COMMENTARY

Thriving in remOTe learning: Promoting self-regulated learning of students in an online learning context

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ABSTRACT

The shift to remote learning during the pandemic highlighted the importance of self-regulated learning (SRL). Education scholars posit that SRL promotes positive remote learning experiences in various student populations. Students cannot be expected to be self-regulated learners in a remote setup by exposing themselves to online courses alone. Thus, the Department of Occupational Therapy of the University of the Philippines Manila College of Allied Medical Professions created a webinar based on the constructs of SRL to aid students in transitioning to this setup. The webinar was organized for students to understand the concept of SRL and to identify SRL strategies they can use. Faculty shared practical tips, personal experiences, and contextualized examples on how students can use these strategies to thrive in the remote setup. Given the positive feedback, there is value found in similar activities to utilizing SRL dimensions to prepare students for remote learning. Recommendations for future studies about SRL are stated.

Keywords: Self-regulated learning, self-regulation, online learning, remote learning

Background

Self-regulated Learning

Self-regulated learning (SRL) is important in promoting positive and successful learning experiences among students [1,2]. A widely common and accepted definition of SRL is that of Zimmerman which pertains to an individual's ability to initiate, sustain, control, and adjust their learning processes and behaviors in response to feedback from themselves and their environment. SRL emphasizes personal autonomy and control to acquire the knowledge and skills needed to achieve their academic goals [3-6]. Students use strategies involving metacognitive, motivational, and behavioral processes to actively think, perform, and self-reflect [6,7].

Dimensions of Self-regulated Learning

The dimensions of SRL originating from Zimmerman's Cyclical Phases Model [8,9] show that a process of forethought, performance, and self-reflection can influence how students approach academic tasks. In schools, students set goals, face obstacles, and create plans (forethought phase)

at the start of a learning task. During the learning process, students use a variety of strategies to help themselves learn and focus on tasks (performance phase). When the activity is complete, the students reflect on their performance and output, and evaluate the learning process and the outcome they have experienced (self-reflection phase). Thus, education scholars advocate the use of SRL strategies in various student populations to support the achievement of academic outcomes. In remote learning contexts, these can help students optimize their academic performance by strengthening their independence and ability to manage their own learning pace and context [10].

Self-regulated Learning in the COVID-19 Remote Learning Context

The shift to remote learning brought about by the COVID-19 pandemic highlighted the importance of SRL among students [1,11,12]. Academic success in remote learning is directly proportional to the students' ability to manage and cope with learning [6]. However, students cannot be expected to become self-regulated in remote learning by simply exposing themselves to online courses [13]. Most students are new or transitioning to this learning context and might not have adjusted their existing SRL strategies to match the demands of remote learning, negatively affecting their academic performance. For example, a study on SRL in medical students enrolled in flipped learning environments found that the students often used planning and reflecting strategies, but needed more guidance in monitoring strategies [14]. However, students who are more confident in their SRL skills can more easily adapt to the remote learning context [10], and these contribute to their intrinsic motivation to adjust their learning processes and behaviors to match the new learning context [15].

Intervention

In order to facilitate transition and adaptation to the remote learning context of its students, the Department of Occupational Therapy (DOT) of the University of the Philippines Manila College of Allied Medical Professions adopted Zimmerman's Cyclical Phases Model to design and organize a webinar introducing students to SRL and its strategies.

Objectives

After the webinar, the department expected that students would be able to:

Understand the concept of SRL and its associated strategies
 Identify various SRL strategies to aid in remote learning

Implementation and Instructional Design

The webinar was initially offered to UP Manila BS Occupational Therapy (OT) students but was also conducted for students in other Philippine OT programs, other UP Manila students through the Alternative Class Learning Experiences (ACLE), and UP Manila Master of Physical Therapy students (UPM-MPT). These were conducted at the beginning of each semester of Academic Years 2020-2021 and 2021-2022. The webinar consisted of 10-minute lectures tackling six SRL strategies used in the remote learning context proposed by Barnard et al. [8], namely goalsetting, task strategies, time management, environmental structuring, help-seeking, and self-evaluation (Table 1). Aside from the use of various instructional strategies, the faculty also shared practical, context-based tips and personal experiences to concretize the concepts for the students. Live open fora were conducted at the end of each webinar to address questions and to facilitate peer sharing and discussion.

Results and Discussion

A total of 429 undergraduate students and 11 graduate students attended the two live and five recorded runs of the webinar. Majority of the participants were students from other OT schools in the Philippines (46.59%). Table 2 shows the breakdown of the number of participants. A total of 294 (66.82%) participants completed the evaluation forms, revealing positive ratings for the contents and relevance of the webinar.

