why participants encourage their children/students to participate in the CST.

Questions 10 and 11 of the interview asked participant's how their children/students scored on CST and how do they use the scores to guide instruction. Ann stated one of her children score well and the other child's scores fluctuate and are sometimes very inconsistent but overall, they are doing well. She added, "In regards to how I use CST scores to guide my instruction, we do know where the kids are on a daily basis. Sometimes we are not teaching what aligns with standards so you feel yourself scrambling to teach certain content area that has not been covered not in a sense that they are behind but because you may have gone more in depth in another study. I do use scores for guidance. We come with surprises in test scores on some years and surprise son the other end of the spectrum. That's the drawback with testing. It doesn't overall assess. Because I do have the ability to be with my kids on a daily basis, it wouldn't frighten my as much I think as if my kids were in public school coming back with test scores that would frighten me and I wonder what that teacher is doing so I get to put the finger on myself. We do know where the kids are overall and it helps to emphasize certain areas so that they can at least be up to par even if it is strictly for you know, test time."

Bea commented her child does well on the CST. "I try to anticipate materials that will be covered. This year I'm following 2 books in math at two different levels. My son is really good in math but it may not show up if we just follow one book. When we get the test prep book it helps so much when we get it early to be able to prepare in some areas. I do look at the scores when I get them and try to evaluate in the literature area whether I should change my approach at home to hit some areas harder where I see scores lagging a little bit. Like last year knowing he'd take the writing exam at the end of the year. We really focused on writing all year so it helps, if we see an area of weakness, I can hit that a little harder."

Ceecee provided comments about the use of students CST scores in aiding parents to prepare children for CST. "It's my responsibility to provide parents with student results and carefully review them for areas of need and strength. I keep a running record of where each student needs to improve and continue practice in areas of strength. I match lessons for standards and because I have proctored the test at various grade levels the past 6 years I have a basic understanding of what skills are being covered. I use the test prep books as well to point out areas students should concentrate more on than others."

Dee had contrasting comments than the other participants. "That's interesting because in our middle/high school classes, we teach the same thing. As an Educational Partner, I can tailor it more. In my classes I cannot tailor it and have to teach the same thing." Eli commented how the school uses the test scores. "Using overall school scores to recognize areas of strength and weakness, and for which grade levels is part of the staff meetings we hold. Providing teachers with the scores and collaborating by grade level seems to be effective. The math teacher looks at math scores for middle/high school students, the science teacher looks at science scores for middle/high school, the focus teacher looks at 9th-12th for English and History. The middle school focus teacher looks at 6th-8th for English and History. The Choice Educational Partner looks at the K-5 scores. The clustered groups of scores for each grade level are provided. Teachers collaborate and develop ways, strategies, and support for students and parents throughout the year up to testing."

These responses elicited students are doing well according to parents. The teachers and administrators provided responses indicating the parents and students need support and resources to prepare for the CST. All participants evaluate student scores to indicate strengths and weaknesses of skills for all grade levels. The scores are used as guidance for instruction and to determine areas of need and improvement. Even though the CST doesn't assess overall student ability, it provides a backbone of achievement for certain academic skills. The parents and teachers are in favor of the test prep books which assist them in matching subject lessons to state standards in preparation for the CST.

Question 12 of the interview asked participants what their views were about the use of overall student scores from the CST to determine if the charter homeschool should receive its funding. Ann began the dialogue, "Well, you know its state standard. What can I say? The state of California has engrained this in my head from forever. So, you know, I guess for now it's what they are using, it's the measure that they have. I do believe, I think that there are a lot of things that need to be revamped, so to speak, that we could do. What the answer is? I think collectively as professionals, as parents, it would be nice to come together to see if we could come up with something else. It seems like we are in this vicious cycle of continuing to just test, and test, and test. I think somehow we can update to overall find out where our kids are and to make sure funding is hitting in the channeling through the right schools, the correct schools. In terms of our homeschool, I know that it's one way but I think that it would be great if our school could receive funding in other areas that I know we are doing, assemblies that we have or outings that the kids do. Just assessing that there was a way that we could assess and

receive funding in that end, because I know that there's a lot of time poured into things that don't fall under the math and the reading. Collectively, if we could come together, I think sometimes schools are receiving funding whether it's economically, for socioeconomic reasons, for reasons of ethnicity. There are a lot of factors that come in. I think there could probably be an overhaul on CST to determine whether or not we should receive funding. I think it's helpful for the school. I don't think it should be the sole reason but it's the lesser of the evils right now. I think that's what we have."

Bea remarked, "I don't believe it is an accurate, that the test scores are an accurate measure of everything that is going on. I don't believe all of the funding should be based solely upon that. I mean even in the traditional school structure, they're saying that the CST scores don't even reflect, like if a student is really struggling and it doesn't measure, there's not credit given for substantial improvement. With homeschooling being a completely different model of education, I don't think the CST scores really can reflect what is really happening in learning. I think it would be beneficial overall to have another way of assessing the progress of the students and the learning that is going on. The scores don't say it all. You can have good scores and know that your child has some major areas that they need improvement on. The scores can reflect that they are doing just fine and they'll progress through the school system but we know that doesn't guarantee that someone is going to graduate and be able to get along just fine in life or be competitive out in the work force. I think they definitely need to look at some other ways of assessing whether the kids are getting the education that they need."

