EFFECTIVE HOMEWORK PRACTICES

Prepared for Littleton Public Schools

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In the following slide deck, Hanover Research discusses the purpose and value of homework, appropriate homework loads, and best practices in homework design.

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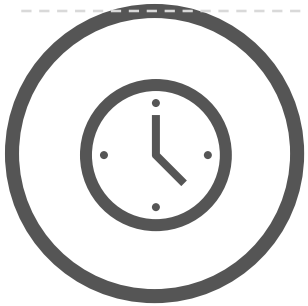
Introduction and Project Background

In the 2018-19 school year, middle and high schools in Littleton Public Schools (LPS) will start later, whereas elementary schools will start earlier. While preparing to implement these changes, LPS continues to explore how homework loads – as well as traffic levels and extracurricular activities – will be affected. To inform and support these efforts, Hanover Research (Hanover) has synthesized our previous research on homework and incorporated more recent findings and suggestions from the academic and professional literature.

Research Questions

Specifically, Hanover sought to addresses the following research questions:

- **What purpose does homework serve? How does homework impact student achievement?**
- **How much homework is appropriate?**
- **Which types of homework should be assigned?**



- **How might school start times affect the amount of time students spend on homework?**

Key Findings

Despite having little or no effect on elementary school students' achievement, homework may positively affect middle and high school students' achievement. In fact, studies indicate that homework positively impacts the achievement of high school students – particularly students in Grades 10-12 – most. However, whether homework promotes student achievement in specific subject areas remains unclear.

Homework loads should increase gradually as students grow older. For example, the "10-minute rule" suggests that teachers should assign students 10 minutes of homework per night per grade level across all subjects. Thus, whereas a student in Grade 2 should receive a total of 20 minutes of homework per night (i.e., 2 x 10 minutes), a student in Grade 11 should receive a total of 110 minutes (i.e., 11 x 10 minutes).

Key Findings

High school students should not receive more than two and a half hours of homework per night. Some research finds that assigning between one and two hours of homework per night impacts high school students' achievement more positively than assigning two or more hours. Further, anecdotal evidence suggests that teachers may decrease excessive homework loads without negatively impacting achievement among high-achieving students.

Delaying school start times may not impact the amount of time secondary students spend on homework. While only a few studies examine the issue, available evidence indicates that delayed school start times do *not* affect how students spend time on out-of-school activities, including homework and extracurriculars. Most of these studies do find, however, that delayed school start times increase sleep duration for adolescents by delaying wake-up times.

Key Findings

Homework assignments should promote learning goals while engaging students. Instead of introducing new material or skills, homework assignments should cover content already introduced in class and/or reinforce previously-learned skills. Further, when designing homework, teachers should consider whether all students have the resources (e.g., at-home internet access) needed to complete an assignment and differentiate assignments appropriately.

Recommendations

Based on these findings, Hanover recommends that LPS:

- **Consider creating district-wide policies or guidelines on homework loads,** such as a “10-minute rule” limiting homework to 10 minutes per night per grade level across all subjects.

- **Survey students and staff during the 2018-19 school year** to understand whether (and how) school start time changes affect the amount of homework assigned and/or the amount of time students spend on homework.

- **Explore ways to provide additional resources to help students complete homework,** such as students who may lack access to technology or reliable internet access at home.

SECTION I: THE PURPOSE AND VALUE OF HOMEWORK

Homework Debate

Homework – its design, its volume, and its impact – remains a contentious topic in education. Over the past century, public movements have called alternatingly for increases or decreases in the amount of homework assigned to elementary and secondary students (Walker, 2015).

Indeed, researchers find that "today, **there is still an ongoing debate on the value and effects of homework**" (Baş, Şentürk, and Ciğerci, 2017). While many educators argue that take-home assignments promote student learning and achievement, parents and education reformers respond that the supposed benefits of homework are unsubstantiated (Weir, 2016).

Purpose of Homework

Teachers commonly assign homework for a variety of instructional and/or non-instructional purposes:

Instructional Purposes

- ✓ **Practice Homework:** To provide students with opportunities for practicing, reviewing or reinforcing the material already presented in the class, and determining whether students have understood the lesson and/or have obtained desired skills.
- ✓ **Introduction Homework:** To introduce new material to be presented by the teacher and help students to get the benefit while the new material is introduced in the class.
- ✓ **Extension Homework:** To provide students with an opportunity to apply and integrate previously learned skills to new situations and/or other interest areas.
- ✓ **Exploration Homework:** To create occasions for students to use different resources like the Internet, library, reference books, etc.
- ✓ **Enabling Homework**: To enable students to use their own skills and abilities to produce creative and individualized products.

Non-Instructional Purposes

- ✓ **Parent-Child Relations Homework:** To establish and improve communication between parents and children about homework's importance for learning.
- ✓ **Personal Development Homework:** To help students acquire responsibility, self-confidence and self-discipline.

