

HIGH SCHOOL STUDENTS' USE OF SELF-REGULATED LEARNING STRATEGIES IN AN ONLINE ENGLISH COURSE DURING THE COVID-19 PANDEMIC

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Received:	21/7/2022	Self-regulated learning (SRL) is essential to language acquisition since learners may self-regulate their learning process. However, the use of SRL strategies among EFL students at all educational levels, including high schools, remains challenging, especially in online courses during the Covid-19 pandemic. Therefore, this study aims to investigate the extent of students' use of SRL strategies in an online English course during the covid-19 pandemic. The study was conducted at a high school in Vietnam with the participation of 124 tenth graders. To collect data, the questionnaire and semi-structured interview were employed. The findings of the study revealed that among 7 categories of SRL strategies, 6 of them were used by the majority of students at a moderate level. The only category that was used at a high level is "environmental structuring strategies". Based on the findings, pedagogical implications are presented for teachers and students to enhance online English teaching and learning in high schools in general.
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VIỆC SỬ DỤNG CHIẾN LƯỢC HỌC TẬP TỰ ĐIỀU CHỈNH CỦA HỌC SINH PHỔ THÔNG CHO KHOÁ HỌC TIẾNG ANH TRỰC TUYẾN TRONG ĐẠI DỊCH COVID-19

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THÔNG TIN BÀI BÁO		TÓM TẮT
Ngày nhận bài:	21/7/2022	Học tập tự điều chỉnh là cần thiết để thụ đắc ngôn ngữ vì người học có thể tự điều chỉnh quá trình học tập. Tuy nhiên, việc sử dụng các chiến lược học tập tự điều chỉnh của học sinh học ở tất cả các cấp học, bao gồm các trường trung học, vẫn còn nhiều thách thức, đặc biệt là trong các khóa học trực tuyến trong đại dịch Covid-19. Do đó, nghiên cứu này nhằm chỉ ra mức độ sử dụng chiến lược học tập tự điều chỉnh của học sinh phổ thông trung học trong một khóa học tiếng Anh trực tuyến trong đại dịch covid-19. Nghiên cứu được thực hiện tại một trường phổ thông tại Việt Nam với sự tham gia của 124 học sinh lớp 10. Để thu thập dữ liệu, bảng câu hỏi và phỏng vấn đã được sử dụng. Kết quả của nghiên cứu cho thấy trong 7 chiến lược, 6 chiến lược được đa số học sinh sử dụng ở mức độ vừa phải. Chiến lược duy nhất được sử dụng ở mức độ cao là "chiến lược cấu trúc môi trường". Dựa vào kết quả nghiên cứu, một số gợi ý được đề xuất cho giáo viên và học sinh nhằm nâng cao việc dạy và học tiếng Anh trực tuyến trong trường phổ thông nói chung.
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1. Introduction

The COVID-19 pandemic, which has infected seventy percent of the world's student population due to complete or partial school shutdowns [1], has had a direct impact on teaching and learning in Vietnam. As a result of the closures, Vietnamese schools have been forced to use online training materials. The Ministry of Education and Training of Vietnam (MOET) has endorsed online learning, a mode of providing education to geographically separated learners since online learning academic achievement would be officially recognized [2]. In traditional classroom learning, "Self-regulated learning (SRL) is considered to be one of the influential aspects of educational success" [3, p. 540]. As SRL strategies are important in typical face-to-face (FTF) classes, it is logical to suppose they will be much more crucial in an online class. Since online learning is characterized by autonomy, it is believed that self-regulation becomes a vital component of success in this virtual setting [4, p. 298]. However, the significance of SRL strategies has not gotten the same attention in the online environment as it has in the regular instructional context.

