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## Impact of homework on academic achievement of students with severe emotional disabilities in a non public school setting

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**IMPACT OF HOMEWORK ON ACADEMIC ACHIEVEMENT OF STUDENTS WITH  
SEVERE EMOTIONAL DISABILITIES IN A NON PUBLIC SCHOOL SETTING**

**Reena Sharma**

**Thesis Submitted in Partial Fulfillment  
of the Requirements  
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**California State University, Monterey Bay**

**The College of Professional Studies**

**School of Education**

**May 2013**

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**ACTION THESIS SIGNATURE PAGE**

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**By Reena Sharma**

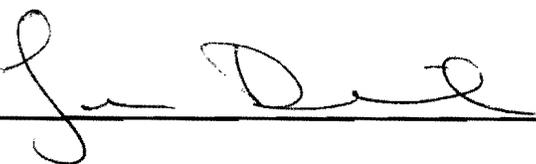
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## **Abstract**

The purpose of this study was to determine the impact of homework on academic achievement of students with severe emotional disabilities in a non public school setting and the impact of homework on these students' home environment. Many studies suggest that if students spend enough time on homework and family support these students with a positive attitude towards homework considering it as an extended learning tool from school to home environment students improve in their academic skills. This study collected empirical data using a pre-and post-test method on a group of special education students in a non public school setting. The control group of six students took homework for two subjects; spelling and mathematics on the same skills they learned in those classes for two weeks. The next two weeks, instruction was given but no homework was given to these students. Additional data was gathered via surveys with parents and caregivers to determine variables such as time spent on homework and their assistance on homework to further aid in analyzing the test results. The results of the study showed significant difference between test scores after the homework week versus the non-homework weeks. Time spent on homework and the amount of correct homework submitted also impacted achievement. The test scores in spelling were higher by 17.7% during the week when homework was assigned in comparison to the two weeks when no homework was assigned. The test scores in math were higher by 6.2%% during the week when homework was assigned in comparison to the two weeks when no homework was assigned. Future research should include culturally diverse groups from various socio-economic levels and a broader range of grade levels.

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## CHAPTER 1

### Introduction

Homework continues to be a lightning rod topic for teachers, parents and students. The primary purpose of assigning homework is to help students strengthen the skills they learn at school, build on that understanding and knowledge and use it in preparation for future lessons. The question that is inadequately answered is whether or not homework significantly increases academic achievement for all students including students with severe emotional disabilities.

Homework is an extension of the learning happened at school. The purpose of homework is to enhance the learning skills, develop self study skills and motivate parent involvement in student learning. Third graders are expected to spend sixty minutes on homework that includes thirty minutes of reading. This criterion is increased by ten minutes for each next grade level. (California Elementary School, 2012-13)

According to “The Individuals with Disabilities Education Act of 2004” (IDEA 2004) special education is classified as twelve different categories; specific learning disabilities, speech or language impairments, mental retardation, emotional disturbance, other health impairments, multiple disabilities, autism, hearing impairments (including deafness), orthopedic impairments, visual impairments (including blindness), traumatic brain injury, and deaf-blindness. States may include a 13th category, developmental delay, for children ages 3 through 9 (U.S. Department of Education, 2005).

The Special Education process consists of steps that includes identifying a child as possibly needing special education services, then evaluating in all areas related to the child’s suspected disability. After evaluation, a group of professionals and the parents which is Individualized Education Program (IEP) team, decide if the child meets the criteria for disability according to IDEA. If the child meets the criteria then he/she is found eligible for special

education services. At the IEP meeting placement and services for the student are decided and documented. A copy of the IEP is given to the parents. After this the school makes sure services are being provided as written in the IEP. The student's progress towards annual goals is measured as stated in the IEP. The IEP is reviewed at least once annually and more often if the school or parent asks for another review. Each special education student must be re-evaluated every three years (Triennial IEP) to determine if the student continues to be a "child with disabilities" as defined by IDEA. At anytime, the IEP team may meet if requested by the parents or educators (Office of Special Education and Rehabilitative Services U.S. Department of Education, July 2000). Based on the individual needs, students are placed in educational environments in the least restrictive environment possible with general education students. Most of the time students with special needs attend public school classes in a less restrictive environment, where they get opportunity to receive education with their non disabled peers up to the greatest extent appropriate. This is when a child is mainstreamed into the "regular classes" or "general education" classes. Public schools are funded by the local, state, and federal government and they must provide education to all the students who live within the borders of their county. The students with such exceptional needs that cannot be met in public schools are provided at a Nonpublic School setting. Nonpublic schools are privately operated institutions that are publicly funded by respective counties of their students' residence. These schools have the most restrictive environment with no students from general education. The classes are small with a larger ratio of adults to students. The students are evaluated more often with the ultimate goal of transitioning back to public schools (Understanding the 13 Categories of Special Education, 2009).

In the case of students in special education programs, many additional assumptions are made such as if the homework actually helps students achieve higher academic success. Factors

often cited include the students' abilities to complete homework of any kind; and the ability and the willingness of their parents to assist in completion of the homework. Students in the non-public school system such as a school connected to a group home have even more assumptions made about them.

Foster children with disabilities are often represented by parents who are absent from their lives but continue to hold parental rights. The homework issue can be exacerbated when the students rely upon various staff that may change shifts during homework time. They may have external issues such as group home rules with which they must comply; or behavioral issues, either their own or those of house mates, that may hinder homework completion (Bursuck, 1994).

Approximately 35% of the school districts often lack a policy regarding homework and students with disabilities are subject to those policies as well, thus reducing their ability to independently practice what they have learned in their special and general education classrooms. Though homework for students with disabilities would increase their knowledge base and understanding of specific content, schools do not often enforce the guidelines, thus reducing opportunities for students with disabilities to succeed academically (Bryan and Burstein, 2004). Therefore, it is imperative that policy makers and school administrators along with teachers, create a uniform homework policy that increases the likelihood of students with disabilities profiting from the additional independent practice.

Some teachers make assumptions that students with special education needs do not require homework for a myriad of reasons that include the belief that these students do not benefit from assigning homework. Parents and caregivers beliefs also run along the spectrum of those who believe all students regardless of classification should be assigned homework to

assist in achievement; to those who are irate when homework is assigned to their special education enrolled child. (Bennett & Kalish, 2006)

Teachers want to ensure that their students in the special education program achieve the highest level of their abilities; and parents want the same for their children. To support their belief they seek help from any research done on this topic for answers. Therein, lays the problem. While numerous studies have been conducted to address the homework issues for the general education population; the special education students are lacking in representation. The question for them remains: does homework significantly increase their academic achievement? Furthermore, if the special education student is a foster child in a group home who is enrolled in a non-public school; how does that impact the possible benefits of homework?

#### Statement of the Problem

Homework can be a useful tool in the learning process if designed correctly to meet the students' needs, but can actually have reverse effects if it is too difficult or time consuming (Cooper, Robinson, & Patall 2006). Homework that is too difficult can create frustration, stress and loss of confidence. On the other hand, homework that is too easy does not further the knowledge base and can create an attitude of nonchalance and reduce motivation to learn new skills. Teachers often use a shotgun approach to homework, disregarding the individual academic level of their students. This happens both in general education as well as in special education even though the student in special education has an Individualized Education Plan (IEP) (Cooper, 2007). This IEP, defined by IDEA, is a written document that states the disabled child's goals, objectives and services for students receiving special education. (Understanding the 13 Categories of Special Education, 2009)

Whether or not the homework has an impact on the student depends on various factors: amount of homework assigned, its relation to the class activities, level of difficulty, time spent on

completion of the homework, and parental support and guidance or independent completion of the homework (Bryan and Nelson, 1994; Cooper, Robinson, & Patall 2006). In this regard, special education students are no different from general education students.

#### Purpose of the Study

Most research on homework issues relies on studies conducted with participants from the general education population. While there are a few studies to answer the question of whether or not homework significantly impacts the academic success of the special education student; searching for an abundance of research on the topic produces few results. Research for special education students within a group home setting is even more elusive. Currently any policy regarding homework for students in special education programs will have limited data support (Bryan and Burstein, 2004).

In early 1900, homework was considered a tool to discipline a child's mind (Brink, 1937). Mind was regarded as a muscle and revising the learned skills was not only gaining more knowledge but also was exercising those muscles. This could easily be accomplished at home, so homework was an important part of schooling. By 1940's, using homework as a skill strengthener or punishment started getting questioned and more importance was given to student's interest in learning. Also homework was seen as interference in students' after school life (LaConte, 1981). By 1950's the cycle reversed, when Russian launched Sputnik satellite. Americans became concerned that their children will not be able to compete with technology. So, homework was brought back as a positive mean to improve learning. Once again by mid sixties contemporary learning theories were again cited as a case against homework since it was an added pressure to student life (Wildman, 1968). Today homework is in a positive light effecting an increase in test scores (National Commission on Excellence in Education, 1983).

The study of homework has primarily focused on how assigned homework completion impacts students in the general education system. Numerous studies across the world have been conducted with this population (Cooper, Robinson, & Patall, 2006). However, the lack of empirical data regarding the student with severe emotional disabilities is insufficient, and therefore this study will concentrate on this particular group of students.

Furthermore, studies on homework that have been conducted with students with special needs have excluded additional factors such as time spent on homework tasks, parental beliefs, ethnicity and gender. While studies of general population conclude that homework is helpful to middle and high school students, for elementary students it does not show the same impact (Bennett and Kalish, 2006). Students in special education are often placed in classes with multiple levels of academics; for example a third grader student may work on 3<sup>rd</sup> grade level mathematics while working at 1<sup>st</sup> grade level reading. Therefore this study showed that when homework is assigned to match the academic level of the student, he or she made significant progress academically. This study factored in cultural, socio economic and the educational background of the caregivers as well as their attitudes on assignment of homework.

Homework can play the role of a bridge between school and caregiver's communication. Homework needs to be designed carefully considering individual needs and performance levels of the students in special education. Therefore, this study determined the role the caregiver played in homework completion. In addition, this study showed the relationship between time spent on homework and impact of homework on test scores.

#### Research Questions

1. Does time spent on completing homework impact the test scores among the upper elementary and middle school students with severe emotional disabilities in a special day class non public school setting?
2. Does assigning homework to these students impact the home environment?

### Definition of the Terms

Special education- Special education or special needs education is the education of students with special needs in a way that addresses the students' individual differences and needs. Ideally, this process involves the individually planned and systematically monitored arrangement of teaching procedures, adapted equipment and materials, accessible settings, and other interventions designed to help learners with special needs achieve a higher level of personal self-sufficiency and success in school and community than would be available if the student were only given access to a typical classroom education.

Common special needs include challenges with learning, communication challenges, emotional and behavioral disorders, physical disabilities, and developmental disorders.