Bullets (excluding bolded text) quoted verbatim from: Gas, Şentürk, and Ciğerci, 2017

Purpose of Homework

Previous research suggests that **teachers most frequently assign *practice* homework**, which reinforces material already presented in class, **followed less frequently by *preparation* homework**, which introduces students to new material.

In addition, **teachers of younger students may be more likely to assign homework for non-instructional purposes.**

However, more recent research on homework typically focuses on how homework assigned for instructional purposes impacts student achievement. As the Center for Public Education notes, “little or no research has been conducted on the effects of noninstructional homework” (Center for Public Education, 2007).

IMPACT OF HOMEWORK ON STUDENT ACHIEVEMENT

Overview

Homework may have a positive effect on student achievement. Experts note that research does not indicate a consensus as to the impact of homework on student achievement (Maltese, Tai, and Fan, 2012; Baş, Şentürk, and Ciğerci, 2017). However, eight research syntheses published between 1983 and 2006 all find that, on average, homework has a positive effect on student achievement, with effect sizes ranging from d=0.21 to d=0.88 (Marzano and Pickering, 2007).

- While these research reviews included studies "spanning a broad range of methodologies and levels of specificity" and often mixed results from experimental studies with correlational studies, their **consistently positive findings support the conclusion that "doing homework causes improved academic achievement."**

- In a 2007 article published in *Educational Leadership* that presents findings from these eight syntheses, the authors highlight two meta-analyses by Cooper and colleagues – which collectively consider findings from more than 150 empirical studies – as "the most comprehensive and rigorous." Notably, these two meta-analyses indicate that **while homework has a positive effect on student achievement overall, this effect varies by students' grade level.**

Effects at the Elementary, Secondary Levels

Despite having positive effects on *secondary* students' achievement, homework may have negligible effects on *elementary* students' achievement. In his 1989 synthesis of research on the effects of homework, Cooper reviewed research from the 1930s onward, identifying 20 experimental studies that compared achievement of students in classes that assigned homework with achievement of students in classes that did *not* assign homework (Cooper, 1989).

In 16 studies, students in classes with assigned homework outperformed their peers in classes without assigned homework. However, across these 16 studies, **the effects of homework on achievement were greatest for high school students, followed by middle school students.** For elementary school students, homework had no effects on their achievement.

Similarly, when considering findings from 50 correlational studies, Cooper found a positive correlation between the amount of time reportedly spent on homework and achievement for high school students (r=0.25) and a weaker, yet still positive, correlation for middle school students (r=0.07). For elementary school students, however, this correlation was near zero.

Effects at the Elementary, Secondary Levels

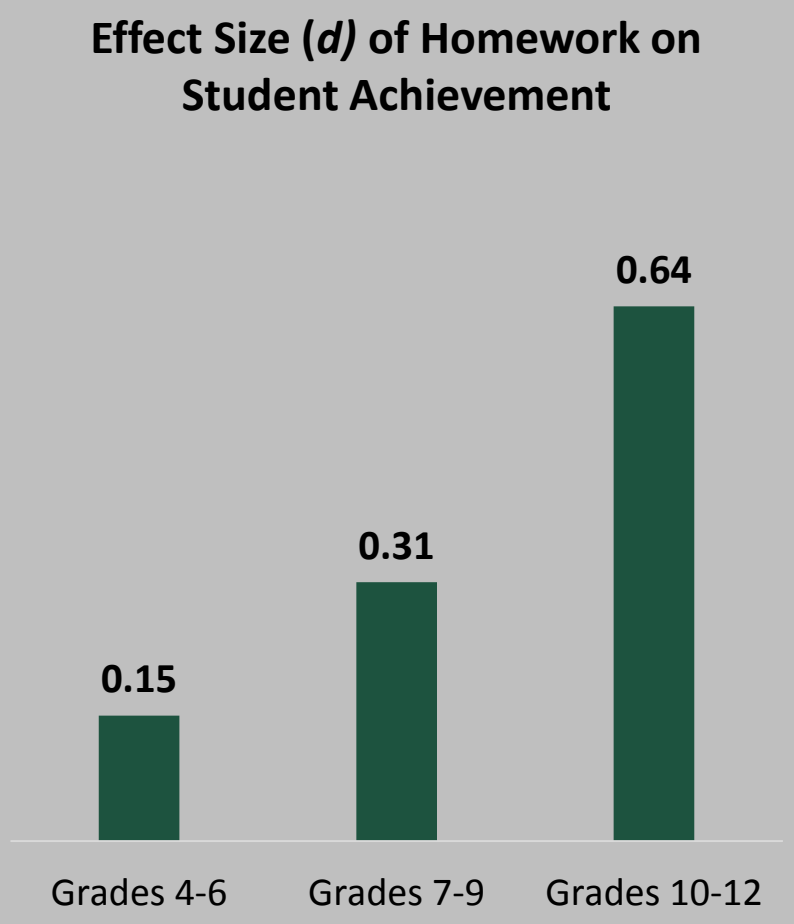


Figure adapted from: Marzano and Pickering, 2007

Findings from the experimental studies included in Cooper's 1989 synthesis indicate that **the average high school student in a class in which the teacher assigned homework outperformed 69 percent of students in a comparable class in which the teacher did not assign homework** (Cooper, 1989).