In order to study online effectively, students must actively "engage in their own learning and assume responsibility for it" [5, p.22]. Students with SRL use a number of learning strategies to improve self-awareness, environmental, cognitive regulation, and learning process adjustment. Learners who are highly self-regulated feel motivated because they believe their ability to leverage and alter learning strategies is imperative for success [6, p.27]. However, it is unrealistic to expect students to enter a course with the ability to manage their own learning, in fact, "students often may not self-regulate during their learning" [7, p.6]. While learning online, "students often lack the necessary self-regulated learning skills to be successful in reaching their goals" [8, p.123] since students are frequently required to perform multiple school tasks with little or no assistance from peers or teachers. This raises the very real possibility that a substantial proportion of students are not as successful as they may be in online learning settings due to a lack of SRL strategies proficiency.

The majority of the students at Dao Son Tay High School (DHS) seem not very active in their English learning as many of them are still dependent on their teachers. Therefore, it is critical for teachers to provide opportunities for students to become aware of SRL to manage the process of learning as well as to use SRL strategies to learn online more efficiently. Perhaps most importantly, there is a need to "learn how best to promote an individual's self-regulatory learning skills at various developmental stages, from nursery school children through college and adult lifelong learning" [9, p.767]. If the role of an educator is to help students become better learners, then courses must be designed not only to satisfy specified unit outcomes but also to scaffold the development of self-regulatory skills. Additionally, there are limited studies that look into how high school students use SRL strategies in online English courses. This study was conducted to bridge this research gap. The research results are expected to inform educators and curriculum designers of the value and necessity, promotion, evaluation and significance of SRL strategies in and through online learning environments. There is a strong need for investigating SRL strategies used by the students in the context of this study to help them better cope with online learning for such a long period of time. This study endeavours to answer the following question: To what extent do students use SRL strategies in the online English course at Dao Son Tay High School during the COVID-19 pandemic?

2. Research methodology

2.1. Research site and participants

The research site of this study is Dao Son Tay High School (DHS) in Thu Duc City. The school has 105 staff members for the 2021-2022 academic year, with almost 2000 students divided into three levels. Despite the fact that the school is located quite far from the city centre and has limited facilities, the professional quality of the school has been enhanced and stabilised thanks to the efforts of the staff and students. DHS offers a vibrant college-preparatory curriculum that emphasises breadth and depth of study across a broad range of topics while also offering unique chances for

advanced classes and independent study. DHS follows a philosophy that puts students at the centre of their education in a dynamic environment that encourages them to think critically and actively engage in their own education. While college readiness is crucial, DHS's goal is to help students develop into responsible, respected citizens who are accountable for themselves and others.

The sample consisted of 124 students from 3 classes at DHS. The total number of male students participating in the study was 66 (53.2%), while that of females was 58 (46.8%). 90 students (72.6%) assume their English proficiency at the elementary level, 13 students (10.5%) assume their English proficiency at the pre-intermediate level, 15 students (12.1%) assume their English proficiency at the intermediate, 6 students (4.8%) assume their English proficiency upper-intermediate level. 114 students (91.9%) have attended from 1 to 3 online English courses, 5 students (4%) have attended from 4-6 courses and 5 students (4%) have attended 7 courses.

2.2. Research instrument

This study employed the closed-ended questionnaire and interview to collect data. The questionnaire which was partly adapted from the studies by Jansen, et al., Zheng, et al., and Su, et al. [10], [11] and [12] consists of two parts. The first part inquiries about the participants' personal information. The second part includes 28 items seeking to find participants' SRL strategies use in 7 sub-strategies of goal-setting and planning, task, self-evaluation, time management, environmental structuring, persistence and help-seeking. Cronbach's Alpha α of the questionnaire was at .928 so the reliability of the questionnaire was very high. Furthermore, the interview consisting of 7 open-ended questions was used to collect qualitative data to gain a deeper understanding of the participants' perceptions and to support quantitative data collected from the questionnaire to investigate the use of the 7 above-mentioned categories of SRL strategies.

2.3. Procedures for data collection and analysis

The questionnaire was piloted with 20 tenth graders who did not participate in the study. In terms of data collection, the questionnaire was created on Google Form, and then a link to the Google Form was sent to 130 students in three classes. It took the participants around 20-25 minutes to complete the questionnaire; nonetheless, finally, among 128 copies were returned, 124 of them were valid. A week after the questionnaire administration, 10 students volunteered to join the semi-structured interview. The interviews were conducted to ask about SRL strategies use during online learning. In addition, audio recordings were employed for later transcription and analysis of the interviewees' responses.

