Increasing the Effectiveness of Homework for All Learners in the Inclusive Classroom

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Abstract

This article discusses how teachers can increase the effectiveness of homework assignments for all learners. Homework, when designed and implemented properly, is a valuable tool for reinforcing learning. This essay provides a summary of educational research on homework, discusses the elements of effective homework, and suggests practical classroom applications for teachers. The synthesis of these three areas is intended to supplement the literature on homework in order to help preprofessional and current teachers increase the effectiveness of homework and employ best practices in inclusive classroom settings. With the increasing number of students with special needs included in general education settings and the increasing pressure placed on students to make academic gains on standardized tests, it is more important than ever that teachers are equipped with the tools necessary to effectively use homework as a learning tool for all students regardless of their ability levels.

Key Words: homework, learning, inclusive classrooms, special education, students with disabilities, supports, teachers, inclusion, parents, studying, home

Introduction

Homework is often a contentious issue for students, parents, and teachers. When utilized properly, homework can be a valuable tool for reinforcing learning that takes place in the classroom. Unfortunately, many teachers do not
use homework effectively. Teachers can improve their utilization of homework by using research-tested strategies and accommodations (McNary, Glasgow, & Hicks, 2005). However, finding the time to read research, understand its implications, and then apply them can be a challenge for time-strapped teachers. The purpose of this article is to provide a summary of homework research, outline the elements of effective homework, and provide practical suggestions for classroom applications.

Increasing the effectiveness of homework is a multifaceted goal. Accommodations, organization, structure of assignments, technology, home–school communication, and students’ home life all influence the effectiveness of homework. Teachers are often given the additional challenge of differentiating instruction for students with a wide range of abilities and varying exceptionalities. Studies have found that students with disabilities experience more difficulty with homework than their classmates without disabilities (McNary et al., 2005). Other students may require an additional challenge in order to receive the most benefit from homework. As inclusive classrooms are more often than not the norm in the U.S., teachers must recognize that students often need accommodations in the way homework is organized and structured in order for it to be most effective.

As student performance and achievement are increasingly placed under scrutiny, teachers are under more pressure than ever to produce results on standardized tests. Research indicates that, along with classroom instruction and students’ responses to class lessons, homework is an important factor that increases student achievement (Cooper, Robinson, & Patall, 2006; Keith & Cool, 1992; Keith et al., 1993; Paschal, Weinstein, & Walberg, 1984). “Although results vary, meta-analytic studies of homework effects on student achievement report percentile gains for students between 8% and 31%” (Van Voorhis, 2011, p. 220). If teachers can learn to utilize research-based best practices to increase the effectiveness of homework, they will have a powerful tool for helping students make academic gains and perform to the best of their ability.

**Summary of Research**

Homework is often a hot-button issue for schools and is thus a frequent topic of educational research. Harris Cooper, a leading expert on the relationship between homework and achievement, defines homework as “tasks assigned by school teachers that are meant to be carried out during noninstructional time” (Bembenutty, 2011b, p. 185). There is considerable debate over the effectiveness of homework among researchers, administrators, teachers, parents, and students. In 2006, Cooper, Robinson, and Patall conducted a meta-analysis of
homework-related research and found that there is a positive relationship between the amount of homework students do and their academic achievement. On the opposite side of the argument, researchers such as Kohn (2006), Bennet and Kalish (2006), and Kralovec and Buell (2000) make a strong case against homework arguing that it marginalizes economically disadvantaged students who find it difficult to complete homework because of inequities in their home environments. They also assert that teachers, in general, are not well trained in how to create effective homework assignments. While these researchers point out some valid cautions, the body of evidence suggesting that homework can be beneficial should compel school policy and the improvement of teachers’ preparation for and utilization of the best homework practices. How then, can educators utilize homework to be most effective? Teachers should be provided with the tools and knowledge necessary to create effective homework. Rather than ask whether or not homework improves learning, a better question is “How can homework be improved to be doable and effective?” By answering this question and creating effective homework assignments, the debate for and against homework becomes a moot point (Voorhees, 2011). “When teachers design homework to meet specific purposes and goals, more students complete their homework and benefit from the results” (Epstein & Van Voorhis, 2001, p. 191). In fact, when homework is properly utilized by teachers, it produces an effect on learning three times as large as the effect of socioeconomic status (Redding, 2000).