In addition, studies comparing in-class study with homework found that:

- **In-class study had a greater effect than homework on elementary students' achievement.**
- Conversely, **homework had a greater effect than in-class study on secondary, especially high school, students.**

Effects at the Elementary, Secondary Levels

More recent research conducted with two colleagues reinforces Cooper's earlier findings that homework has a greater impact on the achievement of secondary students than elementary students. In a 2006 meta-analysis described as "the most comprehensive research on homework to date" by *TIME* in 2016, Cooper and colleagues found that the correlation between homework and student achievement (as measured through scores on unit tests) was positive and statistically significant (Cooper, Robinson, and Patall, 2006).

- However, the authors also found that **"the correlation between time spent on homework and achievement was significantly higher" for secondary students** than for elementary students**.**

- Moreover, "the mean correlation between time spent on homework and achievement was not significantly different from zero" for elementary students.

Effects at the Elementary, Secondary Levels

Experimental research published since 2006 similarly suggests that homework has the greatest effect on secondary students. In a 2017 meta-analysis, Baş and colleagues identified 11 experimental studies published between 2006 and 2014, with a collective sample size of 862 students in elementary through postsecondary school. Across these studies, homework assignments yielded an effect size of *d*=0.229.

While the authors did not find statistically significant differences in grade-level effects, they nevertheless concluded that **"homework works well in upper grade levels, such as 5-8 and 9 and above, rather than in lower grade levels such as 1-4"** (Baş, Şentürk, and Ciğerci, 2017).

Effect of Homework on Student Achievement, by Grade Level

Study Characteristic	Number of Studies	Mean Effect Size*
Grades 1-4	4	0.206
Grades 5-8	4	0.412
Grades 9+	2	0.479

*Differences in effect sizes not statistically significant.

Figure adapted from: Baş, Şentürk, and Ciğerci, 2017

Effects at the Elementary, Secondary Levels

Researchers offer a variety of explanations for why homework may have little or no effect on elementary students' achievement:

- **Younger children, who often struggle to ignore stimuli in their immediate environment, are less able to focus at home than older students;**
- **Younger children likely have less effective study habits than older children;**
- **Teachers of younger children assign homework specifically to develop students' time management, a skill that may not have an immediate impact on student achievement; and**
- **Younger children who struggle in school are likely to spend more time on their homework.**

However, **in spite of these research findings, many researchers still recommend assigning homework to elementary students,** noting the non-instructional benefits. For example, Cooper states (Cooper, 1989):

"Homework for young children should help them develop good study habits, foster positive attitudes toward school, and communicate to students the idea that learning takes work at home as well as at school."

Bullets adapted from: Cooper, Robinson, and Patall, 2006.

Effects by Subject Area

Research findings related to the effects of homework in specific subject areas are limited and inconclusive.

Unpublished experimental research indicates homework is particularly helpful in boosting high school American history and English grades (Cooper, Robinson, and Patall, 2006).

Authors of a 2012 study relying on nationally representative samples of high school students found no relationship between homework and grades in science and mathematics courses. However, the findings suggest that homework positively influenced performance on standardized tests in these subject areas, particularly in mathematics. (Maltese, Tai, and Fan, 2012).

In their 2017 meta-analysis, Baş and colleagues found that homework had a greater effect on student achievement in chemistry and other science courses than in mathematics courses (Baş, Şentürk & Ciğerci, 2017).

For continued discussion of research on the effects of homework, please refer to Hanover's past reports: "Homework Benefits and Practices" and "Impact of Homework on Student Learning."

SECTION II: APPROPRIATE HOMEWORK LOADS

TRENDS IN HOMEWORK LOADS

Trends in Homework Loads

Despite assertions that homework loads are rising, student survey data suggest that the amount of time high school students spend on homework has changed very little over the past 30 years. A longitudinal analysis of the most recently available National Assessment of Educational Progress (NAEP) data shows that homework loads among 17-year-olds in the United States have remained largely the same from 1984 through 2012 (Loveless, 2014).

"How Much Time Did You Spend On Homework Yesterday?" (Age 17, 1984 – 2012)

Amount Assigned	1984	1992	1999	2008	2012
None Assigned	22%	22%	26%	28%	27%
Did Not Do It	11%	12%	13%	12%	11%
Less than 1 hour	26%	29%	26%	27%	26%
1 – 2 hours	27%	25%	23%	22%	23%
More than 2 hours	13%	11%	12%	10%	13%

Figure content from: Loveless, 2014

However, the amount of homework high school students are assigned may vary widely by school. High schools serving high percentages of students who are from socioeconomically advantaged families and likely to attend college, for example, may assign more than three hours of homework per night (Yettick, 2014).

