

The Effectiveness of Explicit Vocabulary Instruction on Productive Vocabulary Learning in Writing Among Intermediate School Learners in Saudi Arabia

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This study aimed to identify the effectiveness of explicit vocabulary instruction on productive vocabulary learning in writing among intermediate school learners in Saudi Arabia, verify the existence of any statistically significant differences at the significance level of 0.01 between the mean scores of the post-test of the control group and the experimental group in the vocabulary test, and verify the existence of any statistically significant differences at the significance level of 0.01 between the mean scores of the pre- and post-test of the experimental group in the vocabulary test in favor of the post-test. The study community consisted of all intermediate school students in the Kingdom of Saudi Arabia, while the study sample included 30 students. The experimental method was adopted to identify the effectiveness of explicit vocabulary instruction on productive vocabulary learning in writing and the achievement test was used as the study tool. The study reached many results including there were no statistically significant differences at the significance level of 0.01 between the mean scores of the post-test of the control group and the experimental group in the vocabulary test and there were no statistically significant differences at the significance level of 0.01 between the mean scores of the pre- and post-test of the experimental group in the vocabulary test in favor of the post-test. According to these results, some recommendations and proposals were made including training English teachers at the intermediate school level in the Kingdom of Saudi Arabia, on explicit vocabulary instruction and conducting future researches on the trends of English teachers at the intermediate school level, in the Kingdom of Saudi Arabia, regarding the adoption of explicit vocabulary instruction while teaching the English language.

Keywords: vocabulary, explicit vocabulary, productive vocabulary, instruction, learners, intermediate school

Introduction

In order to communicate effectively, one must have the flexibility to use words and must be efficient in recognizing and understanding them (Hanson & Padua, 2011). It is generally agreed that vocabulary learning is a critical skill for language learning (Alahmad, 2020). Vocabulary is regarded the bricks of language learning as they facilitate comprehension, enhance communication, and promote achievement (Al-Johali, 2019). Also, mastering language skills depends mainly on mastering words. Alshammari (2020) revealed that understanding the meaning of words plays a critical role in realizing the different contexts needed to experience language in real-life situations.

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Acquiring rich vocabulary helps students convey information effectively and efficiently (Ahmed, 2017). Vocabulary is of critical significance for language learning and teaching. For language learners, vocabulary is of utmost importance; this might be attributed to the fact that the level of vocabulary determines the level of using and practicing language efficiently (Kumar & Kumar, 2020). For this reason, vocabulary instruction has gained increased attention in recent years (Harris, Taylor, Thielke, Gonzalez, & Conde, 2009). Worthy here to mention is that there are certain principles for effective vocabulary instruction which include providing opportunities for active participation, teaching for in-depth understanding, and enhancing repeated practice (Spencer, Goldstein, & Kaminski, 2012).

There are different methodologies that can be employed in the field of teaching English vocabulary (Alshraideh & Alahmadi, 2019; Sain, Nawi, Mustafa, & Kadir, 2016). Many researchers agree that there are four types of vocabulary learning represented in intentional, incidental, implicit, and explicit instruction (Marzban & Kamalian, 2013). Explicit vocabulary has emerged as a must in order to understand the nature of vocabulary instruction (Silverman & Hartranft, 2015). Stockton (2016) defined explicit vocabulary instruction as “a teaching strategy that involves a teacher selecting three to five vocabulary words and focusing instruction around those words” (p. 5). An explicit approach for vocabulary instruction assumes that it is important to have a conscientious focus on specific vocabulary during learning within the classroom by either looking for these words with the help of teachers or working with high frequency words (Longhurst, 2013).

Many researchers have tried to investigate the effectiveness of explicit instruction on language learning. Explicit instruction is helpful for foreign language learners as it helps them face different challenges they might confront while acquiring vocabularies (El-Dakhs, Prue, & Ijaz, 2017). Explicit vocabulary instruction has a positive effect on vocabulary acquisition and the overall performance of language learners in the classroom (Pittman, 2008). Tahir, Albakri, Adnan, and Karim (2020) confirmed that the use of explicit vocabulary instruction is significant for learning the target words as it helps store words in the long-term memory. Hasbūn (2005) confirmed that the use of explicit method helps students acquire the required vocabulary, enables them to know more words to become better readers, and improves their attitudes towards reading.

At the level of English language, Jeong, Won, Jeong, Mo, and Kim (2008) has stated that the explicit method of vocabulary instruction helps learn English vocabulary (Yeung et al., 2019). Students who are taught using explicit vocabulary instruction achieve greater gains in acquiring phonemic awareness and receiving receptive and expressive vocabulary. Explicit instruction is regarded the most important tool for vocabulary enriching in English as a Second Language (ESL) classrooms (Kumar & Kumar, 2020).

Vocabulary learning tasks can be either receptive or productive (Webb, 2005). Receptive vocabulary is used to refer to the ability to understand words while hearing or seeing them, while productive vocabulary is associated with recognizing words either by writing or speaking. Intentional or incidental learning experiences enable learners to transform receptive knowledge into productive use (Zhou, 2010). Receptive vocabulary has the ability to enhance receptive skills such as listening and reading. On the other hand, productive vocabulary can promote productive skills represented in speaking and writing (Alkhofi, 2015). Kim (2013) has emphasized the significance of productive vocabulary from the viewpoint that it plays a critical role in English vocabulary retention.

Statement of the Problem

Vocabulary is significant for successful foreign language acquisition as they have great effects on learners' language skills (Al-Masrai & Milton, 2012). Unfortunately, many language learners are struggling with

comprehending texts; the major reason is that they have a big gap in vocabulary knowledge and acquisition (Eppinger & Browning, 2012). In addition, Gallego and Llach (2009) confirmed that “foreign language learners do not usually succeed in accumulating as large a lexical storage as native speakers do” (p. 114). Accordingly, learners with limited vocabulary find it difficult to understand texts and also have low levels on achievement tests compared to students with linguistic richness (Kumar & Kumar, 2020).

