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# Types of Homework and Their Effect on Student Achievement

Tammi A. Minke

*St. Cloud State University*, [tminke@isd138.org](mailto:tminke@isd138.org)

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**Types of Homework and Their Effect on Student Achievement**

by

Tammi Minke

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Starred Paper Committee:  
Stephen Hornstein, Chairperson  
Hsueh-I Lo  
Marc Markell

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## Chapter 1: Introduction

### Purpose of the Study

Homework is viewed by some as a vital key to student achievement in today's society. Despite this, America had a strong "anti-homework" movement (Eren & Henderson, 2011) in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. The historical events of the Cold War and the global competitive movement with Japan in the 1980s increased the educational shift toward more standards and homework for students (Cooper, Robinson, & Patall, 2006; Eren & Henderson, 2011). Homework continues to be a debatable and controversial topic of discussion amongst school districts across America. Many school districts still believe homework teaches time management skills and responsibility. However, according to Vatterott (2007), true responsibility cannot be coerced, students must be allowed the power to develop and take ownership of their tasks in order to get true learning from homework.

I began my teaching career in 2004 in the field of Early Childhood Special Education. My role as a teacher was not only to educate my students, but also to develop a partnership with my students' parents. Students at such a young age, did not have so-called "homework" as described in this literature review. However, I would create learning targets and objectives for my weekly home visits, and parents were expected to guide their child throughout the week with the recommendations given. In my work with Early Childhood students and parents, student family progress was monitored and observed when parents were a part of their child's learning. As I look back to my work in Early Childhood, I would not say I assigned "homework" to young children and families, but when families were active learners and engaged in their child's learning, more success was observed. This is similar to how I assign homework in my sixth grade classroom today.

Even when I made a decision to change my path in education, I continued to see the importance and relevance of parental support involving student achievement. In 2013, I became a sixth grade math and history teacher. This was a professional change I was excited to pursue. As my first year in sixth grade progressed, I witnessed the struggle to complete homework and the lack of motivation my students experienced throughout the year. However, I found the students' grades were not significantly hindered by their incomplete homework because the daily homework grades only accounted for 30% of their overall grade (the remaining 70% of the students' grades were from Minnesota Standards--summative assessments). Roughly a third of my students continued to struggle with completing their daily homework in math. At times, I saw a relationship between students who did not complete their daily homework and their chapter test scores (summative assessments). Other times, there was no observable difference in student achievement and daily homework completion.

In my classroom, I continuously monitor my students' progress and also monitor and adjust my own teaching practices. I continue to come back to the debate on homework and its purpose in the classroom. According to Gill and Schlossman's (2004) research, "Too much or too little; too easy; too hard; a spur to student achievement or student alienation; a marker of enlightened or lazy teaching; a builder of character or a degrader of self-esteem; too demanding or too dismissive of parents; a stimulus of national economic vigor or behavioral conformity. The range of complaints about homework is enormous, and the complaints tend as much today as in the past toward extreme, angry, often contradictory views" (p. 174).

In this study, I hope to find a more effective homework process that results in overall academic and emotional growth for students to use and promote within my classroom.

## **Research Questions**

The purpose of the study was to understand the different types of homework and to see if and how homework really influences students' academic and emotional achievement. This study also investigates how and why students do not complete homework and how to improve homework completion.

- Does the amount of homework impact students' academic achievement in school?
- What type of homework has the best impact on students' academic achievement in school?

The literature review in Chapter 2 describes homework trends over the years, different types of homework, what constitutes worthy homework, reasons for homework incompleteness, homework completion strategies, parent involvement, positive and negative effects of homework, and recommended time spent on homework for students today in high school, middle school, and elementary students.

## **Use of Findings**

Following this study, I will share my findings and data with other teachers and administrators in my professional learning communities within the North Branch Area Public Schools Middle School. Our educators are in need of professional development opportunities to learn current best practice strategies which are necessary to support diverse needs in our school and classrooms. I will also use my findings to help closely monitor my own classroom practices and to determine how I can adapt and adjust my classroom strategies to best fit the needs of my students and their families. Homework can be more stressful than helpful in some homes, so I hope to offer strategies and resources for both students and parents to use to help make homework less stressful and more productive.

## Definitions

*Homework* is defined as a set of school tasks that are assigned by teachers for students to complete outside of the non-school hours. Variations of homework can be classified according to its amount, skill area, purpose, degree of individualization and choice of the student, completion deadline, and social context (Cooper et al., 2006).

### *Purpose of the homework task:*

- **Pre-learning:** This type of homework is designed to encourage students to think about a previous topic discussed in class (prior lesson) and prepare for future topics. This includes in-depth lessons such as reading or outlining a chapter prior to a discussion in class (Rosário et al., 2015; Vatterott, 2009). Pre-learning may be used to discover what students already know and what may excite student's interests (Vatterott, 2009).
- **Checking for Understanding:** According to Vatterott (2009), checking for understanding is the most neglected use of homework, but is the most valuable way for teachers to gain awareness about what students are learning. An example of how a teacher can check for understanding is by asking students to do a few sample problems in math and explain the steps to the teacher. This strategy is only helpful if teachers know the student completed the work in class with the teacher. Other great examples of strategies are journaling questions about science experiments and social studies projects to explain what happened and why.
- **Practicing:** Rote skills such as multiplication tables or things to be memorized such as spelling words are considered to be the traditional use of homework. Many rote skills are necessary for students to practice but teachers need to make

sure students understand the concept or skill in class. If teachers skip the checking for understanding task, the practice purpose of homework is useless and will only cause frustration for the student and parent. Rote practice should also be spread out over several days rather than doing a skill in one night (Vatterott, 2009).

