Covid -19 Situated Vocabulary Development in EFL/ESL Learners: Context and Strategies

Kamal Raj Devkota, PhD¹ Kamal Kumar Poudel (Corresponding author), PhD² Jyoti Sigdel³

Abstract

This paper presents Covid-19 related vocabulary development in higher secondary level students in Nepal. The study applied a mixed research design and was conducted in different phases. Quantitative information derived through the Vocabulary Test Survey (VTS), and qualitative information collected through free writing tasks were analyzed using descriptive statistics and thematic analysis respectively. The VTS of the 30 most frequent Covid-19 vocabulary items was arried out in two different contexts: word-in-zero-context (WiZC) and word-in-sentence-context (WiSC). The students' responses regarding the (media) sources they acquired/learned from, and the strategies they used to acquire/learn particular vocabulary items were collected as the data, which were analyzed thematically. Finally, the students were involved in free writing tasks which were analyzed to find out the stages of vocabulary development. The findings show that the students' achievement in WiSC was comparatively better than that in WiZC. Yet, the difference was not significant in most of the Covid-19 vocabulary items. Similarly, social media were found key sources of Covid-19 vocabulary development in the learners. Finally, in the case of most of the Covid-19 vocabulary items, the students performed around concept formation, concept extension and limited/controlled use stages of vocabulary development.

Keywords: Covid-19, EFL learning, vocabulary development, word-in-zerocontext, word-in-sentence-context, social media

Background

The Coronavirus disease (widely known as Covid-19), which was first identified in Wuhan of China in December 2019, posed a serious effect on different

¹ Lecturer, CERID, Tribhuvan University; Email: kamalrajdevkota7@gmail.com

² Associate Professor, Mahendra Ratna Campus Tahachal, Email: kkpoudel2023@gmail.com

³ Institute of Advanced Communication, Education and Research, Pokhara University; <u>Email</u>: jyoti.sigdel7@gmail.com

domains of human life including education. Spread as a pandemic across the world in a very short period from its emergence, it caused, among other activities of human life, a serious disruption in the conventional mode of face-to-face teaching, and hard-pressed many schools and colleges to initiate online teaching and learning, although they were not prepared in terms of physical infrastructure and human resources both. Therefore, a large number of schoolchildren, especially those residing in rural settings across the world, remained physically disconnected from formal school learning. As UNESCO pointed out, "more than 1.5 billion students and youth across the planet are or have been affected by school and university closures due to the Covid-19 pandemic" (2020).

Many studies have also unfolded that institutions and people adopted different alternative and informal spaces to continue learning (Smith, 2021; Agaton & Cueto, 2021). For example, English as a second/foreign language (ESL/EFL) learners pursued diverse modes and methods of learning during the Covid-19 pandemic. Nonetheless, they experienced serious disruption in their conventional face-to-face learning (Kawinkoonlasate, 2020; Yi & Jang, 2020). In spite of this situation, they came across words and meanings, images and messages, dialogues and discourses of different sorts created and circulated simultaneously through internet-mediated social media, online programs, TV channels, and radio programs. Al-Jarf (2021) points out that in a new distance learning environment caused by the Covid-19 pandemic, ESL/EFL learners were exposed to a variety of online materials including vocabulary items and technologies as they engaged themselves in mobile apps, audiobooks, podcasts, online dictionaries, and videos. More importantly, since Covid-19 remained a rather sensitive issue to be observed, explored and watched, ESL/EFL learners acquired a significant stock of vocabulary online around the Covid-19 pandemic (Shamsan, Ali and Hezam, 2021).

On the one hand, Covid-19 at least disrupted the conventional face-to-face settings of language teaching and learning and, on the other, language learners were mostly dependent on the online space of learning where they simultaneously interacted with a large number of internet-mediated online information, ideas, ideologies, vocabulary and language contents. The latter situation affected the acquisition and development of language learners. This study aimed to assess vocabulary development in the sampled students mostly in the incidental settings particularly concentrating on contexts and strategies.

The overarching purpose of the study was to investigate the secondary-level students' Covid-19-related vocabulary development based on the context, strategies and development. The specific research questions were as follows.

- i. How do the secondary level EFL learners navigate WiZC and WiSC while acquiring/developing Covid-19 related vocabulary?
- ii. What are the strategies that these learners apply while acquiring/ learning Covid-19 related vocabulary items?
- iii. How does Covid-19 related vocabulary development proceed in EFL learners?