Ceecee followed by stating, "It's ok if they classify/compare charter homeschool with other homeschool's. I believe there is more pressure on the parent/teacher to not be able to teach what they want and have to teach to the test; comparing one group one year to a different group the next is not fair. Each year there are totally different students and you can't compare different types of students."

Dee had opposing views than the previous responses. "I think it has to be the same as the traditional public school. Since that's how they are measured, it should be the same for us."

Eli's comments mirrored the parents and Ceecee's. "Charter homeschool students need to be compared to similar schools. One way to do this is to evaluate the population of the school and how long it has been in existence. It is essential to relieve some pressure from staff and parents to bring up scores and provide more materials, classes, and workshops. By doing this, administration will be encouraged to revamp and change programs in order to meet the needs of the state and hopefully bring CST scores up."

The responses to question 12 generated some personal feelings and challenging propositions for the school and state. Parents voiced their disagreement to use CST to determine school funding. Participants provided alternative methods to determining school funding. It is likely more parents and staff members have the same opinions as those interviewed to assess students by more than just the CST to determine school funding. By coming together as educators, parents, and students policies could be revised in determining school funding for schools not based on solely CST scores.

Question 13 asked participants if the charter homeschool supported their children/students in ways that would help them improve CST scores now and in the future. Bea began the dialogue by stating, "I would say having access to the standards, meeting with the Educational Partner, being able to discuss the kids work, whether there are any areas of concern, whether we need to work harder on anything. I know the test prep booklets help an awful lot. I think pretty much covers it."

Ann agreed, "I agree. The monthly meetings and the support from our consultant I think is very helpful just knowing that the school is a resource and that there are resources there. I love the fact that we can come in. if I've done my own research and I've looked up curriculum that I want to access whether it's midyear or another type that I could come in or if a curriculum is not working for me that I can come in and ask if there's something else that's out there that's working or what the majority of people have gotten and get some feedback from that without having to go back and reinvent the wheel. I think that's very helpful, in that sense, and very supportive. I also like again, the fact that just ahead of time that the school does use the funding to get those test prep books for us. I think that it's not the only way but it definitely beats us going out having to scramble to buy things on our own to get the children prepared. Also, the in office testing that are on the computers that are assessed at the beginning of the year and is it like towards the end of the year that they come in. I don't know what the name of that is but the ones that they do on the computer, testing. I think those are helpful. There are a

lot of other avenues also, depending on where each child is. I think the biggest is the building of a relationship with the Educational Partner. As the Educational Partner sees the work come in and they create a portfolio in their files, and are just able through oral interviews, I find very helpful for our family. I think all of those combined are just now and in the future those are the most conducive to helping our kids improve and do well in school."

Ceecee continued the dialogue, "By looking at and evaluating scores for the breakdown of clusters, in ELA and math at staff meetings. Encouraging the staff, parents, and students, to prepare and practice for the CST well in advance. Analyzing the scores that are basic, below basic, and far below basic and determining areas of need will definitely improve scores. When Educational Partners meet with parents and students and validate their schoolwork they find the work samples that reflect state standards. They revisit the previous years CST scores to determine what areas the students scored low in and provide tutoring, ideas, resources and support. Also, providing materials, curriculum, teaching strategies, a sort of teach to the test method, provide websites, encourage test taking lessons, multiple choice, being able to read in one sitting 30-40 minutes for reading test practice. All these practices will hopefully improve CST scores."

Dee remarked, "Because it's more personalized and with one teacher, the parentteacher, versus a classroom teacher teaching 30 or 40 students. I see that with my daughter. She is homeschooling three of my grandchildren. It's amazing! With my granddaughter, what she's learning she can actually tailor it to things my granddaughter wants to know about in addition to what she needs to learn. None of my grandkids have ever been tested in standardized tests. They live in Arizona. My daughter doesn't homeschool through a private or charter school. Her and her best friend made a co-op, got a group of ladies who have their own co-op, and homeschool their children on their own."

Eli stated, "There must be constant collaboration among teachers, parents, and students to improve scores. It is the schools responsibility to provide materials, curriculum, test prep, and evaluate the school wide results to focus on areas that need improvement. It is the educational partners responsibility to translate and educate the parent about the CST and offer test taking strategies to benefit the students. The school supports homeschool families for CST by offering workshops, extra classes to prepare for the test, provides a test schedule so it's not intimidating to parents and students, and encourages 100% participation, with incentives, breaks, snacks, and beverages."

There was an overall consensus from the group that the school does provide a variety of support and resources to families to help improve CST scores. The participants referenced the importance to collaborate among parents, teachers, and students to find areas the students need to improve on. All participants were satisfied with the test prep books, the meetings with teachers, and additional classes provided to families to help improve scores. Overall, it is the one on one interaction among staff, teacher, parent, and student that provides support and assistance to prepare for the CST.

