[٦]

Using Informal Digital Learning of English for Developing Incidental Vocabulary Learning and Vocabulary Learning Motivation among Secondary Stage EFL Students

Dr. Said Ahmed Mahrous Ahmed Lecturer of Curriculum and TEFL Methodology Faculty of Education, Aswan University

مباة الطمولة والتربية – المصد التامس والتمسون – الجزء الأول – السنة التامسة عشرة – يوليو ٣١٠ ٦

Using Informal Digital Learning of English for Developing Incidental Vocabulary Learning and Vocabulary Learning Motivation among Secondary Stage EFL Students * Dr. Said Ahmed Mahrous Ahme

Abstract

The present study aimed to explore the effect of an Informal Digital Learning of English (IDLE)-based program on developing incidental vocabulary learning and vocabulary learning motivation among secondary stage EFL students. The study used the pre-posttest quasi-experimental one group design. Forty first year secondary stage EFL students participated in the present study. The participants practiced autonomous informal learning activities in out-of-class digital environments. The instruments of the present study included an EFL vocabulary test and a vocabulary learning motivation questionnaire. Data were treated statistically using SPSS. Results of the study showed that the IDLE-based program was found to be effective in developing incidental vocabulary learning and vocabulary learning motivation among secondary stage EFL students.

Key words: Informal digital learning of English, incidental vocabulary learning, vocabulary learning motivation, secondary stage EFL students.

^{*} Lecturer of Curriculum and TEFL Methodology- Faculty of Education, Aswan University.

1. Introduction

Improving learners' foreign language (FL) vocabulary enhances the and develops language learning process. Vocabulary is important for language learners because it greatly affects their communication skills. Without a rich vocabulary, language learners may not be able to effectively communicate their thoughts and feelings in classroom activities, face-to-face communication, writing, and generally in real life.

Vocabulary is central to language because words are the fundamental units of language; English as a Foreign Language (EFL) learners use words which stand for ideas, concepts, objects, and actions in different contexts to express what they mean. EFL experts and researchers have only lately come to understand the significance of lexical information in the communication process and language acquisition.

Furthermore, learning new vocabulary facilitates learners' success in language learning process. Without sufficient knowledge of words, students cannot use the target language effectively. Furthermore, vocabulary is forgotten if it is not acquired and used through appropriate methods that provide students with language input in an authentic target language environment. So, the availability of various multimedia and technological resources promotes the spontaneous acquisition of vocabulary by today's students. In particular, informal digital learning tasks and activities can be a great tool to bring students closer to authentic real-world communicative vocabulary.

1.1. The Problem of the Study

Vocabulary represents a significant component that helps EFL learners in the overall process of language learning in general. The appropriate vocabulary amount is a predictor of better academic performance. Different researchers confirmed the difficulty of vocabulary learning. According to Kikuchi (2009), Yang and Dai (2011), and Nation (2013), vocabulary is a complex and multifaceted construct that includes different components such as written knowledge, oral knowledge, parts of speech, collocations, and associations. So, the heavy burden of learning vocabulary demotivates EFL students in the vocabulary acquisition process.

In addition, EFL learners face many challenges and problems in vocabulary learning. Lack of vocabulary knowledge can be a major reason why students do not want to be exposed to many language learning activities e.g. listening and reading activities. Khany & Khosravian (2014) stated that students who lack adequate vocabulary or vocabulary learning strategies will continue to struggle throughout their language learning process, leading to frustration and continued failure.

In the present study, the researcher investigates the effect of using IDLE on developing incidental vocabulary learning and vocabulary learning motivation among secondary stage EFL students. As a supervisor in the teaching practice program, the researcher noticed a number of problems that the first year secondary stage EFL students encounter when learning vocabulary. They have several common problems such as using inappropriate vocabulary, pronunciation mistakes, and the increasing number of words needed to be used in the communicative contexts. Such vocabulary related problems can be an important reason for making the first year secondary stage EFL students reluctant when practicing reading and listening skills.

In order to make sure that vocabulary is problematic for the first year secondary stage EFL students, a pilot study was conducted. The researcher prepared a writing test which presented to 35 first year secondary stage EFL students. They were required to write a paragraph on "how to protect the environment". Results of the test revealed that 77% of students were not able to show their word knowledge, write various text using different words, or use infrequent vocabulary. Also, the students showed a low level of motivation towards writing the paragraph and they showed lack of confidence in using various vocabulary items to write the essay.