Review of the Related Literature

Vocabulary acquisition in a second/foreign language context has attracted a large number of researchers (e.g. Newton, 2013; Rott, 2013; Schmitt, 2010; Barcroft, 2009; Bogaards & Laufer, 2004; Gu & Johnson, 1996; Laufer & Hulstijn, 2001; Sanaoui, 1995; Schmitt & McCarthy, 1997). Of them, Schmitt (2010) mainly concentrates on "the nature of lexis, its employment in language use, and the best ways of facilitating its acquisition" (p. 3). Sanaoui (1995) identifies two distinct approaches - structured and unstructured - to vocabulary learning. He mentions that these two approaches differ in (a) the extent to which learners engaged themselves in independent study; (b) the range of self-initiated learning activities in which the learners engaged themselves; (c) the extent to which the learners recorded the lexical items they were learning; d) the extent to which the learners reviewed such records; and e) the extent to which they practiced using vocabulary items outside of their L2 course (p. 15). Oxford and Crookall (1990) point out four broad categories of vocabulary learning decontextualizing, techniques, namely, semi-contextualizing, fully contextualizing and adaptable. They further view that learners pick up new vocabulary on their own without any guidance, rather than being explicitly taught as in most language classes.

This sort of 'picking up' new vocabulary occurs mostly in implicit and natural settings. Yet, there should be a proper balance between explicit and intentional learning and implicit and incidental learning (2008). Webb (2008) argues that 'quality context', where the individual words occur, is crucial for strengthening vocabulary acquisition and development in the learners. Extensive reading also provides a natural context for successful vocabulary learning (Jenkins, Stein & Wysocki, 1984). Extensive reading promotes incidental learning where the individual learners implicitly acquire the meaning(s) and use of the words. Besides, extensive reading, different sorts of media as well play a vital role in

promoting vocabulary acquisition in informal and natural settings. Audio/video materials, for example, provide meaningful contexts not just for guessing the meanings of the words, but also for using these words in meaningful communicative situations (Karami, 2019).

There are diverse media contexts where learners can engage themselves in learning vocabulary. Tosun (2015) argues that a blended mode of teaching and learning vocabulary is more effective than the traditional mode of teacher instruction. Both face-to-face instruction and technology-mediated online learning better enhance learners' vocabulary knowledge. Similarly, Munir (2016) points out that the use of the cartoon film media remarkably enhances young children's language as well as vocabulary knowledge. However, as Gibson (2016) has explored, effective computer-based instruction should incorporate cognitive and metacognitive strategies.

Some other researchers have investigated that the use of the media and technology has a positive effect on vocabulary acquisition and development (Pikhart, 2021; Suparsa & Mantra, 2020). Pikhart (2021) points out that there remained a strong psycholinguistic effect of the social media on ESL learners of Generation Z during Covid-19. Similarly, Suparsa and Mantra (2020) mention that although the students got exposed by large to Covid-19-based terminology, they acquired and comprehended only common terms. However, the use of the social media has positive effects on the acquisition and development of lexicon, lexical variations, communication skills and grammar use. This finding resonates with Turan and Akdag-Cimen (2020) who argued that the use of online and flipped instruction significantly affected students' language development.

Still, some more recent studies have investigated vocabulary learning strategies (VLSs) of SL/FL learners during the pandemic (Shamsan, Mohammed Ali & Hezam, 2021). In this regard, the use of computer-assisted (online) technologies supports the development of both cognitive and metacognitive strategies (Ma & Kelly, 2006). For example, in their study of VLSs by Saudi EFL learners, Shamsan, Ali and Hezam (2021) observed that the learners used online VLSs to get the meaning of the new vocabulary items, and cognitive and metacognitive VLSs to revise the learned vocabulary items and strengthen their vocabulary repertoire. The argument regarding VLSs resonates in Ma and Kelly (2006) who pointed out that Computer Assisted Language Learning (CALL) technologies enabled learners to learn vocabulary more efficiently and effectively (p. 15). Finally, vocabulary development in SL/FL learners is a cumulative, yet stepwise

process that undertakes from controlled-productive levels to productive levels of vocabulary use (Laufer & Nation, 1999).

These understandings regarding vocabulary acquisition, learning and development provide a framework for spotting the research gap and developing research questions. The literature review has discussed vocabulary acquisition/learning in native as well as non-native contexts, media use and vocabulary learning/acquisition, and VLSs of different sorts. It has also reviewed the effects of Covid-19 on language learning. However, the question of media use and vocabulary development particularly targeting at Covid-19 related vocabulary in the EFL context has not been investigated yet. This is the gap that this study sets out to fulfill.

