Discovering Students' Strategies in Learning English Online

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Abstract: Online learning poses challenges that students might never have encountered in a face-to-face learning environment. In learning English, students may confront more challenges as they need both cognitive and metacognitive skills in dealing with the dynamic lessons involving interaction, online exercises, and audio, video and text downloads. The challenges faced in online learning have led students to employ learning strategies to help them learn more efficiently and effectively. This paper examined students' strategy use in learning English online and the correlation of the strategies with their academic performance in the subject. Using the Online Language Learning Strategy Questionnaire (OLLSQ) to gauge students' strategy use in the domains of cognitive, metacognitive, resource-management and affective, the findings indicated that all students were high users of OLLS in English online learning with the highest preference for metacognitive as the strategies were helpful to students in planning and organizing their studies. However, there was low correlation between the strategies use and performance. Overall, the strategies have impacted the students positively and helped them to cope with the new learning mode that is different from the traditional learning. It is hoped that the discovery of the strategies could provide some important insights into how students can be more successful in learning online, and help others to achieve their study goals and overcome any challenges confronting them in learning English online.

Keywords: E-learners, Learning strategies, Online learning, Performance

1.   Introduction

The COVID-19 pandemic has disrupted the conventional learning process. Although online learning has existed and been adopted in various forms since at the turn of the 21st century, the pandemic has been the catalyst that hastens and streamlines the adoption of this learning method. With the school being shut, and over 1.2 billion children out of school all over the world, online learning has become a new avenue for the learning process with teaching and learning being undertaken remotely and on digital platforms. Many online learning management systems, learning apps, virtual tutorial and conferencing tools, and learning software have been utilized by teachers and educators during the pandemic to ensure learning does not stop despite the school closure.

The COVID-19 pandemic seems to have reshaped the learning process. With the benefits of online learning as a platform for learning process (Dolence & Norris, 1995; Shopova, 2014), there are signs that educators are now ready to embrace this as part of their 'new normal' in teaching after experiencing this method first-hand. However, despite the benefits of online learning environments,

students taking online courses may face challenges that they might never have encountered in a face-to-face learning environment (Tsai, 2009). These challenges include cognition, metacognition, technical anxiety, and learning style and preferences (Barnard et al., 2009; Tyler-Smith, 2006; Vonderwell, 2003).

In learning English, students may confront more challenges as they need both cognitive and metacognitive skills in dealing with the dynamic lessons involving interaction, online exercises, and audio, video and text downloads. Clarke and Hermens (2001) suggested that online learning is learner-centered, in which, learners can control their own learning pace, and learn independently to suit their learning style. Thus, the challenges faced in online learning have led students to employ learning strategies to help them learn more efficiently and effectively. Research has shown that the use of effective and appropriate online language learning strategies (OLLS) has led to successful academic performance (Shih, 2005; Solak & Cakir, 2015).

1.1   Literature Review

Studies have indicated that students face myriad of challenges in the online learning environment. These include challenges that require cognitive ability to deal with multi-dimension learning tasks and complex contents (Tyler-Smith, 2006), and metacognitive ability to monitor and self-regulate their own learning (Barnard et al., 2009). Other challenges include students' computer and internet anxiety (Conrad, 2002; Saadé & Kira, 2009), and learning styles and preferences (Vonderwell, 2003). The challenges students face in the online learning environment has led them to employ strategies to cope with this mode of learning. Solak and Cakir (2015) posited that learners' use of effective and appropriate online learning strategies can lead to more successful learning achievement.

OLLS are the strategies used by the students to understand and control their learning by employing a range of cognitive, metacognitive, resource management and affective strategies to achieve their online learning goals (Hu & Gramling; 2009; Tsai, 2009; Zarisky & Styles, 2000).

1.1.1   Cognitive Strategies

Cognitive strategies relate to the behaviors in acquiring language in the learning process which include the selection, acquisition, construction and integration of information. These strategies can be further divided into five sub-strategies: 1) rehearsal strategies which involve activities for identifying important elements of the provided materials, and selecting and encoding information like copying out, re-reading, memorizing, listing concepts, putting special marks, underlining and taking notes (Hu & Gramling; 2009; Simsek, 2006); 2) elaboration strategies in which learners build connections between information given and prior knowledge to make meaningful information by editing notes, comparing reading assignments with lecture notes, summarizing, paraphrasing, and finding their own examples from real-world events and problems (Hu & Gramling, 2009); 3) organization strategies in which learners re-arrange or re-structure the content to construct new structure of the learning materials by re-grouping, connecting pieces and generating concept maps (Hu & Gramling, 2009; Simsek, 2006); 4) comprehension or critical thinking strategies which involve applying the existing knowledge to new situations in order to solve problems, make decisions and evaluate information based on standards or knowledge (Al-Buainain, 2010); and 5) internet skills which relate to using skills to undertake tasks such as online searching skills and online communication skills (Tsai, 2009).