The last question posed to the group asked what participants planned beyond the charter homeschool and did parents plan to send the students to public school. Ann began the conversation by stating, "Well, since even pre-school the struggle of back and forth whether or not to send my kid to a public school or homeschool. So we decided to go in (homeschool) because the state of California didn't really require them until six years old so we thought kindergarten will be the test, the test year. We had so much fun with it and it flew by like every school year does so we just continued on. That's kind of the philosophy now. As long as the kids are thriving and enjoying it and they don't feel suppressed or depressed. We continue on and we move forward. I have explored other options for my son. (interviewer interjects and elaborates on the question as harder courses for her middle school student come up what will parent do?). Parent laughed and asked, "Do you mean how long will my brain last? To be quite honest, that hasn't been my biggest fear because I really believe that our homeschool has, really even though I have not had to access the help yet, I feel the support just knowing, there's a confidence knowing that even though he is doing well and knowing that there is a support system there. Knowing that there's these math teachers that are now employed, that are available for us at our, I feel at our beckon call, that they are available to us, gives me a support system. That hasn't been my biggest reason. It has been more that I would like him to be in an arena of other kids who are of the same thought process, more of a feedback to feed off of each other, to be in more of a corporate environment, so to speak, where they can learn from each other. Not necessarily that I would feel that they would get that at every

public school but the schools I have been looking into and researching have been more based on kind of a homeschool model where there's a fine balance of they go to school a few days a week and they are also home a few days a week. I've been exploring those options and I've also been exploring other options as well if he does go full time into a public school that they would be something that would be more conducive to his interests which are science and math. Those are areas that we are exploring right now. My daughter on the other end has just suggested she wants to go to public school for the day, or she wants to go just to see. There's that curiosity and we are open for that but overall, for right now, for our family that this is the best choice for us at the present time. We are open and we always do say, if you want to go to the school, mom has many friends that you can go to school with them today if you'd like to and check it out and see. It's on a day to day basis, and it's on a year to year basis. We'll see. I really don't have answers for the next school year. It's just how as a family we discuss it and how happy they are."

Bea continued the dialogue by stating "We'll probably start looking at other options like around 7th or 8th grade. But again, there's one part of me because I know with all of the resources available for all the people who homeschool, that is still tugging at my heart. I would love it if I could be able to continue. Financial is a big thing. I hope and pray that I wouldn't have to go back to work full time but if we ever reach a situation where I need to go back to work full time. In that case, I'm thinking, we are not talking just a little money. We are talking about almost doubling our income. In that case, I'd probably consider private school as opposed to public school. Another temptation is local charter high school's that have unique philosophies. That is one thing that I feel to be fair, not totally controlling of my son that we would at least look into it. Again, my biggest concern, are the social influences. I don't want to shelter him totally but I am not about to put them in an environment where everything that they stand for and believe in is ostracized. Yeah, we will probably start exploring other options in the 7th grade and after that it might be one year at a time kinda thing. I know that there are some really great resources out there for people who choose to homeschool through high school. So I think that would probably be my first hope."

Ceecee planned to teach for the charter homeschool as long as she could. The charter homeschool is up for a five year renewal this year. Dee planned to stay with

school another six years and then pursue a different career. Eli planned to remain with the charter homeschool unless a better position became open in the same school, another school, or another district. It depended on the school being renewed through the current district.

The parent's feedback indicated parents wanted to homeschool as long as they could even through high school. However, they were open to researching middle and high school's such as private or charter school. These revealed parents were not interested in sending their children to a regular public school. Participants also wanted to remain with the current charter homeschool as long as they were able to. The only changing factor would be if better opportunities arose such as the children wanting to attend a new school, a parent having to work, or a better job opportunity became open for the teaches or administrator. Overall, all participants were satisfied with their current schooling situation and employment.

Triangulation of the Data

An analysis of California standardized test scores for the charter homeschool indicated charter homeschool students scored higher in English language arts when the same groups of students were compared between two testing terms, to different groups of students, and to California students. Math scores were higher when the same groups of students were compared between testing terms and to different groups. Scores indicated high school math scores were difficult to compare due to the higher math level subjects and the different courses middle and high school students are enrolled in each year. This data correlated to the survey and focus group interview responses in the following ways. Parents and focus group responses both indicated students in the charter homeschool score at or above state standards. Parent comments from the survey as well as focus group responses both indicated the need for test prep and additional support or classes in mathematics. This coincides and provides an indication of why mathematics scores may be lower than English language arts and state standards. One parent in the focus group indicated she was teaching from two math books to cover the state standards, and one of the teachers interviewed stated she had to modify her classes and seek additional support for students in need of math tutoring. The administrator emphasized the need to have the math teacher evaluate math scores to assist teachers, parents and students.

The online parent survey results provided parent perception of the California standardized test scores. Parents agreed charter homeschool students score above state standards. More parents agreed charter homeschool students score higher than public school students on CST. More parents did not agree charter homeschool students score lower than public school students. Parents stated they did a good job preparing their children for the CST. Parents also agreed the teachers of the charter homeschool did a good job assisting parents in preparing students for the CST but would like more assistance preparing students for the CST. Parents did not agree the CST was a valid form of student achievement in the charter homeschool. However, parents used the CST scores to guide their instruction.