Methodology

As a mixed method design, this research investigated Covid-19 vocabulary development in forty-four secondary-level ESL/EFL learners in Nepal. In the first phase, a vocabulary survey across mediascapes was conducted and a list of vocabulary items commonly used around Covid-19 was prepared. From the list, 30 most frequent items were identified and selected for Vocabulary Test Survey (VTS). Then, two sets of questionnaire were developed for administering VTS. The first set was designed to assess the students' vocabulary knowledge in WiZC, and the other to assess that in WiSC. Although vocabulary knowledge comprises the complete range of spellings, pronunciation, and collocation including synonymy and antonymy of individual lexicons (Burton, 2009), this research delimited only to the investigation of the learners' general sense, meanings and use of individual items. Similarly, in the second phase, the English language learners involved in VTS were interviewed to explore qualitative information regarding what media-type(s) they were exposed to for the individual items, and what strategy(-ies) the individual learners followed while acquiring/learning the individual items.

Research population, site and sample

The population of this research comprised students studying in higher secondary grades in public schools from two geographical settings in Nepal. Twenty students of Grade 12 from a public school located in Kathmandu Metropolitan City, and the same number from a public school in Gorkha, a hill district of central Nepal, were selected from three streams- Education, Humanities and Management. During Covid-19 the students from the Kathmandu-based school were mostly living on rent with their parents or relatives. However, the students from the Gorkha-based school were mostly living with their parents at home.

Yet, as it was reported during the interview, the Kathmandu-based students had a higher speed internet access than those from Gorkha did. Nevertheless, the students of Gorkha as well had some sort of internet access, albeit a fiber network or subsidized data packages. The Kathmandu-based students often reported that they used different types of social media including Facebook, Twitter, and Online news channels through which they would get exposed substantially to Covid-19 related news, messages and information, notices and precautions. However, the Gorkha-based students reported that they had some experience of volunteering to reduce Covid-19 effects in their local town and neighborhoods.

Data collection procedure

The fieldwork for this study took place in August and September 2020 when the schools were just reopened after the first wave of Covid-19 in Nepal. So, it was a really tough time for the students, the teachers and the researchers to move around. The Government of Nepal had issued different health measures to be followed while working in the community and schools. Following all these measures, the researchers visited the schools, explained the purpose of the visit, and got the respondents' consent for conducting fieldwork for a week. They also asked the students and the teachers for permission so that they could interview the respondents following the health measures set on them.

Before the VTS was undertaken, the students were informed of the purpose of the research and a rapport was built with them so that they would not feel it was a certification test for assessing their vocabulary competence. The students were given a choice about mentioning or not mentioning their names and clues of identification except for gender, availability of the smartphone and time they tentatively spent using the social media during Covid-19.

The fieldwork in these two sites took place in one week's difference. The first and the third authors visited both schools of both sites. On the day of VTS, the researchers, in collaboration with each school administration, managed a room for the students to responding to the questionnaire under a peaceful situation. Before the students were given a questionnaire, they were specially asked to read the instructions given in the questionnaire. As planned, first the questionnaire related to WiZC was administered, allowing them to write the general meanings/sense of the Covid-19 vocabulary items. In about fifteen minutes, after all, the students got ready for the second round VTS. The students were provided with the questionnaire related to WiSC, in which they had to read the words in sentence context and provide the meanings and sense they

understood from the context. In both cases, they were clearly instructed that they could write the meaning(s)/sense of the words in English and/or Nepali as convenient.

The next day, the researchers conducted another round of investigation in which they were given a task for free writing. They were asked to write an essay in English using words related to Covid-19. They were instructed that they could freely select the words and write about Covid-19, the experience they had had, the cautions they got exposed to and the health measures they followed to keep themselves safe from the pandemic.

Finally, after having all these tests completed, the students were individually interviewed for the qualitative data. The interview guidelines particularly focused on how they experienced when their classes were closed, what media they used more, and how they got exposed to the individual vocabulary items which were tested. The interview with each student lasted for half an hour. During the interview, they also reported how they experienced volunteering, particularly in the work like preparing quarantine in the nearby schools and public places.

Data analysis and reporting

The students' scores from the VTS in WiZC and WiSC were analyzed using descriptive statistical tools such as percentage, mean, etc. Nonetheless, the data derived from the free writing and interview techniques were analyzed using MAXQDA – the qualitative data analysis software. Later the output of the analysis of the quantitative data was integrated with the relevant codes that emerged from the analysis of the qualitative information. The quantitative data were analyzed based on the context, strategies and development. Particularly, the test-types: WiZC vs. WiSC, school, gender, students' overall achievement of individual vocabulary items, media types and stages of vocabulary development were conducted. Based on the analysis, this paper highlights the following findings with discussion.

Results

Drawing on the quantitative and qualitative data derived from multiple sources, especially with the context and strategies resulting in EFL learners' development of Covid-19 situated vocabulary in mind, the following themes emerged.

