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Thank you for your request for research on **the impact of homework on student outcomes and whether this impact varies by content area or by grade level**. Ask A REL is a collaborative reference desk service provided by the 10 regional educational laboratories (REL) that, by design, functions much in the same way as a technical reference library. It provides references, referrals, and brief responses in the form of citations on research-based education questions.

**Please note that REL Southwest has not done an evaluation of the resources themselves but offers this list to you for your information only.**

## BACKGROUND

“Homework has been a perennial topic of debate in education, and attitudes toward it have been cyclical (Gill & Schlossman, 2000).<sup>1</sup> Throughout the first few decades of the 20th century, educators commonly believed that homework helped create disciplined minds. By 1940, growing concern that homework interfered with other home activities sparked a reaction against it. This trend was reversed in the late 1950s when the Soviets' launch of *Sputnik* led to concern that U.S. education lacked rigor; schools viewed more rigorous homework as a partial solution to the problem. By 1980, the trend had reversed again, with some learning theorists claiming that homework could be detrimental to students' mental health. Since then, impassioned arguments for and against homework have continued to proliferate.”<sup>2</sup>

Following an established REL Southwest protocol, we conducted a search for research reports, websites, as well as descriptive briefs on the impact of homework on student outcomes and on content area performance or grade. The sources included federally funded organizations, additional research institutions, educational databases, and general Internet searches using Google and Bing. See the methods section at the end of this Ask A REL for additional information on how we identified the following sources.

## QUESTION

What does research tell us about the impact of homework on student outcomes and whether this impact varies by content area or by grade level?

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<sup>1</sup> Gill, B. P., & Schlossman, S. L. (2000). The lost cause of homework reform. *American Journal of Education*, 109, 27–62.

<sup>2</sup> Marzano, R. J., & Pickering, D. J. (2007). The case for and against homework. *Educational Leadership*, 64(6), 74–79.

## SOURCES

Blazer, C. (2009). Literature review: Homework. Miami, FL: Research Services, Office of Assessment, Research and Data Analysis, Miami-Dade County Public Schools. <http://eric.ed.gov/?q=ed536245>.

*From the ERIC abstract:* “Although homework is assigned for a variety of academic and non-academic purposes, there is disagreement within the educational community about the value of homework and the amount of homework students should be assigned. This Literature Review summarizes the benefits and drawbacks of homework and examines how much time students should and actually do spend on homework. Issues such as whether school districts should develop a formal homework policy and how to involve parents in their children’s homework assignments are also discussed. Strategies for increasing homework completion rates, including after-school homework centers, homework hotlines, and peer support programs, are provided. Issues teachers should consider when assigning homework, such as matching assignments to students’ skill levels and learning styles, connecting homework to real life events, and providing feedback on homework assignments, are also reviewed. Research on homework’s impact on student achievement is summarized. Finally, the role of grade level, income level, ethnicity, and gender in homework completion rates and the resulting effects on achievement is also reviewed.”

Cheema, J. R. and Sheridan, K. (2015). Time spent on homework, mathematics anxiety and mathematics achievement: Evidence from a US sample, *Issues in Educational Research*, v25 n3 p246-259. <http://eric.ed.gov/?id=EJ1072462>.

*From the ERIC abstract:* “This study investigated the effect of time spent on homework and mathematics anxiety on mathematics achievement. Data from a nationally representative US sample consisting of 4,978 cases was used to predict mathematics achievement from time spent on homework and mathematics anxiety while controlling for demographic differences such as gender, grade, race, and socioeconomic status. Multiple regression results showed that both math anxiety and time spent on homework had a significant effect on math achievement. The implications are discussed.”

Cooper, H., Robinson, J. C., & Patall, E. A. (2006). Does homework improve academic achievement? A synthesis of research, 1987–2003. *Review of Educational Research*, 76(1), 1–62. <http://eric.ed.gov/?q=EJ751143&id=EJ751143>.

