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21ST-CENTURY LEARNING: UNDERSTANDING THE LANGUAGE LEARNING STRATEGIES WITH TECHNOLOGY LITERACY AMONG L2 LEARNERS

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ABSTRACT

Background and Purpose: The study concerns investigating the learning of English in the 21st-century when digital learning platforms were used in assigning writing activities to students. Specifically, the use of the media was related to the Language Learning Strategies (LLS), namely metacognitive, cognitive, and social strategies classified by O'Malley et al. (1985) with the learning in the 21st-century.

Methodology: The study employed a qualitative research design to collect responses from 72 engineering students studying at a technical university on the East Coast of Malaysia. An open-ended questionnaire was used to collect the responses from the participants and was validated by the researcher's colleague. Reliability was also taken care of in that verbatim reporting was observed in writing the current study's findings. Data were analysed using codes and themes formulated before they were reported.

Findings: The study found that students used metacognitive strategies to check their language in the writing tasks. It was evident that Grammarly, Quillbot, and Google translate, to name a few, were used to check their writing. It was also reported that they linked new information to visual concepts in terms of cognitive strategies. Specifically, they used deduction methods to ensure they understood the sentences they composed. For social strategy, digital platforms, namely WhatsApp, Google Meet, and Discord, were among the common platforms used by the students. The study confirmed that the students demonstrated strong technology literacy as they could use multi-digital platforms to complete the writing tasks.

Contributions: The study identifies the LLS employed by English as a Second Language (ESL) learners in 21st-century-learning. Also, it contributes to providing techniques that English practitioners can use in their writing classes.

Keywords: 21st-century learning, Language Learning Strategies (LLS), technology literacy.

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1.0 INTRODUCTION

Learning in the 21st-century requires language learners to equip themselves with technology literacy. Such is vital because all learning resources can be accessed using the platform. In this era, learning a language is beyond knowing grammar or memorising key points or vocabulary that students can use to acquire English skills. Instead, their competency in acquiring the language required them to be equipped with technology literacy. In the 21st learning environment, they can learn the language by communicating with others through online interactions (Eaton, 2010). Also, engaging in online communication using various platforms can facilitate their language and cultural skills.

Studies were conducted to investigate language learning in Malaysia using several online or digital platforms relevant to 21st-century learning approaches (Jamalai & Krish, 2021; Tan, Lee, Ganapathy, & Kasuma, 2019). It was found that students were motivated to learn English when Kahoot! was employed in learning (Tan et al., 2019). Their study used the platform in a remedial English proficiency course to enrich the students' vocabulary knowledge and grammar. However, more importantly, knowing students' language learning strategies (henceforth LLS) can make learning in the 21st-century become more effective. Generally, there are three common LLS employed by language learners. These are metacognitive strategies, cognitive strategies, and social strategies. Studies (Habók & Magyar, 2018; Ranjan, Philominraj, & Saavedra, 2021) have shown that language learners used some of the strategies, if not all, in their learning to obtain the skills in English. In Habók and Magyar's (2018) study, students showed dominant metacognitive strategies. Its use had a direct effect on foreign language marks.

Similarly, Ranjan et al. (2021) found that metacognitive strategies were used by the students, in particular proficient learners of Spanish. Their study demonstrated that proficient

learners were not hesitant to use the language. Also, the learners showed strong affective strategies (also known as social strategies). They were able to control their anxiety and therefore, were not afraid to take the risk of communicating with others using the language. The current study aims to investigate the use of LLS concerning its use in 21st-century learning. Students in the study are required to engage in a variety of writing activities using these digital platforms which are LinkedIn, Canva, mind map applications, and Google Docs, to name a few. In addition, their technology literacy is examined as they use the platforms to complete the writing tasks. As a whole, the study attempts to find answers to these research questions:

1. How do students employ metacognitive strategies to check their writing when using digital platforms?
2. How do students employ cognitive strategies to manipulate the assigned writing task when using digital platforms?
3. How do students employ social strategies to communicate with their peers when using the digital platform?

