



THE CENTER *for* TRANSFORMATIVE  
TEACHING & LEARNING  
AT ST. ANDREW'S EPISCOPAL SCHOOL

## The Bridge

v.1.6

Welcome back to *The Bridge*, the monthly newsletter of the Center for Transformative Teaching and Learning. Each month *The Bridge* analyzes a specific aspect of teaching and learning through a Mind, Brain and Education Science research-informed lens.

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### What if your pilot was texting and flying? The Value of Monotasking Inside and Outside the Classroom

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What if your pilot was texting and flying? Morris Bates, a recent visitor

to St. Andrew's with eighteen years of experience as a pilot, describes monotasking as one of the most important skills of pilots today. Learning from accidents in the past, designers of pilot training programs emphasize the importance of identifying roles: designating one person to completely focus on flying, while the other pilot in the cockpit focuses on monitoring the route. As a pilot in an increasingly technologically saturated world, Mr. Bates struggles with the challenge that we as educators also face: how do we use computers as a tool without becoming distracted and reliant on them, to the detriment of our safety and learning?

We know that there is no such thing as "multitasking." The brain cannot multitask; instead, it quickly switches from meeting the demands of one task to meeting the demands of another. There is a switching cost for doing so, which results in more effort for less efficient performance. We need to repeatedly coach students to create environments where multitasking is limited. We should strive to have our students, like pilots, focused on one task at a time.

Cognitive mapping happens in active working memory, which holds less things for fewer time than most people imagine. Anything that takes up valuable slots in active memory is detrimental to learning. Although it is difficult in a world saturated with technology to focus on one task, monotasking can actually make the work more enjoyable as well as more productive.

Have you ever eaten dinner with someone who constantly checks their phone? Do you yourself struggle to have a conversation digitally and simultaneously listen and understand what your student, family member or friend is saying? In addition to crippling productivity, multitasking takes a toll on relationships. Research shows that just having a phone on the table can lead to reduced empathy and connection between two people who are having a conversation.

The strength of the relationships between teachers and their students is pivotal for academic success; when students make an emotional connection with their teachers, they are better able to learn and increase their capacity for self-efficacy. Therefore, we as teachers must strive to model monotasking ourselves. It can be as simple as having a conversation during which we actively listen to what a student has to say, which means putting away our work, paying attention to the student and mirroring his or her body language.

Even though not all of us are pilots, we could all benefit from monotasking. Learning happens when new experiences connect to existing knowledge, and this can only happen when deep cognitive engagement occurs. Attention is the key for this deep engagement; without attention, learning doesn't happen.

## Works Cited

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Interested in participating in our professional development adventure this summer? [Click here for information regarding the Science of Teaching and School Leadership Academy](#), a five-day workshop co-designed by the CTTL and individual faculty from Harvard's Graduate School of Education and the Johns Hopkins University Science of Learning Institute.

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