*From the ERIC abstract:* “In this article, the authors summarize research conducted in the United States since 1987 on the effects of homework. Studies are grouped into four research designs. The authors found that all studies, regardless of type, had design flaws. However, both within and across design types, there was generally consistent evidence for a positive influence of homework on achievement. Studies that reported simple homework-achievement correlations revealed evidence that a stronger correlation existed in grades 7–12 than in grades K–6 and when students, rather than parents, reported time on homework. No strong evidence was found for an association between the homework-achievement link and the outcome measure (grades as

opposed to standardized tests) or the subject matter (reading as opposed to math). On the basis of these results and others, the authors suggest future research.”

Dettmers, Swantje; Trautwein, Ulrich; Ludtke, Oliver; Kunter, Mareike; Baumert, Jurgen (2010). Homework works if homework quality is high: Using multilevel modeling to predict the development of achievement in mathematics, *Journal of Educational Psychology*, v102 n2 p467-482. <http://eric.ed.gov/?id=EJ884845>.

*From the ERIC abstract:* “The present study examined the associations of 2 indicators of homework quality (homework selection and homework challenge) with homework motivation, homework behavior, and mathematics achievement. Multilevel modeling was used to analyze longitudinal data from a representative national sample of 3,483 students in Grades 9 and 10; homework effects were analyzed at the student and the class level simultaneously. Students who perceived their homework assignments to be well selected reported higher homework motivation, and homework behavior at both the student and the class level predicted later achievement at the class level. Homework assignments perceived to be cognitively challenging were differentially associated with achievement at the student and the class level. Students who perceived their homework to be challenging (student level) showed relatively poor performance, but homework challenge was positively related to achievement at the class level. (Contains 1 figure, 5 tables, and 5 footnotes.)”

Eren, O., and Henderson, D. J. (2011). Are we wasting our children's time by giving them more homework? *Economics of Education Review*, v30 n5 p950-961. <http://eric.ed.gov/?id=EJ936135>.

*From the ERIC abstract:* “Following an identification strategy that allows us to largely eliminate unobserved student and teacher traits, we examine the effect of homework on math, science, English and history test scores for eighth grade students in the United States. Noting that failure to control for these effects yields selection biases on the estimated effect of homework, we find that math homework has a large and statistically meaningful effect on math test scores throughout our sample. However, additional homework in science, English and history are shown to have little to no impact on their respective test scores. (Contains 9 tables.)”

Fernández-Alonso, R., Suárez-Álvarez, J., and Muñiz, J. (2015). Adolescents' homework performance in mathematics and science: Personal factors and teaching practices, *Journal of Educational Psychology*, v107 n4 p1075-1085. <http://eric.ed.gov/?id=EJ1082700>.

*From the ERIC abstract:* “Classical educational research provides empirical evidence of the positive effect of doing homework on academic results. Nonetheless, when this effect is analyzed in detail there are inconsistent, and in some cases, contradictory results. The central aim of this study was to systematically investigate the effect of homework on performance of students in mathematics and science using multilevel models. The original sample consisted of 7,725 Spanish adolescents with a mean age of 13.78 ( $\pm 0.82$ ) of which 7,451 were evaluated after purging the sample of the students who did little to no homework. A 2-level hierarchical-linear analysis was performed,

student and class, with 4 individual adjustment variables: gender, socioeconomic and cultural level, year repetition, and school grades, which were used to reflect previous student achievement. The individual level examined time spent, effort made, and the way homework was done. The class level considered frequency of assignment and quantity of homework. Prior knowledge, estimated using school grades, is shown to be the most important predictor of achievement in the study. Its effect is greater than the combined effect of all the other variables studied. Once background factors are controlled, the homework variables with most impact on the test are student autonomy and frequency of homework assignment by teachers. Autonomy when doing homework was shown to be the most important individual-level variable in both mathematics and science, and not effort and or time spent doing homework. The optimum duration of homework was found to be 1 hr a day.”