Trends in Homework Loads

Meanwhile, homework loads may have fallen among 13-year-olds and increased among 9-year-olds from 1984 through 2012. The majority of 9-year-olds, however, continue to have less than one hour of homework per night, while the majority of 13-year-olds continue to have from less than one hour to between one and two hours of homework per night (Loveless, 2014).

"How Much Time Did You Spend On Homework Yesterday?" (Ages 9 and 13, 1984 – 2012)

Age 9

Amount Assigned	1984	1992	1999	2008	2012
None Assigned	35%	32%	26%	18%	22%
Did Not Do It	4%	4%	4%	5%	4%
Less than 1 hour	41%	47%	53%	60%	57%
1 – 2 hours	13%	12%	12%	12%	12%
More than 2 hours	6%	5%	5%	5%	5%

Age 13

Amount Assigned	1984	1992	1999	2008	2012
None Assigned	22%	21%	24%	23%	21%
Did Not Do It	4%	4%	5%	7%	5%
Less than 1 hour	36%	36%	37%	43%	44%
1 – 2 hours	29%	29%	26%	21%	23%
More than 2 hours	9%	10%	8%	6%	7%

Figure content from: Loveless, 2014

Trends in Homework Loads

Compared with the NAEP survey, other student survey data suggest a slightly greater homework load on average. One nationally representative survey of more than 2,100 students conducted in 2007 indicates that half of students in Grades 7-12 and more than one-third of students in Grades 3-6 spend an hour or more on homework per weeknight. Higher achieving students, in particular, were more likely to spend an hour or more on homework per weeknight (Metlife, 2007).

Percentage of Students who Spend an Hour or More on Homework per Weeknight

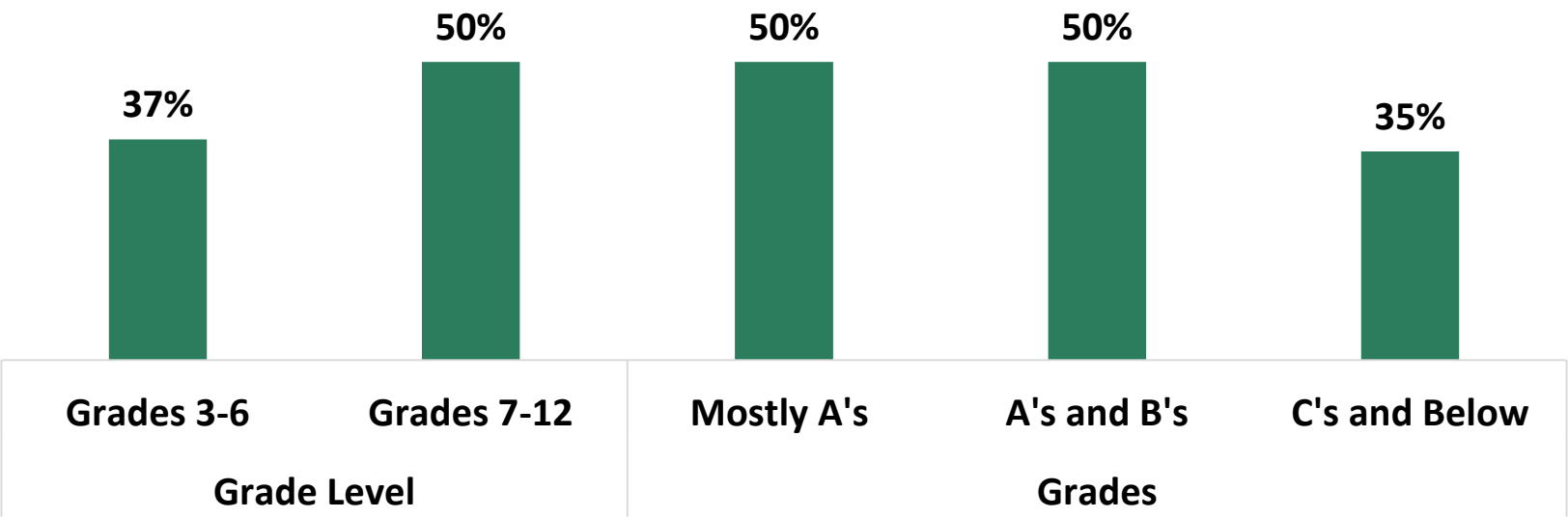


Figure content from: Metlife, 2007

Trends in Homework Loads

Teacher surveys also imply greater homework loads than the NAEP survey data indicate (University of Phoenix, 2014). A national survey of more than 1,000 K-12 teachers found that:

- Teachers reportedly assign 2.9 hours of homework per week to students in Grades K-5, 3.2 hours per week to students in Grades 6-8, and 3.5 hours per week to students in Grades 9-12.
- For a student in Grades 9-12 who has classes with five teachers in different subject areas, this equates to an average of 17.5 hours of homework per week, or more than two hours per night.