2.0 LITERATURE REVIEW

2.1 The Concept of Learning in the 21st-Century

Kuhlthau, Maniotes, and Caspari (2015) relate 21st-century-century learning to guided inquiry. It is a method of teaching and learning that transforms the culture in academic institutions to be a collaborative inquiry community. Learning in the 21st-century enables learners to gain a deep understanding of the subject and at the same time develop their literacy and social skills. Also, learning encourages learners to discover the sources of information by themselves. Discovery learning is paramount nowadays due to the global interconnectedness (Kuhlthau et al., 2015). The use of information technology requires learners to use new skills, new knowledge, and new ways of learning to face the challenge of the changing environment. Kuhlthau et al. (2015) argue that 21st-century learning is beyond providing Internet connection at schools to shift from 20th-century learning to 21st-century learning. Yet, 21st-century learning requires learners to live and work in a complex information environment. Laal, Laal, and Kermanshahi (2012) elaborate on 21st-century learning using the keyword 'collaboration' as it is the trend in learning. According to them, there is a need for society to think and work together on issues they need to solve. The learning of the 21st-century is shifted from doing work with individual effort to group work or from independence to community effort. Laal et al. (2012) further state that 21st-century learning ensures that a common goal can be achieved

when learners at various performance levels work together in small groups. They are responsible for their peer's learning in that the success of their learning enables them to assist their peers in being successful as well. Hence, to make 21st-century learning a success, Laal et al. (2012) recommend learners to have these characteristics in their learning: perceive positive independence, demonstrate considerable interaction, be individually accountable and have personal responsibility, use relevant interpersonal and small group skills and update the function of the group to ensure the goal of the group can be achieved.

2.1.1 Literacy skills

Literacy skills are one of the critical skills in 21st-century learning. According to Stauffer (2020), 21st-century literacy skills constitute information literacy, media literacy and technology literacy. Kuhlthau et al. (2015) argue that literacy skills are a foundational skill that helps learners to understand facts – especially data points of the sources they found on the Internet. The skills enable them to distinguish between facts and fiction, viewing that the world we are living in today is full of misleading information. Literacy skills require learners to find the truth about the sources they found online, and therefore, in learning, they should not be sharing information if they are not sure of its authenticity.

In addition, Lipkin (2018) states that media literacy is the skills that learners use to identify publishing methods, outlets, and sources. They need to distinguish between creditable versus implausible sources. It helps learners find the truth of the sources they have at hand. Using media literacy skills, learners can know the media outlets or formats that are credible or not credible for their learning purposes. To ensure learners are equipped with media skills, they need to hold up the information they obtain from the media outlets, compare several different media networks before using the information, explore media as a creator and understand the bias that the media may portray.

Van Laar, Van Deursen, Van Dijk, and De Haan (2017) assert that technology literacies are technical, information management, communication, collaboration, creativity, critical thinking, and problem-solving in terms of technology literacy. The first dimension of digital skill is technical. A person demonstrates a skill when he/she uses mobile devices to accomplish a particular task. The dimension also connotes the ability to navigate information that is available online. The second is information management. It is the skills to use Information Communication Technology (ICT) in that an individual can effectively search, select, and organise information to reach informed decisions concerning the most suitable sources for a given task. The third is communication, in that an individual demonstrates the ability to

transmit information to others. Fourth is a collaboration that a person uses to collaborate with others using appropriate ICT platforms. Creativity is the fifth dimension. It demonstrates the skills to produce new or unknown ideas. Sixth relates to critical thinking in that a person uses the platform to obtain information and communication utilising reflective reasoning to support his/her claims. Lastly, is problem-solving when a person uses ICT to process and understand a problem. In doing so, he/ she uses his/her cognitive to solve a problem as he/she employs knowledge to find a solution to the problem.