Educational research has repeatedly established the benefits of effective homework. As previously indicated, Cooper and his colleagues (2006) found “generally consistent evidence for a positive influence of homework on achievement” (p. 1), including end of course tests. In the same meta-analytic study, it was found that the average student in a class assigned appropriate homework scored 26 percentile points higher on tests than the average student in a class not assigned homework. With only rare exceptions, the relationship between the amount of homework students complete and their achievement was found to be positive and statistically significant (Marzano & Pickering, 2007). It is noteworthy that the correlation between homework and achievement appears to be stronger in grades seven through twelve than in kindergarten through sixth (Cooper et al., 2006; Marzano & Pickering, 2007; Protheroe, 2009).

Cooper (2007) suggests that teachers should consider the broad benefits of homework. Three of the benefits he highlights are long-term academic benefits, such as better study habits and skills; nonacademic benefits, such as greater self-direction, greater self-discipline, better time management, and more independent problem solving; and greater parental involvement and participation in schooling (Cooper, 2007; Protheroe, 2009). The benefits and purposes of
homework also vary at different grade levels. Cooper (2007) noted that in the earliest grade levels, homework should promote positive attitudes, habits, and character traits; allow appropriate parent involvement; and reinforce learning of simple skills taught in class. In upper elementary grades, homework should play a more direct role in fostering improved achievement in school. Finally, in grades six onward, it should facilitate improving standardized test scores and grades (Cooper, 2007; Marzano & Pickering, 2007). When homework is effective, it benefits many aspects of students’ learning experience.

One of the most important benefits of homework is the acquisition of self-regulation. Two studies by Xu (2008a, 2008b) linked homework management to homework completion. In a 2009 study, Xu found that student achievement appeared to be related to all five subscales of homework management (setting an appropriate work environment, managing time, handling distraction, monitoring motivation, and controlling negative emotion). “Specifically, compared with low-achieving students, high-achieving students reported more frequently working to manage their workspace, budget time, handle distraction, monitor motivation, and control emotion while doing homework” (Xu, 2009, p. 37). Bembenutty (2011c) found that a positive relationship exists between homework activities and self-efficacy, responsibility for learning, and delay of gratification. “Homework assignments can enhance the development of self-regulation processes and self-efficacy beliefs, as well as goal setting, time management, managing the environment, and maintaining attention” (Bembenutty, 2011c, p. 449). These are skills that will serve students well not only as they proceed through their schooling but also as working adults (Bembenutty, 2011a). Self-regulatory skills can be taught and develop over time with repeated practice. “Evidence from experimental studies shows that students can be trained to develop self-regulation skills during homework activities” (Ramdass & Zimmerman, 2011, p. 195). A study by Schmitz and Perels (2011) found that eighth grade students receiving daily self-regulation support during math homework performed better on post-tests than their peers who did not receive self-regulation support. Teaching these skills to students should be a priority for teachers and a focal point when designing homework assignments.

Research has also provided insight on how to make homework most effective for students with learning disabilities and the challenges they face. The importance of homework for students with learning disabilities has increased as these students spend more time in inclusive classrooms (Patton, 1994). Estimates for the prevalence of students with specific learning disabilities (SLD) “range as high as 20% of the population, but recent reports to Congress on IDEA usually show that about 5% of school-age children and youths are receiving services under the SLD category” (National Joint Committee on Learning Disabilities,
Teachers are faced with the challenge of educating all types of students in inclusive settings, including students who have undiagnosed learning disabilities. “Research has shown that homework can have positive effects on school achievement for students with learning disabilities” (Patton, 1994, p. 570; see also Epstein, Polloway, Foley, & Patton, 1993). There is also evidence that homework can have a compensatory effect for students with lower abilities (Keith, 1982), allowing them to earn grades much like their typically developing peers (Polachek, Kneieser, & Harwood, 1978). In a study by Rosenberg (1989) investigating the effects of homework assignments on the acquisition and fluency of basic skills of students with learning disabilities, he found that homework was most effective if the students accurately completed their assignments and demonstrated at least moderate acquisition of the instructional material. Truesdell and Abramson (1992) found a positive correlation between homework completion and academic performance for mainstreamed students with learning disabilities and emotional disturbances. Although there is a need for more research in this area, there is evidence in the current literature that homework can have positive benefits for students with learning disabilities. In fact, “research examining the effect of homework on academic achievement of students with learning disabilities has generally been positive” (Gajria & Salend, 1995, p. 291).