Learning vocabulary is regarded a major challenge in English-language classrooms for many students, despite the fact that it is regarded a critical part of foreign language learning (Alghamdi & Al Ahmed, 2018). Teachers need to develop their teaching strategies in order to overcome the vocabulary gap in language teaching (Eppinger & Browning, 2012). Explicit vocabulary instruction has been proved to have positive effects on students’ vocabulary skills and vocabulary development (Stockton, 2016; Butler et al., 2010).

English language is a core module that is incorporated into the Saudi national curriculum where students learn English for seven years (Altyari, 2017). Regrettably, Saudi learners usually leave schools without acquiring sufficient English vocabulary (Altyari, 2017). Afzal, Shinwari, Sikandar, and Shahzad (2019) confirmed that English learners in Saudi Arabia face many problems, especially at the level of learning vocabulary in English language. Alyami (2016) revealed that students usually use traditional strategies in acquiring vocabulary such as using dictionaries to look for the meaning of new words, or they may ask teachers or their friends about the equivalent of English words in their mother language. On the other hand, strategies that depend on higher order thinking skills such as organizing words according to their meaning are not frequently used.

In accordance with what mentioned above, Elashhab (2019) revealed that students in Saudi Arabia use traditional strategies for vocabulary acquisition such as using English media, acquiring words through reading, employing the monolingual dictionary, using cards to write new words, and applying English words in daily speaking situations. Strategies that require deep processing such as listening to word lists are not frequently used.

Al-Nujaidi (2003) stated that insufficient vocabulary will affect Saudi students’ productive language skills in writing. Alqarni (2019) confirmed that it is important to estimate students’ productive vocabulary size while learning English as a foreign language in Saudi Arabia (Altalhab et al., 2019). Karakoç and Köse (2017) emphasized that “the more productive vocabulary knowledge a student had, the more successful they were in the given writing exam and the impact of the students’ productive vocabulary knowledge on their writing performance was significant” (p. 366). In addition, Ali (2020) confirmed that students’ scores on vocabulary tests are significantly correlated with the strategy teachers usually use in teaching vocabulary.

Based on what mentioned above and keeping in mind the low level of proficiency of Saudi students associated with acquiring English language vocabulary, and taking into account the role of explicit vocabulary instruction in improving students’ linguistic stock and language proficiency level by enhancing productive vocabulary knowledge, the researcher sees the statement of the problem to revolve around identifying the effectiveness of explicit vocabulary instruction on productive vocabulary learning in writing among intermediate school learners in Saudi Arabia.

Objectives of the Study

The main hypothesis of the current study is: Explicit vocabulary instruction has no effect on productive vocabulary learning in writing among intermediate school learners in Saudi Arabia. Under this main hypothesis, there are certain sub-hypotheses that can be reviewed as follows:

1. There are no statistically significant differences at the significance level of 0.01 between the mean scores of the post-test of the control group and the experimental group in the vocabulary test;

2. There are no statistically significant differences at the significance level of 0.01 between the mean scores of the pre- and post-test of the experimental group in the vocabulary test in favor of the post-test.

Therefore, the main objective of the current study is to identify the effectiveness of explicit vocabulary instruction on productive vocabulary learning in writing among intermediate school learners in Saudi Arabia. Under this main objective, there are certain sub-objectives that can be reviewed as follows:

1. Verifying the existence of any statistically significant differences at the significance level of 0.01 between the mean scores of the post-test of the control group and the experimental group in the vocabulary test;

2. Verifying the existence of any statistically significant differences at the significance level of 0.01 between the mean scores of the pre- and post-test of the experimental group in the vocabulary test in favor of the post-test.

Definitions of the Study

Explicit Vocabulary Instruction

Fainman and Tokar (2019) defined explicit vocabulary instruction as “a vocabulary learning activity where the learners consciously and intentionally learn the target vocabulary” (p. 114).

The researcher procedurally defines it as a teaching approach that depends on intentional experiences given to intermediate school learners in Saudi Arabia in order to improve their productive skills in writing.

Productive Vocabulary

Dakhi and Fitria (2019) defined the productive vocabulary as “the set of words used to produce the messages” (p. 18).

The researcher procedurally defines it as the ability of intermediate school learners in Saudi Arabia to retrieve the form and meaning of different English vocabulary while writing; it also reflects learners’ abilities to use this knowledge in different contexts.

Literature Review

Explicit Instruction

Teaching can only be considered effective when teachers begin to recognize the multifaceted nature of the educational process, which entails academic, social, and behavioral aspects. These facets entail a set of practices and strategies that need to be implemented by successful and intellectually well-equipped teachers. Thus, it becomes apparent that effective teaching needs to be handled as a scientific practice that comprises an array of curricular procedures, and also as an artistic approach that entails creative instructional strategies, within the classroom environment (MacSuga-Gage & Simonsen, 2015, p. 14).

In this regard, explicit instruction is supposed to be one of the most practical instructional methods used as an approach to achieve the aforementioned objectives. It mainly aims at assisting students in acquiring all necessary skills directly and explicitly, by making them fully mindful of the skills they have, and how to enhance them even further. Students find it easier to master certain academic practices when they are explicitly exposed to the most effective methods to apply skills within a particular discipline (Kruit, 2018, p. 119).

Based on the foregoing, it appears that the most crucial threat that might cause some problems for many students is not having enough literacy skills to properly study what teachers present to them, and further enhance

their learning. Therefore, teachers must adopt an explicit instruction approach for them to understand the amount of skills students possess and how to help them become aware of what they have and how to obtain more academically decent skills, explicitly.

Explicit Instruction Importance

The importance of explicit instruction is represented in the level of disclosure regarding the information and literacy-related knowledge students received from their teachers without getting trembled with any ambiguous meanings or concepts, which could become an educational barrier in general. Explicit instruction provides students with simple and direct information that simplifies the English language as much as possible, as it transforms the complexities of the English grammar and vocabulary into easily comprehended concepts (Gillian, & Lew, 2018, p. 27).