2.2 O' Malley's Classification of LLS

The classical research conducted by O'Malley, Chamot, Stewner-Manzanares, Kupper, and Russo (1985) identified 26 strategies according to the students' LLS. Their research involved ESL beginners and intermediate learners found these strategies for less complex language tasks. They also found that these strategies used by the learners tended to require little cognitive processing of the learning materials. For teachers, the researchers found that they were not familiar with the learning strategies demonstrated by the students. As a result, the strategies were not introduced when the teacher assigned tasks to the students.

Table 1 (in the Appendix) shows the detailed strategies established in O'Malley et al.'s (1985) research. In terms of metacognitive strategies, learners use the strategies when they know what they are learning and have control of the learning through proper planning. The strategies they employ are functional planning, selective attention, self-management, advanced organisers and others. In addition, the metacognitive strategies also involve monitoring students' learning. They check, verify, or correct their comprehension or performance in the course of language tasks. They evaluate their learning activities that are assigned by their teachers. Therefore, they check the outcome of the assigned task by evaluating the language used to ensure it meets the standard required by the teachers. Using cognitive strategies involves students manipulating or transforming information they will be learning. Therefore, they resource, repeat, group, deduct, use imagery and auditory representation, use keywords, elaborate, transfer, infer, make notes, summarise, recombine and translate the teacher's input in their learning. Finally, social or affective strategies concern communicating or interacting with another person. These strategies demonstrate students' ability in collaborating with peers in problem-solving exercises.

2.3 Integrating LLS with 21st-Century Learning

The concern of integrating LLS with learning in the 21st-century calls for practitioners to validate listening strategies that language learners can effectively use. Wakamoto and Heath (2021) found a need to revisit the evaluation of listening strategies among language learners. This is due to the sociolinguistics landscape of the English language currently used in the 21st-century. There are many L2 speakers compared to L1 speakers, and therefore, refining listening strategies is paramount to ensure speakers can understand what they are listening to. In comparison, Simona (2015) argues that undergraduate students need to be competent in communication skills to succeed in the 21st-century knowledge society. Her study that employed engineering students studying English as a Foreign Language (EFL) revealed that presentations and seminars could assist students in improving their communication proficiency. In her study, the students studying at the tertiary level were required to present in technical and business presentations. In particular, they were taught clear structures of presentations, appropriate language register and technological support to prepare them for their future career opportunities. Internet and 21st-century learning are inseparable, and as such, in language learning, requiring students to learn collaboratively can promote a positive learning environment.

Al-Rawahi and Al-Mekhlafi (2015) reported that project-based learning (PBL) employed in their study improves students' writing strategies. Since instructors provided valuable input via online communication, they could improve their writing skills. Yet, the participants felt that having a timeline to complete the task was necessary. Such was due to improving their writing after receiving feedback from peers and instructors. Also, learning in the 21st-century would best benefit learners and teachers if their learning and teaching styles match. Chetty et al. (2019) compared both styles to help the latter in their academic performance. The study showed that practitioners' teaching styles impacted students' academic performance. In language learning, therefore, teachers have to strategise their teaching styles to help students achieve better academically.

3.0 RESEARCH METHODOLOGY

The study employed a qualitative data inquiry to obtain data for the current study. A questionnaire using open-ended items was employed as the research instrument. In the study, data was collected among 72 students studying at one of the tertiary level educations on the East Coast of Malaysia. They were 45 male and 27 female students who participated in the

study. The majority of them are 23 to 25 years old (n=56), and 14 students are 20 to 22 years old. The remaining two students (n=2) are 26 to 28 years old.