- **Processing:** According to Vatterott (2009), processing homework is used when teachers want students to reflect on concepts being taught in class. This is when teachers ask students to think of new questions and apply the skills and knowledge learned in class. Processing homework is usually a long-term project or task used at the end of a unit or learning target. The term “extension homework” used by Rosário et al. is very similar to processing described by Vatterott that requires higher level or abstract thinking to occur from previous learning tasks.

*Summative assessments* are given periodically to determine at a particular point in time what students know and do not know based on state standards and district benchmarks. These assessments usually occur at the end of the unit or chapter also known as learning target checks in place of tests (Ehringhaus & Garrison, 2013). Summative assessments used in the North Branch Area Public Schools are valued significantly higher than daily work or formative assessments.

*Formative assessments* are part of the instructional process which are incorporated into the classroom practice and provide the information needed to adjust teaching and learning. Formative assessment informs both teachers and students about student understanding and this is

when teachers can make adjustments to curriculum and teaching lessons. The adjustments help to ensure students achieve the Minnesota State standards which are measured by the Minnesota Comprehensive Assessment (MCA's). Formative assessment strategies appear in a variety of formats, such as observations, exit and entrance tickets, quizzes, classroom questions, and informal classroom checks (tests) (Ehringhaus & Garrison, 2013).

*Learning Targets* guide learning. Students will understand the lesson-sized chunk of information, skills, and reasoning processes. Teachers write learning targets from the students' point of view and share them within the classroom for the specific lesson for the day, so students can use them to guide their own learning and so students know what they should know at the end of the lesson. Learning targets should provide a guide for what teaching tactics in place are effective, what needs to be changed and what areas can be improved upon. Learning targets should also assist teachers to set challenging goals to increase rigor and optimal learning (Brookhart & Moss, 2012).

## Chapter 2: Review of Literature

In this chapter, literature has been reviewed that relates to the research questions: Does homework impact students' academic achievement in school and what type of homework has the best impact on students' academic achievement in school? The research shows mixed results, but most articles do suggest that homework for elementary students should be limited and completed with parental support, whereas students at the secondary level should only be given homework with a true value and meaning behind the homework. Researchers at the secondary level conclude that high amounts of homework do not guarantee high performance (Kohn, 2006). Since I have not conducted my own action research, these articles and studies support data from the United States and other countries that can lead to approaches brought into current schools and classrooms. Administrators, teachers, and parents can all benefit from this information to help current students and families achieve more and gain a positive outlook on becoming a life-long learner.

Homework today continues to be a hotly debated and controversial topic of discussion in school districts across America. The literature review describes the homework trends over the years, different types of homework, what constitutes worthy homework, reasons for homework incompleteness, homework completion strategies, parent involvement, as well as positive and negative effects of homework.

The literature review defines homework as a set of school tasks that are assigned by teachers for students to complete outside of school hours (Cooper et al., 2006). The homework process involves three important roles; students, parents, and teachers. Each of the three roles plays an important part in the effects of homework completion and student achievement.

Research supports that teachers assign homework to students for practice to strengthen skills and concepts taught in class. Teachers assume students understand the concept when their homework is successfully completed. They also assume students need additional practice or assistance if students do not complete homework correctly. These assumptions may not always be accurate because each student's situation is different and teachers cannot predict exactly why homework is or is not completed. It is important for teachers to observe the feedback as soon as possible to make effective instructional adjustments for future learning (Miller, Duffy, & Zane, 1993).

### **Homework Trends over the Years**

In the late 19<sup>th</sup> and early 20<sup>th</sup> centuries, America had a strong “anti-homework” movement, somewhat differing to the view of homework today (Eren & Henderson, 2011).

Homework today is viewed by some as a vital key to student achievement According to Wildman, in 1966, the National Education Association issued this statement:

It is generally recommended (a) that children in the early elementary school have no homework specifically designed by the teacher; (b) that limited amounts of homework--not more than an hour a day--be introduced during the upper elementary school and junior high years; (c) that homework be limited to four nights a week; and (d) that in secondary school no more than one and a half hours a night be expected. (as cited in Vatterott, 2009, p. 6)

The historical events of the Cold War and the Russian's launching the Sputnik1 Satellite in 1957 drove homework levels higher. Levels dipped in the mid-1960s and 1970s but again rose in a global competitive movement in the 1980s with Japan resulting in an increased educational shift toward more standards and homework for students (Cooper et al., 2006; Eren & Henderson, 2011).

By the 1990s, homework levels were starting to rise in result of the education standard demands that were led to believe they would help increase academic achievement. With the increased demands of the education standards came higher amounts of homework. This was intended to improve the quality of labor force in the United States. At this time, school districts across the United States began to adopt mandatory homework policies (Eren & Henderson, 2011). By the late 1990s, the homework began to shift back to the anti-homework focus despite the research conducted by leading expert Harris Cooper. In 1998, the American Educational Research Association directed a symposium on homework practices and the latest research about homework. This study found that students could be either positively or negatively impacted by homework depending upon their individual or family circumstances. The reason for further research was the shift of parents' opinions and researchers' beliefs about the lack of evidence between homework and academic achievement (Vatterott, 2009).

Another significant event to impact the homework trend was the No Child Left Behind Act of 2001. In 2002, "No Child Left Behind Act" was signed into law by George W. Bush to increase academic standards and raise school accountability (Bogin & Nguyen-Hoang, 2014). Schools who received Title I funding and failed to meet adequate year progress (AYP) performance targets for two consecutive years were considered "failing" and could potentially be shut down based on performance. Over time this educational policy and the increase in standards and accountability was proven to cause more of a negative consequence to students, families, teachers, and school districts than what was intended by the "No Child Left Behind Act." The act intended to target at-risk students so they would not be "left behind."