Therefore, Colwell (2012, pp. 25-52) stated that it could be noted that the importance of explicit instruction includes the following:

1. Aiding teachers in general and pre-service teachers in particular, and removing all conceivable teaching barriers that might be formed by over-complicated course material;
2. Creating a healthy and informative classroom environment in the future, which enhances the academic performance of both teachers and students;
3. Aiding students in developing their critical thinking skills, and supplying them with all necessary strategies;
4. Reducing the amount of time needed for course preparation, thus, eliminating any potential time-consuming practices that might cause a delay in the teaching process;
5. Stabilizing instructional concepts and ideas that could be well utilized by future teachers and students within classroom environments, regardless of the teaching discipline.

Characteristics of Explicit Instruction

Doabler et al. (2013, p. 2) stated that recognizing the characteristics of explicit instruction is to be inclusive of the following:

1. Transparency: The possibility of creating crystal clear and conspicuous learning strategies;
2. Interconnectivity: The capability of building bridges between previously accumulated knowledge, and newly obtained one;
3. Dynamicity: The utilization of all knowledge students have already gathered, in such a unique, practical, and dynamic fashion;
4. Formation of success: The possibility of scaffolding and promoting students' academic achievement;
5. Automaticity: The provision of a sufficient amount of practice so that the concept of self-study can be swiftly and effectively introduced;
6. The provision of feedback: Students' previously learned material is always being reviewed and evaluated constantly in a systemic manner.

Based on the foregoing, it is concluded that explicit instruction includes many features that make it distinct and set it apart from other instructional methods. These features might vary from one establishment to another, based on multiple variables, such as age, educational stage, and levels of understanding. However, they still revolve around four basic points: transparency and a clear demonstration of course material, connecting new and old knowledge obtained by students, creating a communicative working environment, and allowing students to self-study autonomously.

Creating a Model for Explicit Instruction

Archer and Hughes (2010, p. 2) mentioned that for explicit instruction to be transformed into a model, a taxonomy of elements through which explicit instruction operates should be indicated. These elements are recognized as follows:

1. The main focus of teaching should be directed at delivering the essence of the course material, including skills, strategies, terms, concepts, vocabulary, and rules;
2. Skills that are being taught to students should be sequenced in a logical manner, which ensures mastery of required prerequisites to gain these skills;
3. Teaching should occur under a well-structured procedural set of steps. Complex content needs to be broken down into increments;
4. Lessons are supposed to be organized to exclude any over-complicated concepts, thus eliminating redundancy;
5. Identifying goals is the most important step in teaching. Students need to be mindful of the targeted teaching objectives for them to perform at a good pace;
6. Teachers also need to allow students to present their previously obtained knowledge and review it before delving into the process of instruction.

The usage of a clearly understood language cannot be stressed enough, as it is the only way for students to gain access to information and concepts without having to deal with any lexical or conceptual complications. Teachers have a better chance of utilizing explicit instruction once they systematically modulate it to fit in a model that can be embedded within various curricular activities, in the educational framework. This model must be inclusive of two main (Whiteside, 2013, pp. 13-14).

Stages of Explicit Instruction

Implementing and practicing, and utilizing explicit instruction by teachers and students respectively both occur through a number of stages. These stages include lesson planning which focuses on creating a preliminary design for the course material that is about to be taught, lesson delivery which focuses on the actual teaching of content, and also lesson assessment of evaluation that focuses on reviewing the level of compliance with the previously set plan (Marchand-Martella & Martella, 2013, p. 15).

Therefore, the stages of explicit instruction can be identified in detail as follows:

Stage One: Lesson planning. It defines as the outcomes that are supposed to be the main pillar of teaching. Within a lesson plan, there lies all of the activities and practices, as well as strategies and methodologies used for delivery. Teachers must understand that lesson planning is considered to be a collaborative process that engages both students and teachers together (Ayres, 2014, p. 1).

Stage Two: Lesson delivery. Lesson delivery should be implemented through five different elemental paths, the first of which is opening. Opening is considered to be the most important path among the other four ones that include modeling, guided and independent practice, and also closing. Also it requires attracting students' attention and enhancing their abilities and skills to think and learn (Hoque, 2011, p. 6).

Stage Three: Lesson assessment. Evaluation is significant to the education process. It informs students with the appropriate judgment for them to understand how well they comprehended the lesson, and how much they will academically achieve more skills and knowledge accordingly (Mensah, Bassaw, Bordoh, & Eshun, 2014, p. 46).

Explicit Instruction of Vocabulary

Students often face certain challenges regarding their knowledge and awareness toward morphology, and how to use certain words in a morphologically complex way. This lack of knowledge prevents them from carrying out tasks and it hinders their abilities to write and compose passages in a grammatically proper manner, as well as reach a certain level of linguistic creativity. Luckily, explicit instruction can be used to eliminate the negative influences of such challenges, and create a tool for students through which they can break down words into sections, analyze each section, and expand their vocabulary (Varatharajoo, Asmawi, & Abedalaziz, 2015, p. 45).

Explicit instruction is also a great strategy that teachers can use to help students gain enough confidence using vocabulary fluently, regardless of the number of languages they master. This proves that monolingual and bilingual learners can easily reap the benefits of explicit instruction regarding developing their vocabulary through the usage of multimodal presentations, and repeat exposures to definitions and terms and concepts (Mendez, Crais, Castro, & Kainz, 2015, p. 96).

Explicit instruction also appears to be closely connected to the study of language and linguistic characteristics. It is highly used to explain and elaborate on the elements of literacy, and language content. Needless to say, that explicit instruction, thanks to its direct and conspicuous nature, has become a significant aspect of teaching and learning the language.

