Dr. Gregory Callan's Featured Publication Spotlight

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**Who are the colleagues that you published with?**

My co-author on this manuscript was my graduate school mentor, Tim Cleary. Tim always emphasized the importance of work that is grounded in theory and supported by empirical evidence. His notion is central to the purpose of this paper and future work.

**How does this publication fit into your line of research/inquiry?**

My research primarily examines self-regulated learning (SRL), which includes a variety of sub-processes such as setting goals, planning, and holding adaptive motivational beliefs before a task, using strategies and monitoring during a task, and then evaluating if goals were met, identifying why one succeeded or failed, and adapting for future performances after the task.

Although I have used a variety of measurement techniques to assess SRL, I often use interviews that are completed while learners engage in a target task (e.g., math problems, creative problem-solving, studying). Given that these interviews provide real-time data, they entail a unique opportunity to explore a critical theoretical assumption of SRL. Specifically, this assumption (called the cyclical assumption) is that regulating one’s learning before a task leads to better SRL during the task, which subsequently improves SRL after the task. This assumption then suggests that the SRL improvements after the task sets the stage for an individual to approach that task more adaptively in the future. This critical assumption is rarely tested empirically.

**What makes this publication special?**

What I find most interesting in this paper is that my results supported several aspects of the theory, but not others. To me, this may mean that the cyclical assumption of SRL is more complicated than initially believed. This has important implications for SRL training. For example, if training some SRL processes naturally leads to improvements in subsequent processes (a sort of domino effect), then SRL training may be more efficient if we identify and target the key players in this domino effect. If some processes are excluded from this domino effect, then they may need to be taught individually.

**How does it impact the publications that will follow?**

My students and I have begun a systematic review of publications using real-time interviews. We are examining the findings to explore additional evidence for and against the cyclical assumption of SRL. It is still too early to tell, but our findings could lead to a revision of the most popular theoretical model of SRL. This is both exciting and intimidating because that model is very prominent in our field as has been cited over 7,000 times.