Students with these kinds of special needs are likely to benefit from additional educational services such as different approaches to teaching, use of technology, a specifically adapted teaching area, or resource

room.(<http://www.americantutoringcenter.com/whatissspeced.html>, 2009)

Emotional Disturbance (ED)- a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance:

1. An inability to learn that cannot be explained by intellectual, sensory, or health factors.
2. An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
3. Inappropriate types of behavior or feelings under normal circumstances.
4. A general pervasive mood of unhappiness or depression.
5. A tendency to develop physical symptoms or fears associated with personal or school problems.”

As defined by IDEA, emotional disturbance includes schizophrenia but does not apply to children who are socially maladjusted, unless it is determined that they have an emotional disturbance. (The Individuals with Disabilities Education Act (IDEA) (<http://nichcy.org/>, 2010)

Individualized Education Plan (IEP): special education term outlined by IDEA to define the written document that states the disabled child's goals, objectives and services for students receiving special education. (Understanding the 13 Categories of Special Education, 2009)

Group homes: provide the most restrictive out-of-home placement option for children in foster care. They provide a placement option for children with significant emotional or behavioral problems who require more restrictive environments. The licensed group home is defined as a facility of any capacity which provides 24-hour nonmedical care and supervision to children in a structured environment, with such services provided at least in part by staff employed by the licensee. Group homes run the gamut from large institutional type environments which provide an intense therapeutic setting, often called "residential treatment centers," to small home environments which incorporate a "house parent" model. As a result, group home placements provide various levels of structure, supervision and services.(Ca.gov, Department of Social Services, Copyright © 2007 State of California )

## CHAPTER 2

### Review of Literature

Researchers are divided on the issue of whether or not homework is beneficial for the student in special education program. With this difference in opinions of teachers and researchers along with the lack of clear guidelines regarding homework requirements, it is often the case that some students in special education program do not have the same opportunities for achievement. Students in general education have a variety of teachers, some who require heavy homework, and others who do not. Teachers in general tend to assign homework based on their own beliefs because only approximately 35% of school districts have established homework policies (Bryan & Burstein, 2004). Even with a policy in place; there are variations as to the implementation and little to no actual enforcement of the policy.

Statistically, teachers in countries such as Japan and Denmark that outperform the United States on student achievement tests, tend to assign less homework. However, teachers in countries that score lower, such as Iran and Thailand tend to assign a large amount of homework (Bennett & Kalish, 2006). According to a national survey of 2,900 United States students conducted in 2004 by the University of Michigan; the amount of time spent on homework is up 51% since 1981. When the No Child Left Behind law was implemented, the average weekly time spent on homework for students aged 6-8 more than doubled; increasing from an average of 52 minutes per week to an average of 128 minutes per week (Bennett & Kalish, 2006).

This chapter is a review of the literature published from 1989 to 2008 about how homework impacts the academic achievement of students. It is organized in three sections; 1) Relationship between Homework and Students' Skill level, 2) Relationship between Academic Achievement and Time Spent on Homework, and 3) Affects of Parental Involvement with Homework.

### Relationship between Homework and Students' Skill Level

Many studies that have been conducted have shown that part of the problem with homework for students in special education program is not simply the characteristics of the students; but also the teachers' abilities to assign homework that is appropriate for the skill level of the students. In addition there seems to be a lack of teacher feedback on homework that is completed or even attempted. As approximately 75% of students with learning disabilities are now in the general education population (Bursuck, 1994); there seems to be more risk of having homework assigned that may not meet the abilities of students with special needs.

Bursuck (1994) indicates that homework creates huge challenges for students in special education programs and their families when the students are mainstreamed into the general education classes. He implied that more empirical studies are needed to design appropriate empirically based strategies to improve student performance in homework.

Rosenberg (1989) conducted a study at Johns Hopkins University to examine the impact of daily homework in acquiring basic academic skills of students with learning disabilities. He used six elementary-level students with learning disabilities as defined by a state definition that used the following criteria: 1) A full-scale IQ of 80 or above on the WISC-R or the Stanford-Binet administered by a certified school psychologist; 2) most learning problems not primarily the result of hearing, vision, or emotional problems; and 3) a severe discrepancy between expected ability and actual achievement with overall achievement being at least 1.5 standard deviations below expectancy (Rosenberg, 1989). Additionally the subjects had Individualized Education Plans (IEPs) that indicated a need to work on the acquisition and fluency of basic multiplication facts. Four of the students were Caucasian and two were African-American.

Rosenberg's initial study contained elements to create a baseline and structure to maximize validity. Daily homework assignments were math fact worksheets similar to the

seatwork activities assigned during 30-minute in-class sessions. Students were given daily homework sheets and reminded by the teacher/data collector the importance of doing their homework. (Rosenberg, 1989)

Three types of independent data were collected to assess the relative efficacy of the supplemental homework assignment: measures of math performance, rate of return of homework assignments, and percentage correct on returned homework assignments (Rosenberg, 1989).

Of the six students studied, only two students had clearly enhanced acquisition of the math facts; two students showed no apparent homework effect; the other two students showed some effect however, it was inconsistent and therefore difficult to interpret adequately. Four of the students had a homework return rate of greater than 70%. Three of the six students averaged performance levels of greater than 70% for correct homework. The student who scored the lowest in both the return rate and the level of correct homework was also the student who showed the least impact on acquisition enhancement (Rosenberg, 1989).

Rosenberg (1989) concluded that at first glance, the effects of the supplemental homework assignments on math fact performance could be characterized as equivocal; however, several factors mediated the differential effects of the assigned homework. The patterns revealed that homework was effective only when a rate of homework completion equaled or exceeded 70%; the percentage correct on homework assignments averaged 70% or above and a student demonstrated at least moderate acquisition of the material during checks of performance (Rosenberg, 1989). Students who did not reflect all three components did not show consistent benefits from the homework.

On the surface this study shows that there is not a difference in whether or not students are assigned homework. Further analysis of the study reveals the same conclusions reached by Rosenberg. However, factors that need to be addressed that are missing from this study include

cultural differences. Rosenberg's study is quite small and is not ethnically diverse. While the information taken from this study is invaluable, it is only a beginning and raises further questions. Rosenberg conducted a follow-up study to address the three factors revealed in the initial study. However, again, Rosenberg's study was quite small; the follow-up study used only four students and continued to lack ethnic diversity (Rosenberg, 1989).

#### Relationship between Academic Achievement and Time Spent on Homework

In a larger study, Trautwein (2007) analyzed data from the Program for International Student Assessment (PISA) and concluded that further study was indicated to determine the relationship between homework and academic achievement. (Trautwein, 2007). Trautwein brought to light two important factors: 1) a homework effect at the class level happens when students in classes with a higher quantity or quality of instruction have more pronounced achievement gains than students in other classes; 2) a homework effect at the student level happens when students in the same class differ in their homework behavior and show differential outcomes (Trautwein, 2007).

To account for the variables in previous research studies, Trautwein used the data from the PISA results of 2001; and added additional data from a large German extension school. This afforded additional participants. While Rosenberg's study had only six participants; Trautwein's study had 24,273 students. However, Trautwein's study was based on participants from general education. Furthermore, the study is based on German students only. Regardless, Trautwein's study did result in interesting data. The study revealed that time spent on homework was a predicting factor on the relationship between homework and achievement. The results indicated that the homework time had a negative effect at the student level and a positive effect at the school level. The possible reason for low achievement when longer time was spent on homework might be: it takes weaker students longer to complete an assignment in comparison to

other students. Also the non significant or negative result of homework time on achievement may have some other explanations; one, spending lot of time on homework might interfere with attention on homework and unmotivated the student that affect the efficiency, and two the consistency of time logbook of homework can be questionable. (Trautwein, 2007).

Bryan and Burstein (2004) examined the relationship of students' learning style to homework completion. They reported that research showed different patterns of homework style between high and low homework achievers and between children with positive and negative attitudes toward homework. Reviewing the research, Bryan and Burstein conducted an informal study that assessed the idea that setting the stage for homework should capitalize on personal learning styles. They engaged middle school students in an evaluation of homework completion time and accuracy while watching television, listening to the radio, and working in quiet surroundings. Students reported that their personal preferences influenced the amount of time it took them to complete assignments, but they did not mind spending more time on homework when they could listen to their favorite programs (Bryan and Burstein, 2004).

Students with learning disabilities are often given homework assignments that involve doing incomplete class work. These students may fail to complete homework for the same reasons they did not complete the work in the class (Bryan, Burstein & Bryan, 2001). Learning requires the student's cooperation that in turn requires the student to value school work. Students with learning disabilities describe learning as an imposition (Bryan, Burstein & Bryan, 2001). Studies show that students with learning disabilities find their homework too difficult; they do not do or complete their homework; and they want someone to help them finish their work (Bryan, Burstein, & Bryan, 2001).

Over the last two decades, research about the effectiveness of homework has steadily grown. Harris Cooper from Duke University, arguably the most respected expert on the issue of

homework, along with university students Jorgianne Civey Robinson and Erika Patall, analyzed over 120 studies and indicated that research definitely supports the notion that homework does make a significant impact on academic achievement (Cooper, Robinson, & Patall 2006). Cooper also suggested that research findings support the common “10-minute rule” which states that all daily homework assignments combined should take about as long to complete as 10 minutes multiplied by the student’s grade level. For example a fourth grade student should have 40 minutes homework in comparison to two hours worth homework for high school students (Cooper, Robinson, & Patall 2006). However, more than two hours of homework did not show any higher achievements in academics. Cooper suggested that younger students benefit less from spending longer time on homework due to their less effective study habits and ability to get easily distracted with the surrounding environment than older students. This can be one reason that elementary teachers assign homework to develop study habits and better time management skills among the students (Cooper, Robinson, & Patall 2006).

In the analysis of the data, Cooper included three types of studies that examined the relationship between homework and achievement. The first type of study compared achievement in those students who were assigned homework to those who were not assigned homework and had no other compensatory treatment. The studies included over 3,300 students in 85 classrooms and 30 schools in 11 states. The studies contained 48 comparisons of which 18 used class tests or grades as the outcome measure for homework and 30 used standardized achievement tests. Twenty-five comparisons involved achievement in mathematics, 13 reading and English, and 10 involved science and social studies. The length of the studies averaged 9-10 weeks. These studies revealed a strong relationship between the grade level of the student and the effect the homework had on student achievement (Cooper & Valentine, 2001).

The second analysis compared homework to in-class supervised study. Included in this study were over 1,000 students in 40 classrooms and 10 schools in six states. Again, in these studies, what emerged was a correlation between homework and grade level as far as influence in achievement (Cooper & Valentine, 2001).

The third analysis used statewide and nation surveys that correlated the amount of homework. Of 50 correlations, 43 indicated that students who did more homework showed higher achievement scores. However, the grade level correlation was an influencing factor. The lower the grade level, the less effect homework had on achievement; the higher grade levels showed significant correlation between achievement and homework (Cooper & Valentine, 2001).

Unfortunately, while Cooper is widely recognized as the foremost expert on homework research, his research was directed towards the general education population and not the students from special education population. The literature regarding the impact of homework on Special Education students is minimal, though in recent years there has been advances made due to legislature involving educational performance.