Unfortunately, the act did not successfully help students at-risk the way the policy was intended and new policies have since been put into place (Bogin & Nguyen-Hoang, 2014).

The culture of homework and how it has developed over the last 100 years is based on five unexamined beliefs about children and learning. Vatterott (2009) emphasized five beliefs that are based mostly on faith, tradition, and/or moral judgment versus research and facts. These beliefs are:

Belief #1: The role of the school is to extend learning beyond the classroom.

Belief #2: Intellectual activity is intrinsically more valuable than nonintellectual activity.

Belief #3: Homework teaches responsibility.

Belief #4: Lots of homework is a sign of a rigorous curriculum.

Belief #5: Good teachers give homework; good students do their homework. (pp. 10-13)

Today's homework culture in some schools is a mixture of very old philosophies consisting of who teachers believe students are, who teachers want students to be, and how teachers think they can control students (Vatterott, 2009). Despite the pendulum swing over the last hundred years, pro-homework and anti-homework attitudes are not a new issue. Homework trends and attitudes have historically reflected what is going on in society and the educational philosophy at the time.

According to Bennett and Kalish (2006), no matter where the students live (urban, suburban, or rural areas) or the kind of school kids attend (public, private, or parochial) more than one-third of the families surveyed and interviewed reported being overwhelmed by homework. In a national survey completed in 2004 by the University of Michigan on over 2,900 children, it was found that the time students spent doing homework had increased by 51% since 1981 (Bennett & Kalish, 2006). For some students in this study, it was only an increase of a few more minutes of homework. However, the amounts of homework in this study, far exceeds the

National Education Association guidelines of no more than 10-20 minutes per night in Kindergarten through second grade and 30-60 minutes per night in third through sixth grade. Many researchers recommend far less or even no homework for ages Kindergarten through sixth grade (Bennett & Kalish, 2006; Kohn, 2006).

### **Positive and Negative Effects of Homework**

*Positive Effects of Homework.* According to Cooper (1989) and Cooper et al. (2006), educators compiled a list of potential positive effects of assigning homework to students. The positive effects are broken down into four categories: immediate achievement and learning, long-term academic benefits, nonacademic benefits, and greater parental appreciation of and involvement in schooling. These positive effects may vary with each grade level. Based on Cooper et al.'s (2006) meta-analysis of research, the correlation between homework and achievement is irrelevant for elementary students. One of Florida's superintendents, Heidi Maier, has traded traditional homework with daily reading for elementary school grades because of the clear benefits of reading for students at these grade levels (Strauss, 2017).

Other potential positive effects described in the research (Cooper, 1989; Cooper et al., 2006) are long-term academic benefits (improved attitude toward school, better study skills and habits), non-academic benefits (greater self-direction and discipline, better time organization, more inquisitiveness, and more independent problem-solving), and parental and family benefits (greater parental appreciation of and involvement in schooling, student awareness of connection between home and school, and parental demonstrations of interest in child's academic progress). Table 1 shows the potential positive effects described in (Cooper, 1989; Cooper et al., 2006).

Cooper (2001) conducted a meta-analysis of the effects of homework and its effects on achievement. In all 50 studies examined, 43 correlations indicated that students who did more homework had better achievement scores, whereas only seven indicated that those who did more homework had lower achievement scores. These results benefited students in high school and junior high. Students in elementary school showed very little correlation between homework and achievement. The results are correlations, but that does not imply causality and it is not clear if it is the homework, or the students themselves who create this difference. According to Cooper's research on the positive effects of homework; homework is beneficial as long as teachers use their knowledge of developmental levels to guide policies and expectations all in moderation.

According to Trautwein and Koller (2003), homework behavior is closely linked to three components of self-regulation (motivation, metacognition, cognition). The potential positive effects of homework are highly dependent on students' expectations of success and the value the student attaches to the task, and the student's specific learning style. Despite the lengthy history of homework research, (Cooper et al., 2006; Trautwein & Koller, 2003) the lack of subtle measures of positive effects is that the homework variable is one of many influences on achievement being examined in homework studies.

*Negative Effects of Homework.* The potential negative effects described in the research (Cooper et al., 2006) are satiation (loss of interest in academic material, and physical and emotional fatigue). Other negative effects described are denial of access to extra-curricular activities (in school and out of school), parental interference (pressure to complete homework and perform well), and confusion of instructional techniques (not understanding homework), cheating, and increased differences between high and low achievers. Table 1 shows the potential

negative effects of homework according to homework research of (Cooper, 1989; Cooper et al., 2006).

According to Cooper (2001), parents trying to help with homework can confuse students if the parents is using different instructional techniques than the teacher. Homework can also lead to undesirable behavior such as cheating, through either copying other students' assignments or having someone else complete the work for the student. Homework can also have a negative effect on students from low-income homes who have no educational resources at home. "Low-income students are more likely to work after school or may not have a quiet, well-lighted places in which to complete their assignments" (p. 35).

Cooper was not alone on examining the negative effects of homework. Kralovec and Buell (2001) stated, homework along with recent demographic and economic changes can decrease family involvement time. According to a survey in 1998 by Public Agenda, 50% of parents reported having arguments about homework. Thirty-four percent of parents reported homework as a stress and struggle. In Kralovec and Buell's research, parents reported having conflicting opinions of homework because they want what is educationally best for their child but do not want homework to impose on their family life. Students often miss family meals and activities to complete hours of homework.

