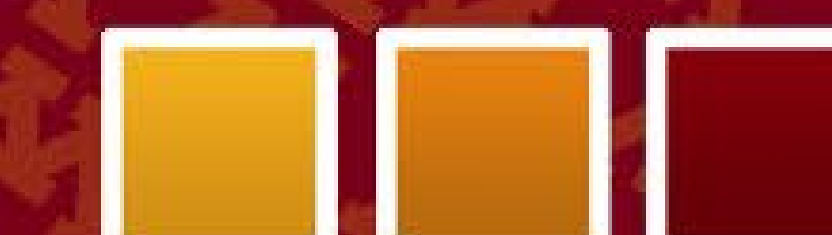


Developing a Study Guide Calendar to Reduce Procrastination

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Abstract

Students may not realize that their study habits and time management skills are ineffective when entering college. As a result, students may tend to procrastinate, feel discouraged about studying, or don't know where to start. The purpose of this study is to determine if implementing a study guide calendar will reduce a student's desire to procrastinate and improve their academic performance in the MLSP 5313 Chemistry course. The questions from the study guide calendar will be implemented into the Fall 2025 MLSP 5313 Canvas course page as semi-daily assignments. Answers to the questions will be released the next day. Pre- and post-course surveys will be used for students to record tendencies of procrastination. BOC and final course grades will be collected from those who participated and compared to the previous cohort scores. This will determine the effectiveness of the calendar in improving academic performance. The most effective study strategies that past studies have identified are spacing study times and using retrieval studying. Interventions using these methods resulted in increased academic performance and improved time management skills. With these findings, it is hypothesized that this study guide calendar will produce similar results. In the future, by implementing these semi-daily questions, students may find themselves having more productive studying and have improved academic performance.

Introduction

Effective Study Strategies

Students' study strategies may have been effective in high school, but as they enter college, they become ineffective. Using flashcards, studying the night before an exam, and underlining or highlighting are a few common low-impact strategies that students have relied on. High-impact strategies, i.e. spacing, self-testing, or diagrams, are less commonly used among students due to their belief that they are learning less compared to cramming and rereading. Rinella & Putnam (2022) have found that instead of using quizzes or self-testing strategies as a study tool, students use these strategies to determine how much they have learned.

Types of Procrastination

Salguero-Pazos and Reyes-De-Cózar (2023) performed a systematic review of educational interventions created to reduce academic procrastination. They defined procrastination as "a common phenomenon that consists of postponing or delaying an activity for later, replacing it with another of lesser importance." The authors found that procrastination can be divided into different styles based on psychological, personal, and pedagogical factors. One article the authors found classifies procrastination into four types: Thrill Seekers, Impulsives, Undecided, and Avoiders. Salguero-Pazos and Reyes-De-Cózar concluded from their findings that classroom interventions focused more on self-regulation with emotion regulation and time management as the top subcategories.

Methods

The study guide calendar will be implemented into the MLSP 5313 chemistry course during the Fall 2025 semester. The questions from the calendar are developed based on the course objectives and materials. Students will be given a short answer assignment that will not affect their course grade. The answers will be released the following day. Students who participated and completed the assignments will be used to collect data for the pre- and post-surveys and course/BOC score comparisons.

Results

Table 1: High-Impact vs. Low-Impact Study Strategies

High-Impact Study Strategies	Low-Impact Study Strategies
Spacing study times throughout the day or week	Cramming the day before the exam
Creating diagrams, pictures	Highlighting or underlining
Self-testing or practice quizzes	Rereading notes or chapters
Flashcards	Copying notes word for word



Figure 1: Study Guide Calendar

References



Discussion

Procrastination and Time Management

Besides effective study strategies, many students, especially neurodivergent students, have difficulty managing their time or reducing procrastination. Procrastination can be separated into different states. The main dimension of procrastination that Salguero-Pazos and Reyes-De-Cozar found in their systematic review is self-regulation with a subcategory of time management. Few universal procrastinator tendencies are thrill seekers, impulsive, undecided, and avoiders. In Romero-Perez & Sanchez-Lissen's (2022) critical review, they found that time management can be malleable and trainable, and implementing support programs for neurodivergent students can aid them in finding strategies that work for them. Implementing time management workshops in the classroom has been seen to increase academic performance and students have commented that they feel "seen and heard" by their instructors.

Study Strategy Survey Results and Time Management Tools

Many effective study strategies and time management tools are available for students. Common time management tools presented through classroom interventions include calendars, the Pomodoro technique, to-do lists, and the Eisenhower Matrix. After implementing classroom interventions, student survey answers indicate that they have adopted recommended high-impact study strategies and time management tools and had increased academic achievement.

Conclusion

Many classroom interventions have been implemented to help students develop effective study strategies or time management skills. The findings from these studies show that the interventions increase academic achievement and/or reduce procrastination tendencies. The study guide calendar aims to combine the most effective study strategies and time management skills from these studies to produce similar results. Though it will be implemented in the upcoming 2025 Fall semester, the future results from this intervention may provide more information on effective study strategies and time management skills.