1.1.2   Metacognitive Strategies

Metacognitive strategies involve the monitoring of the cognitive processes by the learners. This includes preparing and planning to learn, as well as regulating and evaluating their learning process. These metacognitive strategies can be divided into seven sub-strategies: 1) self-regulation strategies that involve learners' awareness and conscious effort in their pursuit of learning goals by setting their goals and managing their own learning performance; 2) time management strategies that require learners' time management skills to follow their own learning schedule by scheduling, planning and managing their study time (Hu & Gramling, 2009; Tsai, 2009; 3) goal setting strategies that refer to

students' determination to achieve their learning target or goal; 4) self-monitoring strategies that relate to students' effort in managing their progress towards attaining their learning goals which include observing their behaviour, cognition and motivation in learning; 5) self-evaluation strategies that are employed by the students to judge their own learning performance; 6) concentration strategies that are employed by the students that help prevent them from being distracted in their study; and 7) self-awareness strategies that relate to learners' awareness about themselves being online learners and their knowledge of e-learning so that they can adopt appropriate strategies to adapt to the learning situations.

1.1.3 Resource Management Strategies

Pintrich and De Groot (1990) described resource management strategies as the way learners deal with the learning resources which include their study environment, learning time and learning support from peers and instructors. This type of strategies can be divided into: 1) environmental management strategies which refer to creating a learning environment that is quiet and free from any visual and auditory distractions, organizing study materials, and arranging collaboration with peers (Zarisky & Styles, 2000); 2) help-seeking strategies which refer to getting help from others and having necessary tools to cope with academic difficulties; and 3) resourcing strategies which involve using available resources to assist learning like the use of online dictionary, grammar check and spell check.

1.1.4 Affective Strategies

Tsai (2009) put forward that affective strategies relate to the students' own perceptions about what they will benefit from the online learning. The strategies employed are closely related to establishing 1) positive attitude to use the Internet for learning; 2) motivation to learn based on their learning goals and objectives; and 3) anxiety reduction in the use of Internet for learning and the online learning environment itself.

1.2 Objectives

Although research on language learning strategies is replete, the OLLS dimension has been less explored. The writers feel that it is of paramount significance to discover the OLLS used by the students that can also help others to achieve their study goals and overcome any challenges confronting them in learning English online. The discovery of the strategies could provide some important insights into how students can be more successful in learning online.

The main objectives of the present study were to discover the strategies employed by the students in learning English online and the correlation of the strategies with their academic performance in the subject. Thus, the research questions could be expressed as the following:

1.   What are the online learning strategies used by the students in learning English?
2.   What are the correlation between the strategies used by the students in learning English with their academic performance in the subject?

2.   Method

112 students who enrolled in an English proficiency course at the diploma level in a local public university participated in this study. The course consists of the four main areas of language skills: speaking, listening, reading and writing. Grammar is also part of the course, but it is taught and learned incidentally within the four skills. Conventionally, the course is mostly delivered using the face-to-face method. However, the COVID19 pandemic has changed this. Open Distance Learning (ODL) has taken place using various e-learning platforms such as Learning Management System (LMS), Virtual Learning Environment (VLE) and social media either synchronously or asynchronously. Students were also required to complete all the assignments online according to the test specifications and schedule.

The Online Language Learning Strategy Questionnaire (OLLSQ) adapted from Kuama (2016), Tsai (2009), and Zarisky and Styles (2000) was used to examine the students' strategy use. The questionnaire contained five parts. Part A was used to gather demographic background of the

participants. It contained open-ended and close-ended questions to gauge information regarding the students' background and their performance in the English subject. Parts B, C, D and E contained 62 statements elicited students' strategy use in the domains of cognitive, metacognitive, resource-management and affective respectively. Five-point Lickert scale of 1 (never use) to 5 (always use) was employed. The questionnaire was distributed online and the invitation to take part in the study was extended to the students with the help of other instructors teaching the subject.

The data were treated quantitatively, involving simple frequency counts of the items in Parts B, C, D and E of the questionnaire. The responses from each item were tabulated according to the respective columns of the scale and reported according to the relevant domains. In evaluating the level of strategies employed by the students, the statistical calculation of interval was used. The level was classified under five categories based on the mean score, adapted from Kuama (2016), as shown below.