A high school student taking five classes may have an average of

17.5

hours of homework per week.

Spotlight: Homework Across the Globe

Internationally, some countries, such as Finland, assign far less homework than the Untied States, but still have higher average scores on the Programme for International Student Assessment (PISA). Researchers who have studied Finland observe that, in addition to assigning less homework, Finnish schools encourage students to pursue their interests outside of the classroom (Kohli, 2014; OECD, 2012).

15-Year-Olds' Average PISA Performance in Reading and Time Spent on Homework (2012)

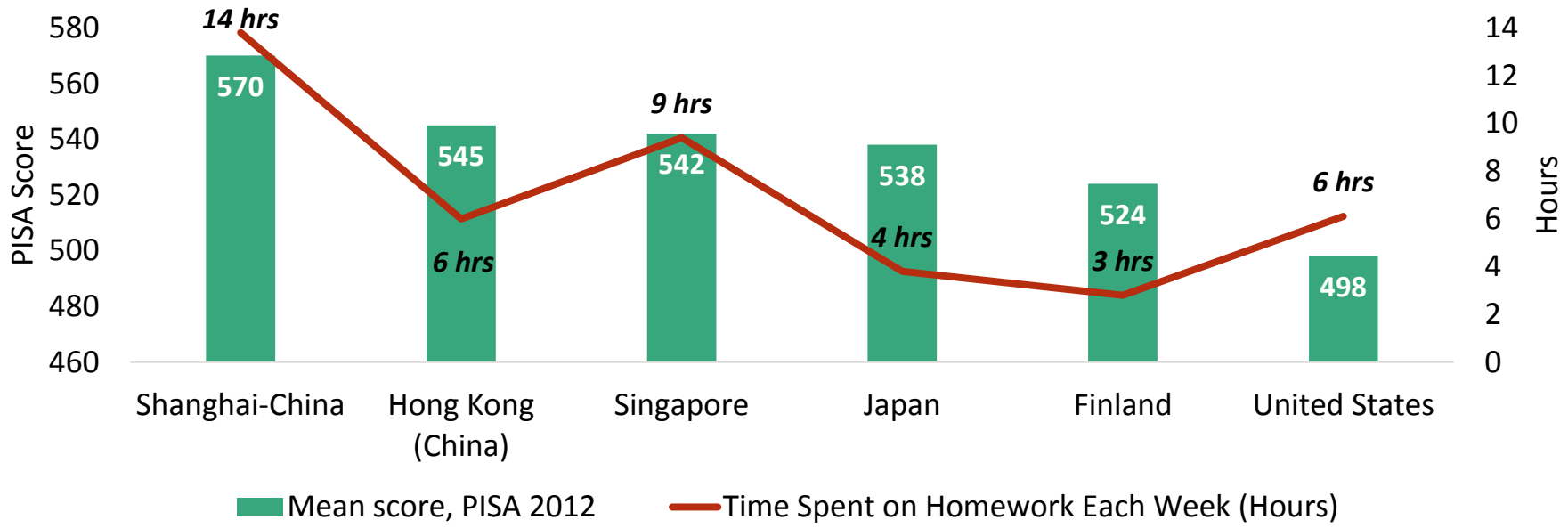


Figure content from: Kohli, 2014; OECD, 2012

RECOMMENDED HOMEWORK LOADS

The 10-Minute Rule

Researchers and national organizations including the National Parent Teacher Association (PTA) and the National Education Association (NEA) support a "10-minute rule," which encourages teachers to assign students 10 minutes of homework per night per grade level across all subjects (NEA).

Guidelines for Homework Loads by Grade Level – The "10-Minute Rule"

Grade Level	Homework Amount	Grade Level	Homework Amount
Grade 1	10 minutes	**Grade 7**	70 minutes
Grade 2	20 minutes	**Grade 8**	80 minutes
Grade 3	30 minutes	**Grade 9**	90 minutes
Grade 4	40 minutes	**Grade 10**	100 minutes
Grade 5	50 minutes	**Grade 11**	110 minutes
Grade 6	60 minutes	**Grade 12**	120 minutes

Teachers should "carefully monitor the amount of homework assigned so that it is appropriate to students' age levels and does not take too much time away from other home activities" (Marzano and Pickering, 2007).

The 10-Minute Rule

Findings support the use of a 10-minute rule where older students receive more homework than younger students. While few studies provide insight into the optimal amount of homework for students, limited findings suggest that the following homework loads are appropriate:

High School Students – From 1 Hour to 2 or More Hours

In his 1989 meta-analysis, Cooper observed that academic returns from homework appeared for high school students completing one hour of homework per night and continued for high school students completing two or more hours per night. A study in Cooper and colleagues' 2006 meta-analysis indicates that seven to 12 hours per week has the greatest impact.