Incidental context of vocabulary learning: Mediascapes and other resources

The analysis of both quantitative and qualitative data shows that the students acquired the vocabulary items from different contexts chiefly including media use. Figure 1 displays that the students acquired/learned most of the Covid-19-related vocabulary items from different types of social media. Facebook and YouTube were reported to have been mostly used. Likewise, TV channels were also highly preferred by the students of both urban and rural settings. The students reported that, besides these media, they got exposed to Covid-19 related vocabulary items from their friends, parents and siblings, teachers, the internet, newspapers, hospital and doctors and Covid-19 related awareness programs.

The analysis of the qualitative data also shows that the students from the metropolitan context of Kathmandu had a fairly stable internet connection to get exposed to different types of social media. Yet, the students from the school of the municipal context of Gorkha reported having had some internet connection-no matter whether it was through a data package or Wi-Fi available at home. They, however, got more opportunities to engage themselves in different types of volunteering during the pandemic. They reported that they were involved in different types of volunteering such as building quarantines, distributing sanitizer and masks to the community people in the nearby villages and also involving themselves in different forms of awareness programs against Covid-19. Although these programs were not directly connected to language teaching and learning, the activities exposed them to Covid-19 related vocabulary items, almost all of them originally English, from natural settings.

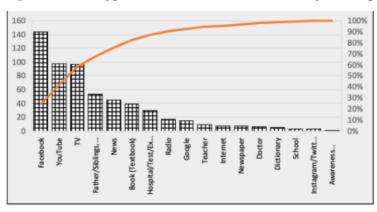


Figure 1 Media types, other resources and vocabulary learning

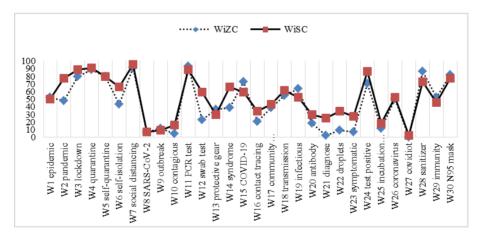
Vocabulary achievement across contexts: WiZC and WiSC

The analysis of VTS in WiZC and WiSC shows that there is no significant difference between the vocabulary achievements of the students in the two different contexts. Figure 2 reveals the vocabulary achievement in the students based on the frequency of the correct responses on each of the vocabulary items tested. The item-wise results are specifically displayed in Box 1, Box 2 and Box 3 below.

Box 1: More frequently responded items: lockdown, quarantine, social distancing, test positive, sanitizer and mask **Box 2**: Less frequently responded items: SARS-Covid, outbreak, contagious, protective gear, antibody, diagnose, droplets, incubation, covidiot **Box 3:** Moderately responded items: epidemic, pandemic, selfisolation, swab-test, community spread, transmission, infectious, coronavirus, immunity

Nevertheless, the these words were responded more correctly in the WiSC test than in the WiZC test: 'pandemic', 'lockdown', 'quarantine', 'swab-test', 'syndrome', 'contagious', 'antibody', 'diagnoses', 'droplets', 'symptomatic' and 'test positive'. This implies that the sentence context (WiSC) facilitates the students to guess and deduce the meanings of the vocabulary items rather than the situation where the words are presented without any context (WiZC).

Figure 2 Vocabulary achievement in WiZC and WiSC



Vocabulary achievement in WiZC and WiSC tests: Comparison between the selected schools

The comparison of vocabulary achievement in WiZC between the school of Kathmandu metropolitan city (School A) and the school of Gorkha Municipality (School B) shows that the students of School B performed better than those of School A in the case of most of the Covid-19 vocabulary items (Figure 3). The students of School A performed better in these words: 'pandemic', 'self-quarantine', 'outbreak', and 'immunity'. However, the difference in the achievement scores between School A and School B in each of the vocabulary items tested in this study was found insignificant.

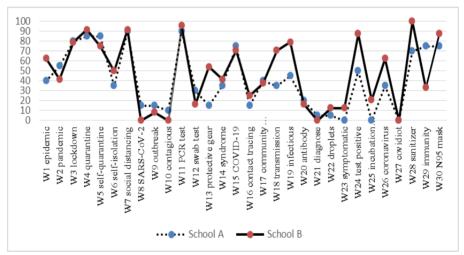


Figure 3 Vocabulary achievement in WiZC: School A and School B

Similarly, the comparison of vocabulary achievement in the context of WiSC between these two schools shows that the students from both of the schools exhibited neck-and-neck performances (Figure 4). In comparing the correct responses in each of the individual vocabulary items, the students of School A performed better in these words: 'pandemic', 'social distancing', 'infectious', 'syndrome', 'droplets', 'immunity' and 'mask', whereas, overall, the students of School B performed better in the WiSC test.