In early research, the comparison in studies was limited to whether or not students completed homework and how that impacted achievement on test scores. Eventually other factors were taken into account such as parental involvement and time spent on the homework. Furthermore, most research is geared toward the general population rather than distinguishing general education students from special education students. Cooper points out that in the current research there are limitations that need to be addressed, such as how the ability level of the student affects the importance of homework in the student's achievement (Cooper, Robinson, & Patall, 2006).

The most commonly used measure for assessing homework performance is the Homework Problem Checklist (HPC), a 20-item parent rating scale. The HPC assessed two

broad factors inattention/work avoidance and poor productivity/non adherence to homework rules. However, the HPC was developed for elementary school age students and many of the items overlapped with symptoms of attention deficit hyperactivity disorder (ADHD). Clearly a different scale was needed.

Power, Dombrowski, Watkins, Mautone, & Eagle, (2007) conducted a study that focused on the development of parent and teacher rating scales of homework performance, which were referred to as the Homework Performance Questionnaire-Parent Scale (HPQ-PS) and the Homework Performance Questionnaire-Teacher Scale (HPQ-TS). These scales excluded items that were directly related to the core symptoms of ADHD and were developed in partnership with teachers and parents. Even though both questionnaires were interrelated they provided unique information about students' abilities associated to homework functioning. Students' ability to complete the homework also depend on the difficulty level of homework (Powers, Dombrowski, Watkins, Mautone, & Eagle 2007).

#### Effects of Parental Involvement with Homework

Presence of homework has a disruptive effect on family life whether it is a student with special needs or a student in general education. It interferes with family activities, quality family time and sometimes is considered school troubles becoming home troubles (Dudley-Marling, C. 2003). Other researchers think that homework may affect the family relationship since they will have less quality time to spend on leisure time activities (Cooper, 1989). Also homework becomes more challenging with academically struggling students ((Bursuck, 1994). However all parents do not think the same way, and some demand more homework for their children ((McDermott, Goldman, & Varenne, 1984). Dudley-Marling (2003) conducted an interview study on twenty three parents of different racial, ethnic and socio economic backgrounds. Some of the parents were couples and some of them were single mothers. Parents reported that

homework took long hours to complete and became a stressful and dreadful activity. Younger students demanded parents to sit with them that interfered with the parents' household responsibilities. Difficult homework assignments led to students' avoidance of homework and parents nagging to complete it that created resentment between family members. This research suggests that parents, teachers and school administrators need to make policies together keeping in mind students' academic level, family structure or socio- economic status, and time requirements of completing homework to make it a learning experience instead of making a burden for families (Dudley-Marling, C. 2003).

Bigger problems arise when parents or caregivers are conflicted in their beliefs regarding the value of homework for the student in special education program. Their beliefs run along a spectrum of those who believe all students regardless of classification should be assigned homework to assist in achievement; to those who are irate when homework is assigned to their special education enrolled child (Bryan & Nelson, 1994).

Hoover-Dempsey, Bassler, & Burrow, (1995) report that parents' beliefs about their children's abilities play a part in how they handle homework. Bryan and Nelson (1994) found that fifty percent of parents of students with learning disabilities believe their children are overwhelmed by the homework assignments. They believe that homework is an added burden because their children have organizational and motivational problems. Parents cite various problems in getting their children to complete homework including procrastination, needing reminders and prompts, and easily distracted during the homework process (Polloway, Epstein, & Foley, 1992). According to Epstein, 1984, student achievement is higher when parents monitor homework, participate in school activities and support the work and values of school. It appears that there is not an accord between parents' and teachers' beliefs and expectations about homework (Bryan & Nelson, 1994). Parents seem to believe that teachers want accurate and

complete assignments; teachers value effort and are lenient when grading (Bryan & Nelson, 1995). Research indicates that many parents believe that partnership with schools in regards to homework support is an important factor in achievement (Levin et al., 1997).

In a 12-year follow up study conducted by Solomon, Wain & Lewis (2002), they found that although the original study contained a variety of survey questions; the issue of homework was repeatedly reported by both parents and students as a major factor in the family relationship. The study clearly showed useful data regarding styles of parenting and parenting beliefs regarding homework value. However, this study did not provide data to further assess whether or not homework had significant impact on academic achievement.

#### Conclusion

Most of the researchers share a common conclusion: more research is needed to determine the effectiveness of homework on academic achievement. However, most researchers acknowledge that studies do support assigning homework to middle and secondary school students. The general rule of thumb is the “10 minute rule” which entails 10 minutes of daily homework multiplied by the grade level of students. Researchers suggest broader studies to include parental involvement, parental attitudes, student motivation, gender, socioeconomic backgrounds, ethnicity, and teacher attitudes and beliefs. Missing from literature is the impact of homework for students with severe emotional disabilities in a non-public school setting such as a group home school. As legislature continues to focus on higher academic scores it is expected that more research will be conducted to empirically support any policy changes.

## **CHAPTER 3**

### **Methodology**

Purpose of this study was to determine the role of homework for students with severe emotional disabilities in a non-public school setting. This study provided empirical data to show that when homework was assigned to match the academic level of the students; the students made significant progress academically. Cultural, socio economic and the educational background of the caregivers as well as the caregivers' attitudes on assignment of homework were factored into the study. The research determined what role the caregiver plays in the impact of homework completion and showed a relationship between time spent on homework and impact of homework on academic achievement.

#### Setting

This study was conducted at a nonpublic school classroom for grade-1 through grade -8 situated on grounds at a group home campus. All of the students are identified with severe emotional disturbance as primary disability criteria. Classroom has 3:1 adult student ratio. All students have IEPs and are reviewed every six months. The school's main goals are to manage students' behavior, instruct them in academic standards, train them in study organization skills and teach them the social coping skills in larger group, so as to mainstream them back to public education system.

#### Participants

The study was conducted on a group of students enrolled in a special education class at a non public school located on the grounds of a group home. These students were placed into the non-public school under the criteria guidelines of the Individuals with Disabilities Education Act (IDEA). Five of the six students are foster children placed at the group home; one is from the community placed into the nonpublic school by the local school district. The grade levels range

from fourth to seventh grades according to the California Academic Content Standards. None of the students have any physical disability. All students have a current Individualized Education Plan (IEP). The participants for this study consisted of six students ages 9-12 years; three females and three males. The ethnic make up of the group includes one Hispanic, two African-American and three Caucasian. Five students live in a group home setting and one lives with his adoptive family. One adoptive parent and five caregivers of these students also participated in the study by answering the survey questionnaire.

This group was selected to reflect special education student population in a nonpublic school setting. Foster children were chosen to reflect the special education population of foster children enrolled in a special education nonpublic school setting.

#### Procedure

This study was conducted at a nonpublic school and involved collecting empirical data using a pre- and post-test method for analysis. At the beginning of the study parents or guardians of the student participants signed a consent form permitting the researcher to involve their children in this study (see Appendix A). They also signed a consent form to participate in answering survey questions (see Appendix B). Consent forms were mailed to the parents/guardians/ caregivers via mail and were retrieved in person and via fax. Surveys were given to parents/caregivers during parent/teacher conference. Students were explained the purpose of the study to obtain their signed consent on an assent form(see Appendix C). A scripted explanation on the assent form was presented to avoid any possible coercion (see Appendix D) with a witness to oversee that the students voluntarily agreed to participate.

Baseline was determined by a pre-test in two areas; spelling and mathematics. The pre-test from k-8 grade levels for spelling consisted of 20 spelling words applicable to the individual's academic level (Appendix E). The pre-test from k-8 grade levels for mathematics had 20 problems

applicable to the individual's academic level (See Appendix F). Each test was limited to 30 minutes for completion. For ten consecutive week days after teacher provided daily instruction participants were given daily homework assignments individualized for each participant's performance level in the two subject areas of spelling and mathematics. Homework consisted of lists of spelling words applicable to the individual's academic spelling performance level; and a math worksheet to complete that is applicable to the individual's academic math performance level. Homework reflected practice work given during class time. Teacher reminded students before leaving for home to complete homework and return the homework the next day.

At the end of the ten days of required homework the participants took the post test in each of the subject to demonstrate academic achievement. The post test in spelling and in math was a duplicate of the pre-test and the students were given a 30 minute time limit for each test.

Weeks later a second pre-test was given to determine a second baseline of knowledge. The second pre-test from k-8 grade levels consisted of 20 new spelling words applicable to the individual's academic spelling level; and 20 new mathematic problems applicable to the individual's academic math level. Each test had a 30 minute time limit. For a period of ten consecutive week days after the teacher provided daily instruction the students were not given required homework in these two subjects. At the end of the ten days period, students were given two post tests, one in spelling and one in math to demonstrate their academic level in the two areas. The post test in spelling and math was identical to the pre-test with the same time limit of 30 minutes.

#### Data Collection

Additional data gathering was conducted via surveys with parents/caregivers (see Appendix G). The teacher sent surveys to the parents/caregivers to gather data regarding amount of time spent on homework and their attitudes regarding their children's homework. The survey

had nine multiple choice questions with additional lines for comments and was available in English or Spanish to accommodate the mono-lingual Spanish speaking caregiver. It focused on many areas including, 1) Did the parent find the homework beneficial academically for their child? 2) Did homework interfere in family activities? 3) Did the parent help the student with the homework? 4) If the parent was unable to help the student, did the school provide assistance, and 5) The amount of time spent on homework?

The teacher distributed the surveys to the parents/caregivers during parent teacher conference week and requested them to complete the surveys within the following week. After five calendar days, the teacher had her classroom aides collect the surveys from the parents/caregivers. The surveys were used to assist in analyzing the results by accounting for variables such as time spent and assistance from parents/caregivers.

#### Data Analysis

The teacher's assistants (classroom aides) at the nonpublic school gathered all of the surveys, pre- and post tests and sample worksheets and submitted it to this researcher for analysis. The researcher recorded the results of both sets of pre and post tests and the parent and caregiver survey responses. Pre and post test results were analyzed quantitatively to determine the actual progress that any given student achieved in all two areas, spelling and mathematics. Progress was compared by using the data of weeks with no homework versus weeks with homework assigned. Analysis from other studies was considered as comparison with general education population to determine whether or not there is an overall difference in progress for special education students versus general education students.

The survey responses were analyzed by a content analysis to determine attitude of parents and caregivers, time spent on homework, and how much assistance was needed for the student to

complete the homework. This qualitative data was analyzed as to how it may or may not have impacted the progress or lack of progress in the students' test scores in spellings and math.

### Summary

Homework is often a popular topic among the educational society; how much homework should be given, what kind of homework should be given and what are the outcomes of homework. These questions become more pertinent and questionable when homework issues are related to students who are attending non public school setting due to their severe emotional disabilities. This study investigated the impact of homework using pre and post test scores of six students attending special day class at a non public school. Quantitative and qualitative data analysis was used from the pre and post tests in spelling and math, and the parent/ caregiver survey results.

