

Distracted by Technology: Focusing Attention on Homework

By **Michael Howard** Mar 27, 2015 10:50:00 AM

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Does your child stay up all night doing [homework](#)? Is he or she often texting or online while doing homework or studying? Is it possible for students to study and do their homework effectively while being distracted by technology? Is [focusing attention on homework](#) really all that important? It's just homework, right?

Welcome to the 21st century. A world filled with distractions every where you turn. How is it even possible to get homework done at all, let alone focus on doing homework without being distracted by a wide variety of electronic gadgets. Back in the not so distant past, you might have heard a kid saying "It doesn't matter if I have the TV on while I do my homework. It's not like I'm studying for a test." Today, it's a bit more complicated as students and their smart phones are inseparable. What might at first glance seem harmless, doing homework or studying while watching TV, texting or checking social media can actually impair learning the material as well as lower test scores. Research has shown that it's one of the worst study habits a student

can develop.



Is There an App For That?

With nearly everyone over the age of 10 having a cell phone and access to the internet these days, it's quite common to find students dividing their attention between texting, checking social media websites and surfing the internet while doing homework and studying for exams. Given that text messaging is the way many students communicate with each other, it's not easy for parents to explain to them that when it's time to do homework or study for an exam it's necessary to turn their phone off.

In all likelihood, they will argue about this as students of all ages seem to have a misconception that they can pay attention to more than one thing at a time and that multitasking is an effective way to do homework or study for a test. How are you, their parent, going to respond? With research. In this blog post, we reviewed the most up to date research that we could find on the subject of multitasking to give parents a better understanding of what it takes to be a successful student.

What Does Research Show About Studying While Distracted by

Technology?

In a study conducted by Dr. Larry Rosen, a psychology professor at California State University - Dominguez Hills, students were observed studying for a 15 minute period where they were told to "study something important." He found was that students generally started to lose focus after about three minutes. On average "students only spent about 65 percent of the observation period actually studying." That's not exactly what you might consider "quality" studying time.

Dr. Rosen did another study where he surveyed high school students and asked them how often they switch from studying to doing something related to technology such as checking email, Facebook, texting or watching TV. Across all grade levels, 80% of students reported that they switch between studying and technology somewhat often to very often. Rosen calls this "Continuous Partial Attention," meaning that most of the time, students are not focused on studying but rather are moving their attention back and forth between studying and various forms of technology. As you might expect, students who were the most distracted generally had the most windows open on their computers. Students who were less distracted had higher GPAs than students who switched back and forth fairly often and those who regularly check Facebook or text messages. Students who had strategies for studying also had higher GPAs according to Rosen's findings.

Rosen explains, "Young people's technology use is really about quelling anxiety...they don't want to miss out or to be the last person to hear some news (or like or comment about a post online)." One of the major problems with texting and posting on Facebook and other social media sites while in

class and/or studying, is that "they draw on the same mental resources—using language, parsing meaning—demanded by schoolwork." Ultimately, he concludes, if we want students to learn and perform at their best, smart phones and other online distractions must be managed.

Can Doing Homework While Distracted by Technology Affect Test Scores?

In another study of 8-18 year old students done by the Kaiser Family Foundation, nearly one third of the students surveyed confessed that when they were doing homework, they were also watching TV, texting, or listening to music. Victoria Rideout, the lead author of the study, warns parents about the dangers of media multitasking. This concern is distinct from worrying about how much kids are online or how much kids are media multitasking overall. "It's multitasking while learning that has the biggest potential downside," she says.

If a student is focused when doing their homework, they actually retain more of the information when it comes time to take a test on the same subject matter. It's like studying for the test little by little and absorbing the information in small chunks. The strategy of 'chunking' bits of information has been shown to be the most effective way to learn larger amounts of information and is a useful test prep strategy. If a student does her homework while multitasking, that will result in less information being retained and therefore more time will be required for test preparation in order to achieve the same result. Compounding matters, if homework is done while multitasking in an introductory class, it will be more difficult to build on that "shaky foundation of knowledge" in

the more advanced class the next semester.

Dr. David Meyer, a psychology professor at the University of Michigan observed that “under most conditions, the brain simply cannot do two complex tasks at the same time. Listening to a lecture while texting, or doing homework and being on Facebook—each of these tasks is very demanding, and each of them uses the same area of the brain, the prefrontal cortex.” Most students incorrectly believe that they can perform two challenging tasks at the same time, according to Meyer. They may like to do it, they may even be addicted to it, but there’s no getting around the fact that it’s far better to focus on one task from start to finish.”

Quick Test for Students to Determine if Multitasking Impacts Performance

Here’s a fun, 3 minute test that you can do along with your kids to demonstrate if multitasking impacts performance (and the time it takes to complete homework). Taking this simple test will allow students to see for themselves if multitasking could potentially be affecting their studying.

<http://davecrenshaw.com/multitasking-example/>

Top 3 Negative Outcomes of Studying While Being Distracted by Technology

According to an article by [Annie Murphy Paul](#), research has shown that there are various negative outcomes that result from students multitasking while doing homework. Paul describes the top 3 negative outcomes. "First, the assignment takes longer to complete, because of the time

spent on distracting activities and because, upon returning to the assignment, the student has to re-familiarize himself with the material.” Second, the mental fatigue caused by repeatedly dropping and picking up a mental thread leads to more mistakes. “Third, students’ subsequent memory of what they’re working on will be impaired if their attention is divided.” Paul explains, “The moment of encoding information is what matters most for retention, and dozens of laboratory studies have demonstrated that when our attention is divided during encoding, we remember that piece of information less well—or not at all.”

Paul goes on to write, "Finally, researchers have found that media multitasking while learning is correlated with lower grades. In Rosen’s study (discussed above), students who used Facebook during the 15-minute observation period had lower grade-point averages than those who didn’t go on the site. In addition, two recent studies by [Reynol Junco](#), a faculty associate at Harvard’s [Berkan Center for Internet & Society](#), found that texting and using Facebook—in class and while doing homework—were negatively correlated with college students’ GPAs."

In conclusion, the evidence is overwhelming. Studying or doing homework while sitting in front of the TV, using social media or texting, makes it more difficult to learn and retain the information, increases the time it takes to complete homework, and may ultimately result in lower test scores. Is your child attached to his smart phone or other electronic gadgets? If so, and grades are suffering, it might be time to take action. Are you ready to help your child break the multitasking habit, learn to focus attention on homework and get on the path to academic success?

How Parents Can Help Children

Manage Distractions While Studying

Teach your child to take technology breaks to separate doing homework from using technology. Here's the strategy: After your child has worked on his homework without interruption for 15 minutes, he is then allowed a technology break for 2-3 minutes to text and post to social media. When the break time is up, you instruct him to turn off his electronic devices for another 15 minutes of doing homework or studying. Students can extend their working time to 20, 30 or 45 minutes and perhaps extend their technology break time to 5-7 minutes. If your child complains that the technology break time is too short, you can let him know that when he is finished with his homework, he can use technology for as long as he wants (or whatever amount of time you say is ok).

Would you like to cut your child's homework time in half?

If so, click below to download our free guide to "Cutting Homework Time in Half." You might also want to contact us to see if [Executive Function coaching can help your child with focusing attention on homework.](#)

[Download Our Student Guide:How to Cut Homework Time in Half](#)

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Attribution: A much more detailed discussion of some of these studies can be found in Slate Magazine (May 3, 2013) by [Annie Murphy Paul](#), a fellow at the [New America Foundation](#) and author of the book Brilliant: The Science of How We Get Smarter.



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