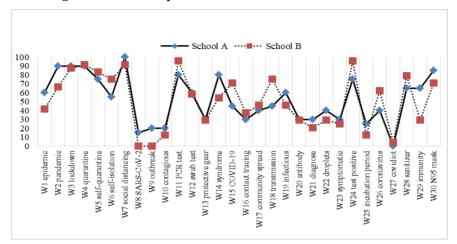


Figure 4 Vocabulary achievement in WiSC: Schools A and B

Overall response frequency of Covid-19 situated vocabulary items

As observed in Figure 5, most students responded to the words 'PCR test', 'social distancing', 'quarantine', 'sanitizer', 'mask', 'lockdown', 'self-quarantine', 'Covid-19', and 'test positive' with correct meanings. However, the words 'swab test', 'contact tracing', 'antibody', 'outbreak', 'incubation period', 'droplets', 'SARS-VoC2, 'symptomatic', 'contagious', 'diagnose' and 'covidiot' were responded by a small number. These Covid-19 vocabulary items were responded to by the average number of students in the VTS test: 'infectious,' 'transmission,' 'epidemic,' 'immunity,' 'community spread' and 'protective gear'.

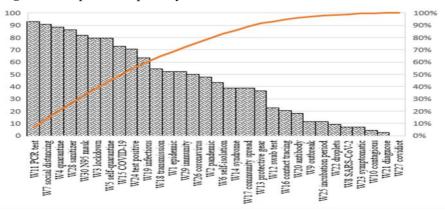


Figure 5 Response frequencuy of Covid-19 situated words

Vocabulary development stages: Learners' experience in free writing

The analysis of the free writing texts (essays) derived from the students shows that the students passed across a four-stage continuum of development concerning the Covid-19 related vocabulary items. The students passed across the concept formation stage, the concept extension stage, the stage of limited/controlled productive use, and finally, the stage of productive use of vocabulary development. At the concept formation stage, the students formed the concept of the Covid-19 words as they got exposed from different forms of media and/or other incidental contexts. At the concept extension stage, they explored the meanings of the vocabulary items and explained in the language(s) they were familiar with. At this stage, they mostly dealt with the semanticcognitive meanings rather than their use in the fullfledged situation of commuication. At the stage of limited/controlled productive use, the students attempted to use the vocabulary in their free writing although they significantly lacked the required vocabulary knowledge that appropriates lexical choice, syntactic accuracy and semantic or pragmatic uses. Finally, at the productive use stage, students used the items in their free writing correctly and appropriately. Using this four-stage vocabulary development continuum as an analytical lens. we analyzed the students' Covid situated vocabulary development, which were

used in the VTS test. The analysis of the individual students' free writing texts reveals some complex situations of Covid-19 vocabulary use. For example, in the following piece of free writing text extracted from her essay, Student 1 seemed to have been performing the use of Covid-19 vocabulary items (underlined) around the stage of limited/controlled vocabulary use.

Coronaviruses are often found in bats, cats...They live in but do not infect animals. Coronavirus is a dangerous disease. Coronavirus is a small but harmful virus. Coronavirus which is commonly as Covid-19... (Student 1)

In the text the student has used Covid-19 related words such as 'Coronaviruses', 'infect', 'virus' and 'Covid-19'. Yet, her use of these vocabulary items in the free writing apparantly lacks proper cohesion and coherence. A similar stage of vocabulary development can be observed in the case of Student 2. For example, in the extract of his essay below, the student has used words like 'Corona', 'Covid-19', 'virus', and 'spread' on a regular basis. However, when the use of the text is closely observed with coherence and cohesion in mind , the student is still not attaining the stage of the productive use of vocabulary development. Although the Covid-19 words have been used in the sentence contexts, the student also has captured a broader context of Covid-19, the vocabulary and

language use still need to be appropriated in textual, discourse and pragmatic contexts.

First, let's start with the human "us". We are the superior being. Whatever happens we are blamed for it. We humans rule this world for the planet.

Now, let's get to the heading. "Corona" commonly known as Covid-19 first introduce from Wuhan, China. As we later knew corona commonly found in bats, cats and camels after research. We started hating those Chinese people because it was obvious (...). As the virus first introduced in public, many people didn't give about it much but the letter is the virus spreads like a fire in the forest. It was hot news. The virus almost on a live half of the world. Because the virus could spread through the air. People stopped everything related to social activities. Like the business company, school or any office. But the government try to control it by creating rule. (Student 2)

In the extract of her essay by Student 3 (below), the student has used words like 'Coronaviruses', 'spread', 'pandemic', and 'lockdown' in the sentence context. Like Student 2, Student 3 has shown a broader understanding of Covid-19, its emergence and its spread across the world. The student also has a wider understanding of the pragmatic sensitivity of Covid-19 situated vocabulary items. Though the student has used a limited number of Covid-19 related words, they have been used in the complete sentence contexts which are, in turn, logically connected in the overall extracted piece. However, when closely observed, the text and the vocabulary used still require to meet the level of the expected competence. Thus, the student seems to meet the highest level of the limited/controlled stage of the vocabulary development continuum. Nevertheless, she needs to be more accurate and appropriate about the use of these words.