Aim of the Study

The current study aimed to explore the effect of IDLE-based program on developing incidental vocabulary learning and vocabulary learning motivation among first year secondary stage EFL students.

1.3. Questions of the Study

Questions of the study can be stated as follows:

- How far would the IDLE-based program be effective in developing incidental vocabulary learning among first year secondary stage EFL students?
- How far would the IDLE-based be effective in developing vocabulary learning motivation among first year secondary stage EFL students?

1.4. Hypotheses of the Study

The present study discusses the following hypotheses:

- There is a statistically significant difference between the mean scores of the study participants on the EFL vocabulary pre-posttests in favor of the post.
- There is a statistically significant difference between the mean scores of the study participants in the pre and post administrations of the vocabulary learning motivation questionnaire favoring the post-administration.

1.5. Delimitations of the Study

The following delimitations were the scope of the current study:

- A group of first year secondary stage EFL students (n=40) at Mohamed Mekawy secondary school, Aswan Educational Administration, Aswan Governorate, the first semester of the academic year 2022/2023.
- Some receptive and productive IDLE activities.

1.6. Significance of the Study

The results of the present study can be helpful for the first year secondary stage EFL students, EFL teachers and course designers. It might help the first year secondary stage EFL students increase their vocabulary size and develop vocabulary learning motivation through the application of some receptive and productive IDLE activities. Moreover, using the receptive and productive IDLE activities in developing vocabulary learning and vocabulary learning motivation among the first year secondary stage EFL students, the current study suggests a modification of the teaching methods currently adopted to

develop secondary stage EFL students' vocabulary learning and vocabulary learning motivation in Egyptian general secondary schools. Finally, EFL teachers can create IDLE-activities and use them inside or outside the classroom to increase students' enjoyment of learning English.

1.7. Definition of Terms

1.7.1. Informal Digital Learning of English

- According to Lee (2020, p. 52), IDLE is defined as "a fully autonomous L2 activity in out-of- class digital environments that is not linked to formal language instruction".
- In the current study, IDLE is operationally defined as fully independent receptive and productive activities performed by first year secondary stage EFL students in out-ofclassroom online environments.

1.7.2. Incidental Vocabulary Learning

- Laufer & Hulstijn (2001, p. 10) defined incidental vocabulary learning as "learning of vocabulary as a byproduct of any activity not explicitly geared to lexical learning".
- In the present study, incidental vocabulary learning is operationally defined as acquiring new vocabulary by the first year secondary stage EFL students as a result of practicing the IDLE-based program activities.

1.7.3. Vocabulary Learning Motivation

- Williams and Burden (1997, p. 120) defined motivation as "a condition of cognitive and enthusiastic excitement that leads to a conscious decision to act and give rise to a period of supported mental and/or physical exertion".
- In the present study, vocabulary learning motivation is operationally defined as a cognitive and emotional condition to learn vocabulary among the first year secondary stage EFL students after practicing informal digital learning activities.

2. Review of Literature

2.1. Incidental Vocabulary Learning

Vocabulary is the cornerstone of the English language. It enables language learners to identify and actively engage in meaningful dialogue with others. Also, It facilitates understanding the text and presenting ideas in writing. Vocabulary affects the acquisition of information and the development of thinking.

Many researchers explained the nature of incidental vocabulary learning. Webb (2020a) stated that the incidental acquisition of English language vocabulary generally occurs as a byproduct of reading for long time during which there is no clear intention to learn words, although words are often learned as a byproduct. Hulstijn (2013) argued that incidental vocabulary learning occurs during comprehension-oriented activities (e.g. reading, listening, and reading-while-listening). Other researchers have shown that ESL/EFL learners might pick up accidental vocabulary through audiovisual input (Peters & Webb, 2018), and watching videos with captions enabled (Montero Perez, Peters, Clarebout, & Desmet, 2014).

