

# Practical Leadership

*Improving the Schools of Today  
Inventing the Schools of Tomorrow*

## RESEARCH INTO PRACTICE

### Homework – How much? What kind?

#### In a Nutshell

The debate about homework never seems to stop. It's one of those perennial issues faced by school leaders. Proponents of homework suggest that less homework would reduce academic rigor. Those questioning homework challenge it's link to student learning. What's interesting is that there's evidence to support both sides of the debate. A recent study by researchers at the University of Virginia and the University of Indiana found no significant relationship between the amount of time spent on homework and grades but did find a relationship between homework and performance on standardized tests.

What we do know is that a survey conducted by the University of Michigan (2004) found that the amount of time spent on homework increased 51% since 1981. So, what do we know about homework? First, busy work turns students away from learning and does not impact overall student learning. Second, when homework exceeds more than 60 minutes a day in grades 3-6, 90 minutes a day in middle level and 120 minutes a night in high school, the benefits decline quickly.

The most frequent questions about homework deal with the amount of homework a student should be expected to complete. But the issue of homework is far more complex than merely providing a guideline for the number of minutes a student should spend on homework.

Friction between school and families is often about homework. Families claim there is too much homework or too little, it's too hard or too easy or directions are unclear. Teachers contend that parents don't support their work or that they don't have time to design effective assignments (Cooper, Robinson & Patall, 2006).

The answer to the question about homework depends on whom you ask and how you phrase the question. Cathy Vatterott author of *Rethinking Homework* (2009), a publication of the Association for Supervision and Curriculum Development (ASCD) described the problem. "Homework has generated enough research so that a study can be found to support almost any position, as long as conflicting studies are ignored."

The bottom line is that there is no agreement among educators and "experts" on the homework issue. At best, homework has some relationship with student academic achievement and it is really difficult to identify whether or not homework impacts grades and test scores. Vatterott says, "It is difficult to separate where the effect of classroom teaching ends and the effect of homework begins."

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## The Issues

The debate about homework is often not about homework at all. For many parents the discussion is all about how to balance competing interests for their child. How much time do they spend on schoolwork? How much time on afterschool programs and activities? How much time for family including dinner? How much time for sleep? (Kralovec & Buell, 2001).

For some educators, and even some families, the amount of homework is an indicator of a school's academic rigor. For others the issue is directly linked to changing accountability for student learning. They believe that learning must extend beyond the classroom even if it intrudes into other activities. Failure to complete homework is often described as the failure of students, and their families, to support the school's efforts rather than as an instructional issue that teachers can address (Vatterott, 2009).

Again, the issue is far more complex and often shaped by our own personal beliefs and our experience as students. Many advocates on both sides of the homework debate suggest that it is about finding the appropriate balance among competing interests (school success, activities, family) and assuring that homework is both relevant, manageable, and truly extends and deepens student learning.

### Summary of Beliefs About Homework (May or May Not Be Supported by Research)

#### Academic Benefits

- fosters retention of factual knowledge
- increases understanding of concepts
- improves study habits and related skills
- strengthens critical thinking and problem-solving ability
- enables students to practice content skills
- provides opportunities to summarize learning, and
- provides enrichment and/or elaboration of content

#### Nonacademic Benefits

- develops or improves attitudes about school and learning
- develops or increases organizational and time management skills
- increases the opportunity for independent problem solving
- develops positive attitudes toward learning and school
- develops self-direction and self-discipline
- promotes inquisitiveness and exploration, and
- promotes the understanding that learning extends beyond the school walls

From: Association of California School Administrators (2007)

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## The Research

### ***The Case for Homework***

Marzano & Pickering (2007) examined research about homework from the past three decades and summarized their findings by quoting from one of the studies.

*With only rare exceptions, the relationship between the amount of homework students do and their achievement outcomes was found to be positive and statistically significant. (Cooper, Robinson & Patall, 2006)*

### ***Homework and Standardized Tests***

A recent study published in *The High School Journal* looked at the relationship between time spent on homework and academic performance in math and science (Maltese, Tai, and Fan, 2012). Using various statistical tests and controlling for students' background, motivation and prior achievement, the researchers found a "consistently positive significant relationship between homework and performance on standardized tests."

The authors suggest that the relationship between homework and standardized tests may show that "the types of homework assignments may work better for standardized test preparation than retaining knowledge. The type of homework students have may expose them to the types of questions, and processes for answering questions, that are similar to those used on standardized tests.