With respect to data analysis, SPSS software was used to analyze the quantitative data. Mean (M), standard deviation (SD), and frequency were calculated. The meaning of the means (M) scores for students' use of SRL strategies were interpreted as follows: Based on the calculated interval coefficient for four intervals in five points ($5-1=4$), intervals with the range of 0.80 (4/5) were arranged. The following criteria in the Likert type scale were used to interpret the data: not at all true /very low (M=1.00 -1.80); rarely true /low (M=1.81 - 2.60); sometimes true / moderate (M=2.61-3.40); often true / high (M=3.41 - 4.20); always true/ very high (M=4.21 -5.00). "Content analysis" was employed for analyzing the data collected from the interviews. The students were coded as S1, S2, S3,...and S10, and the interview questions were coded as IQ1, IQ2, IQ3,..., and IQ7.

3. Results and discussion

3.1. Results

The extent of using SRL strategies among students was expressed clearly through the data which were collected from the questionnaire and semi-structured interview and are presented in Table 1 below. It can be seen in the table that among 7 categories of SRL strategies, "environmental structuring strategies" were the most frequently used by EFL high school students with $M=3.61$ & $St. D=.88$, followed by "persistence strategies", "help-seeking strategies" and "task strategies" with $M=3.29$ 3.17 & 3.1 and $St. D=.81$, .89 & .72 respectively.

The three least frequently used strategies that EFL high school students applied were “goal setting and planning strategies”, “self-evaluation strategies” and “time management strategies” with $M=2.69$, 2.88 , & 2.83 and $St. D=.83$, $.82$ & $.83$ respectively. It can be concluded that the level of using SRL strategies was moderate with $M=3.08$ and $St. D=.82$, which revealed that students sometimes used SRL strategies.

Table 1. Descriptive Statistics of 7 categories of SRL strategies

No.	Categories of SRL Strategies	N=124		
		Mean	St. D	Extent/ Level
1	Goal setting and planning strategies	2.69	.83	Moderate
2	Task strategies	3.10	.72	Moderate
3	Self-Evaluation strategies	2.88	.82	Moderate
4	Time management strategies	2.83	.83	Moderate
5	Environmental structuring strategies	3.61	.88	High
6	Persistence strategies	3.29	.81	Moderate
7	Help-seeking strategies	3.17	.89	Moderate
	Total	3.08	.82	Moderate

More specifically, regarding the category of “**Goal setting and planning strategies**”, among four strategies related to it, “setting short-term or long-term goals in learning” was used this strategy at a low level with $M=2.53$ & $St. D = .95$. However, the other three strategies were used at a moderate level. For more details, the students set goals “to help them manage their studying time”, “to learn language aspects”, and “to memorize words or vocabulary in a task” with $M= 2.69$, 2.75 & 2.81 and $St. D= 1.02$, $.96$ & 1.04 respectively. Regarding qualitative data collected from the interviews, responses of IQ1 showed that 6 out of 10 students reported that more or less they set goals for this online course. For example, several students expressed: *“I planned to make good use of my study time this semester. I also sometimes made specific goals for each unit, like vocabulary or grammar, and tried my best to reach them ”.* (S5); *“I wanted to get better at listening, writing, and speaking English after this class, so I set goals to improve these skills. I thought about what I wanted to learn in each class.* (S10); *“I wanted to have better results this semester. I made a plan for how to spend my time wisely and effectively so I could meet my learning goals”.* (S9)

In terms of the category of “**Task strategies**”, among four strategies related to it, “taking thorough notes for the online course” was employed by most students with $M=3.74$ & $St. D=1.02$, showing that this strategy was used at a high level. Nonetheless, the other three strategies were used at a moderate level, including “reading of online materials”, “pre-class assignment preparation”, and “doing additional activities” with $M= 3.15$, 2.88 & 2.64 and $St. D=.99$, $.91$ & 1.01 respectively.