A great deal of research has investigated the effect of different variables on incidental vocabulary learning. Such variables include listening and reading (Vidal, 2011); captioned videos (Montero Perez, Peters, Clarebout, & Desmet, 2014); and input-based and output-based tasks with varying levels of engagement (Kaivanpanah, Alavi, & Ravandpour, 2020). The findings of these studies revealed that reading is a more efficient way to learn new words. than listening, captioned videos improved learners' vocabulary form and meaning recognition, and the input- and output-based tasks with varying levels of engagement had a positive significant effect on students' vocabulary learning and retention.

To sum up, EFL learners' vocabulary might grow incidentally by being exposed to different words in educational situations, captioned videos, input-based and output-based tasks, and extensive listening and reading. The present study focuses on using the informal digital learning of English, as a technology-based approach, for promoting incidental vocabulary

learning and vocabulary learning motivation among Egyptian secondary stage EFL students.

2.2. Vocabulary Learning Motivation

Motivation is recognized as an important factor in FL/L2 learning. Different theoretical perspectives have been developed to understand motivation. Among these, one of the most widely used frameworks is Self-Determination Theory (SDT). According to SDT, intrinsic motivation (such as intrinsic pleasure and interest) and extrinsic motivation (such as extrinsic reward) are two components of FL/L2 motivation (Deci & Ryan, 2002).

Motivation is essential for successful FL/L2 vocabulary development. Guthrie & Wigfield, (2000) claimed that, to engage in vocabulary instruction and achieve the desired outcomes, students are expected to be continuously motivated to learn vocabulary. Student motivation is a crucial cognitive and enthusiastic condition used to identify the factors that influence student behavior and emotions in vocabulary acquisition.

Based on the reviewed literature, few studies investigated vocabulary learning motivation as a significant component for successful FL/L2 learning. Such studies (e.g. Tseng & Schmitt, 2008; Mizumoto & Takeuchi, 2009; Wang, 2020; Kalkoul & motivated Hamitouche. 2021) showed that outperformed their colleagues who had low levels of motivation regarding vocabulary learning, vocabulary learning development among EFL learners is connected to their vocabulary learning self-regulation. Furthermore, techniques and vocabulary learning self-efficacy, vocabulary learning attitudes positively influenced self-regulation in vocabulary learning. Finally, explicit instruction of vocabulary learning strategies increased EFL students' motivation towards vocabulary learning.

To conclude, due to the importance of vocabulary learning, it is crucial to find out the possible underlying factors which affect students' vocabulary learning motivation. Also, EFL teachers should stimulate students' vocabulary learning motivation by creating and maintaining exciting learning situations and environments through using recent learning approaches such as IDLE activities.

2.3. Informal Digital Learning of English (IDLE)

Technological innovations have afforded new possibilities for communication and also for education. The development and spread of Internet websites and social media platforms have a dual role in restructuring education, as they present both new demands and new opportunities not previously experienced. Laakkonen (2011) stated that the traditional education is no longer regarded as the only valuable environment for knowledge. In the modern world, a huge number of Internet websites and social media platforms present available information to those who have the technical ability and desire to seek it out. Education should focus on learning, creating knowledge and providing the skills and competencies needed to manage knowledge.

In Egypt, the Ministry of Education introduced tablets in general secondary education to enable students to access the needed information online. That is necessary to keep pace with the growing volume of online/offline digital proficiency. The use of tablets has changed the way information is delivered and how information is retrieved over the internet, making it quick and easy to navigate to find the information students are looking for. It allows students to access online information instantly and to store, retrieve, and share information.

With the proliferation of FL/L2 learning opportunities in the online environments outside the school, IDLE is used to address situations that could arise outside language classrooms and have no link to a class environment. IDLE is based on that learning does not primarily focus on teaching and learning the language. Also, curriculum standards, educational policy, teaching practice, or evaluation standards do not directly mediate learning.

As the possibilities of technology for FL/L2 learning outside the classroom have expanded, many studies dealt with IDLE as a new research area worldwide. IDLE has proven to provide considerable benefits in improving EFL students' language learning. According to Lee & Dressman (2018); He & Zhu (2017); Reinders & Benson (2017), the main goal of IDLE activities is to practice independent English language learning.

Outside of the classroom, no official teacher is present to oversee or direct language learning activities. Since the learning process and goal-setting process are mostly controlled by the students without reference to a particular period of time or place, it is therefore more independent learning.

