Studyo

Promoting Students' Executive Functions and Self-Regulated Learning

A digital planner with integrated learning science makes it easy to promote lifelong skills for success on a daily basis.

In an era where the educational landscape is rapidly evolving to meet the demands of the 21st century, leveraging the power of educational technologies has proven critical in facilitating students' development of skills and competencies required for academic excellence and personal growth. Two of these skills are executive functions (EFs) and self-regulated learning (SRL). EFs encompass developmental processes that guide and regulate thought and behavior, while SRL skills reflect students' awareness of their learning strengths and weaknesses (metacognitive), persistence in overcoming challenges (motivated), and strategic learning approaches [1,2]. Both EFs and SRL have proven critical in helping students adapt to environmental demands such as academic standards and social expectations, and ultimately enable students to achieve their goals [2,3].

Research findings with learners from kindergarten to high school have demonstrated that EFs predict academic success when controlling for IQ, and facilitate the development of more sophisticated cognitive processes involved in SRL like metacognition [4,5]. Additionally, **students who display effective SRL skills tend to have better academic outcomes across various learning domains and levels of education** [2, 6].

Moreover, SRL skills are related to positive interpersonal functioning and provide people with the tools necessary to become lifelong learners [6].

Given these positive outcomes, it's no wonder that education research on self-regulated learning has sought to understand how best to develop these skills in classroom settings.

A successful method to support students' EFs and SRL skills involves guiding them to manage their own learning through consistent practice in planning and monitoring their progress. Research findings suggest that embedding EF's into everyday activities may offer effective opportunities to train students' EFs [7]. Additionally, research indicates that explicitly integrating instruction for SRL in typical learning activities can provide opportunities for students' to develop their SRL skills [8]. Gradually increasing students' responsibility for their academic success has also been shown to boost motivation for learning and SRL skills [3,9]. Despite recognizing the importance of EFs and SRL, many educators and school districts face challenges in supporting these skills due to limited resources and training[10]. There's a clear need for scalable,
cost-effective solutions rooted in learning theory to support students' EFs and SRL skill development.

Over the last ten years, Studyo has been effective in addressing the persisting needs of students, teachers and district leaders. Studyo is a user-friendly planning and coordination software that can effortlessly integrate information into its interface from schools' existing learning management systems, aiding students in managing their schedules and tasks more effectively. The Studyo planner aims to foster student agency over their learning journey as they input their tasks and make decisions about their workload. This tool may help facilitate students' EFs as they practice keeping important information in mind, breaking down tasks into manageable segments, and exercise autonomy when planning their workload over time.

As EFs lay the groundwork for SRL processes like metacognition [1, 5], Studyo may also indirectly support the development of students' SRL. By **helping students create clear task timelines spanning days, weeks, and semesters, Studyo enhances students' planning, goal-setting, and prioritization skills**—all crucial components of SRL [3, 6]. Moreover, it facilitates students' ability to monitor and evaluate their progress toward learning goals, which may further enhance their SRL processes [2]. Studyo's integrated analytic features

also empower teachers to monitor students' EFs and SRL skills. This insight enables educators to tailor instructional practices to align with students' individual needs, such as adjusting scaffolding levels, which are crucial for supporting SRL based on students' abilities [11].

Studyo offers a comprehensive solution for schools as its features empower teachers and administrators to develop improved instructional practices and policies that foster an environment wherein students' EFs, SRL and ultimately their academic success and well-being are supported. Through teacher training, Studyo empowers educators to support students' growth in these domains. Not only do our clients report that Studyo has been an integral strategy for targeting students' learning processes, but that it has also improved their communication strategies, ultimately reducing teacher workload. In all, our clients have seen great success in creating a school-wide culture that emphasizes the importance of students' EFs and SRL skills. Our clients show a 95% daily student engagement rate and have chosen to renew their license year after year. When integrated into their daily learning activities, Studyo can provide school districts with an organizational tool that instills student accountability and cultivates a culture of adaptive executive functioning and self-regulation that may continue to expand well-beyond school years.

Contact us to learn more about how we help schools promote executive function and self-regulated learning.

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