Table 1: Mean Score and Categories of Strategy Level

Total Mean Score	Categories of Strategy Level
1.00 – 1.80	Very Low
1.81 – 2.60	Low
2.61 – 3.40	Medium
3.41 – 4.20	High
4.21 – 5.00	Very High

To determine the correlation between the students' strategy use and their performance in the English subject, Pearson correlation coefficient analysis was performed. The data were interpreted according to the following three correlation levels based on Kuama (2016):

Table 2: Correlation Score and Level

Correlation Score	Correlation Level
0.10 – 0.29	Low
0.30 – 0.49	Medium
0.50 – 1.00	High

3.   Results and Discussion

3.1   Online English Learning Strategies Use

Table 3 below summarizes the mean scores and the level of use of the four strategies employed by the students when learning English language online.

Table 3: Strategies Use Summary of Online English Learning

Strategies	N=112		
	Means	SD	Level of Use
Cognitive	3.52	.43	High
Metacognitive	3.66	.44	High
Resources Management	3.55	.49	High
Affective	3.65	.30	High
Total	3.60	.42	High

Based on the table above, among the four strategies used, metacognitive has the highest frequency (3.66) followed by affective with the score of 3.65. There is a slight difference between the two at 0.01 point. Meanwhile, the Resources Management scores 3.55 and Cognitive has the lowest

frequency among the students as the mean score is 3.52. Nevertheless, all the strategies fall in the same category which is high use and the difference in the mean scores is relatively small.

Table 4 depicts the sub-strategies' mean scores and the level of use in learning English language online.

Table 4: Sub-strategies Use Summary of Online English Learning

Strategies	Sub-strategies	Mean	SD	Level of Use
		N=112		
Cognitive	*Rehearsal*	3.54	0.28	High
	Elaboration	3.66	0.41	High
	Organization	2.98	0.50	Medium
	Critical thinking	3.87	0.32	High
	Internet skills	3.56	0.64	High
	Total	3.52	0.43	High
Metacognitive	*Self-regulation*	3.63	0.48	High
	Time management	3.49	0.46	High
	Goal setting	3.80	0.44	High
	Self-monitoring	3.14	0.34	High
	Self-evaluation	4.20	0.46	High
	Concentration	3.09	0.49	Medium
	Self-awareness	4.27	0.44	Very High
	Total	3.66	0.44	High
Resource management	*Environmental management*	3.83	0.39	High
	Help seeking	3.18	0.54	Medium
	Use of resources	3.64	0.55	High
	Total	3.55	0.49	High
Affective	*Attitude*	3.66	0.3	High
	Motivation	3.67	0.28	High
	Internet anxiety	3.62	0.33	High
	Total	3.65	0.30	High

The mean scores of the sub-strategies range from 2.98 to 4.27. The highest use of sub-strategies is self-awareness (4.27), followed by self-evaluation (4.20). Both of these sub-strategies fall under the metacognitive strategies. For the level of use of these two sub-strategies, they are categorized in different levels; the level of use of self-awareness is very high but self-evaluation is only at high level. Nevertheless, the difference of self-evaluation level of use score from high to very high is merely 0.01. Most students answered "frequently" and "always" for the self-awareness question, "I check my practices or quiz marks" as well as for self-evaluation questions, "I check my scores/ marks after doing practices so that I am aware of my performance" and "I compare my scores/ marks with other friends so that I can improve my performance."

Meanwhile, organization has the lowest mean score that is 2.98 and next to it is concentration (3.09). Although the lowest utilization of the sub-strategies is from the cognitive strategies, the second lowest utilization is from a different group that is metacognitive. These two sub-strategies have medium level of use. Most students answered "close to never" for the organization questions, "I divide my lessons into several difficulty levels so that I can understand the lessons well" and "I draw diagrams/ tables when I revise English lessons so that I can remember the lessons better" as well as for the concentration question, "I do not do other activities like listening to music, watching television or surfing the Internet while I am learning English via LMS."

The sub-strategies under resource management have the same results as cognitive for the use levels range from medium to high. For the affective strategies, all the sub-strategies fall under high level of use and the differences in frequency are very close ranging from 3.62 to 3.67. From the data, only

the sub-strategies in the metacognitive strategies have more mixed levels of use – medium, high and very high (Mean= 3.09 to 4.27).

3.2 The Relationship between the Online English Learning Strategies Use and Performance

Table 5 presents the relationship results between the strategies employed and the academic performance of the students.