Researchers have explored the effects of a variety of technologies on IDLE; such as watching and viewing YouTube videos (Burhanli & Bangir-Alpan, 2021), engaging in social media environments (Al-Sabaawi, Dahlan & Shehzad, 2021). The findings of these studies revealed that IDLE activities improved learners' speaking skills (Lee & Dressman, 2018), reading skills (Cole & Vanderplank, 2016), and vocabulary acquisition (Jensen, 2017). In addition, the studies confirmed that IDLE activities significantly enhance students' learning and motivates them to learn (Noor et al., 2022)

To fulfill the aims of the current study, the first year secondary stage EFL students will practice out-of-class, non-formal, and researcher-directed receptive and productive IDLE activities. Thus, the researcher ensures that the students will practice the IDLE-based program activities accurately and in the determined period of time (activity per week).

3. Method and Procedures

3.1. Design of the study

In the present study, the researcher implemented the preposttest quasi-experimental one group design. This group was tested before and after implementing the experiment.

3.2. Participants of the study

A group of first year secondary stage EFL students at Mohamed Mekawy secondary school (n=40), Aswan Educational Administration, Aswan Governorate, participated in the current study during the first semester of the academic year 2022/2023.

3.3. Instruments and Materials

In order to accomplish the aims of the current study, the researcher prepared and employed the following instruments.

3.3.1. The EFL Vocabulary Test

3.3.1.1. Test Description

To measure the first year secondary stage EFL students' vocabulary size before and after the treatment, the researcher prepared the EFL vocabulary test (Appendix 1). The test includes 120 items. The researcher divided the test into two halves; the first half, which includes the odd-numbered items (60 items), was used as a pretest, and the second half, which includes the even-numbered items (60 items), was used as a posttest. The EFL vocabulary test was piloted by administering it to 35 first year secondary stage EFL students (they were not included in the study group), to find out if the test is appropriate for the participants, the test items' level of complexity and simplicity, the clarity of the test instructions, and the time allotted for the test. The researcher determined how long it typically took pupils to complete the test. The total time was divided by the number of students. It was 160 minutes (80 minutes for the first half and 80 minutes for the second half).

3.3.1.2. Test Validity and Reliability

To judge its validity, the EFL vocabulary test was administered to EFL jurors. The EFL jurors confirmed that the test is valid and measures the first year secondary stage EFL students' vocabulary size. In addition, the value of the square root of the reliability coefficient was used to determine the EFL vocabulary test validity coefficient. Based on that, the test validity coefficient was (.84) which is considered acceptable. Thus, the test is valid and can measure the participants' vocabulary size before and after intervention. Moreover, The test-retest procedure was employed to estimate the test reliability. The students were first tested on the 2nd of October 2022. Two weeks later, they were retested. The correlation coefficient was (0.75).

3.3.1.3. Scoring the EFL Vocabulary Test

The EFL vocabulary test total score was 120 marks (60 marks for the first half which includes the odd-numbered items, and 60 marks for the second half, which includes the even-numbered items). For each correct answer, the student was given

one mark; while for each wrong answer or left questions, zero was given to the student.

3.3.2. The Vocabulary Learning Motivation Questionnaire

In the present study, the researcher prepared a vocabulary learning motivation questionnaire in light of the vocabulary learning motivation questionnaire prepared by Tanaka (2017). The researcher helped the students to read, comprehend, and provide accurate answers to the items. The vocabulary learning motivation questionnaire, used in the present study, contains 19 Likert-scale items graded on a 5-point scale, ranging from (1 to 5). The first year secondary stage students were asked to indicate whether they (5 = strongly agree, 4 = agree, 3= uncertain, 2 = disagree, or 1= strongly disagree) with the statements of the scale. For the final form of the vocabulary learning motivation questionnaire, see (Appendix 2).

The vocabulary learning motivation questionnaire was used before administering the the IDLE-based program to determine the level of first year secondary stage EFL students' vocabulary learning motivation. Moreover, the questionnaire was used after the implementation of the IDLE-based program in order to determine how utilizing IDLE may affect vocabulary learning motivation development among first year secondary stage EFL students.