With respect to qualitative data collected from the interviews, responses of IQ5 showed that 8 out of 10 students reported that they substantially used task strategies for this online course. For example, *“I wanted to improve my listening skill so I watched English videos lessons and did extra listening tasks. I also took detailed notes”* (S2); *“I did more exercises to improve my grammar. I always made notes of grammar points in the class and revised them carefully at home.”* (S5)

When it comes to the category of “**Self-evaluation strategies**”, it has four strategies. “Summarizing what students learned in this online course” was used at a low level with $M=2.56$ & $St. D = .99$. Meanwhile, the other three strategies were used at a moderate level, including “checking how well students achieved their objectives”, “communicating with classmates to compare what students learned” and “to assess their academic progress” with $M= 2.60$, 3.23 & 3.15 and $St. D=1.01$, 1.09 & 1.09 respectively. Concerning qualitative data collected from the interviews, responses of IQ7 showed that 8 out of 10 students reported that more or less they self-evaluated what they learned during this online course. For example, several students expressed: *“I tried to see how much I had improved by taking online class tests again. When I had some extra time, I did more tests and looked over the final results. I also talked to my friends about my classes and grades, and I asked my teacher for the results of my progress tests to see how well I*

was learning" (S8); *"If I did not know the answers to some questions on an online English test, I would either ask my teacher for the right answers or take the test as many times as I could to remember the information. I also asked my friends to measure how well I spoke English."* (S2)

With respect to the category of **"Time management strategies"**, there are four strategies related to this category. All of them were used at a moderate level, including "allocating studying time for this online course", "scheduling time to study for this online course", "effort to complete the weekly assignments for this online course", and "distributing their studying time evenly across days" with $M = 2.65, 2.69, 3.19 \text{ \& } 2.81$ and $St. D = 1.06, 1.06, 1.01 \text{ \& } 1.15$ respectively. Regarding qualitative data collected from the interviews, responses of IQ3 showed that 9 out of 10 students reported that more or less they managed their time for this online course. For example, several students expressed: *"I made a study plan according to my school's timetable to spend time on online classes and self-studying. Almost every day, I spent at least an hour getting ready for a new English class. I also tried to get the most out of my time by focusing on one task at a time"* (S7); *"I found time to study vocabulary, grammar, and structures online. I also spent time planning new lessons, taking extra tests, and talking to friends to help me evaluate how well I was doing in school"* (S5); *"I tried to make time for my online study class and other assignments I found online to help me improve my listening skills."* (S8)

With regard to the category of **"Environmental structuring strategies"**, 3 out of 4 strategies were used at a high level. More specifically, "determining where to study in order to minimize distractions", "locating a comfortable place to study for this online course", and "establishing a regular location for online learning" with $M = 3.65, 3.97 \text{ \& } 3.47$ and $St. D = 1.04 \text{ \& } 1.38$ respectively. The only strategy used at a moderate level is "knowing the place for most effectively studying for this online course" with $M = 3.38$ and $St. D = 1.04$. When it comes to qualitative data collected from the interviews, responses of IQ4 showed that 9 out of 10 students reported that they frequently employed these strategies for the online course. For instance, *"I chose a nice place to study online. When I studied alone in a quiet place, I was able to pay more attention. I also didn't use my phone or watch TV so I wouldn't be distracted"* (S4); *"My study corner at home was a quiet place to study. I tried to find a seat near a window so I could get enough light and be comfortable"* (S6); *"I studied by myself in my room at home. I liked sitting at my desk, which has motivational quotes all over it. When I was bored or tired, I liked to listen to some quiet music to feel better."* (S10)