Table 5: The relationship between the online English learning strategies use and academic performance

| Strategies | Online academic performance | | |
	r	Correlation Level	p-value
Cognitive	.075	No correlation	.215
Metacognitive	.351*	Medium	.000
Resource Management	.016	No correlation	.435
Affective	.089	No correlation	.176
Total	.133	Low	.207

* Correlation is significant at the 0.01 level (1-tailed)

As shown in Table 5 above, the correlation level for the overall strategies employed by the students in learning English online and their academic performance is at the low level (r=.133). From the four strategies employed, only metacognitive has a correlation with the students' performance at the medium level (r=.351). The other three strategies (cognitive, resource management and affective), however, do not have correlation as their values are r=.075, .016 and .089 respectively.

3.3 Discussion

In the use of strategies when learning English online, the results indicate that there was no significant difference. The students made full use of all the strategies to their advantage as to ensure successful learning. However, the metacognitive strategies were slightly more preferred among the students as they were the highest employed. The result is in line with studies of Al-Buainain (2010), Kuama (2016) and Liu and Feng (2011). Metacognitive was favorably used due to the following reasons. The nature of online learning required the students to be self-regulated, self-monitored, self-evaluated and well managed. Therefore, they had to review their test scores, checked either they had completed all the given tasks within the stipulated time and set goals. These skills were deemed important by the students to be successful in the course so, they were highly employed. Eventually, they helped the students to have good performance. Since metacognitive was highly employed by the students, it was expected that the highest sub-strategies would come from this strategy group. The result conformed the assumption as self-awareness and self-evaluation was the most frequently used sub-strategies by the students. They were aware that following the course was not enough for them. To achieve their target, they needed to constantly check their practices or quizzes and compare their grades with their friends. Being competitive and aware of their performance would bring positive impact on them for they would strive for the best.

O'Malley and Chamot (1990) stated that metacognitive and cognitive strategies are often used together as they support each other. It is assumed that combining both strategies will give more impact than single strategies. However, this was not the case in this study. Cognitive strategies had the lowest frequency compared to all other strategies (but still at high level). This is not something unusual as it is still in accordance with the studies of Xiao and Hurds (2007), and Abdul Razak et al. (2012). This happened because there was possibility that the students were influenced to react in terms of what they thought they should do rather than what they actually did (White, 1993). Moreover, another possible explanation is the impact of the students' learning mode. The online and distance learning of English put the students into isolated context and demanded the students to be autonomous. To make them feel competent, the students had to encourage, reinforce and motivate themselves besides reduce their

anxiety. Thus, they had to develop ways which could offer good learning conditions to the optimum. This caused the students to employ more affective strategies.

The results further reveal that when finding relationship between their OLLS use and English performance, interestingly, the overall correlation between these variables was only at low level. Although the use of cognitive, resource management and affective strategies was high, they did not have correlation with the students' performance. This was not in line with previous studies as high usage of strategies would normally help students to overcome problems in learning English online and consequently perform better. There were other factors that influenced their performance. It could not be denied that the Covid 19 pandemic has exerted considerable pressure on the students. Besides experiencing total online learning because of the pandemic which they never experienced before, the students also had to face challenges in matters like finance, technology, social as well as mental well-being which directly affected their livelihood. The struggle and high anxiety that they had to put through made them to apply all the strategies they could but these strategies could not be the predictors for success. Moreover, most students were not used to the new learning mode and needed more time to adapt themselves since they were so used to the traditional method and still attached to it (Kuama, 2016). However, in accordance with many studies before, metacognitive was found to be the most beneficial strategies for academic performance (Al-Buainain, 2010; Kuama, 2016; Liu & Feng, 2011). The high usage of the metacognitive strategies had correlation at the medium level for the students' grades. It can be said that the students who performed well in English course, tended to have more control on their studies which would guarantee their success.

4.   Conclusion

The study has indicated that all students were high users of OLLS in English online learning with the highest preference for metacognitive as the strategies were helpful to students in planning and organizing their studies. Although there was low correlation between the strategies use and performance and the use could not be the predictor for success, teachers and educators should still utilize this by addressing content and process to facilitate learning. It is because the strategies could still be impacted the students positively. It is suggested that students too have to adapt themselves to the new learning mode because it has now become the trend to embrace. The shift is inevitable for there is no definite certainty that when the traditional classroom will resume as normal.

The results of this study have several implications for educators, curriculum designers and institutions of learning to enhance students' learning experience. For example, Sim, Sim and Quah (2021) suggested the redesigning of the syllabus to cater the online learning approach, reducing the time for online delivery of lessons to help students retain their on screen attention span, diversifying online teaching methods and incorporating motivating instructional methods to inspire students and enhance their learning engagement.

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