It Emergence in Wuhan, China, in late 2019, the virus that causes Covid-19 has spread to nearly all countries of the world in only a few months. Coronaviruses are often found in bats, cats and camels. The findings indicate the pandemic has had serious impacts on student education. Online education is dependent on technological facilities, including the internet and WIFI, and the discrepancies that exist in their availability are widening the gaps in access and quality of education. The pandemic has had serious impacts on parents, who barely gets

their salaries. In countries like Nepal many peoples wasn't able to have their meals during lockdowns because of poberty. (Student 3)

Finally, Student 4 has also used several Covid-19 situated vocabulary items in his free writing. He has also demonstrated a wider understanding of Covid-19, and its impacts across the globe. For example, he has used such words as 'Coronavirus', 'syndrome', 'virus', 'spread', 'lockdown', 'mask' and 'sanitizer' that are directly connected to the disease. Also, all of these words have been used in the sentence context. Overall, the extracted text also shows that he has already passed across the concept formation and concept extension stages. Yet, he is still at the stage of limited/controlled vocabulary use, although he has demonstrated some instances of the productive use of some Covid-19 vocabulary items such as 'virus', 'lockdown', 'Coronavirus' and 'syndrome' in his free writing.

> Coronavirus is a family of virus types variables that can cause respiratory illness in human beings. they get their names corona from many crown-like spikes on the surface of the virus severe acute respiratory syndrome, and common cold are an example of coronavirus. the new strain of coronavirus was first reported in Wuhan city of China in December 2019. The virus has since spread to all over the world.

> Coronavirus destroyed the world economic system. it directly impacts human beings. At that time many peoples are jobless. Many people have died from this virus. In Nepal, many people cannot get a proper job that's why that people cause many different types of diseases. Many countries have lockdowns at that time. Schools, colleges, universities, and industries are closed so at that time it collapses the whole education system. We also cannot get an education and we cannot go anywhere without masks and sanitizer. (Student 4)

The analysis of the students' free writing as sampled above shows in general that the students demonstrated the concept formation, concept extension and limited/controlled use of most of the Covid-19 situated vocabulary items included in VTS. Although some students used certain Covid-19 related vocabulary items like 'mask', sanitizer', 'coronavirus,' etc. productively in their free writing, they still experienced certain flaws at lexical, syntactic and pragmatic levels of vocabulary choice, use and text construction. Also, the qualitative interviews that followed VTS and free writing exercises with the students show that the students used different types of cognitive and metacognitive strategies of vocabulary learning. For example, Student 3 reported that he used to read the news about Covid-19, underlined the new words she came across in the news, and would write in her diary so that she

could repeat and memorize them for future use. Equally, Student 4 explained that he attempted to use the Covid-19 words in his chats with peers and interactions. He further explained that he used to write names like 'mask', 'sanitizer', 'Covid-19', 'coronavirus' etc. while preparing Covid-19 precaution kits for the community people. Such metacognitive strategies seem to have strengthened his Covid-19 situated vocabulary development.

Discussion

The results of both VTS and the text analysis of the free writing tasks about Covid-19 suggest that the quality of the context in that vocabulary items occur has a greater effect on gaining incidental vocabulary (Webb, 2008). When unfamiliar words occur in communicative events or are adjusted in the context of tasks, the acquisition of word meaning takes place substantially (Newton, 1999). As investigated in this research, the students got exposed to the Covid-19 situated vocabulary items from media and non-media contexts. However, the quality of the context where this vocabulary occurred sufficiently mattered when it comes to the way the students achieved them. It is reproduced as the result of the vocabulary achievement between WiZC and WiSC. Vocabulary achievement is not significantly different. However, the frequency of correct responses in WiSC is greater in the case of certain vocabulary items. The overall achievement is again below the average in the case of many items such as 'epidemic', 'pandemic', 'outbreak', 'contagious', 'diagnose', 'droplets' and 'covidiots'. It implies that the students, on the one hand, had low English language proficiency. On the other hand, the contexts they got exposed to may not be harmonious with their English proficiency levels. Sometimes, when the students get exposed to new vocabulary items in their real-life situations, that will lead them to acquire and learn the word meaning sustainably (Tanaka, Yonesaka, Ueno & Ohnishi, 2015). For example, the students of School B got exposed to many Covid-19 situated vocabulary items in their real-life contexts where they were engaged in different types of volunteering and community work during the pandemic. Here, the students not only employed their cognitive strategies but also their metacognitive strategies in the course of acquiring certain vocabulary in incidental contexts (Zhang, 2009).