Hong, E., Wan, M., and Peng, Y. (2011). Discrepancies between Students' and Teachers' Perceptions of Homework. *Journal of Advanced Academics*, v22 n2 p280-308. <http://eric.ed.gov/?id=EJ919062>.

*From the ERIC abstract:* “For homework to help students improve school achievement and develop responsibility and autonomy in academic endeavors in and out of school, the development of teachers' understanding of students' views about homework and their homework behaviors is critical. Whether the subject of the homework is mathematics, reading, or a second language, teachers' and students' understandings regarding the types of problems that students experience during homework may differ. Discrepancies between students' and teachers' ratings of students' homework behaviors were examined in two subject domains--mathematics and English. Moderating effects of gender on student-teacher ratings were also examined. Participants were 268 tenth graders from a school in China and their math and English teachers. Overall, students' self-ratings of homework behaviors were more negative than teachers' ratings. Male students self-rated or were rated by teachers more unfavorably than their female peers on most measures of homework problems. Discrepancies between students and teachers and across gender were more evident in English than math homework. Although teachers viewed female students as having fewer homework problems than males, when only male students were examined, teachers' and male students' ratings were similar on some measures. The importance of understanding students' homework behaviors was underscored before teachers provided homework interventions. To lessen discrepancies and improve awareness of students' homework behaviors, teachers need to grade and provide feedback on students' homework. (Contains 3 tables.)”

Institute of Education Sciences, National Center for Education Statistics. (2008). Expectations and reports of homework for public school students in the first, third, and fifth grades. Washington, DC: Author.  
<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2009033>.

*From the IES abstract:* “This brief uses data from the Early Childhood Longitudinal Study, Kindergarten Class of 1998-99 (ECLS-K) to examine (1) the amount of time that students' public school teachers expected them to spend on reading/language arts and mathematics homework in first, third, and fifth grades; and (2) reports from parents of

public school children of how often their children did homework at home in the first, third, and fifth grades. Teachers' expectations are reported by the percentage of minority students in the student's school and parents' reports are reported by the child's race/ethnicity. The findings indicate that the amount of reading and mathematics homework that students' teachers expected them to complete on a typical evening generally increased from first grade to fifth grade. In both subjects and in all grades, differences were found by the minority enrollment of the school. Children in schools with higher percentages of minority students had teachers who expected more homework on a typical evening, whereas generally children in lower minority schools had teachers who expected less homework. In addition, in all three grades, larger percentages of Black, Asian, and Hispanic children than White children had parents who reported that their child did homework five or more times a week."

Maltese, Adam V.; Tai, Robert H.; Fan, Xitao (2012) When is homework worth the time?: Evaluating the association between homework and achievement in high school science and math, *High School Journal*, v96 n1 p52-72.  
<http://eric.ed.gov/?id=EJ995290>.

*From the ERIC abstract:* "Even with the history of debate over the merits of homework, there are significant gaps in the research record regarding its benefit to students. The focus of this study is on the association between time spent on homework and academic performance in science and math by assessing survey and transcript data from two nationally representative samples of high school students collected in 1990 and 2002. Using multiple linear regressions and controlling for students' background, motivation, and prior achievement, we investigated how much variance in science and math course grades and achievement test scores could be explained by time spent on homework in those classes. The results indicate that there is no consistent significant relationship between time spent on homework and grades, but a consistently positive significant relationship between homework and performance on standardized exams. (Contains 7 tables and 3 footnotes.)"

Mendicino, M., Razzaq, L., and Heffernan, N. T. (2009). A comparison of traditional homework to computer-supported homework, *Journal of Research on Technology in Education*, v41 n3 p331-359. <http://eric.ed.gov/?id=EJ835243>.

*From the article's abstract.* "This study compared learning for fifth grade students in two math homework conditions. The paper-and-pencil condition represented traditional homework, with review of problems in class the following day. The Web-based homework condition provided immediate feedback in the form of hints on demand and step-by-step scaffolding. We analyzed the results for students who completed both the paper-and-pencil and the Web-based conditions. In this group of 28 students, students learned significantly more when given computer feedback than when doing traditional paper-and-pencil homework, with an effect size of 0.61. The implications of this study are that, given the large effect size, it may be worth the cost and effort to give Web-based homework when students have access to the needed equipment, such as in schools that have implemented one-to-one computing programs."