### ***Homework and Grades***

Maltese, Tai & Fan (2012) did not find a positive relationship between homework and grades. The author suggest that the debate should really be about "quality of homework" rather than quantity. Their study found that "homework should be purposeful and the purpose must be understood by both the teacher and students." Further, "homework must be clear and targeted. With homework, more is not better."

### ***Homework vs. No Homework***

Researchers at Duke University (Cooper, Robinson & Patall, 2006) found that when compared with students who had no homework, those who did had higher scores on classroom tests regardless of subject matter or grade level. But they also found that while much of the link between homework and achievement is positive, the relationship could disappear, or become negative, if homework becomes burdensome.

### ***The Case Against Homework***

Critics of homework have identified several problems. One is the lack of consistency among teachers at the same grade level or content area. There is often little coordination among teachers when a student has multiple teachers and that leads to big differences in the amount of homework from day to day or week to week (Simplicio, 2005). This is a big problem when students are involved in other activities outside of school. The inability to predict the amount of homework leads to choices between completion and other obligations.

Other critics suggest that many homework assignments fail to achieve what they were designed to achieve. There is rarely any differentiation among students so students who have already mastered a concept continue to practice things but not increase learning. Those who do not understand a concept may repeatedly practice tasks incorrectly (Brown Center, 2003).

Finally, critics suggest that because of student schedules, involvement in family and community activities and the wide fluctuation in the amount of homework, homework is often done quickly and may be of poor quality. This is compounded when teachers check on completion, not quality.

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## Developing Effective Homework Practices

### What Is Appropriate?

As with other parts of the homework debate recommendations for amount of homework vary. The National PTA recommends an increasing amount of homework with 10-20 minutes per evening in 1<sup>st</sup> grade and an additional 10 minutes per grade level thereafter. That would mean 120 minutes per evening in the 12<sup>th</sup> grade with the amount varying based on the specific classes a student elects.

The positive impact of homework increases with grade level beginning with the middle grades up to 1 to 2 hours per night (Cooper, 2001). A similar study found a similar positive impact at the high school level up to an average of 1.5 to 2.5 hours of homework per night (Cooper, Robinson & Patall, 2006). All researchers, however, suggest that there are no “hard and fast” rules about the amount of time spent on homework and were clear that for “even the oldest students, too much homework may diminish it’s effectiveness or even become counterproductive” (Cooper, Robinson & Patall, 2006).

Virtually all researchers suggest the need for further research on the design and implementation of homework. The evidence is that all homework does not have the same effect and it is important to provide teachers with information and resources so that they can design the most impactful homework assignments (Cooper, Robinson & Patall, 2006; Maltese, Tai & Fan, 2012; Marzano & Pickering, 2007)

### Guidelines for Beneficial Homework

The research is clear that homework can impact student learning and student achievement. Researchers have identified guidelines that teachers can use to assure that homework is indeed beneficial to students.

**Assign Purposeful Homework** – Legitimate purposes for homework include introducing new content, practicing a skill or process that students can do independently but not fluently, elaborating on information that has been addressed in class to deepen students’ knowledge, and providing opportunities for students to explore topics of their own interest.

**Design Homework to Maximize Completion** – Ensure that homework is at the appropriate level of difficulty. Students should be able to complete homework assignments independently with relatively high success rates, but they should still find the assignments challenging enough to be interesting.

**Involve Parents in Appropriate Ways** – Don’t require parents to act as teachers or to police homework completion but use them as a sounding board to help students summarize what they’ve learned. Talk with parents about homework practices so that can help the school find a balance between homework and other activities.

**Carefully Monitor the Amount of Homework** – Monitor homework so that it is appropriate for students’ age levels and does not take away from other home activities. At the secondary level collaborate among teachers so that expectations are not overwhelming, and therefore, unachievable.

Adapted from: Marzano & Pickering (2007)

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The most effective homework policies have broad support from teachers as well as families. Researchers and organizations serving school administrators recommend working with both groups when refining homework practices. They recommend examining these issues (ACSA, 2007; Cooper, 2001; Marzano & Pickering, 2007; Maltese, Tai & Fan, 2012).

**Purpose** – Write and publicize a purpose statement about homework being clear that homework should produce an impact on student learning.

**Quality and Nature of Assignments** – Assignments should be purposeful, directly linked to what has been taught, and supports and deepens student learning.

**Time Allocation** – Earlier in this brief the amount of time devoted to homework was discussed. Be clear about expectations.

**Feedback/Monitoring** – Establish a system to provide students with feedback about their work. Feedback is directly linked to completion. Specific feedback helps students learn and increases homework completion.

**Support/Intervention/Equity** – Provide an after-school intervention and homework support system. Students have varied levels of support at home and a support system can increase completion and impact learning.