## **Chapter IV**

### **Results and Discussion**

The purpose of this study was to analyze the impact of homework in academic achievement of students with severe emotional disabilities in a non public school setting. This researcher conducted her study at a non public school in north central California. The participants selected were enrolled in a special education class for students with severe emotional disabilities and were placed in this class under the criteria guidelines of the Individuals with Disabilities Education Act (IDEA). The grade level of the participants ranged from third grade to sixth grade according to the California State Content Standards. Six 9 to 12 year old students participated in the study; three females and three males. Two students were from African- American ethnicity, three were Caucasian and one student was from Hispanic background. Five out of the six students lived at a group home and one lived with an adoptive family. This study was implemented by the teacher with the assistance of three additional classroom aides.

For this chapter each research question will be listed and the data of findings with discussion will be presented. The implications of this study and suggestions for further studies will conclude the chapter. This chapter will answer two research questions:

1. Does time spent on completing homework impact the test scores among the upper elementary and middle school students with severe emotional disabilities in a special day class non public school setting?
2. Does assigning homework to these students impact the home environment?

### Research Question 1

Does time spent on completing homework impact the test scores among the upper elementary and middle school students with severe emotional disabilities in a special day class non public school setting?

Time spent on homework is an important factor in determining the rate of achievement. Achievement is inconsistent at the individual level but performance improves at the school level (Trautwein, 2007). Also grade level of the students and time spent on homework is important. Suggested daily homework time should be ten minutes multiplied by student's grade level. Assigning too much homework can have a negative effect on student achievement (Cooper, Robinson and Patall, 2006). Other factors that may effect students' test scores include: how much homework was completed and how much of the returned homework was correct (Rosenberg, 1989).

Parents and caregivers of the participants of this study were provided with a survey questionnaire asking about the average time their child spends every day on homework. All six parents/ caregivers participants completed the survey questionnaire and answered the question: How much time does your child spend doing the homework? Out of six students, five students spent 30-45 minutes and one student spent 45-60 minutes daily on homework (see Table1).

**Table 1.** *Time Spent on Homework n=6*

Time Spent on Homework	Number of Students
Less than 30 minutes	0
30 to 45 minutes	5
45 to 60 minutes	1
60 minutes and more	0

The pre and post test data of the six students was analyzed. Homework was assigned for two weeks versus the next two weeks when the students did not do homework on the spelling and math skills they learned in the classroom.

For spelling, students were given a pre-test to determine their ability to spell twenty words at their grade level. Students were then given a story that included all of the words that were included on the pre-test; a word search; word building activity; and write the word three times activity. The teacher and students worked on these activities together in class. The students were given a copy of that story and a list of the words for homework and were instructed to read the story to their caregivers/parents and complete a “fill in the blanks” worksheet that incorporated the word list to return to the teacher the next school day. For two weeks the teacher completed this homework process daily. A post test was administered to all six students to determine their ability to spell the twenty words at their grade level.

For math, the six students were given a pretest on multiplication skills of double digit by single digit or three digits by two digits multiplication problems depending on their math abilities. Students practiced these skills in the classroom for two weeks and were given daily homework on those same skills. Students were required to return the homework every day for two weeks. A post test the exact same pre test, was administered to all six students to determine their ability to multiply at their grade level.

The results were recorded for the pre and post test for both spelling and math in addition to the percentage of homework completed by each student (see Table 2). Data from Table 2 shows that scores for the spelling pre-test ranged from a low of 5% to a high of 75%. Two students scored 65%, and rest of the students scored 75%, 55%, 45% and 5% respectively with an average of 51.6%. The post-test results in spelling recorded one student with score of 100%,

two students scored 90%, two students scored 85%, and one student scored 65% with an average of 85.8%.

In addition, Table 2 shows that the lowest score for the pre-test in math was 0% with two students scoring 25%, two 71% and one scoring 40% with an average of 38.6%. In the math post test, two students scored 29%, and rest 42%, 66%, 67% and 75% respectively. The average score on the math post test was 51.3%. Four students returned their correct homework 100% of the time and other two students completed 70% and 80% of their correct homework.

The comparison of pre- and post test scores when there was homework showed that spelling scores increased from 51.6% to 85.8% (a 34.2% increase) and math scores increased from 38.6% to 51.3% ( a 12.7% increase). Therefore, the overall average increase in the spelling and math scores achieved on the post test was 34.2% and on math test, 12.7%.

**Table 2.** *Pre and Post Test Data for Spelling, Math and Percentage of Homework Completed for Two Weeks (n=6)*

Students	Gender of Students	Pre- test #1 Result (Spelling)	Post test #1 Result (Spelling)	Pre- test #1 Result (Math)	Post test #1 Result (Math)	% of Homework Completed
1	Female	65	90	25	29	100
2	Male	75	100	25	29	80
3	Female	55	85	71	67	100
4	Male	45	85	71	75	100
5	Female	65	90	0	42	70
6	Male	5	65	40	66	100
Total Average		51.6	85.8	38.6	51.3	91.6

### Pre and Post Test Results for Spelling and Math When No Homework was Assigned for Two Weeks

After a couple of weeks, the same six students were given two pretests, one with twenty new spelling words and one with a new set of multiplication math problems. The same classroom instruction process as first two weeks was repeated in the classroom. Students were given a story that included all of the new words that were included on the pre-test, a word search, word building activity and write the word three times activity. The teacher and students worked on these activities together in the class. The students were also given a new set of multiplication math problems which they practiced everyday in the classroom with the teacher. No homework was given for these two weeks in spelling or math. At the end of these two weeks, a post test to determine their ability to spell the twenty words and a post test to determine their ability to multiply at their grade level was administered to all six students. These post tests were the exact same pre-tests in spelling and in math.

Comparison of spelling pre and post test data showed that when no homework on spelling and math skills was given one student scored 80%, two 90% , one 85%, one 70% and one 20% on spelling pretest. The average score was 72.5% (see Table 3). The spelling post test results at the end of two week period when no homework was given showed that in spelling two students scored 95% and rest scored 90%, 100%, 80% and 75% with an overall average of 89% ( a 16.5% increase).

The math pretest scores ranged from 0 to 95%. Three students scored 0% and the other three scored 88%, 95% and 29% with an average of 35.3%. For the math post test scores, the average overall score was as 41.8% with an increase of only 6.5%. One student's score remained 0%, two students scored 50% and other three scored 25%, 21% and 80% (see Table 3).

Comparison of spelling pre and post tests after two weeks of no homework demonstrated that all students increased their test scores in spelling except one student who dropped his score by 5%. When comparing math pre and post test data one student's test score increased by 50%, one by 21% and two students increased their scores by 25%, but two other students dropped their score 67% and 15% respectively.

**Table 3.** *Average Pre and Post Test Results when Homework was Not Assigned (n=6)*

Students	Gender of Students	Pre- test #2 Results (Spelling)	Post test #2 Results (Spelling)	Pre- test #2 Results (Math)	Post test #2 Results (Math)
1	Female	80	90	0	25
2	Male	90	100	88	21
3	Female	85	80	0	50
4	Male	70	95	95	80
5	Female	90	95	0	25
6	Male	20	75	29	50
Total Average		72.5	89	35.3	41.8

Table 4 (see below) shows that one student took 45 to 60 minutes to complete his/her homework. This student completed 100% of the homework and was able to increase his/her score by 43%.

**Table 4.** *Test Scores when Students Spent 45 to 60 Minutes on Homework (n=1)*

Students who spent 45 to 60 minutes on homework	Number of Students	Percentage of improvement in scores
Homework completed and scored same on pre and post- test	0	0%
Homework completed but made progress on the post- test	1	43%

Table 5(see below) shows the status of the students' progress when they spent 30 to 45 minutes every day on their homework. In this group three students completed the homework and two students did not complete the homework. The three students who completed the homework scored an average 16.5% higher on the test and the two students who did not complete their homework scored 24% higher on the post test. No student regressed on the post test results.

**Table 5.** *Test Scores when Students Spent 30 to 45 Minutes on Homework (n=5)*

Students who spent 30 to 45 minutes on homework	Number of Students	Average Percentage of Improvement in Scores
Homework completed and scored same on pre and post- test	0	0%
Homework completed and made progress on the post- test	3	16.5%
Homework completed but regressed on the post- test	0	0%
Homework not completed and made progress on post- test	2	24%
Homework not completed and regressed on the post- test	0	0%

The two weeks when homework was not assigned all students' made progress on spelling test scores except one but in math two students dropped in their scores significantly. Even though overall progress was made on both trial periods (weeks with homework and weeks with no homework) the progress on non homework weeks was significantly lower than the weeks when homework was assigned (see Table 6).

**Table 6.** *Difference between Pre and Post Test Scores in Spelling and Math With and Without Homework*

Weeks	Spelling	Math
1 and 2 with Homework	34.2%	12.7%
3 and 4 with No Homework	16.5%	6.5%

## Discussion

The students who spent 30 to 45 minutes on homework were from the upper grades. Their results show that when they spent equal amount of time but did not complete the homework their progress was not effected negatively. Also at a higher grade level, when more time was spent on homework the students achieved significantly higher.

According to Harris Cooper's study at Duke University, younger students benefit less from spending more time on homework due to their ability to get distracted easily and less developed study habits than older students. This can be one reason that elementary teachers assign homework to develop study and time management skills in younger students (Cooper, Robinson, & Patall 2006). Also weaker students might spend longer time completing homework that affects their attention and motivation causing a lower achievement in test scores (Trautwein, 2007).

Students' enhanced performance on test scores relies on many factors, including how much homework was returned and how much amount of homework is correct (Rosenberg, 1989). This study finds that four out of six students brought back 100% correct homework and two students brought back incomplete correct homework. Despite bringing incomplete homework the spellings test scores of all students increased. In math five students had almost same increased percentage and one student who dropped 4% scored hundred percent correct after homework was returned. Even though most of the research that has been conducted is on general education students that show that time spent on homework has better effect on achievement and higher grades (Cooper, Robinson and Patall, 2006), this study supports that extra time spent on completion of homework increases the level of performance among upper elementary and middle school students with severe emotional disabilities in a special day class non public school setting.

## Research Question 2

### Does assigning homework to these students impact the home environment?

Attitude of parents and caregivers towards homework to their children with severe emotional disabilities plays an important role in students' homework habits and academic achievements (Hoover-Dempsey, Bassler, & Burrow, 1995). According to Brayan and Nelson (1994) majority of parents of students with disabilities do not take homework positively. They consider homework as an added burden. Parents report various problems in getting the homework done as constant reminders, distractions and lack of motivation from their child (Polloway, Epstein, & Foley, 1992).

This researcher sent surveys to the parents/caregivers of the six student participants to gather data regarding amount of time spent on homework, and the parents' attitudes regarding their children's homework. The survey focused on areas including, 1) Did the parent find homework beneficial academically for their child?; 2) Did homework interfere in family activities?; 3) Did the parent help the student with the homework?; 4) If the parent was unable to help the student, did the school provide assistance, and 5) The amount of time spent on homework (See Appendix G).

Surveys were written in English and Spanish to accommodate the monolingual Spanish speaking parents. The students were asked to return the surveys the following Monday. The teacher had her classroom aides gather all of the surveys for analysis.