Productive Vocabulary Learning

Teaching how to pronounce words accompanied with other methods that facilitate the understanding of different meanings these words entail is monumental for teachers to help students with their vocabulary learning journey. Thus, vocabulary learning is made easy when students comprehend phonetics first, learn how to connect each sound with the correct word, and finally store these sounds in their long-term memory. This ensures them the capability of constituting a database-like phonological memory of different terms and words (Ehri, 2014, p. 5).

Vocabulary learning is considered productive when non-native English learners develop an assistant-learning scheme that helps them facilitate their pronunciation, and understand of what each word means in accordance with the situation it emerges within (Chen & Li, 2010, p. 314).

Productive vocabulary learning is linked with the level of non-native language mastery by students. This encourages teachers to monitor these levels, try their best to enhance their pronunciation of words, and keep as much vocabulary as they can, so that they grow on an intellectual level, and develop their understanding of both phonological and lexical aspects of each word they memorize.

The Importance of Vocabulary

Vocabulary holds great significance for individuals in societies, and its development is essential for their intellectual and linguistic development at an early age. The development of vocabulary is considered an important aspect in the educational realm, and it determines how successful young students will be regarding reading and writing. Vocabulary also enhances their experience and helps them acquire more skills that further scaffold their language learning in the future (Wasik & Iannone-Campbell, 2012, p. 322).

In this regard, it is apparent that vocabulary is essential for students to gain enough knowledge that allows them to master all four skills of any language. Vocabulary also helps students become fluent in their mother tongue, and in any other non-native language, they wish to master, so that they can achieve high levels of success within their academic or professional future life.

The Negligence of the Importance of Vocabulary in Teaching

For almost 30 years since the 1940s, vocabulary teaching was not being focused on or dealt with from a standpoint where teachers felt the necessity of implementing its strategies; it was simply secondary at best for them, not knowing that vocabulary is the building block of words, sentences, and grammatical formations (Begbudieva & Abdullaeva, 2019, p. 3).

It should be noted that vocabulary teaching was not supposed to be the go-to method for teachers to help students learn the best way to gain grammar and lexical skills. Since curriculums were established during the 1960s, vocabulary teaching lost its glamour, as teachers and educational establishments decided to shift their main focus toward teaching language based on situational methods. This long period of neglect was finally put to rest with the dawn of the late 20th century, or in 1994 to be exact (Muliawati & Ismail, 2017, pp. 33-34).

Based on the foregoing, it could be indicated that vocabulary teaching has been kicked to the curb and treated as a secondary or non-existent instructional method altogether. This started in the late 19th century and lived through the first half of the 20th century. However, that all ended in 1994 when teachers and scholars started regaining their faith in using vocabulary teaching as a method for achieving instructional proficiency.

Importance of Productive Vocabulary Learning

Learning skills that may play an instrumental role in vocabulary learning for students should be inclusive of productive skills that do not leave the student's mind overcrowded with unnecessary skills and knowledge. These sets of productive skills are marked by their effectiveness and significance for vocabulary learning, as they enhance and motivate students' learning and guide them to use the right word that fits the correct situational narrative (Imrose, 2016, p. 6).

In this regard, productive vocabulary learning allows students to experience a higher sense of mastery over other students who might be approaching other learning techniques such as receptive vocabulary learning. Productive vocabulary learning helps students learn on an autonomous level, and accumulate vocabulary that is on a par with their academic personal preference; it also enhances their writing in English as a foreign language, regardless of their proficiency level, whether it was low, to lower-intermediate, or even higher-intermediate (Esfahani, Biria, & Haghverdi, 2012, p. 404).

Productive vocabulary learning is also important for students' intellectual aspect, as it enhances their thinking and helps them gain critical thinking skills, get engaged in cooperative activities, and better understand the multifaceted nature of various concepts being taught in relation to educational subjects and course material (Candrasekaran, 2014, p. 16).

It also should be noted that productive vocabulary learning is a process that guarantees the acquiring of competencies for teachers who set some objectives and outcome-based education approaches for students. Productive learning, in general, helps teacher create and identify learning strategies, and evaluate their level of effectiveness; it also makes it easier for students to understand the needs and learning achievements of students, in order to produce initiatives that are suitable for each one of them (Samusevica & Rocane, 2017, p. 187).

Based on the foregoing, one could notice how valuable productive vocabulary learning is, as it facilitates the learners' experience in gaining skills, and creating their stylized writings that embody their thoughts and ideas. On the other hand, productive vocabulary learning assists teachers in evaluating each student's needs and achievement goals in order to create an educational methodology that pattern after these needs and goals.

Productive vocabulary learning also enhances students' linguistic and writing skills and develops both their critical and creative.

Characteristics of Productive Vocabulary Learning

Productive learning in general provides a unique way for instructional methods to be implemented as teachers and students work together. It is also characterized by two basic features that help improve students' skills, including competency-based learning, and project-based learning (Hasanah, Haryadi, & Pratama, 2017, p. 365).

These two characteristics can be elaborated upon as follows:

1. Project-based learning: Project-based learning is nothing but an instructional technique that does wonders concerning elevating the effectiveness of the educational and learning process in allowing students to have a decisive role in their learning process, as they can establish their knowledge structures, and make use of practical engagement in various projects that are related to the subject matter being studied (Shin, 2018, p. 95).

2. Competency-based learning: Competency-based learning simply explains how students exert efforts to gain skills and dedicate their knowledge and experience to finish a certain task assigned to them in order to achieve a specific goal in a real-life practical situation. These efforts are later assessed by instructors—in this case, teachers—so that they could identify their weaknesses and develop new approaches to overcome these weaknesses (Van Klooster & Roemers, 2011, p. 77).

Based on the information that has been provided, it could be concluded that productive vocabulary learning is composed of a number of characteristics that are inclusive of innovating new approaches to help students self-learn, interacting with students and utilizing their contributions including decisions and ideas, and also working in an educational environment where students' obtain new vocabulary and enhance their old knowledge within real-life situations, and realistic contexts, through the usage of both project-based, and competency-based learning methods.