McMullen, S., & Busscher, D. (n.d.) Homework and academic achievement in elementary school. Holland, MI: Author  
[http://www.academia.edu/187437/Homework\\_and\\_Academic\\_Achievement\\_in\\_Elementary\\_School](http://www.academia.edu/187437/Homework_and_Academic_Achievement_in_Elementary_School).

*From the abstract:* “In the literature on the impact of homework there is little empirical support for assigning homework to elementary school students. Nevertheless, the practice has become common despite popular resistance from parents and popular media. We examine the effects of both assigning homework and time spent on homework on mathematics and reading achievement using nationally representative longitudinal data on elementary school students. In order to control for unobserved characteristics and inputs we use empirical techniques that include student fixed effects. We find that homework has a positive impact on academic achievement, and that other empirical approaches may produce misleading results. Additionally, we find that the impact of homework is not uniform across the population, but that some minority groups and low income students get more benefit from homework, indicating that increasing homework assigned could be a valuable policy for decreasing the black-white as well as the income-based achievement gaps.”

Núñez, J.C., Suárez, N., Rosário, P., Vallejo, G., and Epstein, J.L. (2015). Relationships between perceived parental involvement in homework, student homework behaviors, and academic achievement: Difference among elementary, junior high, and high school students. *Metacognition and Learning* 10(3), 375-406.  
<http://eric.ed.gov/?id=EJ1081622>.

*From the abstract:* “This study aims to produce a deeper understanding of the relationship between perceived parental homework involvement (i.e., parental homework control and parental homework support), student homework behaviors (i.e., time spend on homework completion, time management, and amount of homework completed), and student academic achievement. Using Mplus5.1, a structural equation model was fit for 1683 students at different stages of schooling (i.e., elementary school – 5th and 6th grades; junior high school – 7th and 8th grades; and high school – 9th and 10th grades). The data showed that student homework behaviors, perceived parental homework involvement, and academic achievement are significantly related. However, results vary depending on the students’ grade level: (a) in junior high and high school, perceived parental homework involvement is related to students’ homework behaviors, but not in elementary school; and (b) although students’ homework behaviors are related to academic achievement at each school level, the direction and magnitude of the relationships vary. Specifically, the relationship between perceived parental homework involvement and academic achievement is stronger in junior high and high school than in elementary school; and student homework behaviors mediate the association between perceived parental homework involvement (control and support) and academic achievement only in junior high and high school.”

Özcan, Zeynep Çigdem; Erkin, Emine (2015). Enhancing mathematics achievement of elementary school students through homework assignments enriched with metacognitive questions, *EURASIA Journal of Mathematics, Science & Technology Education*, v11 n6 p1415-1427. <http://eric.ed.gov/?id=EJ1078228>.

*From the ERIC abstract:* “Metacognitive enrichment has become an important component of modern mathematics instruction. This study investigates the effect of homework assignments enriched with metacognitive questions on students' mathematics achievement and homework behaviors. A quasi-experimental design with pre- and post-test measures and two groups (experimental and control) was employed to investigate the effect of the enriched homework. Forty-four students, 25 boys and 19 girls, participated in the study. The students in the experimental group responded to metacognitive questions as they worked on homework that otherwise was common to both groups. First semester mathematics scores taken from students' report cards were used as a pre-test of mathematics achievement; the mean of second and third examination scores were used as a post-test. The results revealed a significant difference between the mathematics scores of students who had been given homework assignments enriched with metacognitive questions and those who had not been given such homework.”

Pelletier, R., & Normore, A. H. (2007). The predictive power of homework assignments on student achievement in mathematics. In S. M. Nielsen & M. S. Plakhotnik (Eds.), *Proceedings of the Sixth Annual College of Education Research Conference: Urban and International Education Section* (pp. 84-89). Miami: Florida International University.