The researcher analyzed the surveys and recorded the results of parent responses. The study as a whole was analyzed to determine the efficiency of collected data in regards to whether or not it supports the research question; Does assigning homework to students with severe emotional disabilities in a special day class in non public school setting impact the home environment?

Nine questions were asked in the survey. Most of the nine questions required yes or no responses with a space to explain answers. The frequency of the responses to the survey questions is listed below in Table 7.

**Table 7.** *Parent/Caregiver Survey Results (n=6)*

Question No.	Questions	Answered 'Yes'	Answered 'No'
1	Does your child complete homework every day?	5	1
2	How much time does your child spend doing the homework?		
3	Is your child able to do home work by himself/herself?	4	2
4	Do you help your child in doing homework?	6	0
5	Do you get help from the school, if you are unable to help your child for any reason?	6	0
6	If yes:		
	<input type="checkbox"/> Formal training for homework help	4	0
	<input type="checkbox"/> Simplified directions	2	0
	<input type="checkbox"/> Web resources	1	0
7	Does your child's homework interfere with your every day family routines?	1	5
8	Do you think the homework your child works on helps improve his/her academic performance?	5	1
9	Do you think children should be given homework?	5	1

When asked the question, "*Does your child complete homework every day?*" Five responded "yes" with only one parent/ caregiver responding "no." Four of the six participants who

responded to the survey answered that their children were able to complete the assigned homework by themselves. Two responded that their children needed assistance to complete the assigned homework. All six of the parents/caregivers answered that they help their children with the homework, if necessary. The parents who were providing help to their children said that they help them by simplifying the direction, or breaking down the problems in simpler parts. They also stated that sometimes they read to them and give them related examples. All parents/caregivers said they have been provided help from the school, if they need guidance to help their children in doing their homework. Four parents/caregivers said that they received formal training on how to help their children with homework from the school; two parents/caregivers said that school gave them the simplified directions on how to help with the homework and one parent uses web resources to help with homework.

When asked "*Does your child's homework interfere with your every day family routines?*" Five parents/caregivers responded "no" and one parent/caregiver said, "yes", homework interferes with the everyday family routines. Five parents/ caregivers agreed that homework helps in improving the academic achievements in their children. They commented that it helps their children learn more extensively when they repeat what they learn in class at home and that homework helps the children become more responsible. These parents/caregivers stated that sometimes homework is just copying the material given from classroom where the child does not need to think and reason. One parent/caregiver said that her child does not understand math concepts; citing the example that when given the same problem, the child gives a correct answer one time and an incorrect answer the next time.

When asked "*Do you think children should be given homework?*", five parents/caregivers responded positively and one parent/caregiver responded that there should be no home work. The reason given for the negative response was that some parents work two jobs

and it is difficult for them to help the child in doing homework. Also children do not understand that homework is their responsibility; being a single parent is very difficult for them to help the children while completing so many other responsibilities for the family.

### Discussion

Some researchers found that homework for students with special needs is an added burden to the family time and energy due to the tantrum or procrastination by the students. It interferes with the emotional and mental harmony of the family (Brayan and Nelson, 1994). In this study, one parent, who reported that homework interferes with the family life, is a single parent and works longer hours to support the family. The struggle over the homework issue creates everyday stress on that family. Researchers like Cooper (1989) also found that homework may affect the family relationship since they will have less quality time to spend on leisure time activities. In addition, the issue of homework becomes more difficult when students are struggling academically (Bursuck, 1994). It becomes even more strenuous when a student is attending non public school due to severe emotional and behavioral issues. In this study, most of the parents/caregivers had a positive attitude towards the home work. Only one parent reported that it interferes with family time activities. The all agreed however, that they could get help from the school, if they were ever unable to help their child with homework.

### Implications for Further Research

The results of the survey demonstrated that all of the parents/ caregivers do help their children with homework, and most believe children should be given homework. There may be barriers however, such as availability of resources for the parents to adequately assist their children. Results of this study indicated that when enough time is spent on homework and parents/caregivers are able to help these students with severe emotional disabilities in upper elementary and middle school, their scores can improve significantly. This test group was very

small and most of the students lived in a group home. Only one student came from outside the group home. So the sample for parent challenges was based on only one student. For the remainder of the students, homework time can be interfered by behavior issues from other group home peers and the quality and quantity of academic support from the group home staff can differ. The changing staff roles and assignments is also another factor to keep in consideration. A staff member can be assigned different duties during the homework time when a student may have had a special rapport with that staff member.

This researcher focused only on reading and math skills. This is only two subjects of learning for a student and results cannot be expanded to other subjects with any measure of validity or reliability. Further studies need to be conducted to address these issues in order to determine whether or not assigning homework is beneficial for other students with special needs.

Further research is needed to address the particular needs of students with special needs. Valid studies must include factors that are prevalent for special education students such as lower tolerance for school work, and low self-discipline for self-study. Other factors that need to be considered include parental involvement and family dynamics of the student in special education programs.

To determine and support the results of this study further research might be conducted on a larger group of students with severe emotional disabilities and for a longer period of time. Various culture and socio economic groups can be involved in future studies to have a better understanding of the impact of homework. Education of parents/ caregivers, quality of homework and various grade levels of special needs students at public school settings will be helpful to determine the case of homework for students with special needs.

### Conclusion

According to the results of this study homework helps the academic achievement among the upper elementary and middle school students with severe emotional disabilities in a special day class non public school setting. Important factors to consider are the educational background of parents/ caregivers; time and the support provided to complete the homework; and time spent on homework. Further studies are needed using wider range of students, from different cultures and socio- economic groups.

## Chapter V

### Summary

Homework continues to be a lightning rod topic for teachers, parents and students. The primary purpose of assigning homework is to help students strengthen the skills they learn at school, build on that understanding and knowledge and use it in preparation for future lessons. The research is very limited in this area especially in relation to students with disabilities. The question that is inadequately answered is whether or not homework significantly increases academic achievement among these students. The purpose of this study was to determine the relevance and importance of homework to help students with severe emotional disabilities who are living at group or foster care homes. This research answered two questions: 1) “Does time spent on completing homework impact the test scores among the upper elementary and middle school students with severe emotional disabilities in a special day class non public school setting, and 2) Does assigning homework to these students impact the home environment?

The participants in this study were six students and their parents/caregivers from a single special day classroom in a non public school fourth through eighth grade with severe emotional disabilities. This school operates at the campus of a group home in California. Students from the community also attend this school if they are struggling in public school setting due to their emotional and behavioral needs. . The schools main goals are to modify students’ behaviors and academic skill levels so as to mainstream them back to public education system.

The procedures of this study consisted of students’ participation in two pre and two post tests in spellings and in math and their parents/ caregivers completing a survey. All students and parents/caregivers were asked to participate in the research study and sign a consent form. The parents/caregivers were surveyed about their opinions on homework.

The six students participated in taking a pre test on spelling and one in math and then worked on these skills in the classroom under the teacher's instruction for two weeks while taking homework every day. Then post tests in math and spelling were given after two weeks of homework and data was recorded. This process was again repeated for two weeks but no homework was given during that second time period.

Results showed that students improved 34.2% in spelling and 12.7% in math when they completed the homework. They still improved in spelling and math skills by 16.5% in spelling and 6.5% in math when they did not have homework. The percentage dropped however when there was no homework. Also the students who spent more time on homework and returned correct homework scored higher on the post test. Most of the parents/caregivers participating in this study had a positive attitude towards homework and all reported helping the child with homework.

In conclusion, assigning correct amount of homework aligned with the classroom work can increase the academic achievement in students with severe emotional disabilities at a non public school setting. In addition, assigning homework to these students truly does impact their home environment. This quantitative research was conducted for the Master's in Education at California State University, Monterey Bay.

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**APPENDICES**

**APPENDIX A**  
**Consent Form**

## Consent Form

### **Committee for the Protection of Human Subjects, CSUMB CONSENT TO PARTICIPATE IN RESEARCH**

**Title of Project:** IMPACT OF HOMEWORK ON ACADEMIC ACHIEVEMENT OF STUDENTS WITH SEVERE EMOTIONAL DISABILITIES IN A NON PUBLIC SCHOOL SETTING

---

- We would like you to participate in a research study conducted by Reena Sharma (Head Special Education Teacher at Keith Thompson NPS, Hollister, CA and MAE student at California State University at Monterey Bay) to be used for determining the impact of homework on academic achievement in special education students.
- The purpose of this research is to determine whether or not special education students significantly benefit from required homework. Homework continues to be a lightning rod topic for teachers, parents and students. Special Education students have many assumptions made regarding their ability to complete homework; the ability and/or willingness of parents to assist their children; and the value of homework in regards to whether or not it actually helps the special education student achieve higher academic success. While there are studies to answer the question: Does homework significantly impact the academic success of the special education student; overall research is minimal and inconclusive on various fronts.
- You were selected as a participant in this study because you have a child attending school in K-8 classroom setting, where the teacher is also the researcher.
- The benefits of participating in this project include determining if homework improves the academic performance of students or it is an unnecessary burden on students and their families. If it has positive outcomes how much home work should be given without interfering in a child's everyday life.
- If you decide to participate in this research, you will be asked to encourage your child to complete his/her homework without any additional compensation and complete a survey at the end of the study.
- If at anytime you or your child do not wish to continue to participate in this project, you can stop at anytime.
- Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will only be disclosed with your written or witnessed verbal permission or as required by law
- Taking part in this project is entirely up to you. You can choose whether or not to be in the study. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you do not want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.
- If you want to know more about this research project or have questions or concerns, please call me at 831-297-0095 or email at [reenasharma77@yahoo.com](mailto:reenasharma77@yahoo.com). You may also contact my advisor Dr. Irene Guzicki at 831-582-5081.

- The project has been reviewed and accepted by California State University, Monterey Bay. You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study.
- If you have questions about CSUMB's rules for research, please call the Committee for Human Subjects Chair, Chip Lenno, CSUMB Technology Support Services, 100 Campus Center, Building. 43, Seaside CA 93955, 831.582.4799.
- You will get a copy of this consent form. Thank you for considering participation.

Sincerely,

Reena Sharma  
(Head Special Education Teacher at Keith Thompson NPS, Hollister, CA and MAE student at CSUMB)

### **Consent Statement**

I understand the procedures described. My questions have been answered to my satisfaction and I freely agree to participate in this study. I know what I will have to do and that I can stop at any time.

I have been given a copy of this Consent Form.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

### **Signature of Researcher**

In my judgment, the participant is voluntarily and knowingly giving informed consent and possesses the legal capacity to give informed consent to participate in this research study.