The Effect of Explicit Instruction on Vocabulary Productivity in Writing

Gaining enough knowledge and obtaining the required skills to express oneself in written form are of great importance. This importance manifests itself in reading, as reading words can be translated into writing efficient texts. This indicates how acquiring the right amount of vocabulary might save students and researchers alike from facing challenges while composing their academic writings (Schmitt, 2000, p. 52).

In this regard, it becomes obvious that active vocabulary is related to productive learning along with writing in a foreign language. Productive learning is all about students utilizing certain words and terms that they fully understand, and are well capable of pronouncing. These words and terms can be used in written form, which cannot, in any way, shape, or form, be separated from having the ability to speak and pronounce them sequentially, which further reveals that productive learning allows students to use the right vocabulary to express their thoughts in written form (Mega, 2012, pp. 7-8).

As far as explicit instruction goes, it can be noted that explicit instruction has been proven to play a huge role in the development and enhancement of students' abilities to write in English as a foreign language, regardless of their level of mastery (Dastjerdi & Shirzad, 2010, p. 168).

Therefore, students are advised to depend on explicit instruction if they wish to morph their language skills and writing performance from an amateur level, into a professional and academic level. This is mainly attributed to the fact that explicit instruction encourages students to become more aware of their skills, and the writing tasks

they should carry out and implement successfully to help develop specific skills. In this case, explicit instruction serves as a diagnostic tool that sheds light upon skills that need to be elevated, and recommends certain strategies for this matter (Negari, 2011, p. 303).

Based on the foregoing, it should be noted that vocabulary is perhaps the beacon of success for students who seek to develop their writing skills in a non-native language including, but not limited to, English. Therefore, using the right instructional method is key to activate the most dynamic form of vocabulary acquisition, and the best candidate seems to be represented in explicit instruction, as it works hand-in-hand with productive vocabulary learning in order to create an environment for students where they are autonomous learners, but also open to having informative discussions with their peers and teachers so that they can create their articles that reflect their thoughts and points of view in written form. Explicit instruction is the missing jigsaw puzzle piece that compliments productive vocabulary learning, as the former creates conspicuous teaching frameworks that are free from complications and redundancy, and the latter promotes searching for vocabulary, and gains as many new words and terms as possible autonomously. This could eventually help develop a student who can write, speak, read, and communicate in English, without going astray from the essence of his/her conceptual idea around which his whole argument revolves.

Methodology

The experimental method was applied, which Al-Zuhairi (2017, p. 330) referred to as “a method for intentional variables defined by specific situations or phenomena of input under controlled conditions that represent a subject of research, in the manner of applying a certain factor to a group without the other”. The experimental method was used to identify the effectiveness of explicit vocabulary instruction on productive vocabulary learning in writing among intermediate school learners in Saudi Arabia.

Research Variables

The research variables consisted of the following:

1. The independent variable, which was the “Explicit Vocabulary Instruction”;
2. The dependent variable, which was the “Productive Vocabulary Learning in Writing”.

Research Community

The research community consisted of all intermediate school students in the Kingdom of Saudi Arabia and their number as indicated by the official website of the General Authority for Statistics, 2020 was 1,532,703.

Research Sample

The researcher selected 50 participants randomly in this research after being selected by applying a straightforward placement test to determine their language efficiency. Then, he divided the sample into two main groups; the first group was the experimental group which consisted of 25 students and they were taught 30 vocabulary items in the first unit of the English textbook of the third-grade students of the intermediate school for two weeks. Teaching explicit vocabulary items involved three main strategies; the first strategy was about translating those vocabulary items into the student’s native language, while the second strategy was about illustrating each item in the pictures; and the third strategies was about using vocabulary items in various contexts. On the other side, the second group was the control group and they were taught the same vocabulary of the same unit without any use of the mentioned strategy during the same period. The effects of vocabulary instruction were assessed using a writing test to measure the writing capacity of students which was adopted from Papadopoulou’s

(2007) study, and it was modified to fit the students' English textbook, and it was used to assess students' vocabulary learning.

Exogenous Variables

The researcher sought to adjust the exogenous variables through the following procedures:

1. Adjusting factors related to the research sample which included:

(a) The research sample consisted of third-grade students in an intermediate school in the Kingdom of Saudi Arabia in the academic year 2020/2021 A.D.;

(b) Gender: All research sample members were male students, as the Kingdom of Saudi Arabia separates between genders in its schools.

2. Adjusting factors related to the research experiment:

(a) Academic content: The first unit of the English language textbook was taught for of the third-grade students of the intermediate school;

(b) Teaching media: Proper teaching aids were used according to each group: the experimental group and the control group;

(c) Teacher: The English language teacher at the school was assigned to teach the experimental group which showed a high understanding of the proposed strategy and enthusiasm for training on its implementation, while the control group was assigned another teacher;

(d) Research experiment duration: The same time period was determined for teaching the academic content for both groups, and the teaching process took two weeks equivalent to six lessons by three lessons per week.

Research Sample Equivalence

The researcher achieved equivalence of the two research groups with the following:

Students' score rate in the achievement test of the pre-test:

The researcher reviewed the students' scores of the experimental and control groups for the achievement test of the pretest.

T-test was used by the researcher in order to verify the extent of the equivalence of both research groups for the pre-test in the achievement test. The results of the equivalence of both research groups were indicated in Table 1.

Table 1

The Homogeneity of Both Research Groups in the Vocabulary Learning Test

Group	Mean ranks	Sum of ranks	Mann-Whitney <i>U</i> test	Wilcoxon Rank test	Z-score	Sig. level	Significance
Control	24.62	615.50	290.500	615.500	0.430-	0.667	Not-significant
Experimental	26.38	659.50					

The previous table showed that there were no statistically significant differences between the mean scores of the study sample in the pre-test of the control and experimental groups on the vocabulary learning test, as the value of Mann Whitney was 290.500, which was not statistically significant at the level of significance (0.05), indicating the equivalence of the study sample in the pre-test in the vocabulary learning test.