Concerning the category of **"Persistence strategies"**, among four strategies related to this category, "continuing working when it was difficult to study online" was used at a high level with $M = 3.71$ & $St. D = 1.05$. The other three strategies were used at a moderate level. More specifically, "forcing themselves to pay attention", "working hard in order to do well in the course", and "continuing working until the task was completed." with $M = 3.04, 3.17 \text{ \& } 3.27$ and $St. D = .95, .97 \text{ \& } 1.1$ respectively. With respect to qualitative data collected from the interviews, responses of IQ6 showed that 6 out of 10 students reported that more or less they used persistence strategies for this online course. Several samples from the interviews are as follows: *"I talked to my friends when I got bored of the teaching so I could pay more attention in class. Sometimes it was hard to pay attention in all of my classes, so I talked to my classmates to keep myself going motivated"* (S3); *"I always did my best to pay attention in class by doing things like asking and answering questions, taking part in group discussions, and doing my homework. I also did my best to stay away from the smartphone or the TV and study in a quiet place."* (S10)

Last but not least, the category of **"Help-seeking strategies"** contains 4 strategies. The strategy that was used at a low level is "seeking assistance from the instructor of this online course" with $M = 2.42$ and $St. D = 1.06$. On the contrary, "consulting with classmates and friends when confused about course content" and "identifying a course-content expert with whom they might confer when students need assistance" were used at a high level with $M = 3.48 \text{ \& } 3.51$ and $St. D = 1.17 \text{ \& } 1.18$ respectively. The last strategy "sharing problems and seeking solutions" was used at a moderate level with $M = 3.31$ and $St. D = 1.19$.

Regarding qualitative data collected from the interviews, responses of IQ2 showed that 7 out of 10 students reported that more or less they used help-seeking strategies for this online course. Several students stated, *"Sometimes it was hard for me to understand the instructions, so I asked my classmates or my elder brother for help." They were able to help me understand the new information and remember it better*" (S6); *"When I studied online, Messenger, Zalo, and a Facebook group helped me talk to my friends more often and get help when I needed it. I also did what I could to get help from my teacher"* (S7); *"Learning new grammar and words worried me a lot while I was studying online. I looked at websites to find out more. I also asked my friends and teacher for help to get through the difficult times."* (S1)

3.2. Discussion

Regarding the extent of students' SRL strategies use in the online English course, the findings of the study revealed that most of the students used SRL strategies at a moderate level. The results reported similar to those of other studies, including [13] and [14]. It is probable that the participants recognized the significance of self-regulation so they paid close attention to applying strategies to meet the requirements of online learning. As Oxford states: "Self-regulated learners pay attention to the demands of a task and deploy strategies to meet task demands" [15, p.72]. Moreover, the results are in line with some conclusions of the recent research by Bylieva, et al. [16], which revealed that students evaluate self-regulation indicators the best in the domain of environment, and the lowest in setting goals and managing time.

In more details, regarding "Goal setting and planning strategies", the findings of the study showed that the students sometimes set goals and plan for their learning, especially long-term goals. One of the possible explanations for this is that the grade tenth students might not have clear plans or specific goals for the new school year in a new learning environment. This finding of the study is consistent with that of Bylieva, et al. [16] showing that goal setting and planning strategies were valued the lowest in online learning. Another explanation is that students might not recognize the importance of setting long-term or short-term goals. As a result, further coaching and training on goal setting and planning strategies should be implemented to assist students in the future. On the contrary, students moderately set goals for time management, language aspects for the whole course and specific goals prior to each task or lesson. SRL requires learners to think about what and how they learn [17].

In terms of "Task strategies", it was explored that the students frequently made notes throughout the course. This may be explained by the fact that students in high school habitually followed the course's rules requiring making careful notes for the teacher's check-up at the end of the semester. Additionally, students did not often read the online materials or prepare assignments. The possible explanation is that not all the students studied with a computer or laptop; many of them used smartphones instead, which was not easy for them to read materials. That is the reason why students were reluctant to frequently spend extra time on the phone apart from attending synchronous online classes. This finding related to the use of task strategies is in alignment with that of the study conducted by Peng [18].