\_\_\_\_\_  
Signature of Researcher

\_\_\_\_\_  
Date

**APPENDIX B**

**Parental Consent Form**

## Parental Consent Form

# Committee for the Protection of Human Subjects, CSUMB PARENTAL/LEGAL GUARDIAN CONSENT TO PARTICIPATE IN RESEARCH

**Title of Project:** IMPACT OF HOMEWORK ON ACADEMIC ACHIEVEMENT OF STUDENTS WITH SEVERE EMOTIONAL DISABILITIES IN A NON PUBLIC SCHOOL SETTING

---

- We would like your child to participate in a research study conducted by Reena Sharma (Head Special Education Teacher at Keith Thompson NPS, Hollister, CA and MAE student at California State University at Monterey Bay) to be used for determining the impact of homework on academic achievement in special education students as her Master thesis at California State University, Monterey Bay.
- The purpose of this research is determine whether or not special education students significantly benefit from required homework. Homework continues to be a lightning rod topic for teachers, parents and students. Special Education students have many assumptions made regarding their ability to complete homework; the ability and/or willingness of parents to assist their children; and the value of homework in regards to whether or not it actually helps the special education student achieve higher academic success. While there are studies to answer the question: Does homework significantly impact the academic success of the special education student; overall research is minimal and inconclusive on various fronts.
- Your child was selected as a participant in this study because he/she is a special education student at K-8 level in the teacher/researcher's classroom.
- The benefits of your child's participation in this project include:
  1. Participants may learn why and how homework is beneficial to them and they might be less resistant to homework assignments in future.
  2. They may be indirect factors of future revised homework policies.
- If you decide to allow your child to participate in this research, [*he/she*] will be asked
  1. Complete their spelling and math homework assignments for one month and take pre and post tests.
  2. There will be no penalties for incomplete assignments.
- Any information that is obtained in connection with this study and that can be identified with your child will remain confidential and will only be disclosed with your written or witnessed verbal permission or as required by law.
- Allowing your child to take part in this project is entirely up to you. You can choose whether or not to allow your child to participate. If you consent to your child's participation in this study, you may withdraw that consent at any time without consequences of any kind. Your child may also refuse to answer any questions [*he/she*] does not want to answer and still remain in the study. The investigator may withdraw your child from this research if circumstances arise which warrant doing so.

- If you want to know more about this research project or have questions or concerns, please call me at 831-297-0095 or email me at [reenasharma77@yahoo.com](mailto:reenasharma77@yahoo.com). You can also contact my advisor Dr. Irene Guzicki at 831-582-5180.
- The project has been reviewed and accepted by California State University, Monterey Bay. You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study.
- If you have questions about CSUMB's rules for research, please call the Committee for Human Subjects Chair, Chip Lenno, CSUMB Technology Support Services, 100 Campus Center, Building. 43, Seaside CA 93955, 831.582.4799.
- You will get a copy of this consent form. Thank you for considering participation.

Sincerely,

Reena Sharma

(Head Special Education Teacher at Keith Thompson NPS, Hollister, CA and MAE student at CSUMB)

### Parental Consent Statement

I have read the contents of this Consent Form. My questions have been answered to my satisfaction. I freely give my permission for my child to participate in this study. I know that I can withdraw my consent at any time.

I have been given a copy of this form.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

### Signature of Researcher

In my judgment, the participant is voluntarily and knowingly giving informed consent and possesses the legal capacity to give informed consent to participate in this research study.

\_\_\_\_\_  
Signature of Researcher

\_\_\_\_\_  
Date

**APPENDIX C**

**Assent Form**

## Assent Form

### Committee for the Protection of Human Subjects, CSUMB ASSENT TO PARTICIPATE IN RESEARCH

**Title of Project:** IMPACT OF HOMEWORK ON ACADEMIC ACHIEVEMENT OF STUDENTS WITH SEVERE EMOTIONAL DISABILITIES IN A NON PUBLIC SCHOOL SETTING

---

My name is Reena Sharma.

- I would like you to take part in a spelling and math project.
- If you agree to be a part of this study, some days you will have homework and some days you won't. Your homework will include spelling words and math problems that we learned about in the class. As always you will be tested on what you learned in math and spelling.
- This homework assignment will be a part of your everyday class work. It will not put any additional burden on your everyday after school activities.
- This math and spelling project may improve your spelling and math skills.
- We will also ask your parents/ guardians to give their permission for you to take part in this study. I want you to know that although your parents/ guardians may agree to your participation in this study, you may decide to not participate.
- Do you have any questions about this study? You can ask any questions about this study at any time during school day.
- You can stop at any time by just telling me to stop or I do not want to participate in this project anymore.

Signing your name at the bottom of this form means that you agree to be in this study. You and your parents will be given a copy of this form.

---

### Assent Statement

Please mark one of the choices below to tell us what you want to do:

\_\_\_\_\_ No, I do not want to be in this project.

\_\_\_\_\_ Yes, I do want to be in this project.

I understand the procedures described. My questions have been answered to my satisfaction and I freely agree to participate in this study. I know what I will have to do and that I can stop at any time.

I have been given a copy of this Assent Form.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

---

---

### **Signature of Researcher**

I have read this form to the participant and/or the participant has read this form. I have provided (or will provide) the participant with a copy of the form. An explanation of the research was given and questions from the participant were solicited and answered to the participant's satisfaction. In my judgment, the participant has demonstrated comprehension of the information.

\_\_\_\_\_  
Signature of Researcher

\_\_\_\_\_  
Date

---

---

### ***Optional:***

### **Witness Statement**

I have witnessed the assent process and believe that the participant listed above has been fully informed, understands the project and his/her role, and has voluntarily agreed to participate.

\_\_\_\_\_  
Witness's Signature

\_\_\_\_\_  
Date

**APPENDIX D**

**Script of Assent for Minors**

## Script of Assent for Minors

### Script of Assent for Minors

**Title of Project:** IMPACT OF HOMEWORK ON ACADEMIC ACHIEVEMENT OF STUDENTS WITH SEVERE EMOTINAL DISABILITIES IN A NON PUBLIC SCHOOL SETTING

---

My name is Reena Sharma.

- I would like you to take part in a spelling and math project.
- If you agree to be a part of this study, some days you will have homework and some days you won't. Your homework will include spelling words and math problems that we learned about in the class. As always you will be tested on what you learned in math and spelling.
- This homework assignment will be a part of your everyday class work. It will not put any additional burden on your everyday after school activities.
- This math and spelling project may improve your spelling and math skills.
- We will also ask your parents/ guardians to give their permission for you to take part in this study. I want you to know that although your parents/ guardians may agree to your participation in this study, you may decide to not participate.
- Do you have any questions about this study? You can ask any questions about this study at any time during school day.
- You can stop at any time by just telling me to stop or I do not want to participate in this project anymore.

### Signature of Researcher

I have read this form to the participant and/or the participant has read this form. I have provided (or will provide) the participant with a copy of the form. An explanation of the research was given and questions from the participant were solicited and answered to the participant's satisfaction. In my judgment, the participant has demonstrated comprehension of the information.

\_\_\_\_\_  
Signature of Researcher

\_\_\_\_\_  
Date

### ***Optional:***

#### **Witness Statement**

I have witnessed the assent process and believe that the participant listed above has been fully informed, understands the project and his/her role, and has voluntarily agreed to participate.

\_\_\_\_\_  
Witness's Signature

\_\_\_\_\_  
Date

**APPENDIX E**

**Spelling Test**

Spellings List  
K-2 Grades  
Pre-test 1

1. cat
2. not
3. will
4. see
5. man
6. go
7. get
8. it
9. I
10. did
11. do
12. dog
13. Red
14. big
15. fun
16. the
17. me
18. is
19. run
20. sun

Spellings List  
K-2 Grades  
Post -test 1

1. cat
2. not
3. will
4. see
5. man
6. go
7. get
8. it
9. I
10. did
11. do
12. dog
13. Red
14. big
15. fun
16. the
17. me
18. is
19. run
20. sun

Spellings List  
K-2 Grades  
Pre-test 2

1. no
2. you
3. and
4. my
5. at
6. are
7. had
8. has
9. boy
10. run
11. fan
12. in
13. is
14. up
15. for
16. be
17. all
18. by
19. am
20. so

Spellings List  
K-2 Grades  
Post-test 2

1. no
2. you
3. and
4. my
5. at
6. are
7. had
8. has
9. boy
10. run
11. fan
12. in
13. is
14. up
15. for
16. be
17. all
18. by
19. am
20. so

Spellings List  
3-5 Grades  
Pre-test 1

1. help
2. said
3. your
4. jump
5. with
6. play
7. away
8. want
9. Girl
10. name
11. when
12. round
13. under
14. very
15. show
16. over
17. our
18. could
19. five
20. about

Spellings List  
3-5 Grades  
Post-test 1

1. help
2. said
3. your
4. jump
5. with
6. play
7. away
8. want
9. Girl
10. name
11. when
12. round
13. under
14. very
15. show
16. over
17. our
18. could
19. five
20. about

Spellings List  
3-5 Grades  
Pre-test 2

1. which
2. one
3. once
4. think
5. does
6. cape
7. before
8. goes
9. kind
10. nine
11. are
12. better
13. because
14. been
15. start
16. those
17. only
18. never
19. would
20. today

Spellings List  
3-5 Grades  
Post-test 2

1. which
2. one
3. once
4. think
5. does
6. cape
7. before
8. goes
9. kind
10. nine
11. are
12. better
13. because
14. been
15. start
16. those
17. only
18. never
19. would
20. today

Spellings List  
6-8 Grades  
Pre-test 1

1. shrieked
2. regional
3. socially
4. summarized
5. auditorium
6. revolt
7. duration
8. amplify
9. bulging
10. unified
11. satisfied
12. classified
13. inspected
14. magnified
15. crisis
16. poverty
17. democracy
18. diversity
19. impractical
20. interrupted

Spellings List6-8 Grades

## Post-test 1

1. shrieked
2. regional
3. socially
4. summarized
5. auditorium
6. revolt
7. duration
8. amplify
9. bulging
10. unified
11. satisfied
12. classified
13. inspected
14. magnified
15. crisis
16. poverty
17. democracy
18. diversity
19. impractical
20. interrupted

Spellings List  
6-8 Grades  
Pre-test 2

1. resignation
2. alternative
3. expectations
4. vigorous
5. traditional
6. informational
7. brutal
8. gracious
9. detachable
10. ambitious
11. spacious
12. conservation
13. boisterous
14. irritable
15. reluctant
16. rational
17. significantly
18. fluently
19. unassembled
20. intolerable

Spellings List  
6-8 Grades  
Post-test 2

1. resignation
2. alternative
3. expectations
4. vigorous
5. traditional
6. informational
7. brutal
8. gracious
9. detachable
10. ambitious
11. spacious
12. conservation
13. boisterous
14. irritable
15. reluctant
16. rational
17. significantly
18. fluently
19. unassembled
20. intolerable

**APPENDIX F**

**Math Test**

K-2 Grades  
Pre-test 1

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Integer Addition**

$\begin{array}{r} 8 \\ +4 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ +1 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ +2 \\ \hline \end{array}$	$\begin{array}{r} 25 \\ +4 \\ \hline \end{array}$	$\begin{array}{r} 31 \\ +6 \\ \hline \end{array}$	$\begin{array}{r} 85 \\ +76 \\ \hline \end{array}$
--	--	---	---	---	--