3.3.2.1. Validity

The vocabulary learning motivation questionnaire was submitted to a panel of EFL jurors and experts to achieve its content validity. The jurors were asked to judge the questionnaire face validity in terms of clarity of items and suitability for the participants' level. All jury members indicated that the vocabulary learning motivation questionnaire is clear and suitable for the participants of the present study and valid for measuring their vocabulary learning motivation.

3.3.2.2. Reliability

The reliability of the vocabulary learning motivation questionnaire was calculated through using the test re-test method. Thirty five first year secondary stage EFL students were asked to respond to the vocabulary learning motivation

questionnaire, then after two weeks, it was given to the same group once more. The Pearson correlation between the two administrations was (.77). This confirms the reliability of the vocabulary learning motivation questionnaire to measure the participants' motivation towards vocabulary learning.

3.3.2.3. Scoring the Vocabulary Learning Motivation Questionnaire

Under the guidance and help of the researcher, the participants were required to read the vocabulary learning motivation questionnaire's statements and choose one of the options (5 = strongly agree, 4 = agree, 3= uncertain, 2 = disagree, or 1= strongly disagree). The student who chooses 'strongly agree' with all statements will receive a score of five for each of the nineteen statements. Such a student will receive a total score of ninety-five marks, the maximum score possible. A student, who chooses 'agree' to all statements, will receive a score of four for each statement or a total score of seventy-six marks and so on. The high the student's score is, the high is his vocabulary learning motivation.

3.3.3. The Informal Digital Learning of English-based Program

The aim of the IDLE-based program was to help the first year secondary stage EFL students develop their incidental vocabulary learning and vocabulary learning motivation. The IDLE-based program was implemented in the first semester of the academic year 2022/2023. The program lasted for two months and consisted of seven activities; each of which took a week. The researcher introduced the IDLE activities for the first year secondary stage EFL students. They were asked to practice and participate in receptive and productive IDLE activities to develop their vocabulary learning and vocabulary learning motivation. For the final form of the IDLE-based program used in the present study, see appendix (3).

4. Results of the Study

Taking into account the study hypotheses and using the SPSS program version 19, the results of the current study are presented as follows:

4.1. Hypotheses (1)

The first hypothesis asserts that "There is a statistically significant difference between the mean scores of the study participants on the EFL vocabulary pre-posttests in favor of the post".

The following table shows students' mean scores, standard deviations, t-value and level of significance on the EFL vocabulary pre-posttests.

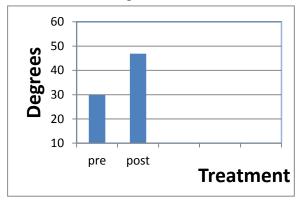
Table (1): The t-value, mean scores, standard deviations, and level of significance

| on the EFL vocabulary pre-posttests. | | | | | | | |
|--------------------------------------|-------------|----|-------|------|-------|-----|------|
| Skill | Measurement | N | Mean | S.D | T- | D.F | Sig. |
| | | | | | Value | | |
| Vocabulary | Pre | 40 | 29.92 | 5.02 | 13.05 | 39 | 0.05 |
| learning | Post | 40 | 46.85 | 5.71 | 13.03 | 39 | 0.03 |

As table (1) indicates, the mean score of the study participants on the EFL vocabulary posttest is higher than their mean score on the pre-test, where "t-value" is (13.05) which is significant at the (0.05) level of significance. So, the first hypothesis was confirmed.

The results of the first hypothesis showed a statistically significant difference between the mean scores of the first year secondary stage students on the EFL vocabulary pre-posttests in favor of the post. As shown in table (1), the study participants achieved more development in their incidental vocabulary learning in the post-test than in the pre-test. This proved and confirmed the first hypothesis statistically. This development as indicated in Figure (1) can be related to the IDLE-based program.

Figure (1): The mean scores of the study participants on the EFL vocabulary preposttests.



The effect size of the IDLE-based program is indicated in the following table:

Table (2): The effect size of the IDLE-based program on the incidental vocabulary learning

| | icai iiiig | | |
|-----------------------------------|------------|---------|-------------|
| Skill | t-value | d-value | Effect size |
| Incidental vocabulary learning | 13.05 | 2.06 | Large |

As indicated in table (2), the development of the study participants' incidental vocabulary learning can be related to the use of the IDLE-based program which is found to be effective in developing the first year secondary stage EFL students' incidental vocabulary learning.