**Teacher Collaboration** – Provide time for teachers to work together on consistency of homework expectations and coordination of assignments. This is particularly critical at the secondary level where a student will have more than one teacher.

## Final Thoughts

One of the best sources of information about homework and how to support effective homework practices is an [ASCD](#) publication [Rethinking Homework: Best Practices That Support Diverse Needs](#). The author, Cathy Vatterott, is a former teacher and school administrator. She provides an explicit set of strategies for thoughtfully examining homework expectations and supporting homework completion and support strategies. Her website, [www.homeworklady.com](http://www.homeworklady.com), provides many useful materials and tools.

## Online Resources

### Homework or Not: That is the (Research) Question

This story from District Administration magazine summarizes recent research on homework. <http://www.districtadministration.com/article/homework-or-not-research-question>

### When is Homework Worth the Time

*The High School Journal* – A. Maltese, R. Tai, X Fan(2012)

This recent study found no significant relationship between the amount of time spent on homework and grades but did find a positive significant relationship between homework and performance on standardized tests.

[http://muse.jhu.edu/login?auth=0&type=summary&url=/journals/high\\_school\\_journal/v096/96.1.maltese.html](http://muse.jhu.edu/login?auth=0&type=summary&url=/journals/high_school_journal/v096/96.1.maltese.html)

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## **Does Homework Improve Academic Achievement? A Synthesis of Research**

H. Cooper, J. Robinson & E. Patall (2006)

This report examines research on the effectiveness of homework from the 1930's to the mid 2000's. It concludes that homework is positively related to student learning and improved test scores. The report also makes recommendations for appropriate homework practices.

<http://larrycuban.files.wordpress.com/2011/06/review-of-educational-research-2006-cooper-1-62.pdf>

## **Changing Times of American Youth** (2004) – F. Juster, H. Ono & P. Stafford

University of Michigan - Institute for Social Research

This report describes changing family patterns among American youth and the way they spend their time.

[http://www.ns.umich.edu/Releases/2004/Nov04/teen\\_time\\_report.pdf](http://www.ns.umich.edu/Releases/2004/Nov04/teen_time_report.pdf)

## **ACSA Policy Position Paper on Homework** (2007)

Developed by the Association of California School Administrators

This paper discusses the debate about homework, reviews the research and makes recommendations for school and districts about how to refine their homework policies.

<http://www.acsa.org/FunctionalMenuCategories/Media/PositionPapers/GotHomework.aspx>

## **The Case For and Against Homework** – R. Marzano & D. Pickering (2007)

This synthesis of the research on homework suggests strategies that teachers can use to assure that homework has the greatest impact on student learning.

<http://www.ascd.org/publications/educational-leadership/mar07/vol64/num06/The-Case-For-and-Against-Homework.aspx>

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## **Do Students Have Too Much Homework?** – The Brown Center Report on American Education, The Brookings Institute (2003)

This report describes the debate about the balance between homework and other activities.

<http://www.brookings.edu/research/reports/2003/10/education-loveless>

## **NEA – Research Spotlight on Homework**

This site provides NEA's recommendations regarding the time for homework.

<http://www.nea.org/tools/16938.htm>

## **Synthesis of Research on Homework** – H. Cooper (1989)

This classic synthesis of research on homework was prepared by one of the nation's best-known researchers on the topic.

<http://www.ascd.org/publications/educational-leadership/mar07/vol64/num06/The-Case-For-and-Against-Homework.aspx>

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## **Homework in the 21<sup>st</sup> Century: The Antiquated and Ineffectual Implementation of a Time Honored Educational Strategy** – J. Simplicio (2005)

The author contends that while homework may positively impact student learning many of the things students are asked to do fail to achieve that goal.

<http://eric.ed.gov/?id=EJ725164>

### **Print Resources**

Cooper, L. (2007). *The Battle Over Homework* (3<sup>rd</sup> ed.). Thousand Oaks, CA: Corwin

Dean, C., Hubbell, E., Pitler, H & Sontje, B. (2012). *Classroom instruction that works: Research-based strategies for increasing student achievement* (2<sup>nd</sup> ed.). Alexandria, VA: ASCD.

Vatterott, C. (2009). *Rethinking Homework: Best Practices that Support Diverse Needs*. Alexandria, VA: ASCD.

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This *Research into Practice* brief was prepared by Practical Leadership, LLC and authored by Ronald Williamson, Professor of Educational Leadership at Eastern Michigan University and Howard Johnston, Professor of Secondary Education at the University of South Florida. The brief is prepared for use by principals and school staff in Oregon GEAR UP schools.

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