With respect to "Self-evaluation strategies", the findings are compatible with the study from Bylieva, et al. [16]. It was concluded that students self-evaluated their learning at a moderate frequency. Although students often took notes, it is probable that they lacked the ability to consolidate the lesson for comprehension. On the other hand, it was evident that students were able to interact with their peers to assess their progress in this online course. In addition, after completing the course, students were able to determine whether they had met their goals. The likely reason is that students were well-aware of self-evaluation strategies to monitor their own progress.

Although high school students were observed to use "Time management strategies" in their online English course, their use of these strategies was at a moderate level. It was evident that online language learners are conscious of their time and use ways to actively manage their online

learning. This finding validates the conclusion of prior research conducted by Su, et al. [12] and Lin, et al. [13] showing that most of the students employed time management strategies at a moderate level. It can be affirmed that the participants might understand the need for planning, organising, and distributing time for online courses, assignments, and additional homework.

With respect to “Environmental structuring strategies”, the findings of the study revealed that the students used these strategies at a high level. This finding is in line with Peng [18] and Bylieva, et al. [16] who discovered that, among all SRL strategies, students preferred environmental structuring strategies the most. That is because during the Covid-19 pandemic time, students were forced to remain at home with their families. They might recognize the significance of choosing a pleasant place in order to minimize distraction. This might be explained that the majority of students possess a comfortable room or a study place during the online course.

Regarding “Persistence Strategies”, the findings indicated that students used these strategies from a moderate to a high level. It can be explained that students were aware that studying online for so long may be challenging, so they exerted considerable effort to maintain their education. During the online English course, the instructor reminded the class that online learning may endure for the full semester, which encouraged students to study online from home. In addition, the students pushed themselves to pay attention and work diligently despite the uninteresting nature of the activity or materials. Students may have lost interest in online learning as a result of a lack of instructor and peer engagement. As Jansen, et al. [10] stated in their research that it is necessary to create a scale to measure persistence in order to take effort and motivation control into consideration.

Finally, the findings of the study revealed that students used “Help-seeking strategies” at a moderate level. It was evident that many students sought assistance from peers, acquaintances, or an expert. One probable reason is that students might have difficulties with online learning, necessitating support from close relatives or classmates. These findings are consistent with those of the study by Zheng, et al. [11]. In addition, the students moderately discussed their problems with their counterparts. This finding revealed the fact that students may be easily reached and shared throughout the course. In contrast, not many students attempted to get assistance from the instructor. This may be because during synchronous online learning with a limited amount of time, the course curriculum may be overwhelming and students might find it challenging to get prompt feedback from their instructor.

4. Conclusion

The current study highlights the seven categories of SRL strategies that 10th-grade students used in an online English course in a high school in Vietnam during the Covid-19 Pandemic. The findings revealed that among the seven categories of SRL strategies, “environmental structuring strategies” were used at a high level, while the other six categories included “goal setting and planning strategies”, “task strategies”, “time management strategies”, “persistence strategies”, “help-seeking strategies”, and “self-evaluation strategies” were used at a moderate level.

Based on the findings of the study, several recommendations are offered to both EFL teachers and high school students. Firstly, many strategies were still used by the students at a moderate or low level. It is suggested that at the beginning of an online English course, the teacher should have discussion with students about the various types of learning strategies that can be used in online English classes and help them understand that setting short-term or long-term goals in learning English online is really essential. That is because, thanks to the set goals, they will be able to manage or divide time properly for learning different aspects and skills of the English language. In addition, the teacher also needs to show them how to read materials, prepare lessons and do assignments in an online course. Especially, after each unit or class session, students should be instructed how to summarize what they have learned and what activities to participate in so that they can evaluate their learning progress and achievement. What is more, during an online course, many students have difficulties in their learning, so the teacher should always be friendly

to them and encourage them to share opinions, ask questions and seek assistance from the teacher. Last but not least, it is advisable that to be successful in an online English course, students should take the initiative to apply different SRL strategies in their online English learning.

This study was conducted at a high school in Vietnam with the participation of 10th grade students, so it can be said that the scale of the study is so modest; more extensive research is needed in the future. More samples drawn from various academic levels and research locations should be made available so that the findings can be generalized to more similar EFL contexts.

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