While homework is a valuable tool in inclusive classrooms, it is important that teachers understand the challenges students with varying exceptionalities will face. Students with learning disabilities are more likely to have problems with homework that their nondisabled peers (Bryan, Burstein, & Bryan, 2001; Bryan & Nelson, 1995; Bryan, Nelson, & Mathur, 1995; Epstein et al., 1993). Characteristics of students with learning disabilities interfere with every step of homework, “including understanding assignments, accurately recording them, remembering to take materials home, setting time aside to work, organizing necessary materials, following through and completing work, putting it in a safe place, and then remembering to take it back to school” (Bryan et al., 2001, p. 168). Students with learning disabilities also often have negative attitudes towards homework (Bryan & Nelson, 1995; Bryan et al., 1995; Sawyer, Nelson, Jayanthi, Bursuck, & Epstein, 1996). When teachers design more effective homework that meets the characteristics described in the next section, it helps to alleviate many of these issues for students with learning disabilities. Additionally, the issues and resulting practices for learning disabled students are relevant and helpful for all students in the inclusive classroom, regardless of whether or not they have a disability.

Research has demonstrated that homework can be an effective teaching tool for all types of students. The accomplished teacher should make a concerted
effort to increase the effectiveness of homework through research-based practices. When research is applied to the classroom in meaningful ways, it is a powerful tool for developing successful teaching strategies. Navigating through the challenges of inclusive settings is difficult, but educational research has repeatedly suggested that homework can be an important tool for helping learners at all levels of ability achieve at a higher level.

**What Makes Homework Effective?**

In order to increase homework effectiveness, teachers must understand what makes homework effective. Cathy Vatterott (2010) identified five fundamental characteristics of good homework: purpose, efficiency, ownership, competence, and aesthetic appeal. Purpose means that all homework assignments are meaningful. Teachers should give students assignments that are purposeful for them and methods that work for their learning styles. Teachers should not assign homework as a matter of routine, rather, only when there is a specific purpose. Students must also understand the purpose of the assignment and why it is important in the context of their academic experience (Xu, 2011). Assigning “busy work” or rote assignments is counterproductive. Homework should provide teachers with feedback about student understanding (Redding, 2000) and thus should reinforce concepts. Homework should not be given on topics that have not been taught (Redding, 2000). Finally, students should leave the classroom with a clear sense of what they are supposed to do and how they are supposed to do it (Protheroe, 2009).

Efficiency is the second hallmark of effective homework. Homework should not take an inordinate amount of time and should require thinking. Students who spend too much time on homework (more than 90 minutes at the middle school level) actually perform worse than students who spend less time (Cooper et al., 2006; Shumow, 2011). Some schools use the policy of 10 minutes a night of homework in first grade and then add ten minutes for each subsequent grade level (Redding, 2000). This provides a common expectation for homework that gradually increases as students grow and develop. Tasks that are of moderate difficulty are most likely to enhance student motivation (Dettmers, Trautwein, Lüdtke, Kunter, & Baumert, 2010). Assignments that are too easy can lead to boredom, and assignments that are too difficult lead to frustration. Well structured assignments that are adequately difficult are key.

The third hallmark of effective homework is ownership. Students who feel connected to the content and assignment learn more and are more motivated. Providing students with choice in their assignments is one way to create ownership. Connecting assignments with student interest is also essential for
promoting ownership (Warton, 2001; Xu, 2011). Getting to know students and even visiting them at home not only helps educators better create effective assignments based on student interests, but it also facilitates student ownership because they know their teacher cares (Kyle, McIntyre, Miller, & Moore, 2005). As Warton (2001) has noted it is also incredibly important that students understand the utility of homework and view it as important. In addition, homework should be structured in a way that the students can accomplish it with relatively high success rates (Protheroe, 2009). When students can take pride in a job well done, they feel more ownership of their work.

Competence is the fourth hallmark of effective homework. Students should feel competent in completing homework. In order to achieve this, it is beneficial to abandon the one-size-fits-all model. “Homework that students can’t do without help is not good homework; students are discouraged when they are unable to complete homework on their own” (Vatterott, 2010, p. 13). Homework should be differentiated so that it is the appropriate level of difficulty for individual students. This can be achieved in a variety of ways: different rubrics, shorter assignments (Cooper & Nye, 1994), or more challenging requirements for gifted students. Teachers also need to take into account accommodations recommended for students with special needs as noted on their IEPs. The sheer amount of work can be a huge obstacle for struggling students. In addition, it is of great importance that educators adequately explain and scaffold assignments to ensure success.