<http://digitalcommons.fiu.edu/cgi/viewcontent.cgi?article=1266&context=sferc>.

*From the abstract:* “This study examined the relationship between homework performance (percent of homework completed and percent of homework correct), student characteristics (Stanford Achievement Test score, gender, ethnicity, and socio-economic status), perceptions, and challenges and academic achievement determined by the students' average score on weekly tests and their score on the Florida Comprehensive Assessment Test (FCAT) Norm Reference Test (NRT) mathematics assessment.”

Saam, J. and Jeong, T. (2013). In search of the epiphany of homework assignments: A model of evaluating local schools' homework practices. *Universal Journal of Educational Research*, v1 n2 p119-127. <http://eric.ed.gov/?id=EJ1053978>.

*From the ERIC abstract:* “Some parents and students perceived demanding homework assignments as a frequent source of grievance, particularly for those high performing students who want spare time for independent study and cultivation of talents through extracurricular activities. Teachers tended to perceive homework assignments as a meaningful extension of instruction time and a media of communication between school and home. Cognizant of the possible conflicts about homework practices between school and home, the current study investigated homework issues from the students' and their parents' perspective while maintaining the integrity and information provided by the teachers of those students. The overarching goal of the current study was to establish a conceptual and applicable model for evaluating homework practices in local schools. Data collected included student and parent surveys, teacher homework philosophies, sample homework assignments, and homework hallway charts. The survey results were analyzed inductively and six key issues were identified pertinent to homework assignments in a well performing middle school in a Mid-western state in the

United States of America. The six prominent factors identified include: grade-level homework coordination, positive perception about homework, homework as academically engaged time, motivation of doing homework, uniqueness of math homework, and ability-matching of homework. Some implications for parents and educators were articulated.”

Schnee, E. and Bose, E. (2010) Parents "don't" do nothing: Reconceptualizing parental Null actions as agency, *School Community Journal*, v20 n2 p91-114.  
<http://eric.ed.gov/?id=EJ908211>.

*From the ERIC abstract:* “This paper presents findings from a larger study that examined the roles that parents and caregivers are given and/or choose to enact to support their children's mathematics learning, particularly in relation to their children's math homework. Based on interviews with parents of elementary-age children from three different urban school districts in the northeastern United States, we propose a conceptualization of parental engagement that uses a framework of human agency to understand both beliefs and rationales underlying parental actions as well as the apparent lack of actions. Our findings identify challenges parents encounter in relation to their children's school mathematics and reveal the limits of school-centered conceptions of parental engagement. (Contains 2 tables.)”

Sharp, C., Keys, W., & Benefield, P. (2001). Homework: A review of recent research. Berkshire, UK: National Foundation for Educational Research.  
<https://www.nfer.ac.uk/publications/HWK01/HWK01.pdf>.

*From the description:* “This review was commissioned by Ofsted (Office for Standards in Education). It set out to identify the best evidence from recent research into homework. It considered research literature published between 1988 (the year of the Education Reform Act) and 2001. The review also considered literature reviews and Ofsted reports published immediately before 1988, in order to take account of the findings from previous research.”

Taskin Ekici, F. (2014). Elementary school students? Views on the homework given in science courses, *Educational Research and Reviews*, v9 n17 p594-605.  
<http://eric.ed.gov/?id=EJ1041401>.

*From the ERIC abstract:* “Homework is a significant part of teaching and learning process. For this reason, teachers use it constantly as tools of teaching process. The effect of homework on students? achievement and student-parent relationship has been emphasized in several studies. The present study aimed to find out the views of the middle school students (n = 705) about homework. Additionally, it has been examined whether these views differ according to several variables such as gender, class level, and the education level of the parents. Survey method was used in the study. It was found out that the views of the students about homework do not significantly differ in terms of the variables such as gender or the educational levels of their parents, but they differ according to class levels. Furthermore, an important proportion of the students believe that science homework does not improve their power of thinking and creativity. In addition to this, the students stated that they were more careful about and spare



more time for their homework because it will contribute to their success in the high school entrance exam.”