Middle School Students – From Less than 1 Hour to 2 Hours

In his 1989 meta-analysis, Cooper found that academic returns from homework appeared for middle school students completing less than one hour of homework per night, then diminished for middle school students completing more than one to two hours.

Elementary Students – Less than 1 Hour

Research broadly suggests that homework does not improve achievement for elementary students. The 10-minute rule accordingly limits elementary students' nightly homework to less than one hour, from 10 minutes (Grade 1) to 50 minutes (Grade 5).

Content adapted from: Cooper, 1989; Cooper, Robinson, and Patall, 2006

Excessive Homework Loads

Excessive homework loads are associated with student stress, headaches, exhaustion, and other negative health outcomes. For example, a study of high performing California high schools where 93 percent of students typically enrolled in college found that students had an average homework load of 3.1 hours per night. In addition, the authors found that (Galloway, Conner, and Pope, 2013):

- **72 percent of students in these high schools "reported being often or always stressed over schoolwork,"** with 82 percent indicating that they experienced "physical symptoms due to stress;" and
- **68 percent of students in these high schools reported that their schoolwork prevented them from getting enough sleep,** with students getting 6.8 hours of sleep per night on average. In comparison, experts recommend that adolescents receive between 8.5 and 9.25 hours of sleep per night.

Acknowledging that nightly homework loads exceeding two hours may have detrimental achievement effects, **some researchers suggest limiting the amount of homework assigned to high school students to between 90 minutes and two hours** (Galloway, Conner, and Pope, 2013).

Reducing Homework Loads

Anecdotal evidence suggests that decreasing homework loads for high achieving high school students does not negatively impact achievement. Pope, who has co-authored research investigating the detrimental effects of excessive homework loads among high-achieving high school students, notes that (Yettick, 2014):

"We have seen teachers in Advanced Placement classes known for high levels of homework load cut their homework by one-third to one-half without any negative effects on AP test scores."

However, the fact that surveys indicate only a small percentage of high school students receive more than two hours of homework per night on average implies the need to interpret any anecdotal evidence with caution (Loveless, 2014).

SCHOOL START TIMES AND HOMEWORK LOADS

Homework and School Start Times

Delaying school start times for adolescents may not impact the amount of time they spend on homework. Relevant studies are limited, however, as school start times research typically examines students' sleeping patterns instead of out-of-school activities. For example, a 2016 school start times literature review notes only three studies that measured the time students spent on homework (Wheaton, Chapman, and Croft, 2016).

Most studies indicate that delaying school start times increases sleep duration for adolescents by delaying the time at which they wake up (Wheaton, Chapman, and Croft, 2016). As surveys indicate that more than one in five students fall asleep while doing homework at least once per week, increased sleep may help students complete homework more efficiently (Wahlstrom and Owens, 2017; American Academy of Pediatrics, 2014).

Homework and School Start Times

According to two studies, a delay in middle and/or high school start times may have <u>no effect</u> on the amount of time students spend on homework.

Boergers, Gable, and Owens (2013)

Sample: 197 high school students attending a boarding school

Start Time Delay: 8:00 a.m. to 8:25 a.m. (25 minutes)

Results: The authors found that the delay did not affect the amount of time high school students spent on homework. The authors further noted "no significant difference in hours spent on…school sports, organized community sports, music activities, volunteer work, or hanging out with friends."

Danner and Barbara (2008)

Sample: Approximately 10,000 students in Grades 6-12 attending a county-wide district in Kentucky.

Start Time Delay: 7:30 a.m. to 8:30 a.m. for high school (1 hour); 8:00 a.m. to 9:00 a.m. for middle school (1 hour)

Results: In the year following the change, there was a slight increase in the percentage of students who reported working at a job 10 hours or more per week. However, "there were no significant differences in hours spent on homework, school sports, organized community sports, music activities, volunteer work, or hanging out with friends."

Homework and School Start Times

One study, however, finds that students attending middle schools with later start times may spend more time on homework**.**

Edwards (2012)

Sample: Initial sample size of more than 20,000 students from all middle schools within Wake County, North Carolina

Start Time Delay: Middle schools with a 7:30 a.m. start time were compared with middle schools with an 8:00 a.m. or 8:30 a.m. start time

Results: Students who started school one hour later watched 12 fewer minutes of television each day and spent nine more minutes doing homework each week. Edwards hypothesized that students who start school earlier also finish earlier, thus perhaps spend more time watching television (and not doing homework) before parents return home from work.

SECTION III: BEST PRACTICES IN HOMEWORK DESIGN

CHARACTERISTICS OF EFFECTIVE HOMEWORK

Importance of Effective Homework

The <u>type of homework</u> students receive may affect student achievement more than the <u>amount of time</u> students spend on homework.

In his 1989 research synthesis, **Cooper stressed the importance of selecting appropriate and meaningful homework assignments.** When designing homework, teachers should consider, for example, its purpose, the skills and resources needed to complete it, how much should be assigned, and the timeline for completion (Cooper, 1989).