The above results correlated to the focus interview responses. Participant responses concur with the survey results charter homeschool students score well on CST. Participants also had strong opinions about the California Standardized Test. Participants stated they did a good job preparing students for the CST and provided in depth examples and explanations for this. Interview participants also requested additional support in preparing students for the CST. Though parents did not believe the CST was the only measure to assess student achievement, they allowed their children to participate in the testing in support of the charter homeschool. A critical element of this research was the narratives of the interview participants. Through the interviews, the themes of family, flexibility, and support emerged that were upheld by anecdotal information and associated with the survey data in regards to parent perceptions of the California Standardized Test Scores. The themes and perceptions of the interview participants indicated student's performance on the CST relies heavily on parent involvement, and the support and flexibility provided by the charter homeschool. The flexibility parents have to prepare their students for the CST promotes participation in the activities and resources the charter school offers to prepare students for the CST which in turn, supports the school and families.

The triangulation of the CST scores, the survey responses and narratives of the focus interview participants was a critical element to this research. The focus group

participants added depth to the understanding of the analysis of CST scores and survey responses. The correlation of data to the literature is addressed in the following chapter.

CHAPTER 5

DISCUSSION AND RECOMMENDATIONS

INTRODUCTION TO THE DISCUSSION AND RECOMMENDATIONS

The purpose of this study was to investigate student achievement in a charter homeschool. The first four chapters of this dissertation presented the purpose of the study, research questions, importance of the study, review of the literature, the research design and methodology, and results.

Exploring student achievement in a charter homeschool presented similarities and differences in comparison to the existing literature. Results from the parent survey and the focus group interview about parent perception of student achievement based on the California Standardized Test scores articulated valuable information to contribute to the limited literature on student achievement in a charter homeschool. The data results could enhance policymaking in such schools as well as traditional public schools. The existing laws of determining school funding based on CST scores are not embraced by parents and teachers of the charter homeschool. However, parents and teachers support the school and participate in CST. Parents and teachers remain advocates to homeschooling and the philosophy of using a variety of curricula to instruct students based on their interests. Parent survey responses and focus group participant responses would like to have a diverse set of criteria to determine student achievement. As long as students are learning it should not matter what standards they are using for student progress. Suggestions for creating a new accountability model for charter homeschools may begin to more accurately identify student achievement.

Data results correlated to the review of the literature of homeschool, charter schools, and student achievement. There were also disparities in the results when compared to the literature. The following sections provide data linked to the literature about charter homeschools and student achievement.

Charter Homeschool

The literature suggested parents choose homeschool because they believe they can provide adequate instruction for their children than they would receive in a public school (Klein, 2006, Princiotta, Bielick, & Chapman, 2006). The survey and parent responses from the focus interview indicated parents felt they did a better job at educating their children than if they were in a public school. Forty-one percent of parent responses from the survey verified charter homeschool students scored higher than public school students on CSTs. Parents chose to homeschool to enhance their children's talents and cognitive styles as suggested in the literature (Davies & Aurini 2003). One respondent stated it was through homeschool, her child's learning is fostered and enhanced through a variety of curriculum and teaching opportunities. It is by means of a charter school parents and teachers are able to advocate for homeschooling.

Charter school laws allow for innovation and educational alternatives not available in a traditional public school (Fine Jr., Manno, & Bierlein, 1996). Interview respondents demonstrated enthusiasm and satisfaction for the innovative programs the charter homeschool has to offer such as field trips, full day visual and performing arts classes, and math and science labs and tutoring classes not available in traditional public school. It is by the approval of the parent created school board these programs are available to students.

Wamba and Asher (2003), surveyed parents for reasons they chose a charter school. Five hundred survey responses indicated parents chose a charter school for small size, higher standards, educational philosophy, and greater opportunity for parent involvement and better teachers. The charter homeschool's philosophy defines parents as the primary educators of their children and 100% parent involvement is a requirement of the charter homeschool. The small class size can be as small as one and up to six based on data results. In regards to higher standards, about thirty-eight percent of parents, agreed students in the charter homeschool scored above state standards. Various comments from the same question confirmed students did better and were held more accountable for performance and some of their courses were more advanced than those from public school. Charter schools are expected to promote educational choice for parents and provide novel educational innovations (Huerta & Gonzalez, 2002). The interview responses correlated to the themes transpired from the focus group interview: family, flexibility, and support and the literature cited. Parents experienced flexibility through educational choice provided by the charter homeschool. They also received support by means of the innovative programs and developing model as verified by the interview respondents.

Based on interview responses by the charter homeschool teachers and administrator, the novel charter homeschool is committed to providing high quality programs and resources for parents and students. The increasing move toward accountability of student performance in public education, has forced the charter homeschool to use the results of the California standardized test scores as an indicator of efficacy. The test scores, survey results and responses, and focus interview responses identified determining factors in relation to student achievement in a charter homeschool.

Student Achievement

The analysis and findings from California standardized test scores paralleled the review of literature about student achievement in homeschool and charter schools. Students in a charter homeschool scored higher in reading and language than math as determined by the student achievement analysis of Collum's study (2005). Figure 1 and Figure 2 verified the charter homeschool students scored higher in English language arts than in math when administered the standardized test two consecutive years. The same scores were compared to different groups by grade level in the charter homeschool, and to groups by grade level in California tested in 2006 and 2007. Analysis of scores indicated homeschool students do better and score higher in English language arts when compared to different groups and to students in California. Test score results correlated to parent survey results proving students in the charter homeschool scored higher than students in public school. However, math scores tended to decline as the grade level increased and students were enrolled in higher leveled math courses such as Algebra 2 and Geometry.