4.2 Hypotheses (2)

The second hypothesis states that "There is a statistically significant difference between the mean scores of the study participants in the pre and post administrations of the vocabulary learning motivation questionnaire in favor of the post-administration".

The following table includes students' mean scores, standard deviations, t-value and level of significance in the pre and post administrations of the vocabulary learning motivation questionnaire.

Table (3): The t-value, mean scores, standard deviations, and level of significance in the pre and post administrations of the vocabulary learning motivation

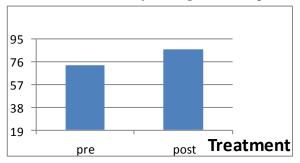
| quesuonnan e | | | | | | | |
|------------------------|-------------|----|-------|------|-------|-----|------|
| Scale | Measurement | N | Mean | S.D | T- | D.F | Sig. |
| | | | | | Value | | |
| Vocabulary | Pre | 40 | 72.72 | 2.96 | | | |
| learning motivation | Post | 40 | 86.57 | 2.70 | 21.91 | 39 | 0.05 |

As table (3) indicates, the study participants' mean score in the post administration of the vocabulary learning motivation questionnaire is higher than their mean score in the preadministration, where "t-value" is (21.91) which is significant at the (0.05) level of significance. Based on that, the second hypothesis was confirmed.

The results of the second hypothesis indicated that there was a statistically significant difference between the mean scores of the study participants in the pre and post administrations of the vocabulary learning motivation

questionnaire in favor of the post-administration. Table (3) indicated that t-value was significant at 0.05 level. This confirmed the second hypothesis statistically. Figure (2) illuminates these results:

Figure (2): The study participants' mean scores in the pre and post administrations of the vocabulary learning motivation questionnaire



The present study focused on developing the first year secondary stage EFL students' vocabulary learning motivation through the offered activities in the IDLE-based program. These activities provided opportunities for first year secondary stage EFL students to watch YouTube videos, play online games, be active on social media, listen to English podcasts, watch educational English contents online, and write comments in English on social media. As a result, the post administration has indicated that the first year secondary stage EFL students' vocabulary learning motivation was developed due to the influence of the IDLE-based program. The following table presents the effect size of the IDLE-based program on the study participants' vocabulary learning motivation:

Table (4): The effect size of the IDLE-based program on the study participants' vocabulary learning motivation

| vocabulary learning motivation | | | | | | |
|--------------------------------|-----------------|------|-------------|--|--|--|
| Scale | t-value d-value | | Effect size | | | |
| Vocabulary learning motivation | 21.91 | 3.46 | Large | | | |

5. Discussion

The primary purpose of the present study was to develop the incidental vocabulary learning and vocabulary learning motivation among first year secondary stage EFL students through using the IDLE-based program. Through the program, the participants of the present study autonomously used various digital resources and practiced many receptive and productive IDLE activities such as watching YouTube videos, being active on social media, listening to English podcasts, watching educational English contents online, and writing comments in English on social media to support their own FL. The results of the present study showed that the IDLE-based program has improved the study participants' incidental vocabulary learning and vocabulary learning motivation. These improvements can be due to the effectiveness of practicing the activities of the IDLE-based program.

The **IDLE-based** program facilitated spontaneous vocabulary acquisition for the first year secondary stage EFL students. The receptive and productive IDLE activities helped the students to be closer to authentic real life communication vocabulary needed to express a wider range of meanings. Also, practicing the receptive and productive IDLE activities stimulated the first year secondary stage EFL students to notice and acquire different words incidentally because if the EFL students used the words frequently and in a variety of contexts, vocabulary can be fully acquired. To conclude, the IDLE-based program presented a setting with plenty of realistic and rich information, which facilitated incidental vocabulary learning among the first year secondary stage EFL students.

The findings of the present study are consistent with the results of some recent studies (e.g., Sundqvist & Wikström, 2015; Sundqvist & Sylvén, 2016; Cole & Vanderplank, 2016; Jensen, 2017; Lee & Dressman, 2018; Lee, 2019a) which have confirmed the effect of the IDLE in enhancing English language skills and components, such as vocabulary, reading skills, speaking skills, cognitive performance, motivation and willingness to communicate.