When the study was conducted, they are taking engineering and technology majors in electrical and electronics, manufacturing, mechanical and computer sciences. Thirty-one (n=31) of them are students from the Faculty of Computing, 23 are from the Faculty of Manufacturing and Mechatronic Engineering Technology, 11 students are studying at the Faculty of Mechanical and Automotive Engineering Technology, and finally, seven are from the Faculty of Electrical and Electronics Engineering Technology. In terms of research instruments, the researcher formulated all the items in the questionnaire. Nevertheless, it was based on the LLS developed by O'Malley et al. (1985), referring to their classification of LLS and descriptors. Concerning the layout of the sections in the questionnaire, its first part concerns obtaining demographic information from the students. Students' age, courses the students are taking, and their genders are the items that are formulated in the first section of the questionnaire. Items concerning students' LLS are composed in the second part of the questionnaire.

Content validity was conducted by asking a colleague's peer to assess the adequateness of the open-ended questionnaire so that it contains all the items that represent the construct being measured (Yagmale, 2003). Meanwhile, reliability was ensured by including rich and thick verbatim descriptions when students responded to the constructed items (Noble & Smith, 2018). Therefore, in reporting the findings of the current study, respondents' written responses were not changed in that spelling mistakes were not corrected, and grammatical errors were not taken care of either. Concerning data collection procedures, the teacher-researcher informed the students about the study and asked for volunteers to participate in the research. They were required to complete an online questionnaire via Google Form in three days. After the period was over, the online questionnaire was closed to proceed with analysing the responses written by the students. When responding to the items in the questionnaire, they were informed to write any responses without judging their opinions. Their responses could be their experiences using LLS when the teacher required them to write on LinkedIn, Canva and Google Docs. Thematic coding and themes formulation was conducted to analyse the data. In reporting the findings, S1, S2 and so forth were used to identify the respondents as Student 1, Student 2, and so on. Also, frequency count was used to record the number of times students use the digital platforms related to the LLS.

4.0 RESULTS AND DISCUSSION

4.1 Students' use of Metacognitive Strategies to Check Their Writing when Using Digital Platforms

Table 1 shows students' frequency of using digital platforms to check their writing tasks. The students in the study employed self-evaluation as one of the approaches in the metacognitive strategies to check their assigned writing tasks. It shows that Grammarly was used by most of the students (n=35) while Google Translate (n=9) was the second website that was visited to translate the sentences they wrote. Five of the students stated they used an online dictionary to check their writing to ensure the accuracy of their constructed sentences. Quillbot (n= 4) was used among the students as well. Meanwhile, two students (n= 2) chose Microsoft Word, and another two (n= 2) asked their friends to check the language they used in the assigned tasks. Finally, the least digital platform they employed was Free Grammar Checker (n=1).

Table 1: Frequency of using digital platform

Nos	Digital platform	Frequency
1.	Grammarly	35
2.	QuillBot	4
3.	Microsoft Word	2
4.	Microsoft Word Editor	1
5.	Google translate	9
6.	Free grammar checker online	1
7.	Ask friends	2
8.	Online dictionary	5

Several themes are formulated after synthesising the students' responses to their uses of metacognitive skills in learning. In answering Research Question One, two themes are formulated for the responses. These themes are "Self-evaluation in checking the language use for accuracy" and "Self-management to enable learning".

4.1.1 Self-evaluation in checking the language used for accuracy

O'Malley et al. (1985) state that self-evaluation is one of the metacognitive strategies L2 learners use to check the language they use for the assigned task. S45 remarked that he used Grammarly to check grammar and spelling to ensure that his sentences were clear and understandable. Also, it helped him to paraphrase the sentences. He said, *I will check my grammars, spelling errors and sentences construct so that it is clear and understandable.*

Paraphrase. Find similar posting, extract the keywords and write it with my own sentences. Example LinkedIn post". For S35, he used Google Translate and Google search engine to confirm the words he wanted to use in his writing. He informed, *"I will use google translate to check a word that I dont understand and something find a words in google to check my vocabulary and grammar*". For S26, he would verify the vocabulary that he was not familiar by searching them in the search engine as he said, *"...if I have any unfamiliar word, I would use the search engine on the internet to find the meaning of the word"*. Reading twice was also the approach that was used by one of the students as he proofread his works. He said, *"Well when I'm writing down I used online tools like Grammarly. And then I would proof read my post two times before I send"*.