Aesthetic appeal is the fifth hallmark of effective homework and is often overlooked by teachers. The way homework looks is important. “Wise teachers have learned that students at all levels are more motivated to complete assignments that are visually uncluttered. Less information on the page, plenty of room to write answers, and the use of graphics or clip art make tasks look inviting and interesting” (Vatterott, 2010, p. 15). Ultimately, effective homework should be purposeful, efficient, personalized, doable, and inviting.

Classroom Application

Understanding research on homework and what makes it effective is useless unless a teacher can translate this information into practice in the classroom. The practical applications for increasing homework effectiveness can be divided into three categories: strategies for teachers, parent involvement and training, and self-regulation strategies. There are a variety of research-based strategies for helping teachers increase the effectiveness of homework in inclusive settings. These strategies are not only helpful for students with special needs but for all students in the classroom. As previously stated, it is important that home-
work has a clear purpose and is not assigned simply as a matter of routine. This purpose should be explicitly expressed to students; they should have a clear understanding of instructions as well. Homework should not be used to teach new material (Cooper & Nye, 1994; Patton, 1994), and students should fully understand the concepts and possess the skills needed to complete homework assignments. Homework should never be assigned as a form of punishment (Patton, 1994; Redding, 2006) and should be structured so that it is challenging without being overwhelming (Protheroe, 2009).

In the classroom there are several procedures teachers can utilize to improve homework effectiveness. Teachers should assign homework at the beginning of class. Homework should be explained and directions should be posted on the board in writing (McNary et al., 2005). Students should be given the opportunity to start homework in class (Cooper & Nye, 1994; McNary et al., 2005; Patton, 1994) so that the teacher can check for understanding and provide students with assistance before they leave. Homework should be explicitly related to the class work. Finally, homework should be returned promptly with feedback (Redding, 2006). Students learn more from homework that is graded, commented upon, and discussed in class by teachers (Cooper & Nye, 1994; Jenson, Sheridan, Olympia, & Andrews, 1994; Keith, 1987; Protheroe, 2009; Redding, 2000, 2006).

Students with learning disabilities may exhibit one or more of several characteristics that make homework completion challenging, including distractibility, procrastination, need for constant reminders to start working, failure to complete homework, daydreaming, and problems working independently (Patton, 1994). In addition to the suggestions in the preceding paragraph, there are some additional strategies teachers can employ to help these students have more success with homework. Teachers should assess students’ homework skills so that they are aware of potential problems. They should also involve parents from the beginning (Patton, 1994), as parental involvement in homework has been found to lead to higher homework completion, which in turn produces higher achievement (Keith, 1992). It is very important that the consequences of not completing homework are clearly communicated to students and parents (Patton, 1994). Teachers should differentiate homework where necessary by providing different rubrics, shorter assignments, or more appropriate passages based on reading level. Time frames can also be adjusted for students with learning disabilities (McNary et al., 2005). Finally, teachers should coordinate with one another so that students are not being overwhelmed with many assignments and projects at the same time (McNary et al., 2005; Patton, 1994).

Parents are an essential element of successful homework practice; many studies and reviews of the literature have found that increased parent involvement
is associated with improved student achievement (Bennett-Conroy, 2012; Gutman & Midgley, 2000; Henderson & Mapp, 2002; Henderson, Mapp, Johnson, & Davies, 2007; Hill & Tyson, 2009; Jeynes, 2005; Simons-Morton & Crump, 2003). Teachers cannot follow students home, so it is important that parents are provided with the tools to successfully be involved with their children’s homework. A highly effective way to do so is for teachers to provide training at the beginning of the school year on how to best assist their children with their homework (Cooper & Nye, 1994; Redding, 2000; Shumow, 1998). It may also be helpful for parents to see examples of how teachers or skilled parents work with children on homework assignments (Shumow, 2003). Parents should be encouraged to serve in a supporting role (Redding, 2006). One way to accomplish this is to provide some guidance on the purpose of the assignment and how teachers would like parents to help. If parents perceive that the teachers are more interested in learning goals and in promoting higher order thinking and that elaboration and transfer of responsibility to the child are ways to accomplish those goals, then parents might be more likely to help in less controlling and more elaborative ways. (Shumow, 2003, p. 21)

Well designed homework should not require parents to teach their children acquisition-stage skills and thus will also help parents serve in a supporting role. Several meta-analytic studies have found that high parental expectations also make a significant impact on student achievement (Jeynes, 2011). Parents should create a homework environment that is conducive to learning (Cooper & Nye, 1994; Patton, 1994). There should be a specific time and area for homework completion. The area should be distraction free and have the necessary materials for completing homework (Redding, 2000, 2006). Parents should also encourage their children and maintain involvement (Patton, 1994). Teachers can assist parents by conveying these suggestions at back to school nights, in classroom newsletters, and at parent–teacher conferences.