These studies have provided evidence that using the receptive and productive IDLE activities was effective in developing vocabulary learning. Moreover, the present study confirms the effectiveness of the IDLE activities in developing first year secondary stage EFL students' vocabulary learning and vocabulary learning motivation.

6. Conclusion

Learning new vocabulary, which is a difficult process for most language learners, is important for language learning in general and for enhancing communication skills in particular. Also, The increasing access to different multimedia and technology resources, including the receptive and productive IDLE activities, offers learners many opportunities to enrich their vocabulary. The current study investigated the effect of an IDLE-based program on developing incidental vocabulary learning and vocabulary learning motivation among secondary stage EFL students. Results indicated that the participants' incidental vocabulary learning vocabulary learning and motivation were developed as a result of the IDLE-based program which may be regarded as a means to develop incidental vocabulary learning and vocabulary motivation among the first year secondary stage EFL students. The receptive and productive IDLE activities should be included in EFL programs to develop students' vocabulary acquisition which affects positively their FL communication competence.

7. Recommendations of the Study

The following recommendations are suggested in light of the findings of the current study:

- 1. Vocabulary learning and vocabulary learning motivation should be given more attention when designing English language programs.
- 2. EFL teachers should clarify the importance of EFL vocabulary to their students. In addition, they should illustrate the importance of the receptive and productive IDLE activities as they help the students to acquire new vocabulary.
- 3. Training the first year secondary stage students on the use of the receptive and productive IDLE activities to develop their vocabulary learning.
- 4. Training the first year secondary stage students on the use of the receptive and productive IDLE activities to develop their vocabulary learning motivation.

8. Suggestions for Further Research

Considering the delimitations and results of the current study, the following issues are recommended for more study:

- Finding out the effect of using the IDLE activities on developing preparatory stage students' vocabulary learning.
- Investigating the effect of using the IDLE activities on developing Faculty of Education EFL majors' vocabulary learning.
- Investigating the effect of using the IDLE activities on reducing vocabulary learning anxiety among preparatory stage EFL students.
- Finding out the effect of using the IDLE activities on increasing the Willingness to communicate and reducing communication apprehension among secondary stage EFL students.
- Investigating the effect of using Out-of- school digital gameplay on developing foreign language proficiency among secondary stage EFL students.

References:

- Burhanli, S., & Bangir-Alpan, G. (2021). Why do university students prefer YouTube to learn and study?. Educational Policy Analysis and Strategic Research, 16(4), 164–177.
- Cole, J., & Vanderplank, R. (2016). Comparing autonomous and class-based learners in Brazil: Evidence for the present-day advantages of informal, out-of-class learning. System, 61, 31–42.
- Deci, E., & Ryan, R. (2002). Handbook of self-determination research. University Rochester Press.
- Guthrie, J., & Wigfield, A. (2000). Engagement and motivation in reading. In M.L. Kamil, P.B. Mosenthal, P.D. Pearson, & R. Barr (Eds.), Handbook of reading research: Volume III (pp. 403-422). New York: Erlbaum.
- He, T., & Zhu, C. (2017). Digital informal learning among Chinese university students: The effects of digital competence and personal factors. International Journal of Educational Technology in Higher Education, 14,(1), 1–19.
- Hulstijn, J. (2013). Incidental learning in second language acquisition. In C. A. Chapelle (Ed.), The Encyclopedia of applied linguistics (pp. 1–5). Oxford, England: Wiley Blackwell.
- Jensen, S. (2017). Gaming as an English language learning resource among young children in Denmark. CALICO Journal, 34(1), 1–19.
- Kaivanpanah, S., Alavi, S., & Ravandpour, A. (2020). The effect of input-based and output-based tasks with different and identical involvement loads on Iranian EFL learners' incidental vocabulary Learning. Cogent Psychology, 7: 1731223.