4.1.2 Self-management to enable learning

Self-management in O'Malley et al.'s (1985) LLS refers to students' ability in understanding the conditions that help them to learn. In managing their understanding, they get help from their peers. A few students in the current study employed this learning strategy in the assigned task. S20 for instance, required someone to check sentences he has written. He said: "*Read again the text and let someone check it for me if there any time"*. Similarly, S24 asked his friends to check the sentences he wrote as he stated, *"I will read my sentence and I will seek my friend's help to check it for me"*. Another student that employed the strategy was S44. She said that she sought opinions from her friends about her writing piece. And if she was not sure of the spelling of a certain word, she used the search engine. She shared her experience of her self-management learning strategy: *"I ask my friends some opinion on my writing and if I am curious about the spelling or the meaning of the word, I frequently using Google"*.

The study found that students employed several platforms to check their language for the writing tasks. Indeed, they demonstrated the ability to utilise technology literacy in the assigned tasks when they successfully wrote postings on LinkedIn and short messages in Canva and Google Drawing. Using self-evaluation strategies, they checked the grammar used by visiting various free software online or the Grammarly website. They did the least to use Google Translate since they wrote sentences using their mother tongue and then translated them to English. They also used self-management strategies in that they would be asking their friends to check the written sentences. This was because they felt that it was not sufficient for them to be satisfied with their English sentences. But they looked for confirmation by asking their friends to ensure the sentences were also understood by others.

This study confirms that the use of technology supported students' metacognitive learning abilities, as was also demonstrated in Rahimi and Katal's (2012) study. The use of podcasts was found to be significantly related to metacognitive listening strategies awareness among their students. Also, the use of podcasts had a significant effect on their students' perceived use of the platform for listening activities. In learning English, the researchers predicted that podcasts could assist students in their problem-solving activities and increase the latter's knowledge/skills in learning English as a Foreign Language. Similarly, Haukås, Bjørke, and Dypedahl (2018) found that multimedia tools assisted students in their metacognitive awareness, specifically in EFL writing tasks. The use of various multimedia platforms enabled the Chinese students to tackle general and specific writing tasks administered in their writing activities. The students showed that they planned and organised their thoughts and materials before attempting to write. They also demonstrated a high level of autonomy when they accessed various materials in the complex multimedia learning environments. Therefore, well-prepared students tended to show strong metacognitive awareness. As a result, they completed their writing faster than others as they had clear goals.

Moreover, students with low to average moderate intrinsic and extrinsic motivation levels may not utilise their metacognitive effectively. Such was demonstrated in research conducted by Lin, Zhang, and Zheng (2017). Their study showed that the students' metacognitive strategies were used moderately when they enrolled in online language courses. However, the researchers perceived that it was not peculiar to obtain the results. Lin et al. (2017) recommended a need to revisit the mechanisms of virtual-school settings that were employed in the study. Such was due to different tools that might produce different metacognitive learning strategies among language learners.

4.2 Students' use of Cognitive Strategies to Manipulate the Assigned Writing Task when Using Digital Platforms

Three themes are formulated in identifying the cognitive strategies used by students when they utilise digital platforms for learning in the 21st-century. The formulated themes are "Relating new information to visual concepts", "Use deduction to understand the second language", and "Note-taking of important points".

4.2.1 Relating new information to visual concepts

This theme concerns students using images or visuals as they receive new information. Two students used Canva, a publishing tool that helped them visualise important points.

Nevertheless, the students only wrote on Canva when asked about the cognitive learning strategies without explaining how it was employed in relating to the new information, they transferred to become visual concepts.