Based on the results of these forms, students appreciated the chunking of similar strategies into the six webinar lectures. Some students reported that they were already doing or were planning to do some of the mentioned strategies, so the webinars helped deepen their understanding and reinforce their current and future strategies. Although the shared strategies were derived from literature and personal experiences of the faculty, examples were adapted to consider the remote learning context and the contexts of the student groups. For example, other roles (e.g., working professional, parent) of MPT students and the availability of current and free software applications for time management were considered in illustrating strategies. These contextually-based recommendations may have piqued the interest and participation of the student groups as some remarked that the strategies were relevant, relatable, and practical to their own contexts.

Students also appreciated the open fora as these gave them the avenue to clarify strategies, ask for advice, and share their own strategies with others. Students mostly asked about how to address procrastination, how to make their home study area as conducive as a pre-pandemic public study area (*e.g.* library, cafe), and how to manage time for self-care and leisure with their study demands. Due to limited time, unanswered questions during the webinars were compiled and answered by the Department through a Frequently Asked Question sheet. Students also recognized this limitation and cited that the webinars can be improved by providing more time for interactive discussion and for each strategy to be explained further.

Conclusion and Recommendations

The shift to remote learning due to COVID-19 triggered the need to aid students in developing SRL to manage their learning goals in a new context. Students who are metacognitively, motivationally, and behaviorally active in their own learning are bound to achieve more academic success. The Department's SRL webinar has proven to be effective in facilitating the development of SRL and its strategies among its students. Given the generally positive feedback, the Department will continue to offer the SRL webinars and adapt the content and delivery



Table 1. Instructional Design for DOT Webinar on	Remote Self-regulated Learning	Strategies [11]
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Zimmerman's Cyclical Phases Model [8,9]	Strategy	Definition [16,17]	Objectives	Webinar Content	Instructional Strategies
Forethought phase	Goal-Setting	Planning out and setting tasks to achieve a goal	 To evaluate one's own motivations and goals To understand the steps of goal-setting To create SMART goals for academic tasks 	 Steps of goal- setting; Definition of SMART goal-setting 	 Reflection points; Verbal instruction; Visual aids; Goal-setting exercise
Performance phase	Task Strategies	Strategizing mechanisms in achieving a set goal	 To evaluate one's own work and study habits To identify task strategies that will aid in achieving set goals 	 SRL task strategies to increase productivity and manage time; Sample SRL tools, apps 	 Reflection points; Verbal instruction; Visual aids
	Time Management	Planned use of time to carry out tasks efficiently based on an established time or deadline	 To identify SRL strategies that improve time management To identify various tools and applications to promote SRL 		 Verbal instruction; Visual aids
	Environmental Structuring	Creating an environment that facilitates learning	 To understand the importance of work or environmental set-up in supporting learning To identify ways to curate or modify the environment to support learning 	 Importance of the environment set-up in supporting SRL; How to set up work or study environment to maximize SRL 	 Verbal instruction; Visual aids
	Help-Seeking	Requesting assistance as needed in remote learning	 To understand the difference of instrumental and expedient help in remote learning To identify resources available to support students in remote learning context 	 Definition of help-seeking; Different kinds of help; Benefits of seeking help; University resources 	 Reflection points; Verbal instruction; Visual aids
Self-reflection phase	Self-Evaluation	Process of reflecting on performance based on criteria set in goal setting	 To understand the purpose and benefits of self-evaluation in learning To identify strategies that promote self- evaluation behaviors 	 Definition and importance of self- evaluation; Self-evaluation strategies 	 Reflection points; Verbal instruction; Visual aids

Participant group	n = 440	Percentage
UP Manila BS OT students	130	29.55%
Run 1: September 2020	99	
Run 2: September 2021	31	
UP Master of Physical Therapy students	11	2.50%
Other Philippine OT Schools, in collaboration with Occupational Therapy Students Assembly	205	46.59%
Run 1: October 2020	154	
Run 2: November 2020	51	
Alternative Class Learning Experience (2 consecutive runs)	94	21.36%

based on participating students' learning contexts. However, an evaluation of the students' SRL skills through pre- and postsemestral or academic year assessments is recommended. This will better evaluate if the participants were able to apply the SRL strategies taught in the webinars. Knowing these will provide the Department with insights on how to further improve the SRL skills of students in both traditional and remote learning contexts.

Further studies on how the SRL process changes and knowing which SRL strategies work best in the remote learning context will advance understanding of the challenges and opportunities posed by this new learning context to the academe. The differences in context among students is also an important factor to examine as this may indicate different demands and different SRL strategies. Moving forward, knowing which SRL strategies are most employed and effective for students in the remote learning context will also help academicians adjust their instructional strategies to promote academic performance and achievement.

Competing Interests

The authors have no competing interests to declare.

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