Research Experimental Design

The study sample members were divided into two groups and they were:

1. The experimental group:

The subjects of the first unit of the English language textbook were taught to third-grade intermediate school students using proposed strategies based on three main strategies; the first strategy was about translating those vocabulary items into the student's native language, while the second strategy was about illustrating each item in the pictures; and the third strategy was about using vocabulary items in various contexts.

2. The control group:

They were taught the same vocabulary from the same unit without any use of the mentioned strategy during the same period (see Figure 1).

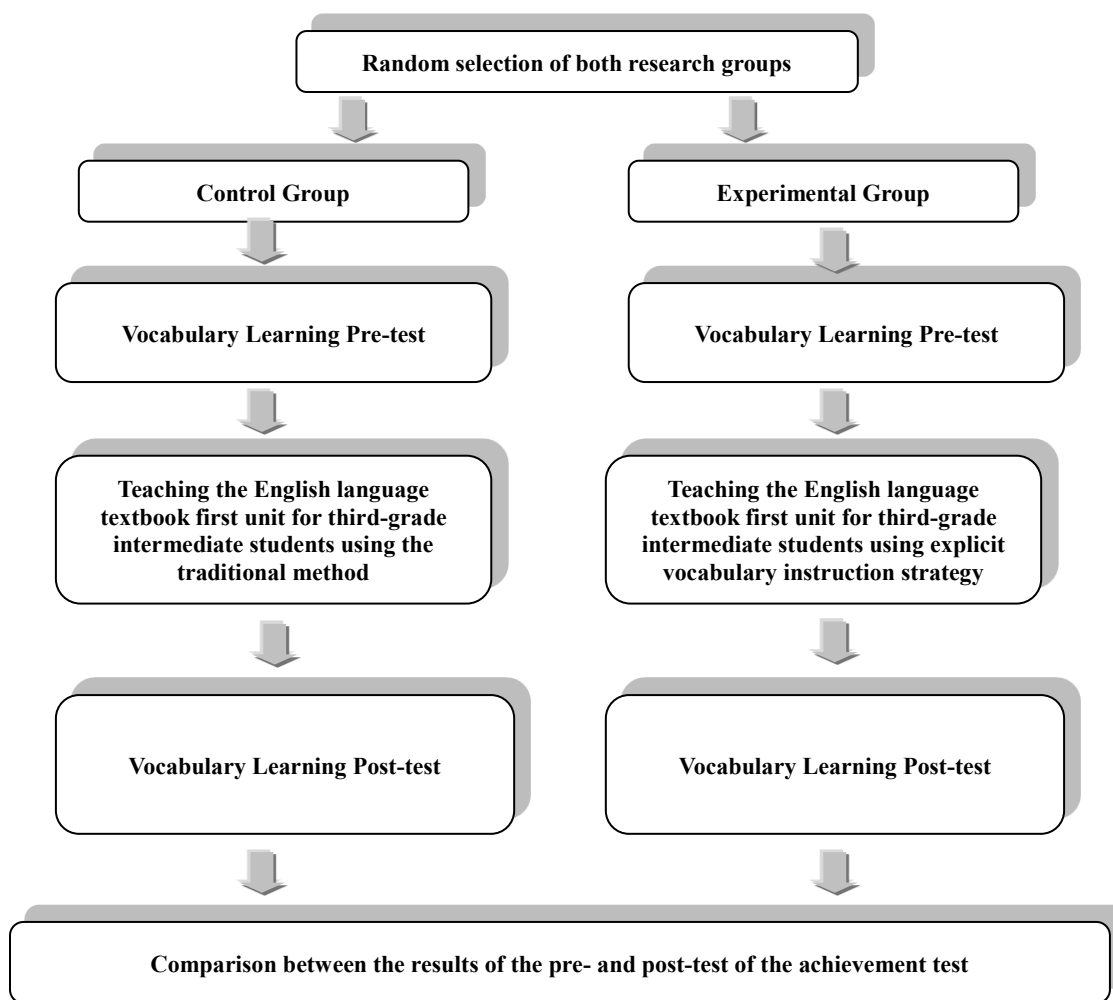


Figure 1. Research experimental design.

Research Tools: Achievement Test

The effects of vocabulary instruction were assessed using a writing test to measure the writing capacity of students adopted from Papadopoulou's (2007) study and it was modified for students' English language textbook and used to assess students' vocabulary learning.

1. Developing the achievement test instructions:

Instructions for the achievement test were clearly determined, enabling the learner to answer the test in an easy manner without consulting outside help. The instructions included the following:

- (a) write your name at the beginning of the test;
- (b) write the class name at the beginning of the test;
- (c) read the question phrases well before answering them and be careful when answering;
- (d) in the writing test, there is one correct answer and the rest is wrong;
- (e) never leave any question without an answer;
- (f) the assigned score to the question will be canceled if you choose more than one alternative;
- (g) don't get wrapped up in anything but the exam questions.

2. Test validity:

In order to ensure the validity of the test content and its questions, the researcher presented the test in its initial form to a group of arbitrators specialized in the field of curriculum and teaching methods the English language to express their opinion on the following:

- (a) the adequacy of the test items and their relevance to the objectives;
- (b) objectives' scientific accuracy;
- (c) the integrity of test phrases from vocabulary errors.

The researcher conducted all the amendments recommended by the arbitrators, and thus the test became appropriate, valid according to the arbitrators, and ready for application. The test consisted in its final form of 40 questions and the total score of the test reached 40 scores (see Table 2).