Parent communication is also an important consideration for effective homework practices. Parents can be powerful allies for teachers, but teachers need to keep them informed (Shumow, 2011; Redding, 2000). Technology has made parent communication easier than ever for teachers. Email, phone-based homework hotlines, and online homework sites can be used to supplement traditional assignment books. Educators can survey parents to know the most convenient form of communication for each family. Keeping parents informed of assignments and when their child needs extra help is essential for effective homework practice. Additionally, teachers can provide parents with a list of suggestions on how to best help their children with homework. Report cards,
student-led conferences, and school newsletters are also valuable forms of communication (Redding, 2000). Communication is most effective when it flows in both directions, and teachers should aim to listen to and communicate with parents rather than simply informing them (Redding, 2000). When teachers include parents, a powerful alliance is formed to help children be successful and for homework to be more effective (McNary et al., 2005).

While teachers and parents can work together to positively contribute to the success of students, educators must also remember that the home environments of students are often unequal. While some students have educated parents and technology at their disposal, others live in relatively unsupervised homes—often due to parents working multiple jobs to make ends meet—without technology or other resources. Teachers need to be aware of these inequities and barriers when designing homework assignments to ensure that all students can complete the assignments successfully. In a recent study, Bennett-Conroy (2012) found that, for many parents, these barriers may be overcome when teachers design “interactive assignments which do not require reference materials or a high level of subject matter knowledge and by teacher initiated phone calls that take place when a parent has time” (Bennett-Conroy, 2012, p. 104). Older siblings and other relatives can also be a valuable resource for families, and many schools in underserved communities also provide after school programs with supervised homework help.

The final area that teachers can apply research-based practices to improve homework effectiveness is self-regulation. In order to successfully complete homework, students must learn to self-regulate (Xu, 2009; Xu & Corno, 1998) by setting goals, selecting appropriate learning strategies, maintaining motivation, monitoring progress, and evaluating homework outcomes (Bembenutty, 2011c). Students must be taught these skills, and teachers can assist students to learn self-regulating skills in a variety of ways. Teachers should reinforce the use of planners and other time management tools in the classroom. These tools should be part of classroom routines and modeled by the teacher. It is also important for teachers to 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. Finally, students must be taught how to evaluate and self-reflect. Teachers should actively scaffold and teach these metacognitive skills as part of their curriculum. By integrating self-regulation skills into the curriculum, teachers add a level of effectiveness to homework that will serve all their students throughout the rest of their lives.
Conclusion

Homework has the potential to be an extremely valuable part of students’ learning experience. The increasing frequency of inclusive classroom settings, however, makes designing and implementing effective homework a challenge for teachers. Fortunately, research has provided teachers with valuable tools and knowledge to meet this challenge successfully. It is the teacher’s responsibility to create effective homework assignments and to provide students and parents with the tools necessary for the process to be as successful as possible. If teachers make a concerted effort to utilize classroom strategies to assist students, design homework in a manner research suggests is most effective, provide opportunities for positive parent involvement, and actively teach self-regulation, they will create a homework program that sets all students up for success. Creating assignments that meet the five hallmarks of effective homework (purpose, efficiency, ownership, competence, and aesthetic appeal) will facilitate student interest in homework and promote the belief among students and parents that homework is meaningful and important (Vatterot, 2010). Educators can set students up for success by communicating with parents about homework expectations and student needs, taking into account varying exceptionalities in homework design, and teaching students self-regulation techniques through homework assignments. By taking a community approach, educators can create an atmosphere in their schools where teachers, parents, and students work together as partners in the educational journey of students. When teachers believe in the importance of their homework enough to apply research-based strategies and truly facilitate effective homework practice, they will create a classroom of learners who also believe in the importance of the work and, ultimately, of themselves.

References


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