Vocabulary acquisition/learning is not necessarily confined to the acquisition of word meanings alone. Rather, it means whether the acquirer/learner can use the words in his/her language use and communication. Free writing tasks are often considered important to assess whether the acquirer/learner has achieved the productive stage of vocabulary use. In this sense, the question is whether the learner/acquirer can transform the passive vocabulary of his/her mental dictionary into active vocabulary that s/he uses in his/her language production (Laufer, 1998). The findings regarding the Covid-19 situated vocabulary items

tested through the text analysis of the free-writing texts produced by the students show that most of the students were found to have achieved the development stages of concept formation and concept extension. They achieved the controlled stage of vocabulary development in the case of the vocabulary items such as 'mask', 'sanitizer', 'coronavirus', etc. However, only a few students nearly reached the productive stage of vocabulary development in the case of these vocabulary items. In this sense, as Meara (1996) argues, a word develops from the basic word meaning stage to the detailed knowledge stage over time. The research shows that the students got exposed to the Covid-19 related words in the media and non-media contexts, they memorized the word meanings, and got some contexts as the words were circulated over different contexts. Yet, in this study, the quality of exposure and also the detailed knowledge about the words that they got in explicit language teaching did not take place. Therefore, as vocabulary development continued, most of the students supplied the strategies required at the controlled productive stage, not the productive stage (Laufer & Paribakht, 1998).

Finally, the overall analysis of the quantitative information obtained through VTS and qualitative information obtained through the free writing tasks and interviews shows that the media have a crucial impact on vocabulary development in the students. We conclude that learners apply both cognitive and metacognitive strategies while acquiring/learning vocabulary in incidental contexts. Moreover, they seem to pass across the different stages of vocabulary development.

The multistage sequential vocabulary development unfolds several questions for further investigation. First, in this research in particular, the difference in vocabulary achievement between WiZC and WiSC is not significant in most of the Covid-19 situated vocabulary items which were tested. This is a relevant question but many studies claim that the sentence context provides the learners with clues to the meanings of the newly exposed words (Decarrico, 2001). Second, the media do provide some incidental contexts for vocabulary acquisition. Yet, they should be brought into explicit teaching while considering the productive use of vocabulary. As in this research, the students are found not more confident in using Covid-19 situated vocabulary since they were not provided with explicit and corrective feedback. Finally, the vocabulary development stages are quite blurred while identifying the development stage of the overall vocabulary knowledge of the learners, or the learner's detailed knowledge of a particular vocabulary item. For example, in the overall vocabulary repertoire, the students seemed struggling with learning items but they have met some concept formation and concept extension stages. However,

they are again not proficient enough to use vocabulary in their language production in the case of most of the Covid-19 situated items tested in this study.

Conclusion

Context and learner strategies contribute to the development of the integral parts of incidental vocabulary acquisition/learning in the ESL/EFL context. The quality of context strengthens not only the concept formation, concept extension and controlled productive use, but also the meaningful acquisition/learning and productive use of the vocabulary items. In the study, the learners' knowledge of necessary meanings of Covid-19 situated items was assessed through WiZC and WiSC tests; and the achievement in the WiSC test appeared better than in the WiZC test including most of the Covid-19 related vocabulary items. Even the sentence contexts that were provided to the students could not provide students with more clues to the meanings of several of the Covid-19 words because the students' proficiency level of English was below the average. Yet, the students applied both cognitive and metacognitive strategies for acquiring/learning some Covid-19 words in the incidental contexts. These strategies were more targeted at enhancing the students' concept formation, concept extension and controlled production of the Covid-19 generated words. Therefore, regarding the productive use of Covid-19 situated vocabulary items tested in this study, the quality of contexts (incidental situations where new words are repeatedly used), and learner strategies should be promoted and enhanced. In this regard, the study shows that media and real-life situations can be for vocabulary development in ESL/EFL learners.

Acknowledgement

The authors acknowledge T. U. Research Centre for Educational Innovation and Development (CERID) for granting the principal author the mini-research entitled *Incidental Vocabulary Acquisition Across Mediascapes* ... from which this article is substantially informed.

References

- Agaton, C. B., & Cueto, L. J. (2021). Learning at Home: Parents' Lived Experiences on Distance Learning during COVID-19 Pandemic in the Philippines. *International Journal of Evaluation and Research in Education*, 10(3), 901-911.
- Al-Jarf, R. (2021). Differential effects of the iPad on first and second language acquisition by Saudi children during the Covid-19 pandemic. In *Conference proceedings of*» *eLearning and Software for Education*

«(*eLSE*) (Vol. 17, No. 01, pp. 95-104). Carol I National Defence University Publishing House.