The comparisons of fourth grade math scores for students from charter homeschool and California confirmed the findings in the study conducted by the U.S. Department of Education of 4th grade charter school students. Math scores were lower when compared regular public school 4th grade students (Braun, Jenkins, & Craig, 2006). Parent comments in the survey requested assistance in math as well as comments from the interview respondents. One parent stated the need to instruct her child in more than one math book due to the curriculum she used, did not align to state standards. The second parent stated as her child began new and higher level math courses, such as Geometry, she would seek assistance through tutors at the charter homeschool. Both teachers from the focus interview expressed concern and the need for the charter homeschool to provide extra support, classes, and tutoring for students who are struggling in math. The administrator commented the need for teachers to collaborate and develop strategies and ideas of how to raise student test scores.

In spite of the charter homeschool students performing better on average for California standardized test scores in English language arts across different groups and the state, it was difficult to compare scores due to a number of factors. As the literature suggested, it is nearly impossible to keep groups similar over time and students are not representative of students in general (Riley, 2000). The charter homeschool had a high transience of students returning to public school after a year or vice-versa. The number of students whose test score results applied to testing terms 2006 and 2007 was only 182 compared to the 404 that tested in 2007. The total number tested in 2007 was used to compare demographic groups. Parent comments in the survey also indicated dissatisfaction with the California standardized test scores. According to Riley (2000), charter schools exist for diverse populations and it is difficult to keep similar groups over time due to design difference, a variety of curricula, and differing instructional methods, as well as transience.

Zimmer and Buddin (2006), claim students in non-classroom based instruction have lower average test scores than do similar students in traditional schools. However, as mentioned, the charter homeschool students scored as well as or better than similar students of different groups and California in English language arts. The literature held true for standardized math scores of students in the charter homeschool. According to Buddin (2006), minority groups are not consistently producing improved test scores. Charter schools that have been developed for diverse populations such as minority groups have not closed the achievement gap. The Hispanic group data indicated students scored lower than the White (non-Hispanic) group. It should be noted the number of Hispanic students tested had almost 100 students less than the White group. In addition, there were not enough students tested in 2nd through 5th grades for the Hispanic group to compare percentages. Three of the six Hispanic groups for the same grade level, had percentages close to those for the White groups. Other groups compared were female to male. There were 208 females and 195 males tested in 2007. The percentages for female groups of each grade level were higher than males. Students whose parents had some college scored higher than students whose parents were college graduates followed by students whose parents were high school graduates.

Some disparity in results was found in the survey results. Where parent agreed students scored above state standards and better than public school students several comments suggested dissatisfaction with California standardized test scores. Comments such as, "Don't care", "Parents don't want to have their kids tested,", and "It is a waste of time", conflict with the majority of parents who answered they used the standardized test scores to guide their child's instruction. Where parents perceived themselves as doing a good job preparing students for the California standardized tests, the comments contradicted the results. Comments such as, "I don't", "I don't teach to the test", "Some do, some don't; "We don't test prep at all generally", "Most parents don't teach to the test" and "My personal goals are not based on test scores" challenged the results from the questions about parents perceptions of the California standardized test scores. Based on the data analysis and discussion of findings, implications and recommendations were suggested.

Implications

The present study has highlighted the importance of learning and understanding academic achievement of students in a charter homeschool. There were several implications to this study. First, parents are advocates for educating and homeschooling their children and desire their children experience an enhanced education and environment. Parents believe their children do not experience this in a traditional public school. In the charter homeschool, parents and teachers come together to provide a quality program for students where they can feel and become successful. The partnership of parent, student, and teacher, requires dedication and commitment for student achievement. The individualized and differentiated instruction the student receives assures students the opportunity to score well on the CST. Student performance on the CST determines the school, district, and state status for academic achievement. All stakeholders must be well vested in the homeschool instruction to ensure proficient test scores.

Second, using the California standardized test scores as a means of academic achievement and school success varies, depending on the school model, student demographics, and populations of each school. There is concern that students do not acquire the essential skills through homeschooling to score proficient on the CST. The continued efforts of the charter homeschool to create and design the necessary resources to improve test scores across grade levels is a powerful predictor student test scores will improve. Parents will continue to use the charter homeschool as a network for resources, curriculum, and qualified teachers, to meet state standards and obtain access to the CST.

Third, parents do not fully substantiate the use of California standardized test scores as a means of academic achievement and school success yet there is participation in CST to support the charter homeschool. Parents and teachers understand for the charter homeschool to sustain its status, they will be required to comply with district and state requirements. As charter homeschools continue to grow the appeal of an innovative model of school will continue to attract parents and students. The self paced and individualized instruction students receive through the charter homeschool paves a path for success for many students. Parents and teachers of the charter homeschool are willing to meet the demands of policymakers and the state to provide quality programs and continue the innovations developed by all stakeholders of the charter homeschool.