Unfortunately, the literature offers few "recommendations [on homework design] that are specific enough to help busy practitioners" (Marzano and Pickering, 2007). Consequently, to the extent possible, the following slides present best practices in homework design as discussed by expert practitioners or supported more directly by research.

Characteristics of Effective Homework

Vatterott, a Professor in the Department of Educator Preparation, Innovation and Research at the University of Missouri-St. Louis, explains that**, to deepen students' understanding of key concepts and build essential skills,** good homework assignments should exhibit five characteristics (Vatterott, 2010):

Purpose: Homework should check for understanding or provide opportunities to practice or apply knowledge and skills.

Efficiency: Homework should maximize opportunities for students to learn and demonstrate their knowledge.

Ownership: Homework should offer students choices, be personally relevant, and create personal relationships between students and content.

Competence: Students should be able to do homework on their own and have a sense of accomplishment after completing it.

Aesthetic Appeal: Teachers should make homework inviting and visually uncluttered to motivate students to complete it.

Figure adapted from: Vatterott, 2010.

Characteristics of Effective Homework

Similarly, **the American Federation of Teachers (AFT) notes that effective homework assignments**:

- ✓ **Provide clear instructions for students;**
- ✓ **Can be completed successfully;**
- ✓ **Are not too long;**
- ✓ **Can be completed in a flexible time frame;**
- ✓ **Use information and materials that are readily available;**
- ✓ **Reinforce and allow practice of previously taught skills;**
- ✓ **Are not just unfinished class work;**
- ✓ **Are interesting to students and lead to further exploration and study;**
- ✓ **Stimulate creativity and imagination in the application of skills;**
- ✓ **Encourage students to work cooperatively; and**
- ✓ **Stimulate home and class discussion.**

Figure bullets quoted verbatim from: AFT

Characteristics of Effective Homework

The AFT further indicates that, according to research, homework is:

- **Most effective when it covers material already taught.**

  However, giving an assignment on material that was taught the same day is not as effective as an assignment given to review and reinforce skills learned previously.

- **Most effective when it is used to reinforce skills learned in previous weeks or months.**

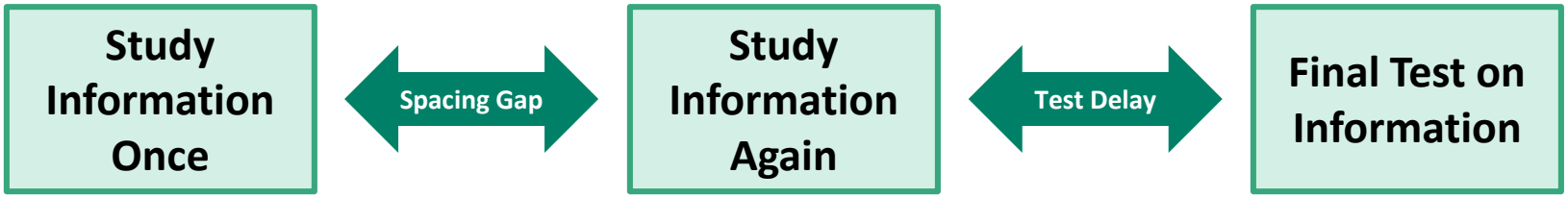
- **Less effective if it is used to teach complex skills.**

Accordingly, the AFT recommends that teachers discuss the purpose of specific homework assignments, assign a combination of short- and long-term assignments, occasionally offer students choice in their assignments, and communicate the level of quality expected for all assignments, and note how assignments will affect students' grades (AFT).

Bulleted content quoted verbatim from: AFT

The Spacing Effect

In general, students have greater retention when information is revisited after a delay instead of repeated back-to-back. For example, students tend to retain more vocabulary when they are exposed to terms and definitions every few minutes (or days) rather than when the same term is repeated consecutively. Several studies also observe that students exposed to vocabulary or tested on historical facts across a single or multiple week(s) retained these words and facts better than students who were exposed or tested multiple times across a shorter period of time (Carpenter, 2014).

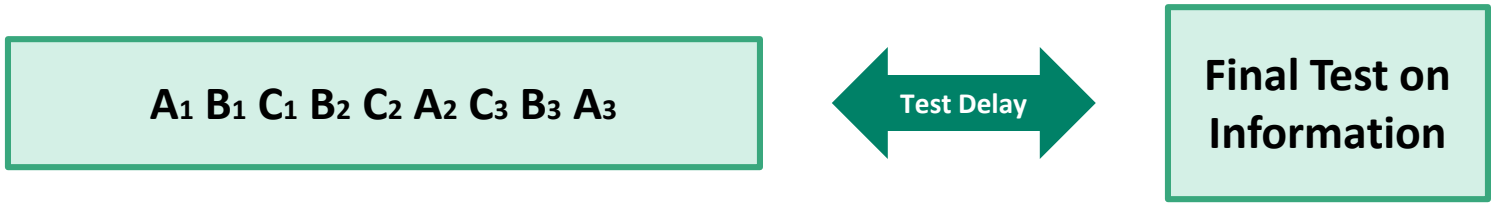


Based on these findings, to reinforce student learning and retention, teachers should consider spacing out homework assignments covering the same content across multiple days.