- Decarrico, J. S. (2001). Vocabulary learning and teaching. *Teaching English as a second or foreign language*, *3*.
- Gibson, C. (2016). Bridging English Language Learner Achievement Gaps through Effective Vocabulary Development Strategies. *English Language Teaching*, 9(9), 134-138.
- Jenkins, J. R., Stein, M. L., & Wysocki, K. (1984). Learning vocabulary through reading. *American Educational Research Journal*, 21(4), 767-787.
- Karami, A. (2019). Implementing Audio-Visual Materials (Videos), as an Incidental Vocabulary Learning Strategy, in Second/Foreign Language Learners' Vocabulary Development: A Current Review of the Most Recent Research. *Journal on English Language Teaching*, 9(2), 60-70.
- Kawinkoonlasate, P. (2020). Online Language Learning for Thai EFL Learners: An Analysis of Effective Alternative Learning Methods in Response to the COVID-19 Outbreak. *English Language Teaching*, *13*(12), 15-26.
- Laufer, B. (1998). The development of passive and active vocabulary in a second language: Same or different? *Applied linguistics*, *19*(2), 255-271.
- Laufer, B., & Nation, P. (1999). A vocabulary-size test of controlled productive ability. *Language testing*, *16*(1), 33-51.
- Laufer, B., & Paribakht, T. S. (1998). The relationship between passive and active vocabularies: Effects of language learning context. *Language learning*, 48(3), 365-391.
- Ma, Q., & Kelly, P. (2006). Computer assisted vocabulary learning: Design and evaluation. *Computer Assisted Language Learning*, 19(1), 15-45.
- Meara, P. (1996). The vocabulary knowledge framework. *Vocabulary acquisition research group virtual library*, 5(2), 1-11.
- Munir, F. (2016). The effectiveness of teaching vocabulary by using cartoon films toward vocabulary mastery of EFL students. *Journal of English Language Teaching and Linguistics*, 1(1), 13-37.
- Newton, J. (1995). Task-based interaction and incidental vocabulary learning: A case study. *Second language research*, *11*(2), 159-176.
- Oxford, R., & Crookall, D. (1990). Vocabulary learning: A critical analysis of techniques. *TESL Canada Journal*, 09-30.
- Pikhart, M., & Botezat, O. (2021). The impact of the use of social media on second language acquisition. *Procedia Computer Science*, 192, 1621-1628. https://doi.org/10.1016/j.procs.2021.08.166

- Schmitt, N. (2008). Instructed second language vocabulary learning. *Language teaching research*, *12*(3), 329-363.
- Shamsan, M., Mohammed Ali, K. J., & Hezam, T. (2021). Online learning amid COVID-19 pandemic: A case study of vocabulary learning strategies. Online Learning Amid COVID-19 Pandemic: A Case Study of Vocabulary Learning Strategies (April 2021). Arab World English Journal (AWEJ) Special Issue on Covid, 19. https://ssrn.com/abstract=3851763
- Smith, A. (2021). COVID-19 and Informal Education: Considerations for Informal Learning During the Pandemic. International Journal of Multidisciplinary Perspectives in Higher Education, 6(1), 122–127. https://doi.org/10.32674/jimphe.v6i1.2640
- Suparsa, I. N., & Mantra, I. B. N. (2020). COVID-19 terminologies: The extent of student's vocabulary acquisition during learning from home. *International Journal of Linguistics and Discourse Analytics*, 2(1), 41-47. https://doi.org/10.52232/ijolida.v2i1.28
- Tanaka, H., Yonesaka, S. M., Ueno, Y., & Ohnishi, A. (2015). An e-portfolio to enhance sustainable vocabulary learning in English. *The EuroCALL Review*, 23(1), 41-52. https://doi.org/10.4995/eurocall.2015.4663
- Tosun, S. (2015). The effects of blended learning on EFL students' vocabulary enhancement. *Procedia-Social and Behavioral Sciences*, *199*, 641-647.
- Turan, Z., & Akdag-Cimen, B. (2020). Flipped classroom in English language teaching: a systematic review. Computer Assisted Language Learning, 33(5-6), 590-606.
- Webb, S. (2008). The effects of context on incidental vocabulary learning. *Reading in a foreign language*, 20(2), 232-245.
- Yi, Y., & Jang, J. (2020). Envisioning possibilities amid the COVID-19 pandemic: Implications from English language teaching in South Korea. *TESOL Journal*, 11(3). https://doi.org/10.1002/tesj.543
- Zhang, B. (2009). FL Vocabulary Learning of Undergraduate English Majors in Western China: Perspective, Strategy Use and Vocabulary Size. *English Language Teaching*, 2(3), 178-185.