Table 2

Pearson Correlation Coefficients for Achievement Test

Question No.	Correlation coefficient	Question No.	Correlation coefficient	Question No.	Correlation coefficient
1	0.750**	15	0.822**	29	0.880**
2	0.780**	16	0.686**	30	0.466*
3	0.828**	17	0.600**	31	0.656**
4	0.465*	18	0.550**	32	0.373**
5	0.855**	19	0.577**	33	0.656**
6	0.550**	20	0.893**	34	0.550**
7	0.465*	21	0.563**	35	0.466*
8	0.523**	22	0.427*	36	0.656**
9	0.550**	23	0.347**	37	0.373**
10	0.320**	24	0.874**	38	0.466*
11	0.539**	25	0.601**	39	0.656**
12	0.465*	26	0.577**	40	0.373**
13	0.765**	27	0.550**		
14	0.550**	28	0.693**		

3. Test reliability:

In order to calculate the test reliability coefficient, the researcher applied the test to a sample (other than the research sample) consisting of 28 students from the first intermediate grade, and the reliability coefficient was calculated by several different methods as follows:

(a) Split-half method:

The test was applied once and the scores were divided into two parts and the correlation coefficient was calculated between them, then the reliability coefficient was calculated using Spearman's correlation coefficient and its results are shown in the following Table 3:

Table 3

Calculating the Achievement Test Reliability Using the Split-Half Method

Axes	Phrases No.	Split-half coefficient
Achievement test	40	0.855

The previous Table 3 showed that the test had a high-reliability coefficient as the reliability rate of the achievement test using Spearman's correlation coefficient was 0.855 and this is an appropriate rate, which reassures the researcher to apply the study tools to the selected sample.

(b) Cronbach's Alpha coefficient:

The reliability coefficient was calculated by the Statistical Package for the Social Sciences (SPSS) using Cronbach's Alpha and the results are shown in the following Table 4:

Table 4

Calculating the Achievement Test Reliability Using the Cronbach's Alpha Coefficient

Axes	Phrases No.	Cronbach's Alpha coefficient
General reliability of achievement test	40	0.953

As shown in the previous Table 4, the test had a high-reliability coefficient as the reliability rate of Cronbach's Alpha coefficient of all the questions of the achievement test was 0.953 and this is an appropriate rate, which reassures the researcher to apply the study tools to the selected sample.

4. Difficulty/facility index calculation of the achievement test questions:

It was measured by the percentage of learners who answered the questions correctly among all those who tried to answer it, that is, it is the percentage of the number of learners who answered the questions correctly.

The question is considered easy if most learners answered it (i.e., its degree of difficulty is low). The question is considered difficult if only a small number of them answered it (i.e., a high degree of difficulty). Therefore, very easy and very difficult questions must be excluded or modified, because it is not distinct to the educated, and the researcher has accepted the facility indexes that range between 20% and 80%.

$$\text{Facility Index} = \text{Correct Answers Number} / \text{Tested Learners}$$

$$\text{Difficulty Index} = \text{Wrong Answers Number} / \text{Tested Learners}$$

As shown in the below Table 5, it is evident that the achievement test has satisfactory difficulty indexes, as no question exceeds the ratio specified by the researcher, which is from 20% to 80%.

5. Item discrimination index of the achievement test:

The discrimination index is related to a large degree with the difficulty index, so if the purpose of the test is to differentiate between students and those less able, then the distinct question is what leads to this purpose. It was calculated by arranging the students' papers in ascending order according to the grades, dividing the papers into two groups: highest and lowest. Approximately 32% were selected from the higher and the lower groups, and then the discrimination index was calculated by the following equation (see Table 6).

$$\text{Discrimination Index} = \frac{\text{Correct answers (Highest Group)} - \text{correct answers (Lowest Group)}}{\text{One of the two groups sample number}}$$

Table 5

Difficulty/Facility Index of the Achievement Test Phrases

Phrase No.	Difficulty index	Facility index	Difficulty percentage (%)
1	0.50	0.50	50
2	0.54	0.46	54
3	0.57	0.43	57
4	0.39	0.61	39
5	0.61	0.39	61
6	0.46	0.54	46
7	0.39	0.61	39
8	0.68	0.32	68
9	0.46	0.54	46
10	0.29	0.71	29
11	0.50	0.50	50
12	0.39	0.61	39
13	0.71	0.29	71
14	0.46	0.54	46
15	0.68	0.32	68
16	0.46	0.54	46
17	0.71	0.29	71
18	0.68	0.32	68
19	0.50	0.50	50
20	0.61	0.39	61
21	0.68	0.32	68
22	0.57	0.43	57
23	0.36	0.64	36
24	0.61	0.39	61
25	0.50	0.50	50
26	0.50	0.50	50
27	0.68	0.32	68
28	0.46	0.54	46
29	0.61	0.39	61
30	0.32	0.68	32
31	0.54	0.46	54
32	0.36	0.64	36
33	0.54	0.46	54
34	0.68	0.32	68
35	0.32	0.68	32
36	0.54	0.46	54
37	0.36	0.64	36
38	0.32	0.68	32
39	0.54	0.46	54
40	0.36	0.64	36

Table 6

Discrimination Index of the Achievement Test

First question	Highest group (10 students)		Lowest group (10 students)		Discrimination index
	Wrong answers	Correct answers	Wrong answers	Correct answers	
1	0	10	9	1	0.90
2	0	10	9	1	0.90
3	0	10	9	1	0.90
4	2	8	7	3	0.50
5	0	10	9	1	0.90
6	2	8	8	2	0.60
7	2	8	7	3	0.50
8	3	7	8	2	0.50
9	2	8	8	2	0.60
10	2	8	5	5	0.30
11	1	9	7	3	0.60
12	2	8	7	3	0.50
13	2	8	10	0	0.80
14	2	8	8	2	0.60
15	1	9	10	0	0.90
16	0	10	7	3	0.70
17	3	7	9	1	0.60
18	3	7	9	1	0.60
19	1	9	7	3	0.60
20	0	10	10	0	1
21	3	7	9	1	0.60
22	3	7	8	2	0.50
23	3	7	7	7	0.40
24	0	10	10	0	1
25	3	9	7	1	0.80
26	1	9	7	3	0.60
27	3	7	9	1	0.60
28	0	10	7	3	0.70
29	0	10	10	0	1
30	2	8	7	3	0.50
31	1	9	8	2	0.70
32	2	8	7	3	0.50
33	1	9	8	2	0.70
34	3	7	9	1	0.60
35	2	8	7	3	0.50
36	1	9	8	2	0.70
37	2	8	7	3	0.50
38	2	8	7	3	0.50
39	1	9	8	2	0.70
40	2	8	7	3	0.50

6. Determining the time required to apply the test:

The time required to apply the test was determined depending on the performance of the pilot sample, as the time spent by each student in answering the test questions was calculated and the total sum of time was divided by the number of students of the group, and it was found that the appropriate time to answer all the test items was 35 minutes.

