Homework, Sleep, and the Student Brain

At some point, every parent wishes their high school aged student would go to bed earlier as well as find time to pursue *their own* passions -- or maybe even choose to relax. This thought reemerged as I reread Anna Quindlen's commencement speech, <u>A Short Guide to a Happy Life</u>. The central message of this address, never actually stated, was: "Get a life."

But what prevents students from "getting a life," especially between September and June? One answer is homework.

Favorable Working Conditions

As a history teacher at St. Andrew's Episcopal School and director of the <u>Center for Transformative Teaching and Learning</u>, I want to be clear that I both give and support the idea of homework. But homework, whether good or bad, takes time and often cuts into each student's sleep, family dinner, or freedom to follow passions outside of school. For too many students, homework is too often about compliance and "not losing points" rather than about learning.

Most schools have a philosophy about homework that is challenged by each parent's experience doing homework "back in the day." Parents' common misconception is that the teachers and schools giving more homework are more challenging and therefore better teachers and schools. This is a false assumption. The amount of homework your son or daughter does each night should not be a source of pride for the quality of a school. In fact, I would suggest a different metric when evaluating your child's homework. Are you able to stay up with your son or daughter until he or she finishes those assignments? If the answer is no, then too much homework is being assigned, and you both need more of the sleep that, according to Daniel T. Willingham, is crucial to memory consolidation.

I have often joked with my students, while teaching the Progressive Movement and rise of unions between the turn of the 19th and 20th centuries, that they should consider striking because of how schools violate child labor laws. If school is each student's "job," then students are working hours usually assigned to Washington, DC lawyers (combing the hours of the school day, school-sponsored activities, and homework). This would certainly be a risky strategy for changing how schools and teachers think about homework, but it certainly would gain attention. (If any of my students are reading this, don't try it!)

So how can we change things?

The Scientific Approach

In the study "What Great Homework Looks Like" from the journal <u>Think Differently and Deeply</u>, which connects research in how the brain learns to the instructional practice of teachers, we see moderate advantages of no more than two hours of homework for high school students. For younger students, the correlation is even smaller. Homework does teach other important, non-cognitive skills such as time management, sustained attention, and rule following, but let us not mask that as learning the content and skills that most assignments are supposed to teach.

Homework can be a powerful learning tool -- if designed and assigned correctly. I say "learning," because good homework should be an independent moment for each student or groups of students through virtual collaboration. It should be challenging and engaging enough to allow for deliberate practice of essential content and skills, but not so hard that parents are asked to recall what they learned in high school. All that usually leads to is family stress.

But even when good homework is assigned, it is the student's approach that is critical. A scientific approach to tackling their homework can actually lead to deepened learning in less time. The biggest contributor to the length of a student's homework is task switching. Too often, students jump between their work on an assignment and the lure of social media. But I have found it hard to convince students of the cost associated with such task switching. Imagine a student writing an essay for AP English class or completing math proofs for their honors geometry class. In the middle of the work, their phone announces a new text message. This is a moment of truth for the student. Should they address that text before or after they finish their assignment?

Delayed Gratification

When a student chooses to check their text, respond and then possibly take an extended dive into social media, they lose a percentage of the learning that has already happened. As a result, when they return to the AP essay or honors geometry proof, they need to retrace their learning in order to catch up to where they were. This jump, between homework and social media, is actually extending the time a student spends on an assignment. My colleagues and I coach our students to see social media as a reward for finishing an assignment. Delaying gratification is an important non-cognitive skill and one that research has shown enhances life outcomes (see the <u>Stanford Marshmallow Test</u>).

At my school, the goal is to reduce the barriers for each student to meet his or her peak potential without lowering the bar. Good, purposeful homework should be part of any student's learning journey. But it takes teachers to design better homework (which can include no homework at all on some nights), parents to not see hours of homework as a measure of school quality, and students to reflect on their current homework strategies while applying new, research-backed ones. Together, we can all get more sleep -- and that, research shows, is very good for all of our brains and for each student's learning.