Kohn (2006) examined frequent complaints heard about homework and further describes five basic themes. Homework is reported to have a burden on parents. Many parents return home from work and have to help with homework they may not have any educational knowledge of or the resources to help their child causing not only a burden but also stress, family conflict, less time for other activities and a loss for future learning.

All of Kohn's (2006) themes described above are interlocked and affect a family's household. Family conflict tends to occur when students are struggling at home with homework and parents are unable to help with the homework. According to Kohn, "an hour spent doing homework at home is an hour not spent doing other things" (p. 15). There is less opportunity for students to read for pleasure, socialize with friends, get exercise, and engage in extra-curricular activities, get adequate sleep, or just being a kid.

**Table 1****Potential Effects of Homework that Might Serve as Outcomes for Research***Potential effects of homework that might serve as outcomes for research*

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**Potential positive effects**

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**Immediate achievement and learning**

Better retention of factual knowledge

Increased understanding

Better critical thinking, concept formation, information processing

Curriculum enrichment

**Long-term academic benefits**

More learning during leisure time

Improved attitude toward school

Better study habits and skills

**Nonacademic benefits**

Greater self-direction

Greater self-discipline

Better time organization

More inquisitiveness

More independent problem-solving

**Parental and family benefits**

Greater parental appreciation of and involvement in schooling

Parental demonstrations of interest in child's academic progress

Student awareness of connection between home and school

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**Potential negative effects**

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**Satiation**

Loss of interest in academic material

Physical and emotional fatigue

**Denial of access to leisure time and community activities****Parental interference**

Pressure to complete homework and perform well

Confusion of instructional techniques

**Cheating**

Copying from other students

Help beyond tutoring

**Increased differences between high and low achievers**

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*Note.* Adapted from Cooper (1989). Copyright 2005 by American Psychological Association. Reprinted with permission.

## **Different Types of Homework**

There are three types of instructional homework purposes: practice, preparation, and extension (Rosário et al., 2015). These practices can be used by teachers when assigning homework tasks to promote student engagement and meaningful learning.

Practice homework focuses on tasks taught in class to increase speed, demonstrate mastery, review work, study for tests, and retain specific skills over time (Rosário et al., 2015). Teachers assign practice and preparation homework most often because it can be more convenient and less time consuming. Practice homework is more often used in mathematics and spelling to increase spelling proficiency and fluency in math facts.

Preparation homework focuses on preparing students for the next lesson (Rosário et al., 2015). This type of homework is inherently linked to pre-learning by Vatterott (2009). The homework is designed to encourage students' thinking about a previous homework topic discussed in class and prepare for future topics. In a study of 638 sixth-grade students, practice and preparation homework tasks showed impact on students' mathematic achievement (Rosário et al., 2015). Students were able to review the material covered in the future lesson from the textbook and write the main ideas covered in a notebook to help prepare the students for learning. Students would use the textbook to help focus on the next lesson and prepare for what would be covered in the future class lesson (Rosário et al., 2015).

Extension homework focuses on promoting the shift of previous learning to new tasks (Rosário et al., 2015). Extension homework requires higher level or abstract thinking to occur. Teachers use this form of homework to encourage students to collaborate with peers and be more

creative during students' learning. Real-life, hands-on applicable skills are used to complete extension homework tasks. This provides a richer learning experience for students. Rosário et al. noted that homework with a specific purpose of extension (promoting problem-solving skills) is valuable for improving students' achievement.

### **What Constitutes Worthy Homework**

In the face of the anti-homework or pro-homework trends, homework should not be strictly about rote learning. The best kind of homework should broaden student understanding and build on essential skills (Vatterott, 2010). According to Vatterott, the best homework tasks should exhibit five characteristics. These five hallmark characteristics of homework are: purpose, efficiency, ownership, competence, and aesthetic appeal.. The task or homework students complete need to have clear academic purpose such as practice, checking for understanding, or applying the knowledge or skills students have learned in their lesson. The homework assigned should also efficiently demonstrate student learning, promote ownership by offering choices and be personally relevant. Lastly, students need to successfully complete the task without help. The task should be enjoyable and interesting to the student to get maximum learning out of the task (Vatterott, 2009).

According to Schimmer (2016), teachers should ask the following questions to ensure homework is a productive learning experience:

- 1) Is it learning-centered? Homework should be about essential learning or standards. Homework should never be about busywork or putting in time.
- 2) Is it necessary? Is it necessary for students to take time from their home lives to complete an assignment?
- 3) Is it reasonable? Is it reasonable to expect students to complete an assignment within the time available? Is it a reasonable amount of time given the age of students?

- 4) Is it high quality? Word searches and crossword puzzles, for example, are not quality tasks in lieu of other activities or family time.
- 5) Are students ready? Students must be ready to work independently in order for homework to be productive. Otherwise, frustration and discouragement can result. (Teachers often have to differentiate homework given the typical clusters of readiness within a given classroom).
- 6) Were students involved? Homework is typically more productive when students have input on its purpose, what it entails, and how much is necessary. Do students have a choice, whenever possible, in deciding activities beyond instructional minutes? (Schimmer, 2016, p. 112)

These questions also relate to Vatterott's (2010) five hallmarks of good homework.

“Homework should be meaningful, purposeful, efficient, personalized, doable, and inviting”

(p. 15). Most importantly, students should be able to communicate freely with teachers when they struggle and admit when they do not understand a task and can do it without a penalty (bad grade, more homework). According to Cooper, influences on homework are complex, there is no simple general finding applicable to all students therefore if assigned, it needs to be individualized to meet the needs of all learners (Bennett & Kalish, 2006).