Theodore, L. A, DioGuardi, R. J., Hughes, T. L., Aloiso, D., Carlo, M., Eccles, D. (2009). A class-wide intervention for improving homework performance, *Journal of Educational & Psychological Consultation*, v19 n4 p275-299.  
<http://eric.ed.gov/?id=EJ870571>.

*From the ERIC abstract:* “Homework completion has an important impact on the overall academic functioning of students. Consultation requests often center on identifying efficient interventions so that teachers may facilitate the homework process and enhance students' academic achievement. This investigation employed a randomized interdependent group contingency and randomized reinforcers to improve homework completion and accuracy of spelling performance in 21 elementary school students. An ABAB reversal design across all students was employed. Results showed this intervention to have a positive impact on both spelling homework completion and accuracy rates. Limitations, future research, and contributions are addressed. (Contains 3 tables and 1 figure.)”

Trautwein, U. (2007). The Homework-Achievement Relation Reconsidered: Differentiating Homework Time, Homework Frequency, and Homework Effort, *Learning and Instruction*, v17 n3 p372-388. <http://eric.ed.gov/?id=EJ762780>.

*From the ERIC abstract:* “The popular claim that homework time is positively related to achievement and achievement gains was tested in three studies. Time on homework was compared and contrasted with other indicators of homework assignment (i.e., homework frequency) and students' homework behavior (i.e., homework effort). The results of the three studies indicate that homework assignments are positively associated with achievement (class-level effect) and that doing homework is associated with achievement gains (student-level effect), but that the positive effects of homework assignments and completion are not captured by the "time on homework" measure.”

Valle, A., Regueiro, B., Nuñez, J.C., Rodriguez, A., Piñeiro, I., & Rosário, P. (2016). Academic goals, student homework engagement, and academic achievement in elementary school. *Frontiers in Psychology* 7(463), 1-10.  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4814489/>.

*From the abstract:* “There seems to be a general consensus in the literature that doing homework is beneficial for students. Thus, the current challenge is to examine the process of doing homework to find which variables may help students to complete the homework assigned. To address this goal, a path analysis model was fit. The model hypothesized that the way students engage in homework is explained by the type of academic goals set, and it explains the amount of time spend on homework, the homework time management, and the amount of homework done. Lastly, the amount of homework done is positively related to academic achievement. The model was fit using a sample of 535 Spanish students from the last three courses of elementary school (aged 9 to 13). Findings show that: (a) academic achievement was positively associated with the amount of homework completed, (b) the amount of homework completed was

related to the homework time management, (c) homework time management was associated with the approach to homework, (d) and the approach to homework, like the rest of the variables of the model (except for the time spent on homework), was related to the student's academic motivation (i.e., academic goals)."

Van Voorhis, Frances L. (2011). Adding families to the homework equation: A longitudinal study of mathematics achievement, *Education and Urban Society*, v43 n3 p313-338. <http://eric.ed.gov/?id=EJ920632>.

*From the abstract:* "Families, whether guided or instructed to, often become involved in their children's homework. This study examined the effects of a weekly interactive mathematics program (Teachers Involve Parents in Schoolwork-TIPS) on family involvement, emotions and attitudes, and student achievement. Students and families (N=153) from four urban elementary schools participated in this two-year quasi-experimental study, with teachers assigned randomly to TIPS or Control conditions. Seventeen percent of students used TIPS two years, forty percent completed TIPS one year, and forty-three percent never used TIPS. The majority of the sample (57%) represented African-American students, and the remaining students (43%) were Caucasian, with almost 70% of the sample qualifying for free- or reduced-price lunch. Overall, TIPS students and families reported significantly higher levels of family involvement, more positive feelings and attitudes about math homework, and significantly higher standardized mathematics scores than Control students. This coordinated homework process may be a useful tool for educators seeking more favorable and academically productive home learning experiences for students and their families."