$\begin{array}{r} 19 \\ +17 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ +0 \\ \hline \end{array}$	$\begin{array}{r} 32 \\ +8 \\ \hline \end{array}$	$\begin{array}{r} 69 \\ +7 \\ \hline \end{array}$	$\begin{array}{r} 79 \\ +7 \\ \hline \end{array}$	$\begin{array}{r} 64 \\ +44 \\ \hline \end{array}$
--	--	---	---	---	--

$\begin{array}{r} 6 \\ +2 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ +0 \\ \hline \end{array}$	$\begin{array}{r} 90 \\ +33 \\ \hline \end{array}$	$\begin{array}{r} 98 \\ +59 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ +7 \\ \hline \end{array}$	$\begin{array}{r} 96 \\ +15 \\ \hline \end{array}$
--	--	--	--	--	--

$\begin{array}{r} 58 \\ +3 \\ \hline \end{array}$	$\begin{array}{r} 54 \\ +3 \\ \hline \end{array}$	$\begin{array}{r} 46 \\ +41 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ +1 \\ \hline \end{array}$	$\begin{array}{r} 57 \\ +1 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ +0 \\ \hline \end{array}$
---	---	--	--	---	--

$\begin{array}{r} 6 \\ +2 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ +3 \\ \hline \end{array}$	$\begin{array}{r} 94 \\ +0 \\ \hline \end{array}$	$\begin{array}{r} 14 \\ +8 \\ \hline \end{array}$	$\begin{array}{r} 74 \\ +7 \\ \hline \end{array}$	$\begin{array}{r} 51 \\ +5 \\ \hline \end{array}$
--	--	---	---	---	---

$\begin{array}{r} 2 \\ +1 \\ \hline \end{array}$	$\begin{array}{r} 14 \\ +0 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ +1 \\ \hline \end{array}$	$\begin{array}{r} 55 \\ +3 \\ \hline \end{array}$	$\begin{array}{r} 16 \\ +5 \\ \hline \end{array}$	$\begin{array}{r} 46 \\ +25 \\ \hline \end{array}$
--	---	--	---	---	--

$\begin{array}{r} 27 \\ +4 \\ \hline \end{array}$	$\begin{array}{r} 58 \\ +37 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ +8 \\ \hline \end{array}$	$\begin{array}{r} 46 \\ +4 \\ \hline \end{array}$	$\begin{array}{r} 44 \\ +5 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ +0 \\ \hline \end{array}$
---	--	---	---	---	--

K-2 Grades  
Post-test 1

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Integer Addition**

$\begin{array}{r} 8 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ + 1 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 25 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 31 \\ + 6 \\ \hline \end{array}$	$\begin{array}{r} 85 \\ + 76 \\ \hline \end{array}$
---	---	--	--	--	---

$\begin{array}{r} 19 \\ + 17 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 0 \\ \hline \end{array}$	$\begin{array}{r} 32 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 69 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 79 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 64 \\ + 44 \\ \hline \end{array}$
---	---	--	--	--	---

$\begin{array}{r} 6 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 1 \\ + 0 \\ \hline \end{array}$	$\begin{array}{r} 90 \\ + 33 \\ \hline \end{array}$	$\begin{array}{r} 98 \\ + 59 \\ \hline \end{array}$	$\begin{array}{r} 7 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 96 \\ + 15 \\ \hline \end{array}$
---	---	---	---	---	---

$\begin{array}{r} 58 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 54 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 46 \\ + 41 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ + 1 \\ \hline \end{array}$	$\begin{array}{r} 57 \\ + 1 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 0 \\ \hline \end{array}$
--	--	---	---	--	---

$\begin{array}{r} 6 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 94 \\ + 0 \\ \hline \end{array}$	$\begin{array}{r} 14 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 74 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 51 \\ + 5 \\ \hline \end{array}$
---	---	--	--	--	--

$\begin{array}{r} 2 \\ + 1 \\ \hline \end{array}$	$\begin{array}{r} 14 \\ + 0 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 1 \\ \hline \end{array}$	$\begin{array}{r} 55 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 16 \\ + 5 \\ \hline \end{array}$	$\begin{array}{r} 46 \\ + 25 \\ \hline \end{array}$
---	--	---	--	--	---

$\begin{array}{r} 27 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 58 \\ + 37 \\ \hline \end{array}$	$\begin{array}{r} 10 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 46 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 44 \\ + 5 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ + 0 \\ \hline \end{array}$
--	---	--	--	--	---

K-2 Grades  
Pre-test 2

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Integer Addition**

$\begin{array}{r} 39 \\ + 6 \\ \hline \end{array}$	$\begin{array}{r} 50 \\ + 32 \\ \hline \end{array}$	$\begin{array}{r} 51 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 79 \\ + 12 \\ \hline \end{array}$	$\begin{array}{r} 74 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 84 \\ + 43 \\ \hline \end{array}$
--	---	--	---	--	---

$\begin{array}{r} 95 \\ + 5 \\ \hline \end{array}$	$\begin{array}{r} 30 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 66 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 91 \\ + 23 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ + 0 \\ \hline \end{array}$	$\begin{array}{r} 11 \\ + 2 \\ \hline \end{array}$
--	--	--	---	---	--

$\begin{array}{r} 97 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 85 \\ + 60 \\ \hline \end{array}$	$\begin{array}{r} 90 \\ + 0 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ + 0 \\ \hline \end{array}$	$\begin{array}{r} 45 \\ + 36 \\ \hline \end{array}$
--	---	---	--	---	---

$\begin{array}{r} 49 \\ + 6 \\ \hline \end{array}$	$\begin{array}{r} 44 \\ + 27 \\ \hline \end{array}$	$\begin{array}{r} 23 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 85 \\ + 6 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 1 \\ \hline \end{array}$
--	---	--	--	---	---

$\begin{array}{r} 17 \\ + 9 \\ \hline \end{array}$	$\begin{array}{r} 69 \\ + 6 \\ \hline \end{array}$	$\begin{array}{r} 63 \\ + 0 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 75 \\ + 11 \\ \hline \end{array}$	$\begin{array}{r} 54 \\ + 1 \\ \hline \end{array}$
--	--	--	---	---	--

$\begin{array}{r} 17 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 96 \\ + 73 \\ \hline \end{array}$	$\begin{array}{r} 65 \\ + 0 \\ \hline \end{array}$	$\begin{array}{r} 30 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 94 \\ + 44 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 0 \\ \hline \end{array}$
--	---	--	--	---	---

$\begin{array}{r} 6 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 71 \\ + 46 \\ \hline \end{array}$	$\begin{array}{r} 40 \\ + 24 \\ \hline \end{array}$	$\begin{array}{r} 74 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ + 3 \\ \hline \end{array}$
---	---	---	--	---	---

K-2 Grades  
Post-test 2

Name: \_\_\_\_\_ Date: \_\_\_\_\_

**Integer Addition**

$\begin{array}{r} 39 \\ + 6 \\ \hline \end{array}$	$\begin{array}{r} 50 \\ + 32 \\ \hline \end{array}$	$\begin{array}{r} 51 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 79 \\ + 12 \\ \hline \end{array}$	$\begin{array}{r} 74 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 84 \\ + 43 \\ \hline \end{array}$
--	---	--	---	--	---

$\begin{array}{r} 95 \\ + 5 \\ \hline \end{array}$	$\begin{array}{r} 30 \\ + 8 \\ \hline \end{array}$	$\begin{array}{r} 66 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 91 \\ + 23 \\ \hline \end{array}$	$\begin{array}{r} 4 \\ + 0 \\ \hline \end{array}$	$\begin{array}{r} 11 \\ + 2 \\ \hline \end{array}$
--	--	--	---	---	--

$\begin{array}{r} 97 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 85 \\ + 60 \\ \hline \end{array}$	$\begin{array}{r} 90 \\ + 0 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ + 0 \\ \hline \end{array}$	$\begin{array}{r} 45 \\ + 36 \\ \hline \end{array}$
--	---	---	--	---	---

$\begin{array}{r} 49 \\ + 6 \\ \hline \end{array}$	$\begin{array}{r} 44 \\ + 27 \\ \hline \end{array}$	$\begin{array}{r} 23 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 85 \\ + 6 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 1 \\ \hline \end{array}$
--	---	--	--	---	---

$\begin{array}{r} 17 \\ + 9 \\ \hline \end{array}$	$\begin{array}{r} 69 \\ + 6 \\ \hline \end{array}$	$\begin{array}{r} 63 \\ + 0 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 75 \\ + 11 \\ \hline \end{array}$	$\begin{array}{r} 54 \\ + 1 \\ \hline \end{array}$
--	--	--	---	---	--

$\begin{array}{r} 17 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 96 \\ + 73 \\ \hline \end{array}$	$\begin{array}{r} 65 \\ + 0 \\ \hline \end{array}$	$\begin{array}{r} 30 \\ + 7 \\ \hline \end{array}$	$\begin{array}{r} 94 \\ + 44 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 0 \\ \hline \end{array}$
--	---	--	--	---	---

$\begin{array}{r} 6 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 71 \\ + 46 \\ \hline \end{array}$	$\begin{array}{r} 40 \\ + 24 \\ \hline \end{array}$	$\begin{array}{r} 74 \\ + 3 \\ \hline \end{array}$	$\begin{array}{r} 5 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ + 3 \\ \hline \end{array}$
---	---	---	--	---	---

3-5 Grades  
Pre-test 1

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Integer Multiplication

$$\begin{array}{r} 75 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 21 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 79 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 86 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 58 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 87 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 65 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 23 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 26 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 13 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 83 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 42 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 99 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 72 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 60 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 75 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 31 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 96 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 29 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 33 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 74 \\ \times 3 \\ \hline \end{array}$$

$$\begin{array}{r} 85 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 18 \\ \times 3 \\ \hline \end{array}$$

3-5 Grades  
Post-test 1

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Integer Multiplication

$$\begin{array}{r} 75 \\ \times 6 \\ \hline \end{array} \quad \begin{array}{r} 21 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 79 \\ \times 8 \\ \hline \end{array} \quad \begin{array}{r} 11 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 86 \\ \times 6 \\ \hline \end{array} \quad \begin{array}{r} 58 \\ \times 2 \\ \hline \end{array} \quad \begin{array}{r} 87 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 65 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 23 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 26 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 13 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 83 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 42 \\ \times 8 \\ \hline \end{array} \quad \begin{array}{r} 99 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 72 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 60 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 75 \\ \times 4 \\ \hline \end{array} \quad \begin{array}{r} 31 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 96 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 29 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 33 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 74 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 85 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 18 \\ \times 3 \\ \hline \end{array}$$

3-5 Grades  
Pre-test 2

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Integer Multiplication

$$\begin{array}{r} 71 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 22 \\ \times 8 \\ \hline \end{array} \quad \begin{array}{r} 87 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 10 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 71 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 63 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 88 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 53 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 95 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 99 \\ \times 4 \\ \hline \end{array} \quad \begin{array}{r} 74 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 41 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 69 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 71 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 72 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 72 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 38 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 22 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 23 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 24 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 88 \\ \times 4 \\ \hline \end{array} \quad \begin{array}{r} 10 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 55 \\ \times 9 \\ \hline \end{array}$$