### **Reasons for Homework Incompletion**

According to Killoran (2003), homework completion is one of the most frustrating behavior problems for educators in the classroom. There are four different theories of development that describe why students do not complete homework; behaviorism, constructivism, maturational theory, and ecological systems theory. These theories of development are norms about the nature of humans and how they develop. Killoran described these four reasons why students do not complete homework and how these theories impact student behavior, resulting in homework incompletion.

The first reason students do not complete homework is because of positive reinforcement for incompletion (behaviorism theory). In order to change this behavior, teachers and parents

need to identify an appropriate reinforcement and present it to the student when homework is complete (Killoran, 2003). Reinforcements are defined as anything that results in a behavioral increase or staying the same. The reinforcement can make the behavior positive or negative depending upon the student and how teachers use the reinforcement.

The second reason students do not complete homework is because students are functioning at a lower level than the homework assigned (homework is too difficult). According to Jean Piaget, a constructivist could argue that the homework is not at a level in which the child can construct knowledge therefore; the student does not complete their homework. If the student is not at the same level as the homework the student will not be able to do it. It will make no sense to the student. A constructivists' solution to chronic incomplete homework would be to give the student work that they are able to do. When students struggle to complete homework because homework is too difficult, teachers need to identify where the students' academic level is and adjust the homework level to the needs of the individual student. Teachers need to continue to structure the classroom to facilitate positive interactions that encourage students and lead them to the next level (Killoran, 2003).

The third reason students do not complete homework is because they are not developmentally ready to complete the task and do not understand the assignment. The maturation theory promotes the gift of time and encourages teachers to not push the students because they are not developmentally ready to learn the information. Students will begin to develop a negative attitude toward the specific subject and the teacher and will no longer work to their potential. Research suggests teachers should encourage students in a positive manner and assign homework students can complete. Teachers generally give the same homework to each

student in the class and research states students need individualized homework to best meet their academic achievement (Killoran, 2003).

According to Killoran (2003), the final reason research states why students do not complete their homework is because the student's environment is interfering with their ability or desire to complete homework (ecological systems). These environments can be situations at school with friends and outside of school during extra-curricular events or at home. Teachers do not always witness or recognize the different friend and family dynamics of their students which can emotionally affect their academic performance. Teachers need to carefully identify the different dynamics in their classroom. This can be challenging with a large number of students and families. To help with the students' success, teachers should build a rapport with the students so they feel comfortable asking questions about problems with the students' varying environments. By identifying students that are challenged with environmental difficulties and allowing them to receive extra teacher guidance or help at school to complete the tasks, it will help build the student's confidence for future success (Killoran, 2003).

Killoran was not alone in pointing out reasons for homework incompleteness. Trautwein and Koeller (2003) described the intrinsic value that describes the enjoyment a student acquires from performing a task or activity. If students do not feel that homework is intrinsically motivating, they are more likely to not complete the homework or complete the homework with poor quality. The research on reasons for homework incompleteness makes it very difficult to find a correlation between homework and academic achievement when some students do not complete their homework. According to Schimmer (2016), it is best to have the balance between

no homework and the aggressive approach to homework. Teachers, parents, and students will all benefit from homework when ensuring homework is worthwhile.

### **Homework Completion Strategies**

*Teacher Strategies to Improve Homework Completion.* Teachers have a significant impact on student self-confidence, motivation, and student achievement. It is important for teachers to identify specific homework strategies that effectively increase homework completion and student achievement. In 1998, Bryan and Sullivan-Burstein studied the effects of teacher-selected strategies for students with learning disabilities and no homework problems, students with learning disabilities with homework problems, average-achieving students with homework problems, and average-achieving students without homework problems. There were three strategies that resulted in significant increases in homework completion in this study; real-life assignments, student planners, and self-graphing homework completion charts.

Real-life assignment strategies are intended to help students make a connection between the classroom material being taught and real-life activities outside of school (Bryan & Sullivan-Burstein, 1998). These real-life assignments are described in research as extension assignments (Rosário et al., 2015). These assignments promote abstract and critical thinking skills at a higher level for students which increases student achievement.

The second teacher-selected strategy used in the study is a student planner. The student planner is a self-managed skill used with students and parents to create a positive homework practice. This results in increased homework completion and communication amongst parents. In the study parents and teachers viewed homework planners as a successful tool that increased parent involvement with homework and positive communication for teachers to use with parents and their child (Bryan & Sullivan-Burstein, 1998).

The third teacher-selected strategy used in the study is a self-monitoring task used by students to graph their individual homework completion (Bryan & Sullivan-Burstein, 1998). The self-managed strategy provided more independent accountability for the students' academic successes. Students in the study felt a sense of accomplishment and pride in their work. The research in this study provided a positive insight to enhance teacher's knowledge of best practices to use in their classroom for students. Teachers need to be constantly thinking about changing their practices and evaluating the impact of their teaching strategies to best fit the needs of their students.

According to Schimmer (2016), "If the purpose of the homework assignment is practice, then the focus should be on descriptive feedback that advances the learning" (pp. 126-127). Schimmer stated "if the purpose for homework is to further students' learning, then grading that work is counterproductive." This type of homework should be used as a formative assessment and should not be judgmental. As was previously mentioned, formative assessments inform both teachers and students about student understanding and this is when teachers can make adjustments to curriculum and teaching lessons. Formative assessment strategies appear in a variety of formats, such as observations, exit and entrance tickets, quizzes, classroom questions, and informal classroom checks (tests) (Ehringhaus & Garrison, 2013). These strategies should be used to gather information not necessarily grades. According to Schimmer (2016), grading reduces the effect of feedback and teachers should save the grading process for later when verification is needed. Students need feedback to correct and change their behavior and academic achievement. Academic achievement should be graded when students have been given adequate practice and feedback.