Recommendations

Continued research about academic achievement of students in a charter homeschool is recommended. As charter homeschools continue to grow not only in California, but

across the nation, further research would benefit in understanding the structure and philosophies of such schools. A new study with a larger population and sample size including more schools and participants to compare programs among charter homeschools would be beneficial in evaluating innovative practices as they are being developed and implemented. The study of diverse groups such as English learners or special education and how these students are performing in charter homeschools would determine if charter homeschools promote student success for such groups. It is crucial as charter homeschools grow and develop into acceptable models of education, data of similar schools be aggregated.

The study of charter homeschools with the same population or same types of groups can be studied and compared to one another. Charter homeschools from similar areas or within the same districts can be studied in regards to programs, governance, and student achievement. Longitudinal studies and trend analysis is suggested to better identify the academic achievement of students in a charter homeschool model. Participant data through surveys and focus groups is significant when conducting research. Gaining access to more participant information or conducting more focus groups to learn about charter homeschools would be highly recommended. Conducting in-depth studies of administration and staff could inform on the perspectives of these participants separate from parents in regards to their methodologies and philosophies in favor of a charter homeschool. Conducting student interviews at various grade levels and learning about their experience in the charter homeschool would also provide valuable data. Finally, the study of the roles policymakers at the district and state level entail in the development or maintenance of charter homeschools would be significant for the efficacy of such schools.

Limitations/Delimitations of the Study

This study posed several limitations and delimitation described as follows. The population included some students who had never attended a public school due to being independently homeschooled. This limitation caused unfamiliarity with the CST format. Some students may have been newly enrolled in the homeschool who attended a private or other homeschool the prior year of the study. These schools may not have

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administered the same type of assessment as the CST. In addition, students may not have taken CST assessments the previous school year or the current year the study took place due to reasons such as absences or waivers. Other limitations include the small sample size of the students being studied. The student population did not represent a diverse number of ethnicities. In addition, not all grade levels had a high enough enrollment to determine data for various demographic groups such as parent education level, special education, or English learners.

Another limitation included some students who tested on parts or sections of the CST assessments but did not complete the entire assessment. The CST can also be invalidated if a student was found cheating, guessing, or refused to take the assessment. In regards to the interviews, interviewees may not have responded truthfully. However, it was expected the interviewees responded to questions with complete honesty based on their desire to improve the current educational program for their children. In addition, only one focus group was conducted. The one delimitation pertains to only one charter homeschool analyzed in this study.

Significance of the Study

Charter homeschool is a new and innovative approach to public education. The model researched in this study is one type of model. There are different types of charter schools, specifically charter homeschools opening their doors each year. Districts are taking the risk to sponsor such schools in efforts to raise student achievement and increase their budget allocation. This option is available to all students, traditional public school, traditional homeschool, and private school. It is a choice of public education free of charge for families that may want an alternative style of education for their children. School districts are challenged to meet the influx of students who are newly enrolled to the district. Due to restricted funds by the district and state, charter schools must carefully budget their use of resources, curriculum, staffing, and facilities.

Charter homeschool provides standards based curriculum and accountability for what homeschooled students are achieving. As the research on charter homeschools broadens, schools will gain knowledge and seek what is successful and what is not from these types of schools. A partnership among schools can be created and developed for the

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benefit of all stakeholders, especially the students. New research will assist in deciphering the various models and structures of these schools. Continued research will provide insight for trends in a variety of populations attracted to charter homeschool.

The California Standardized Tests are one method of demonstrating student achievement in this type of model. The use of the test results and comparing student scores over a two year period provided how students achieve. Continued research over a number of test terms will clearly define how students perform in this type of school model. The CST analysis serves as a base and guide to student achievement. Other forms of assessment to measure achievement would be beneficial to the research. Limited research has been completed on charter homeschools. There is a need to answer questions about its structure and student achievement. Most importantly, the need to assess the efficacy of student achievement through this model adds to the existing literature of charter homeschools.

Conclusion

This study was distinctive because it used a mixed methods approach to contribute to the limited research on academic achievement of students in a charter homeschool. A range of research questions were studied to ascertain student achievement in the charter homeschool. The research questions were created based on the need to determine how students were achieving in this new type of school model. A comparison of scale scores from the California standardized test scores were analyzed in English language arts and math for the same group of students tested over two years. The initial data indicated charter homeschool students scored higher than public school students and students in California in English language arts. The quantitative data made an important contribution to understanding student achievement in a charter homeschool. The collection and access to student data examined a viable topic to explore. The CST was one unifying measure to determine the outcome of student achievement. The score results are a vital component to the development of new programs and resources for students. As the middle and high school enrollment increases, the administration of the CST increases holding more students, parents, and teachers of the charter homeschool accountable to increase test scores, especially in the area of mathematics. Middle and high school

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student achievement establishes what works and does not work for these grade levels. This provides continued collaboration among charter homeschool staff and parents to prepare students in the primary and intermediate grades to improve test results before these students reach middle and high school. Stakeholders will develop better test preparation courses and provide more resources to increase test scores for current middle and high school students and for future students.