4.2.2 Use deduction to understand the second language

Students employed deduction as one of the cognitive strategies when they consciously applied rules to produce or understand language (O'Malley et al., 1985). S47 watched YouTube to understand the general information of the language task that was assigned to her. Then she read materials on the Internet to obtain more information about the task. The last step she did was jot down key points before summarising the information using her own words. These cognitive learning processes were her responses to deducing in understanding the second language. She explained in detail by writing:

> *"I usually refer to YouTube to understand general the information explained by the video. Then I will find some read materials in webpages to get more information in detail. After I will jotted the key points and summarise it with my own words".*

S13 summarised important points and related the task to his life. She performed the strategy in one of the writing activities using LinkedIn as she posted about engineering and nature. She said, *"Summarise the important point and applied in real life"*. S67 performed three processes in deducing the information he obtained. He summarised, elaborated and wrote the information he received. He worded, *"I usually summarise in points and then elaborate it when needed, and I do have sticky notes as well to jot down any important tasks for me to not overlook them"*. Meanwhile, summarising and then remembering were the typical steps used by S44 to understand the assigned task. She said, *"I usually only summarise important points just to have me remembered the whole thing that I need to do and when to complete it"*.

4.2.3 Note-taking of important points

The majority of the students took notes for important points as the activity helped them transform the information they learned. S37 prepared notes as she attempted to complete the assigned task. She also tried to understand the requirements of the task. She explained, "Make notes and try to understand what the lecturer wants". Similarly, S38 read notes, but he referred to online resources before attempting to do the activity. He wrote, *"I read notes given and also do some research on Internet for some information"*. Reading and later making notes were the

process performed by S48 concerning her use of cognitive strategies. She responded, *"I more to read notes first and make a notes to summarise the main points*. Likewise, S56 made notes but he reviewed the notes after they were made. S56 stated, *"Making notes and review the notes when doing class activity*. S69 performed similar process but later sought further information via the Internet. He reflected, *"I always read notes and search in the google"*. From the responses provided by the students, it showed that they performed similar steps to manipulate the resources they will be or are learning. Some of them have more than one process as they took notes, reviewed the notes, and referred to the Internet to further understand the tasks given by the teacher.

Overall, the students in the study demonstrated that they transformed new information into visual concepts when they used cognitive strategies. They also consciously applied rules to understand the sentences they wrote. This was evident when they watched YouTube and used sticky notes before they wrote sentences relevant to the tasks being given by the teacher. Apart from that, they summarised important points as they practised writing by wording the sentences on their own. This finding broadly supports the work of Nami, Marandi, and Sotoudehnama (2018), although theirs was on discourse speaking skills. Nevertheless, their study found that teachers demonstrated cognitive learning strategies when online collaboration was carried out in a discussion. The computer-mediated discourse enabled the teachers who were their study's respondents to construct knowledge. At the same time, they used the platform for socialising and peer instructions. More specifically, the five in-service EFL teachers reported in Nami et al.'s (2018) study employed a Yahoo Group discussion list that engaged them with professional dialogue on topics related to technology. The cognitive learning strategies used by the teachers (as coded by the researchers when reporting the findings) were suggestions, questions, unclassified answers, and delivery. The researcher concluded that the asynchronous exchange provided opportunities for knowledge construction at different levels of cognitive presence.

The writing of important points that the students in the current study demonstrated could be compared to Koc and Koc's study (2016). The participants (trainee teachers of English) listened to important keywords that carry meaning when they were engaged in online activities. Notably, in the listening activity, they listened to important keywords that carried meaning. These results also match an earlier study on note taking concerning cognitive strategies that promoted intrinsic motivation among L2 learners (Ali, 2022). In her study, it was reported that the learners made notes on the important things when they listened to lectures. In the use of Canva, for instance, it encouraged creativity as they could use various features

provided by the resource while taking notes. Also, one of the samples in the study was motivated using the mind map application as he could make short notes. The iPad used when note-taking enabled him to read quick notes at his convenient time.