*Student Homework Attitude-Engagement to Homework Completion.* Student engagement strategies are linked to student academic achievement (Cates & Dalenberg, 2005). The specific procedures teachers use to engage students learning and homework completion correlates with student achievement. Researchers (Van Voorheis, 2011) reported homework in the elementary years for students was perceived as being negative rather than positive for the students. Students felt the homework assigned was “busywork” and did not have an impact on their academic achievement. Students need to feel the value and purpose of the assignment in order to put forth the effort in learning. Bryan and Sullivan-Burstein (1998) found that student achievement and homework completion increased when homework completion was reinforced with a reward (tangible or non-tangible items).

Students need to feel a sense of love and belonging at both the elementary and secondary level. When students feel safe and valued, they will provide more effort and complete their homework. Homework completion does not always have a significant impact on student achievement, but could help prepare students to become independent problem solvers (Schimmer, 2016).

### **Parent Involvement with Homework**

Parent involvement, in regard to student achievement, is perceived by researchers to be both positive and negative (Cooper et al., 2006; Gonida & Cortina, 2014). An example of a negative effect of parent involvement is when parents put pressure on themselves for their child to complete homework and perform well. If the child does not perform well, it becomes a negative reflection of the parent. When parents are involved in their student’s learning, some feel confusion toward instructional techniques, especially in mathematics, and feel inadequate to assist their child (Gonida & Cortina, 2014). Teachers appreciate any additional support at home

with their child. Despite parents who do not feel adequate helping their child at home because of their lack of skills, teachers strongly encourage the positive relationship between child and parent. Building a positive bond and relationship between parent and child increases confidence and communication skills.

Parent involvement (Cooper et al., 2006; Gonida & Cortina, 2014; Van Voorheis, 2011) promotes a strong relationship with the students' school and positive communication increases. Parent demonstration of interest in their child's academic progress also promotes confidence and builds students' knowledge. When students are aware of their parent's involvement between home and school, the students provide more of an effort and higher rate of work completion, which optimally increases student achievement (Cooper et al., 2006). This research is contradictory to some of the previous research stated above from Schimmer, Bennett and Kalish, and Kohn. Parent involvement, communication, and supports between home and school are highlighted to be important in the success of students.

Homework practices in schools today can cause frustration, exhaustion, anxiety, and nagging by parents and teachers. The assumption that homework promotes higher achievement, reinforces learning, teaches study skills and responsibility is an inaccurate assumption for younger students based on the literature review. Research also concludes that there is very little correlation between homework and achievement for older students as well. According to Kohn (2006), the question is: "If homework really offers all pain and no gain, then why do we force children to come home from school and work second shift."

According to Bembenutty (2011), research and the National Parent Teacher Association, National Education Association, and Department of Education websites, the following are five roles for parents to play in the homework process to be most helpful:

1. Be a stage manager. Make sure your child has a quiet, well-lit place to do homework. Make sure the needed materials (e.g., paper, pencils, dictionary) are available.
2. Be a motivator. Homework provides a great opportunity for you to tell your child how important school is. Be positive about homework. The attitude you express about homework will be the attitude your child acquires.
3. Be a role model. This is especially important for young students. When your child does homework, don't sit and watch TV. If your child is reading, you read too. If your child is doing math, balance your checkbook. Help your child see that the skills they are practicing are related to things you do as an adult.
4. Be a monitor. Watch your child for signs of failure and frustration. If your child asks for help, provide guidance, not answers. If frustration sets in, suggest a short break.
5. Be a mentor. When the teacher asks that you play a role in homework, do it. If homework is meant to be done alone, stay away. Homework is a great way for kids to develop independent, lifelong learning skills. Over-involvement can be a bad thing. Don't teach your child that 'when the going gets tough, mom gets going.' (p. 344)

Cooper et al.'s (2006) review reported a correlation between students who complete homework and better school outcomes. The studies indicated that parent involvement in homework could affect student success by having an impact on homework completion. There was no correlation in this study between parent involvement and academic achievement. Districts and schools who wish to give importance to parent involvement in homework, should consider providing parent workshops to teach parents how to be involved with their child's homework (Patall, Cooper, & Robinson, 2008).

Xu and Corno (2003) studied the relation between student achievement, homework help, helper's education level, and homework management. The study consisted of 140 students in grades sixth through eighth grades located at a middle school in New York City. Seventy-four percent of the students in the study received free lunches and over half of the students lived with

both parents. Student achievement on the standardized tests for math and reading showed no significant achievement difference between students who received homework help than those who did not. There was also no significant difference between students who received help from parents with bachelor's degrees and those who help students that did not have a bachelor's degree. This research indicated that there was no correlation between homework help, helper's education level, homework management, and academic achievement.