3-5 Grades  
Post-test 2

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Integer Multiplication

$$\begin{array}{r} 71 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 22 \\ \times 8 \\ \hline \end{array} \quad \begin{array}{r} 87 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 10 \\ \times 1 \\ \hline \end{array}$$

$$\begin{array}{r} 71 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 63 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 88 \\ \times 5 \\ \hline \end{array} \quad \begin{array}{r} 53 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 95 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 99 \\ \times 4 \\ \hline \end{array} \quad \begin{array}{r} 74 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 41 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 69 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 71 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 72 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 72 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 38 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 22 \\ \times 9 \\ \hline \end{array} \quad \begin{array}{r} 23 \\ \times 3 \\ \hline \end{array} \quad \begin{array}{r} 24 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 11 \\ \times 1 \\ \hline \end{array} \quad \begin{array}{r} 88 \\ \times 4 \\ \hline \end{array} \quad \begin{array}{r} 10 \\ \times 7 \\ \hline \end{array} \quad \begin{array}{r} 55 \\ \times 9 \\ \hline \end{array}$$

6-8 Grades  
Pre-test 1

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Integer Multiplication

$$\begin{array}{r} 743 \\ \times 29 \\ \hline \end{array}$$

$$\begin{array}{r} 155 \\ \times 27 \\ \hline \end{array}$$

$$\begin{array}{r} 439 \\ \times 29 \\ \hline \end{array}$$

$$\begin{array}{r} 683 \\ \times 13 \\ \hline \end{array}$$

$$\begin{array}{r} 599 \\ \times 12 \\ \hline \end{array}$$

$$\begin{array}{r} 215 \\ \times 25 \\ \hline \end{array}$$

$$\begin{array}{r} 904 \\ \times 45 \\ \hline \end{array}$$

$$\begin{array}{r} 114 \\ \times 52 \\ \hline \end{array}$$

$$\begin{array}{r} 134 \\ \times 92 \\ \hline \end{array}$$

$$\begin{array}{r} 808 \\ \times 98 \\ \hline \end{array}$$

$$\begin{array}{r} 178 \\ \times 15 \\ \hline \end{array}$$

$$\begin{array}{r} 737 \\ \times 75 \\ \hline \end{array}$$

$$\begin{array}{r} 803 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 240 \\ \times 82 \\ \hline \end{array}$$

$$\begin{array}{r} 246 \\ \times 33 \\ \hline \end{array}$$

$$\begin{array}{r} 167 \\ \times 12 \\ \hline \end{array}$$

$$\begin{array}{r} 366 \\ \times 47 \\ \hline \end{array}$$

$$\begin{array}{r} 124 \\ \times 18 \\ \hline \end{array}$$

$$\begin{array}{r} 804 \\ \times 93 \\ \hline \end{array}$$

$$\begin{array}{r} 259 \\ \times 68 \\ \hline \end{array}$$

$$\begin{array}{r} 152 \\ \times 82 \\ \hline \end{array}$$

$$\begin{array}{r} 491 \\ \times 54 \\ \hline \end{array}$$

$$\begin{array}{r} 746 \\ \times 46 \\ \hline \end{array}$$

$$\begin{array}{r} 584 \\ \times 19 \\ \hline \end{array}$$

6-8 Grades  
Post-test 1

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Integer Multiplication

$$\begin{array}{r} 743 \\ \times 29 \\ \hline \end{array}$$

$$\begin{array}{r} 155 \\ \times 27 \\ \hline \end{array}$$

$$\begin{array}{r} 439 \\ \times 29 \\ \hline \end{array}$$

$$\begin{array}{r} 683 \\ \times 13 \\ \hline \end{array}$$

$$\begin{array}{r} 599 \\ \times 12 \\ \hline \end{array}$$

$$\begin{array}{r} 215 \\ \times 25 \\ \hline \end{array}$$

$$\begin{array}{r} 904 \\ \times 45 \\ \hline \end{array}$$

$$\begin{array}{r} 114 \\ \times 52 \\ \hline \end{array}$$

$$\begin{array}{r} 134 \\ \times 92 \\ \hline \end{array}$$

$$\begin{array}{r} 808 \\ \times 98 \\ \hline \end{array}$$

$$\begin{array}{r} 178 \\ \times 15 \\ \hline \end{array}$$

$$\begin{array}{r} 737 \\ \times 75 \\ \hline \end{array}$$

$$\begin{array}{r} 803 \\ \times 10 \\ \hline \end{array}$$

$$\begin{array}{r} 240 \\ \times 82 \\ \hline \end{array}$$

$$\begin{array}{r} 246 \\ \times 33 \\ \hline \end{array}$$

$$\begin{array}{r} 167 \\ \times 12 \\ \hline \end{array}$$

$$\begin{array}{r} 366 \\ \times 47 \\ \hline \end{array}$$

$$\begin{array}{r} 124 \\ \times 18 \\ \hline \end{array}$$

$$\begin{array}{r} 804 \\ \times 93 \\ \hline \end{array}$$

$$\begin{array}{r} 259 \\ \times 68 \\ \hline \end{array}$$

$$\begin{array}{r} 152 \\ \times 82 \\ \hline \end{array}$$

$$\begin{array}{r} 491 \\ \times 54 \\ \hline \end{array}$$

$$\begin{array}{r} 746 \\ \times 46 \\ \hline \end{array}$$

$$\begin{array}{r} 584 \\ \times 19 \\ \hline \end{array}$$

6-8 Grades  
Pre-test 2

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Integer Multiplication

$$\begin{array}{r} 526 \\ \times 38 \\ \hline \end{array}$$

$$\begin{array}{r} 101 \\ \times 35 \\ \hline \end{array}$$

$$\begin{array}{r} 450 \\ \times 68 \\ \hline \end{array}$$

$$\begin{array}{r} 545 \\ \times 75 \\ \hline \end{array}$$

$$\begin{array}{r} 323 \\ \times 34 \\ \hline \end{array}$$

$$\begin{array}{r} 384 \\ \times 53 \\ \hline \end{array}$$

$$\begin{array}{r} 192 \\ \times 98 \\ \hline \end{array}$$

$$\begin{array}{r} 216 \\ \times 48 \\ \hline \end{array}$$

$$\begin{array}{r} 540 \\ \times 72 \\ \hline \end{array}$$

$$\begin{array}{r} 632 \\ \times 57 \\ \hline \end{array}$$

$$\begin{array}{r} 613 \\ \times 73 \\ \hline \end{array}$$

$$\begin{array}{r} 979 \\ \times 35 \\ \hline \end{array}$$

$$\begin{array}{r} 271 \\ \times 64 \\ \hline \end{array}$$

$$\begin{array}{r} 963 \\ \times 48 \\ \hline \end{array}$$

$$\begin{array}{r} 651 \\ \times 17 \\ \hline \end{array}$$

$$\begin{array}{r} 756 \\ \times 15 \\ \hline \end{array}$$

$$\begin{array}{r} 560 \\ \times 67 \\ \hline \end{array}$$

$$\begin{array}{r} 958 \\ \times 52 \\ \hline \end{array}$$

$$\begin{array}{r} 830 \\ \times 22 \\ \hline \end{array}$$

$$\begin{array}{r} 661 \\ \times 55 \\ \hline \end{array}$$

$$\begin{array}{r} 810 \\ \times 29 \\ \hline \end{array}$$

$$\begin{array}{r} 913 \\ \times 92 \\ \hline \end{array}$$

$$\begin{array}{r} 430 \\ \times 32 \\ \hline \end{array}$$

$$\begin{array}{r} 905 \\ \times 53 \\ \hline \end{array}$$

6-8 Grades  
Post-test 2

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Integer Multiplication

$$\begin{array}{r} 526 \\ \times 38 \\ \hline \end{array}$$

$$\begin{array}{r} 101 \\ \times 35 \\ \hline \end{array}$$

$$\begin{array}{r} 450 \\ \times 68 \\ \hline \end{array}$$

$$\begin{array}{r} 545 \\ \times 75 \\ \hline \end{array}$$

$$\begin{array}{r} 323 \\ \times 34 \\ \hline \end{array}$$

$$\begin{array}{r} 384 \\ \times 53 \\ \hline \end{array}$$

$$\begin{array}{r} 192 \\ \times 98 \\ \hline \end{array}$$

$$\begin{array}{r} 216 \\ \times 48 \\ \hline \end{array}$$

$$\begin{array}{r} 540 \\ \times 72 \\ \hline \end{array}$$

$$\begin{array}{r} 632 \\ \times 57 \\ \hline \end{array}$$

$$\begin{array}{r} 613 \\ \times 73 \\ \hline \end{array}$$

$$\begin{array}{r} 979 \\ \times 35 \\ \hline \end{array}$$

$$\begin{array}{r} 271 \\ \times 64 \\ \hline \end{array}$$

$$\begin{array}{r} 963 \\ \times 48 \\ \hline \end{array}$$

$$\begin{array}{r} 651 \\ \times 17 \\ \hline \end{array}$$

$$\begin{array}{r} 756 \\ \times 15 \\ \hline \end{array}$$

$$\begin{array}{r} 560 \\ \times 67 \\ \hline \end{array}$$

$$\begin{array}{r} 958 \\ \times 52 \\ \hline \end{array}$$

$$\begin{array}{r} 830 \\ \times 22 \\ \hline \end{array}$$

$$\begin{array}{r} 661 \\ \times 55 \\ \hline \end{array}$$

$$\begin{array}{r} 810 \\ \times 29 \\ \hline \end{array}$$

$$\begin{array}{r} 913 \\ \times 92 \\ \hline \end{array}$$

$$\begin{array}{r} 430 \\ \times 32 \\ \hline \end{array}$$

$$\begin{array}{r} 905 \\ \times 53 \\ \hline \end{array}$$

**APPENDIX G**

**Parents/ Caregivers Survey**

**Parents/ Caregivers Survey**

Dear Parents/ Caregivers,

Please read the questionnaire below and fill the appropriate box or write your answers on the given space.

1. Does your child complete homework everyday?

- Yes
- No
- Other Comments

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2. How much time does your child spend doing the homework?

- Less than 30 minutes
- 45 minutes
- 60 minutes
- 30minutes
- Any other comments

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3. Is your child able to do home work by himself/herself?

- Yes
- No

4. Do you help your child in doing homework?

- Yes/How \_\_\_\_\_  
\_\_\_\_\_
- No (Please give a reason)

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5. Do you get help from the school, if you are unable to help your child for any reason?

- Yes
- No

6. If yes:

- Formal training for homework help
- Simplified directions
- Web resources

7. Does your child's homework interfere with your every day family routines?

- Yes
- No
- If yes, how?

\_\_\_\_\_

\_\_\_\_\_

8. Do you think the homework your child works on helps improve his/her academic performance?

- Yes

How \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

- No

Why \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

9. Do you think children should be given homework?

- Yes
- No