Walker, K. (2007). Homework: Too Much, Too Little? Research Brief, *Education Partnerships, Inc.* <http://eric.ed.gov/?id=ED537910>.

*From the ERIC abstract:* "What is homework? What value and benefit does it have for students? Some common perceptions from the students' perspective is that it is busy work, it takes away from other activities (i.e. sports, clubs, hanging out with friends, jobs, etc.), and/or it prevents them from getting as much sleep as they would like. From the teachers' perspective: it develops responsibility and good study habits, it helps the students prepare for what they will experience in college, and/or it takes precious time to design, assign and grade. The amount of homework given to students has varied over the past century, however, the amount of time spent on homework is up 51% since 1981 ("The myth about homework"). With the advent of No Child Left Behind, daily homework time has increased substantially. Countries that outscore America on standardized tests such as Japan, Denmark and the Czech Republic assign less homework than do the U.S. schools. Conversely, countries that score low on standardized tests, such as Greece, Thailand and Iran, give a much higher amount of homework. Some research has found those who do homework tend to "...outperform students who do not do it by 69%" ("Review of literature on homework"). (Contains 27 resources.)"

## ADDITIONAL ORGANIZATIONS AND RESOURCES TO CONSULT

Bembenutty, H. (2011). The last word: An interview with Harris Cooper: Research, policies, tips, and current perspectives on homework. *Journal of Advanced Academics*, 22(2), 340–349.

*“Summary adapted from the article:* This is an interview with researcher Harris Cooper who coauthored a synthesis of research on homework effects (see Cooper, Robinson, and Pattall, 2006). He suggests that to avoid negative effects and maximize the chance of positive effects, homework should be prescribed in amounts that are consistent with what the empirical evidence suggests are beneficial for kids at different stages of development. In addition, teachers should take into account the unique needs and circumstances of their students.”<sup>3</sup>

Canadian Council on Learning. (2009). A systematic review of literature examining the impact of homework on academic achievement. Ottawa, ON: Author. (*Not peer-reviewed*).[http://edu.au.dk/fileadmin/edu/Udgivelser/SystematicReview\\_HomeworkApril27-2009.pdf](http://edu.au.dk/fileadmin/edu/Udgivelser/SystematicReview_HomeworkApril27-2009.pdf).

*From the description:* “This review addresses the question, ‘is there an academic benefit to homework for students enrolled in the K-12 school system?’ The homework debate has increased in prominence as a result of Cooper’s (2006) review of evidence, the SCAL 2007 report, and several books that argue against homework published over the last four years. This review seeks to understand first, the latest empirical evidence regarding the possible academic benefits of K-12 homework, and second, the popular nature of this issue.

Cooper (2006) summarizes research conducted in the United States between 1987 and 2003 on the effects of homework on student achievement from Kindergarten through Grade 12. To avoid overlap with Cooper and to examine recent contributions to the research literature, this review examines studies published from 2003 to 2007. Cooper’s selection of studies provides interesting points of comparison which will be outlined in the discussion section.”

*Canadian Council on Learning (2009).* Homework helps, but not always. Lessons in Learning, (*Not peer-reviewed*) <http://eric.ed.gov/?q=ED519297&id=ED519297>. Ottawa, ON: Author.

*From the ERIC abstract:* “Few issues in education affect as many families as homework. Its near-universal place in formal schooling leaves few students and parents untouched. Yet the history of homework is characterized by debate about both its effectiveness and legitimacy. Attitudes toward homework move through cycles of enthusiasm and opposition. Homework is popular in times of worry about the quality of learning among young people (e.g., in the late 1950s after the Soviet Union launched Sputnik) and unpopular when it is perceived as unduly oppressive (e.g., starting in the mid-1960s, alongside a number of societal factors, such as the rise of the civil rights

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<sup>3</sup> Summary by REL Northwest’s Ask A REL Reference Desk Librarian.

movement, growing opposition to the U.S. war in Vietnam and the emergence of the youth culture). CCL's review focused on 18 different studies that reported a total of 57 distinct achievement measures (e.g., overall grades; student marks on a standardized English test; student marks on a standardized math test; student marks on teacher-developed tests and projects) across six different subject areas. These studies demonstrate that homework with an enhanced pedagogical technique is likely to increase academic achievement and unlikely to impede it. Common across the interventions was a component of meta-cognition or constructive learning. In other words, these homework assignments demanded active learning, rather than rote repetition of classroom material. A list of effective homework practices is included (Contains 2 figures.).”