### **Recommendations for Time Spent on Homework**

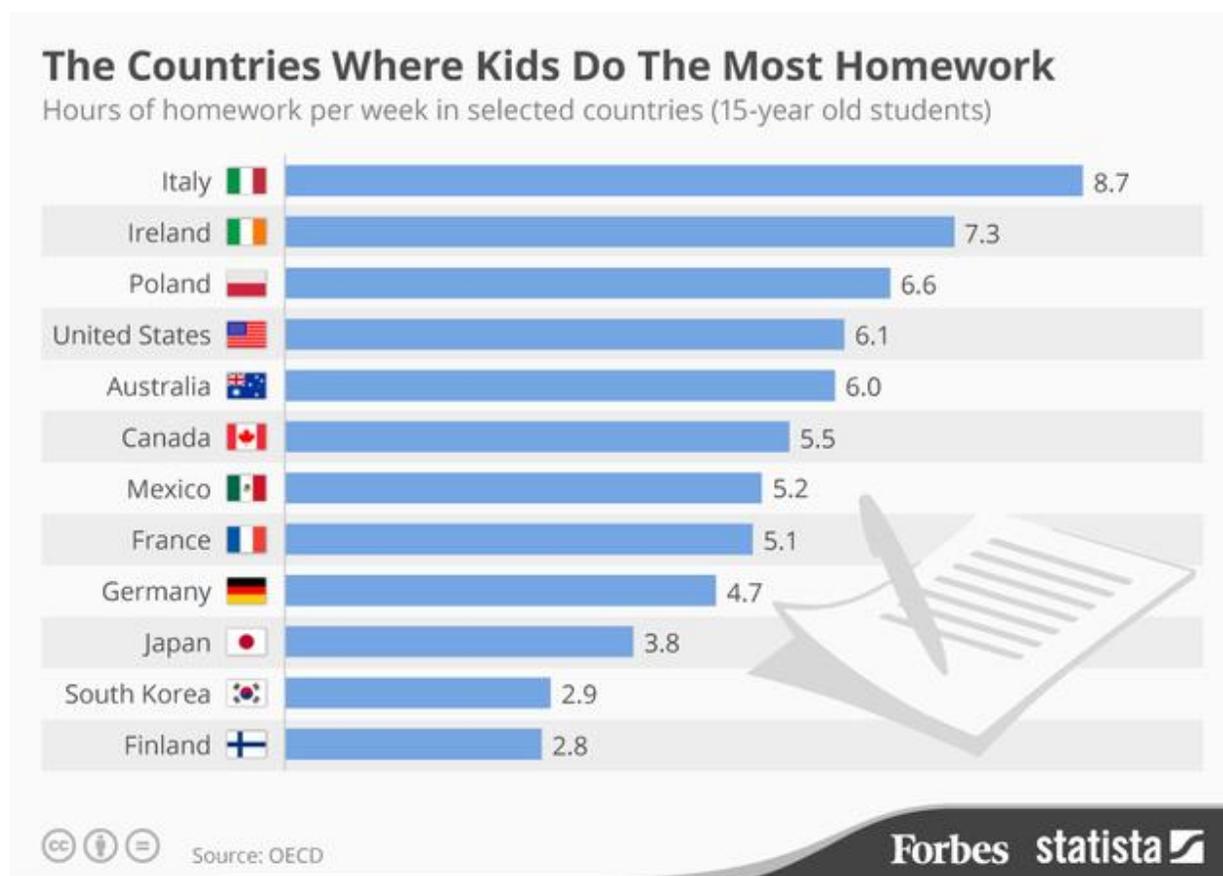
According to Bembenutty (2011) and Bennett and Kalish (2006), kids in the United States are doing far more homework than the guidelines from the National Education Association suggests. The National Education Association is an organization of more than 2.7 million teachers and educators founded in 1857. The National Education Association and National Parent Teacher Association guidelines stipulate no more than 10-20 minutes of homework per night for children in kindergarten through second grade and 30-60 minutes per night in grades third through sixth grade. Other researchers recommend even less or no homework for children in the early elementary grades (Bennett & Kalish, 2006). These recommendations fall in line with general guidelines suggested by researcher Harris Cooper: 10-20 minutes per night in the first grade, and an additional 10 minutes per grade level thereafter (e.g., 20 minutes for second grade, 120 minutes for 12<sup>th</sup> grade). High school students may sometimes do more, depending on what classes they take (Bennett & Kalish, 2006; Cooper et al., 2006).

Regardless of our nation's "anti-homework" and "pro-homework" researchers and their findings, there are other countries who assign high amounts of homework and fail to produce

high-achieving students. According to Baker and Letendre, countries such as Japan, Denmark, and the Czech Republic who assign little homework have some of the highest scoring students on achievement tests. Other countries such as Greece, Thailand, and Iran have some of the worst average scores, but have teachers who assign high amounts of homework (as cited in Bennett & Kalish, 2006, pp. 12-13). Figure 1 describes the hours of homework per week from greatest to least. American children do more homework than many other countries, but still only score around the international average. According to Baker, “It seems like the more homework a nation’s teachers assign, the worse that nation’s students do on achievement tests” (as cited in Bennett & Kalish, 2006, p. 13).

Figure 1

## The Countries Where Kids do the Most Homework



(OECD, 2014)

Based on research from Bembenutty (2011) and Bennett and Kalish (2006), parents, and school district policies, there is a wide variation of the amount of homework students complete per day and even per week. As described in the heading “homework trends,” homework fluctuates based on the social and economic status at the current time. Current research states that homework is based on one assumption: more homework boosts test scores, which in turn will boost business or the economy. According to research, there is no correlation between increased homework loads and any nation’s economic success (Bennett & Kalish, 2006).

Cooper et al. (2006) stated homework is complex and there is no simple, general finding applicable to all students.

### **Chapter 3: Summary and Recommendations**

Despite America's differences and values on homework, there continues to be research to support both the positive and negative effects of homework. Students need to be involved and feel responsible for their learning; sometimes homework and standardized testing are the only options to assess student achievement and success in students. The overall research presented on effects of homework and student achievement clearly states specific variables (frequency, time, parent involvement, types of homework) that both positively and negatively impact student achievement (Cooper et al., 2006). Parents, teachers, and students need to collaboratively find the accurate individual homework plans to help increase student engagement, homework completion, and student achievement.