The quantitative data collected and analyzed supported the findings in the qualitative phase of this explanatory research. Consequently, the interpretations of the data became more meaningful when combined with data using other research methods such as the parent survey and interview responses. The data analyzed by the survey and interview allowed the researcher to explore parent perceptions of student achievement based on California standardized test scores and identified factors that lead to similarities and some differences among respondents. Parent and staff input played a significant role in the development of the research questions. It is the parents and staff who created the charter homeschool philosophies and structure. Parents and staff meet on a regular basis to discuss school business and ways to improve and provide more resources to the students.

The willingness of parents and staff to participate in the survey and focus group indicated the need for communication and support for all involved. Their participation and contribution to the development and improvement of the charter school is to be commended. It is through actively involved participation and positive role models, students will learn from and succeed. It is the charter homeschool teachers who empower parents to homeschool their children. The charter homeschool teachers continually collaborate to provide tools to parents and students for academic success. Charter homeschool teachers work with a variety of abilities and circumstances parents and students bring to the charter homeschool. It is the responsibility of the charter homeschool teacher to assist the parent and student through individualized and differentiated learning strategies to help them become successful. Charter homeschool teachers help parents and students achieve academically. Charter homeschools may not be an alternative type of education for every student. However, all models of education have much to learn from the charter homeschool environment in regards to student achievement and the development of learning for all stakeholders.

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APPENDIX A

DESCRIPTIVE STATISTICS

CST scores ELA 2006/2007

	N	Minimum	Maximum	Mean	Std. Deviation
ELA06	182	174	600	348.66	61.899
ELA07	182	204	483	342.83	60.539

CST Scores ELA 2006/2007 = Females

	N	Minimum	Maximum	Mean	Std. Deviation
ELA06	92	174	600	357.48	63.340
ELA07	93	231	480	352.03	56.524

CST Scores ELA 2006/2007 = Males

	N	Minimum	Maximum	Mean	Std. Deviation
ELA06	89	231	489	340.53	59.148
ELA07	89	204	483	333.81	63.530

CST Scores Math 2006/2007

	N	Minimum	Maximum	Mean	Std. Deviation
MATH06	174	198	565	316.17	66.664
MATH07	167	172	600	305.56	61.920

CST Scores 2006/2007 Math =Females

	N	Minimum	Maximum	Mean	Std. Deviation
MATH06	89	220	565	319.18	67.085
MATH07	87	221	600	307.75	60.499

CST Scores 2006/2007 Math = Males

	N	Minimum	Maximum	Mean	Std. Deviation
MATH06	84	198	565	313.49	66.723
MATH07	79	172	557	303.52	64.058

APPENDIX B

INVITATION TO PARTICIPATE IN AN ONLINE SURVEY

Dear Parents,

My name is Mary Leeds. I am a graduate student in the joint doctoral program in the School of Education at San Diego State University (SDSU) and at the school of Leadership and Education Sciences (SOLES) University of San Diego (USD). I am extending an invitation to you to participate in a doctoral dissertation study I am conducting on student achievement in a charter homeschool.

I appreciate you taking the time to respond. Your response will contribute to broadening the limited research on student achievement in a charter homeschool. Your participation is completely voluntary and all information will be kept confidential. The results will be reported in a dissertation that I will complete as a requirement of my doctoral program. The survey will take about 5 minutes and is online. You will be asked about your experiences with the charter homeschool and student achievement.

The website link allows you to go directly to the survey, www.surveymonkey.com When you arrive at the website, please follow the directions and continue to the end of the survey and click on submit. Your participation in this study is voluntary. Confidentiality will be maintained to the extent allowed by law. If you have any questions regarding the research, please contact me at 619-248-5332 and/or marybteachn@yahoo.com.

I sincerely appreciate your willingness to consider this opportunity. A copy of this study's Informed Consent Form is provided and I can mail you a hardcopy upon request.

Please note the last day to complete the survey is _____. Upon receipt of the

survey, you will be entered in a raffle for a gift card to a local restaurant.

Thank you,

Mary Leeds

APPENDIX C

PARENT SURVEY

Demographic Information

- 1. How many children do you have?
 - 1
 2
 3
 4 or more
- 2. How long have you been homeschooling your children?

0	0-1 years
0	1-2 years
0	2-3 years
0	3-4 years
0	4-5 years
0	5-6 years
0	6-7 years
0	7-8 years
0	8-9 years
0	9 or more years

3. What are the grade levels of the children in your household who are enrolled in the charter homeschool?

0	К				
0	1				
0	2				
0	3				
0	4				
0	5				
0	6				
0	7				
0	8				
0	9				
0	10				
0	11				
0	12				

The following statements will provide information about the California Standardized Test (CST) the charter homeschool students take each Spring. Please answer honestly and provide comments if necessary. Choose a number between 1 and 5 that best describes your view of the following statements. The scale is as follows:

	1	2	3	4	5	
	Strongly Agree	Agree	No Opinion	Disagree	Strongly Disagree	
4.	Students in the cha	arter homes	school score above	state standard	is based on CST scor	res
	1	2	3	4	5	
Co	mments:					
5.	Students in the cha	urter homes	school score below	state standard	ls based on CST scor	res
	1	2	3	4	5	
Co	mments:	<u></u>				
 Students in the charter homeschool score higher than students in traditional public school on CST 						
	1	2	3	4	5	
Co	mments:					