Cooper, H. (2008). Does homework improve academic achievement? If so, how much is best? Retrieved from SEDL website: <http://www.sedl.org/pubs/sedl-letter/v20n02/homework.html>

*From the article:* “The homework question is best answered by comparing students assigned homework with students assigned no homework who are similar in other ways. The results of such studies suggest that homework can improve students’ scores on the class tests that come at the end of a topic. Students assigned homework in second grade did better on the math tests; third and fourth graders did better on English skills and vocabulary tests; fifth graders on social studies tests; ninth through 12th graders on American history tests; and 12th graders on Shakespeare tests. Across five studies, the average student who did homework had a higher unit test score than the students not doing homework. However, 35 less rigorous (correlational) studies suggest little or no relationship between homework and achievement for elementary school students. The average correlation between time spent on homework and achievement was substantial for secondary school students, but for elementary school students, it hovered around no relationship at all.”

Marzano, R. J., & Pickering, D. J. (2007). The case for and against homework. *Educational Leadership*, 64(6), 74–79. Retrieved from <http://eric.ed.gov/?id=EJ766368>.

This article provides a chart with a summary of research findings and a discussion of the research, as well as a list of research-based homework guidelines.

Protheroe, N. (2009). Good homework policy, *Principal*, v89 n1 p42-45. <http://eric.ed.gov/?id=EJ852907>.

*From the ERIC abstract:* “Homework is often a hot-button issue for schools. Even with a school homework policy, the homework practices of teachers vary in quality, with some teachers applying best practice standards, while others assign homework too difficult for some students, or collect homework without providing feedback to students. In addition, families in which parents work and children participate in an array of after-school activities provide an environment where homework time and parental assistance is often scarce. Thus, principals need to address parents' concerns about excessive homework-or teachers' concerns when too many students fail to complete it. Principals and

teachers can use research about homework to address two important questions: Does homework support higher levels of student learning? What are characteristics of effective homework practices? This brief overview of the current research and practices related to homework highlights the complexity of the issue. For homework to be effective, it should be carefully planned to support specific educational goals, take into account the specific abilities and needs of students, and strengthen the link between home and school. (Contains 3 online resources.)” This article was not peer reviewed.

## METHODS

### Keywords and Search Strings Used in the Searches:

Homework: Homework effectiveness: Homework impact on achievement or performance

### Search of Databases and Websites

- Institute of Education Sciences (IES) website (<http://www.ies.ed.gov>) and IES sources: Regional Educational Laboratory (REL) Program, National Center for Education Statistics (NCES), National Center for Education Research (NCER), What Works Clearinghouse (WWC)
- ERIC database ([www.eric.ed.gov](http://www.eric.ed.gov))
- Google Scholar ([scholar.google.com](http://scholar.google.com))
- Google ([www.google.com](http://www.google.com))
- Bing ([www.bing.com](http://www.bing.com) )

### Criteria for Inclusion

REL Southwest selected resources that provide research on the impact of homework on student outcomes and whether this impact varies by content area or grade level. When REL Southwest staff reviewed resources, we considered – among other things – three factors:

1. **Date of Publication:** The most current information (primarily published from 2005 to the present) is included.
2. **Source and Funder of the Report/Brief/Article:** Priority was given to publications written in relevant, peer-reviewed journals or reports or produced by well-known research organizations.
3. **Methodology:** sources include reported studies, literature reviews and policy reports.

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