Although homework trends seem to fluctuate based on social and economic status of our country, we as educators, parents, and students must instill the appropriate value of quantity and quality of homework. Homework is not an all or nothing proposition. Students should be involved in their homework and have choices or options to the type of homework that best meets each of their individual learning styles (Schimmer, 2016; Vatterott, 2007; Vatterott, 2009; Vatterott, 2010).

Throughout the research, there is very little research that supports that the traditional homework system improves achievement, improve grades, and builds character (Kohn, 2006). Kohn believes the "homework myth" actually has an adverse effect on a child's interest in learning and homework actually promotes students to become more dependent on teachers and parents. According to Cooper, if you want to build student responsibility and the love of independent learning, assignments should be designed so that most students can complete the

assignments successfully and get a good grade. This will in turn build intrinsic motivation. Homework should never be used as a punishment for poor behavior (Bennett & Kalish, 2006).

### **Recommendations**

My goal for this paper was to be able to provide my colleagues, administration, and parents with information and resources on what appropriate guidelines and recommendations are appropriate for today's students in the 21<sup>st</sup> century. I have learned achievement is not directly correlated to homework completion and specific amounts of homework. Students need to be directly involved in the homework process and have a choice to help meet the needs of each individual learner. When students really believe that learning will directly benefit them in their lives, they will have better attitudes and more success towards academic achievement, self-efficacy, confidence, and be life-long learners (Vatterott, 2009).

Districts, administration, and teachers rethinking the traditional homework system need to be aware of research surrounding a non-traditional or new paradigm for homework and how to best support long-term and short-term goals for students' academic practices. Given there is not explicit data that homework is of any benefit because teachers do not know who did it or helped with the homework, why should we as teachers assign homework at all? Throughout my research, I have come back to this question multiple times and asked myself this question. I believe there is a lack of research supporting both positive and negative effects of homework to just eliminate all homework or give homework. More informal research needs to be conducted specifically within each teacher's classroom and teachers then need to create the best balanced plan within their own classroom. Not every classroom can have the same homework and assessment procedures. Professionally, teachers need to have the freedom and support from

administration to observe, try new homework or in-class work procedures, and reflect on their current homework practices and adjust to what will be most successful for their students.

Based on my research, I have a completely different outlook on homework and what it will look like for my classroom. I will be using the research compiled from this review such as making sure I am designing quality homework assignments that fit the needs of all my students and modifying my grading procedures for homework. The most significant change I want to adjust in my classroom is grading fewer homework assignments and giving more feedback on work completed during class time. If homework is assigned in my class, I want students to have more of a choice and input in their assignments. Below are my recommendations for implementing best homework practices that improve academic success and discourage an “I hate school” attitude:

1. **Designing Quality Homework Tasks:** Designing quality homework tasks to fit the needs of each individual student. Each homework assignment needs to allow students a choice, opportunity to share information about themselves or their lives, and allow students to create products or presentations that tap emotions or feelings about the subject area (Vatterott, 2007).
2. **Differentiating Homework Tasks:** Homework is generally completed individually unless specified in younger grades to require parent involvement. Because most homework is completed individually, motivation is a key issue to differentiating homework tasks to ensure students can be academically successful. (Vatterott, 2009).
3. **Moving from Grading to Checking Tasks:** Many teachers today believe every assignment needs to be graded. Research is showing that as long as students receive

- adequate feedback on their assignments or tasks, homework grading is not necessarily helpful in academic achievement. Excessive homework and teacher grading can be detrimental to the teacher and student (Schimmer, 2016).
4. **Provide a Detailed Plan for Implementing a New Homework Paradigm:** Having a detailed plan is key to success in implementing a new homework shift to a grade level or building. Providing clear expectations and goals will help teachers, parents, and administrators all get on the “same page.” A descriptive plan from the new paradigm for homework from (Schimmer, 2016; Vatterott, 2009) will be used to help guide and design a plan to ensure proper homework amounts and what quality is best for student success in our school.
  5. **Staff Development/Training:** In a true homework shift from traditional to new paradigm, staff need to see and feel the value of change in their teaching and student achievement. There are many researchers that support the “no-homework” policy and others who see the importance of homework. If homework is assigned appropriately using the new paradigm shift based on quality, student choice, opportunity to share information about themselves or their lives and how the homework tasks relate to them, and allow students to create products or presentations that tap emotions or feelings about the subject area, teachers and students will see the value of implementing new homework philosophies. In order for this to be successful, districts or school buildings need to be consistent amongst teachers to be successful. Students and families will not see the value of completing homework when it is

assigned if proper parent involvement strategies and teacher training is not completed with consistent follow through.

### **For Future Research**

The research of homework will continue to form and change over time as the “anti-homework and pro-homework” debate continues. The homework debate will continue on as long as our economy and social status change. The research in this starred paper helps to define homework trends over the years, different types of homework, what constitutes as worthy homework, reasons for homework incompleteness, homework completion strategies, parent involvement, positive and negative effects of homework, and recommended time spent on homework for students today in high school, middle school, and elementary students.

The next steps in researching homework is the variations in subject matter of homework assignments, including subjects other than math and reading. There needs to be more research in the area of motivation and how or if motivation relates to homework completion and student achievement. Despite all the research on homework and academic achievement there is a very little correlation between the two. Assigning homework is very subjective and what one teacher assigns for a particular assignment, someone could have as many reasons why the assignment might not be effective in attaining the desired results. There are simply too many other factors that impact student learning and academic achievement. A research question on homework guidelines topic could be: Why do homework trends change based on our country’s economic and social status? The research and findings could lead to educational policy changes to better meet the needs of school districts, teachers, and families.

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