Figure adapted from: Carpenter, 2014

The Interleaving Effect

Completing homework problems in a more random and less predictable order also may be more effective, particularly when studying mathematics. For example, after learning about exponents, students might solve one problem requiring multiplication of exponents, then a problem requiring addition, then a problem requiring division, and so on. In this example, problems are *interleaved* because problems involving different operations (multiplication, addition, division) are mixed together rather than assessed separately (Carpenter, 2014).



When designing homework, especially in mathematics, teachers should consider interleaving problem sets to ensure that students perform various operations in different sequences.

Figure adapted from: Carpenter, 2014

HOMEWORK POLICIES AND PRACTICES

Effective Homework Practices

Strategies for Teachers

- Teachers should assign homework at the beginning of class.
- Homework should be explained and directions should be posted on the board in writing.
- Students should be given the opportunity to start homework in class.
- Homework should be explicitly related to class work.
- Homework should be returned promptly with feedback.

Strategies for Parents

- Parents should receive training at the beginning of the school year on how to best assist their children with their homework.
- It may also be helpful for parents to see examples of how teachers or skilled parents work with children on homework assignments.
- Parents should be encouraged to serve in a supporting role.
- Parents should create a homework environment that is conducive to learning.
- Parents should also encourage their children and maintain involvement.

Self-Regulation Strategies

- Teachers should reinforce the use of planners and other time management tools in the classroom.
- Teachers should remind students of due dates on a regular basis both orally and by writing them on the board.
- Teachers can teach students to delay gratification in class and encourage them to apply the same techniques at home.
- Students must be taught how to evaluate and self-reflect. Teachers should actively scaffold and teach these metacognitive skills as part of their curriculum.

For continued discussion, please refer to Hanover's past report: "Homework Benefits and Practices."

Figure bullets quoted verbatim with minor changes from: Carr, 2013

Equitable Homework Practices

Ethnic, cultural, linguistic, socioeconomic, and other stereotypes may result in some students being perceived as unmotivated and unprepared to learn. To overcome these stereotypes, *Teaching Tolerance* recommends that teachers ask the following questions before assigning homework: (Teaching Tolerance, 2012)

Do all my students have a workspace and good lighting at home?

Do my students work in the evening or have household responsibilities?

Do my students have internet access?

Do my students have an adult who can help with homework?

Teachers should differentiate homework where necessary, such as by making shorter assignments or choosing more appropriate reading passages (Teaching Tolerance, 2012).

Figure content adapted from: Teaching Tolerance, 2012

Grading Homework

Teachers should consider excluding grades on homework assignments from final course grade calculations. According to Vatterott, "the current consensus is that homework is formative assessment." For final course grades to accurately reflect students' learning and content mastery, teachers should only consider performance on summative assignments (e.g., research papers) or assessments when calculating final course grades (Vatterott, 2013; Vatterott, 2011; Cushman, 2010).

However, teachers should emphasize the connection between homework completion and performance on summative assignments or assessments. Teachers are often reluctant to make homework ungraded because grades motivate students. Explaining to students how completing homework will prepare them for graded assignments or assessments may be an alternative means of motivating them (Vatterott, 2011).

Providing Feedback on Homework

Relatedly, **teachers should provide students "with specific, timely feedback" on their homework,** as students who receive such commentary outperform peers who do not (AFT; Carr, 2013; Marzano and Pickering, 2007). When reviewing homework assignments, teachers may ask themselves:

- **Is there an error?**
- **What is the probable reason for the error?**
- **How can I guide the student to avoid the error in the future?**
- **What did the student do well that could be noted?**

In standards-based grading, which measures students' mastery of well-defined course objectives, teachers assess and provide feedback on homework. However, this feedback may not be incorporated into overall course grades (Vatterott, 2011).

Bullets quoted verbatim from: American Federation of Teachers

Homework Policies

A district- or school-wide homework policy may help ensure that homework assignments and loads support student learning. When developing an official homework policy, district and/or school leaders should include these stakeholders in the decision-making process (NEA):

Homework policies should address: homework's purposes; how much and how often homework is assigned; teachers' and students' responsibilities; and the role of parents (or others) who provide assistance (NEA). In addition, homework policies should set high standards for homework completion that motivate all students (Room 241 Team, 2013):

"A clear homework policy will lay out the possible consequences of avoiding assignments or turning in incomplete work. *Consequences can vary based on the student grade level and age, but can include lowering the grades on a report card or taking away classroom privileges."*

KEY RESOURCES

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