4.3 Students' Use of Social Strategies to Communicate with their Peers when Using Digital Platforms

O'Malley et al. (1985) define social strategies as cooperation among learners upon completing a language task. The strategies enable students to work with one or more peers to obtain feedback, pool information or model a language activity. Three themes were formulated concerning the social strategies used by the students in the current study. The themes are "Texting via WhatsApp for initial task delegation", "Discussion via Google Meet for further communication' and "Discord for instant messaging and voice calls" were formulated after understanding and synthesising the responses made by the students.

4.3.1 Texting via WhatsApp for Initial Task Delegation

In the current study, students employed various digital platforms to interact with their peers, including WhatsApp, Google Meet, Discord, and Messaging via Facebook. Specifically, they made calls and texted their friends using the applications. Table 2 shows the common digital platforms they used to communicate with their friends for the assigned tasks. The most common platform to communicate was WhatsApp (n=38) followed by Google Meet (n=11) and the least was Discord (n=3).

Nos	Digital platform	Frequency
1.	WhatsApp	38
2.	Google Meet	11
3.	Discord	3

Next is the explanation of using digital platforms to communicate with peers. S10 used WhatsApp as she made calls to her friends to discuss and decide their plan to complete the assigned task. Usually, she assigned a proofreader to ensure she used correct grammar. She put extra miles to ensure her works were error-free. She said:

> *"I usually WhatsApp them or call them and discuss on how we should navigate. And what content is the most suitable. Sometimes I would ask them to help be an extra proof reader of my work in case I missed any grammar mistakes or typos".*

For S24, he also used WhatsApp to interact with his friends. He used the platform to communicate with his friends, asking for confirmation on the objectives of the assigned task. He commented, *"I will interact with my friends through WhatsApp. I will reconfirm back the assignment objectives with them".* Similarly, S36 did the same as communicating via WhatsApp enabled her to achieve mutual understanding among members of her group. She remarked, *"… via WhatsApp to ask for confirmation on mutual understanding of the task".* WhatsApp was also used by S44 to communicate with her friends. Yet, at times, she used online meeting platforms to further discuss the task assigned by the teacher. She wrote, *"I will interact with them through WhatsApp and sometime we will do some online meeting to know further about the assignment".*

4.3.2 Discussion via Google Meet for Further Communication

Students used Google Meet as a follow-up platform to discuss further the assigned tasks given by the teacher. For students in the Computer Sciences Faculty, online meetings were held if their friends had problems troubleshooting software they were using. S53 for instance, shared her experience of using Google Meet for the discussion. She said:

> *"I interact with my friends using Google Meet and WhatsApp. If we are confused about any activity, we will discuss the activity using Google Meet or WhatsApp. If the activity uses software we are unfamiliar with it, we can help each other by sharing screens in Google Meet".*

Another student, S69 used WhatsApp and Google Meet to interact with her friends. She wrote, *"I always use WhatsApp and google meet to interact with my friends".*

4.3.3 Discord for Instant Messaging and Voice Calls

Discord is another platform students use to interact with their friends. Its use enabled them to send instant messaging and chat in groups. Mainly it allowed them to message each other to complete an assigned task. Yet, they did not explain how Discord was used in relation to completing the exercise that the teacher gave. Their responses to using Discord are:

S51 : *Through WhatsApp, Discord*

S57 : *WhatsApp, Google meet, Discord*

S59 : *Through WhatsApp, Discord and Google Meet*

The findings showed that students employed three main platforms to interact with their friends. These are WhatsApp Messenger, Google Meet and Discord. They used more than a single platform depending on the kind of activities assigned by their teacher. WhatsApp was used to initiate the discussion, while further communication was conducted using Google Meet. Sometimes, they also used Discord to text one another as another alternative for communication. It showed that they adopted various platforms for communication to achieve their learning purposes. Following the present results, participants in Chen, Wang, and Rodway (2021) also adjusted their learning with the technology when learning online Chinese courses. The researchers also found that social strategies were influenced by various factors such as learning mode (synchronous and asynchronous), learning environments, learning contexts, technology and interactants. It was concluded that students should be aware of applying social strategies in their learning. On the other hand, teachers could guide their students using collaborative social strategies in online Chinese courses. The current study results also reflect Sugiartha's (2021) study. Her students developed online group discussions to complete the assigned tasks. The eighth-graders interacted with one another in the online learning environment and asked questions to their teachers when they did not understand the learning content.

5.0 CONCLUSION

The study concludes that the students demonstrated strong technology literacy, since they are able to use multi-digital platforms to complete the writing tasks. This study has implications on the 21st-century in that language learners need to utilise various platforms for learning. Ali, Bakar, Ahmad, and Saputra (2022) argue that online environment facilitates language learning. Therefore, the use of the digital platforms as in the current study can ensure the effectiveness learning in the 21-st century. The findings contribute to language practitioners by formulating classroom activities, especially in preparing the writing activities for ESL learners. Further research in this area could be established by conducting interviews with the students as the current research employed open-ended questions to obtain its data.

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APPENDIX (TABLE 1)

Nos	Learning Strategies	Descriptions
A	**Metacognitive Strategies**	
	Advanced organisers	Making a general but comprehensive preview of the organising concept/ principle in an anticipated learning activity
	Directed attention	Deciding in advance to attend in general to a learning task and to ignore irrelevant distractors.
	Selective attention	Deciding in advance to attend to specific aspects of language input or situational details that will cue the retention of language input.
	Self- management	Understanding the conditions that help one learn and arranging for the presence of those
	Advanced preparation	Planning for and rehearsing linguistic components necessary to carry out an upcoming language task.
	Self-monitoring	Correcting one's speech for accuracy in pronunciation, grammar, vocabulary, or for appropriateness related to the setting or to the people who are present.
	Delayed production	Consciously deciding to postpone speaking to learn initially through listening comprehension
	Self-evaluation	Checking the outcomes of one's own language learning against an internal measure of completeness and accuracy.
	Self-reinforcement	Arranging rewards for oneself when a language learning activity has been accomplished successfully.
B	**Cognitive Strategies**	
	Repetition	Imitating a language model, including overt practice and silent rehearsal.
	Resourcing	Using target language reference materials
	Directed physical response	Relating new information to physical actions, as with directives.
	Translation	Using the first language as a base for understanding and/ or producing the second language
	Grouping	Reordering or reclassifying and perhaps labeling the material to be learned based on common attributes.
	Note-taking	Writing down the main idea, important points, outline, or summary of information presented orally or in writing
	Deduction	Consciously applying rules to produce or understand the second language

	Recombination	Constructing a meaningful sentence or larger language sequence by combining known elements in a new way
	Imagery	Relating new information to visual concepts in memory via familiar, easily retrievable visualisations, phrases, or locations
	Auditory representation	Retention of the sound or similar sound for a word, phrase, or longer language sequence.
	Key word	Remembering a new word in the second language by: 1. identifying a familiar word in the first language that sounds like or otherwise resembles the new word, and generating easily recalled images of some relationship between the new word.
	Contextualisation	Placing a word or phrase in a meaningful language sequence.
	Elaboration	Relating new information to other concepts in memory.
	Transfer	Using previously acquired linguistic and/ or conceptual knowledge to facilitate a new language learning task.
	Inferencing	Using available information to guess meanings of new items, predict outcomes, or fill in missing information.
	Question for clarification	Asking a teacher or other native speaker for repetition, paraphrasing, explanation and/ or examples.
C	**Social Mediation**	
	Cooperation	Working with one or more peers to obtain feedback, pool information, or model a language activity