- Kalkoul, N., Hamitouche, F. (2021). Investigating Integrative and Instrumental Motivation and Vocabulary Learning among Third Year English as a Foreign Language Secondary School Students at Batna Province, Algeria. Revue des lettres et des sciences sociales, 18 (2), 316-330.
- Khany, R., & Khosravian, F. (2014). Iranian EFL learners" vocabulary development through Wikipedia. English Language Teaching, 7(7), 57-67.
- Kikuchi, K. (2009). Listening to our learners' voices: What demotivates Japanese high school students?. Language Teaching Research, 13(4), 453–471.
- Laakkonen, I. (2011). Personal learning environments in higher education language courses: an informal and learner-centred approach. In S. Thouësny & L. Bradley (Eds.), Second language teaching and learning with technology: views of emergent researchers (pp. 9-28).
- Noor, U., Younas, M., Aldayel, H., Menhas, R., & Qingyu, Xu. (2022). Learning behavior, digital platforms for learning and its impact on university student's motivations and knowledge development. Educational Psychology, 13, 1-12.
- Lai, C., Zhu, W., & Gong, G. (2015). Understanding the quality of out-of-class English learning. TESOL Quarterly, 49(2), 278–308.
- Laufer, B., & Hulstijn, J. (2001). Incidental vocabulary acquisition in a second language: The construct of task induced involvement.

 Applied Linguistics, 22(1), 1–26.
- Lee, J. (2019). Quantity and diversity of informal digital learning of English. Language Learning, 23(1), 114–126.
- Lee, J. (2019a). Informal digital learning of English and second language vocabulary outcomes: Can quantity conquer quality?. British Journal of Educational Technology, 50(2), 767-778.

- Lee, J. (2020). Informal digital learning of English and strategic competence for cross-cultural communication: Perception of varieties of English as a mediator. ReCALL, 32(1), 47–62.
- Lee, J., & Dressman, M. (2018). When IDLE Hands Make an English Workshop: Informal Digital Learning of English and Language Proficiency. TESOL Quarterly, 52(2), 435–445.
- Leona, N., van Koert, M., van der Molen, M., Rispens, J., Tijms, J., & Snellings, P. (2021). Explaining individual differences in young English language learners' vocabulary knowledge: The role of Extramural English Exposure and motivation. System, 96, 102–402.
- Mizumoto, A., & Takeuchi, O. (2009). Examining the effectiveness of explicit instruction of vocabulary learning strategies with Japanese EFL university students. Language Teaching Research, 13(4), 425-449.
- Montero Perez, M., Peters, E., Clarebout, G. & Desmet, P. (2014). Effects of captioning on video comprehension and incidental vocabulary learning. Language Learning & Technology, 18(1), 118–141.
- Nation, I. S. (2013). Learning vocabulary in another language. Cambridge University Press.
- Peters, E., & Webb, S. (2018). Incidental vocabulary acquisition through viewing L2 television and factors that affect learning. Studies in Second Language Acquisition, 40(3), 551–577.
- Reinders, H., & Benson, P. (2017). Research agenda: Language learning beyond the classroom. Language Teaching, 50(4), 561–578.
- Sundqvist, P., & Sylvén, L. (2016). Extramural English in the teaching and learning: From theory and research to practice. London: Palgrave Macmillan.

- Sundqvist, P., & Wikström, P. (2015). Out-of-school digital gameplay and in-school L2 English vocabulary outcomes. System, 51, 65-76.
- Tseng, W., & Schmitt, N. (2008). Toward a model of motivated vocabulary learning: A structural equation modeling approach. Language Learning, 58(2), 357-400.
- Vidal, K. (2011). A comparison of the effects of reading and listening on incidental vocabulary acquisition. Language Learning, 61(1), 219-258.
- Wang, Xu. (2020). L2 vocabulary learning motivation by Chinese EFL learners. Proceedings of 11th International Conference of Experimental Linguistics, 12-14 October 2020, Athens, Greece.
- Webb, S. (2020a). Incidental vocabulary learning. In S. Webb (Ed.) The Routledge handbook of vocabulary studies (pp. 225–239). Routledge.
- William, M., & Burden, R. (1997) Psychology for Language Teachers. Cambridge: Cambridge University Press.
- Yang, W., & Dai, W. (2011). Rote memorization of vocabulary and vocabulary development. English Language Teaching, 4(4), 61–64.