7.	. Students in the charter homeschool score lower than students in a traditional public					
	school on CST					
	1	2	3	4	5	
Co	omments:				<u> </u>	
8.	Parents in the c	harter homesch	nool do a good j	ob preparing s	tudents for CST	
	1	2	3	4	5	
Co	omments:					
	<u></u>	<u></u>				
9.	The teachers in	the charter hor	neschool do a g	ood job provid	ling resources to	prepare
	for CST					
	1	2	3	4	5	
Co	omments:					
10	. Parents would l	ike more assist	ance from the c	harter homesc	hool in preparing	students
	for the CST					
	1	2	3	4	5	
Co	mments:				······	
—				<u> </u>		
11.	. The CST is esse	ential and a val	id form of stude	ent achievemer	nt in the charter h	omeschool
	1	2	3	4	5	
Со	mments:					

12. You use your child/children's CST scores to guide your instruction

1	2	3	4	5	
Comments:					

APPENDIX D

CONSENT TO PARTICIPATE IN A FOCUS GROUP INTERVIEW

Purpose of Research:

You are being asked to participate in a research project conducted by Mary Leeds in the School of Education, San Diego State University (SDSU) and School of Leadership and Education Sciences (SOLES) at the University of San Diego (USD). You are being asked because of your involvement with a charter homeschool.

Purpose: The purpose of this study is to describe student achievement based on standardized assessment scores and participation in an interview.

Participation: You will be asked to participate in a focus group interview. It will take about 45-60 minutes. Your name will be kept confidential. You will be asked open ended questions and answer periods will be interactive. As the dialogue is relatively informal, insight into the research questions may formulate further questions and interviewer may prompt you for further responses. The researcher will transcribe your responses and produce a printed copy for you to review. You will be asked to add, delete, or change anything you wish and return it to the researcher within a few days. Revisions will be made if necessary. Audio tapes may be used during interviews to assure accuracy of response. All information provided will be confidential. The interview gathers information on your perception of student achievement. Your responses will be transcribed and destroyed at the completion of the dissertation.

Risk & Benefits: There are no risks associated with this study. This research is expected to benefit the growing charter homeschool community by providing a description of a new educational alternative to traditional schooling within the public school system.

Voluntary Participation: Please understand that participation is completely voluntary. Your decision whether or not to participate will in no way affect your current or future relationship with the charter homeschool, SDSU, or USD, their faculty, students or staff. You have the right to withdraw from the research at any time without penalty. You also have the right to refuse to answer any question(s) for any reason.

Confidentiality: Your individual privacy will be maintained in all publications or presentations resulting from this study. Participant names will not be used in the final research document unless your written permission is obtained. In order to preserve the confidentiality of your responses, this legal document has been provided for your assurance. If you have any questions or would like additional information about this research, please contact me at 619-248-5332, and/or marybteachn@yahoo.com. You may call IRB A signed copy of this consent form will be given to you.

I understand the above information and have had all of my questions about participation on this research project answered. I voluntarily consent to participate in this research.

Signature of Participant	Date
Printed Name of Participant	
Signature of Researcher	Date

APPENDIX E

OPEN-ENDED FOCUS GROUP INTERVIEW QUESTIONS

- 1. What is your background and experience in homeschooling?
- Where did your children attend school prior to enrolling in the charter homeschool?
 Where did you teach prior to working for the charter homeschool?
- 3. What are your reasons and why do you homeschool/work for a charter homeschool?
- 4. What grades are your children in? What grades do you assist parents in teaching?
- 5. Why did you choose a charter homeschool? Why did you choose to work for a charter homeschool?
- 6. What is your present experience in the charter homeschool?
- Do you use tutors or other teachers to assist you in homeschooling your children/students? Explain.
- 8. What are your views about California Standardized Test (CST)?
- 9. Why do your children/students participate in CST?
- 10. How do you use your children/students CST scores to guide your instruction? How do you use CST scores to assist parents in teaching?
- 11. What is your view on how your children/students are achieving in the charter homeschool based on their CST scores?
- 12. What are your views about the use of overall student scores from CST to determine if the charter homeschool should receive its funding?
- 13. How does the charter homeschool support your children/students in ways that will help them achieve and improve CST scores now and in the future?

14. What are your plans beyond the charter homeschool? Do you plan on sending your child to a public school?

APPENDIX F

GLOSSARY

Academic Performance

Levels -	Performance scores reported as advanced (90-99%),
	proficient (70-89%), basic (50-69%), below basic (30-
	49%), and far below basic (10-29%). (CDE, 2006)
Charter School -	Public school of choice operating with freedom from
	many regulations of traditional public schools.
	(CDE, 2006)
CST -	California Standardized Test
	Annual Assessments administered to 2 nd -11 th grade public
	school students designed to match the states rigorous
	academic content standards for each grade level. (CDE,
	2006)
Homeschool -	Terms used are homeschooling, home education, or home
	school, defined as the process by which students are
	educated at home rather than in an institution such as a
	public or private school. (Lines, 2000)
State Standards -	Adopted by the state board of education, defined skills
	students should know in each academic area and each grade
	level. (CDE, 2006)