Statistical Methods

SPSS, the Pearson correlation coefficient, Cronbach's Alpha reliability coefficient, split-half method, Wilcoxon rank test, and Mann-Whitney test were used as statistical methods.

Results and Discussion

Reporting research results.

1. Reporting the results of the first hypothesis, proposing that there were no statistically significant differences at the significance level of 0.01 between the mean scores of the post-test of the control group and the experimental group in the vocabulary test and in order to check the validity of this hypothesis, Mann Whitney *U*-test was used as follows (see Table 7):

Table 7

Mann-Whitney Test for Differences Between Control and Experimental Groups in Post-test of the Vocabulary Test

Group	Mean ranks	Sum of ranks	Mann-Whitney <i>U</i> -test	Wilcoxon Rank test	Z-score	Sig. level	Significance
Control	13.00	325.00	0.000	325.000	6.086-	0.000	Significant
Experimental	38.00	950.00					

As shown in the previous Table 7, it was found that there were statistically significant differences at the significance level of 0.01 between the mean scores of the post-test of the control group and the experimental group in the vocabulary test in favor of the experimental group.

2. Reporting the results of the second hypothesis, proposing that there were no statistically significant differences at the significance level of 0.01 between the mean scores of the pre- and post-test of the experimental group in the vocabulary test in favor of the post-test and in order to check the validity of this hypothesis, Wilcoxon rank test was used as follow (see Table 8):

Table 8

Wilcoxon Rank Test to Detect the Presence of Statistically Significant Differences Between the Mean Scores of the Pre- and Post-tests of the Experimental Group on the Vocabulary Test

Group	Mean ranks	Sum of ranks	Direction	Z-score	Sig. level	Significance
Post-experimental	0.00	0.00	0 ^a	4.376 ^b -	0.000	Significant
Pre-experimental	13.00	325.00	25 ^b			

Notes. a. Post-experimental < Pre-experimental; b. Post-experimental > Pre-experimental; c. Post-experimental = Pre-experimental.

As shown in the previous Table 8, it was proved that there were statistically significant differences at the significance level of 0.01 between the mean scores of the pre- and post-test of the experimental group in favor of the post-test. This result goes in harmony with Pittman (2008) who has revealed that explicit vocabulary instruction has a positive effect on vocabulary acquisition and the overall performance of language learners in

the classroom. In a related context, Tahir et al. (2020) have confirmed that the use of explicit vocabulary instruction is significant for learning the target words as it helps store words in the long-term memory.

Discussing of the Research Results

The research results concluded based on the hypotheses were discussed and interpreted as follows:

1. Discussion and interpretation of the results of the first hypothesis, proposing that: “There were no statistically significant differences at the significance level of 0.01 between the mean scores of the post-test of the control group and the experimental group regarding the vocabulary test”:

It was found that there were statistically significant differences between the mean scores of the post-test of the control group and the experimental group in the vocabulary test in favor of the experimental group. This result is consistent with Hasbún (2005) who has confirmed that the use of explicit method helps students acquire the required vocabulary. Also, Karakoç and Köse (2017) emphasized that the productive vocabulary knowledge is associated with success in the writing exam.

This could be attributed to the fact that explicit instruction has enhanced vocabulary enrichment among students, and also enhanced students’ knowledge of many vocabularies, which were difficult to be learned by their peers in the experimental group due to the strategies adopted while teaching them, as translating words into the native language of the students facilitated students’ knowledge of their meaning, and also connecting pictures with vocabulary made it easy for the students to connect between the meaning and the word. The same was supported by literature like Codina Camó and Pladevall Ballester (2015, p. 111) suggesting that providing the translation of words into native language is among the controversial practice if used to deal with vocabulary in foreign linguistic environments, because connecting foreign words with their synonyms in the native language, especially in the earliest stages of foreign language teaching, enhances the constitution of vocabulary meaning in the native language of the student. However, Rima (2016, p. 111) mentioned that using pictures in language instruction creates the proper environment required for enhancing vocabulary knowledge among students, as pictures are useful tools used by teachers to improve students’ motivation in learning.

It could be said that teaching strategies have contributed to the enrichment of productive vocabulary among students. This goes in harmony with Ali (2020) who has confirmed that students’ scores on vocabulary tests are significantly correlated with the strategy teachers usually use in teaching vocabularies. In this regard, Faraj Kudaravalli, and Wasko (2015, p. 14) mentioned that productive vocabulary learning strategies include the following: vocabulary pattern, which includes the pronunciation and the student’s ability to pronounce the word correctly; writing, which includes the student’s ability to spell and write the word in the right way; word syllables, which include student’s ability to use the word parts easily in his sentences or speech; meaning, which includes both the word pattern and meaning, through the student’s ability to produce the word pattern suitable for the target meaning; connections, which include student’s ability to memorize the word when mentioned in a related idea; and the use, which includes grammatical functions, through the student’s ability to use the word in the correct grammatical constructions.

2. Discussion and interpretation of the results of the second hypothesis, proposing that: “There were no statistically significant differences at the significance level of 0.01 between the mean scores of the pre and post-test of the experimental group in the vocabulary test in favor of the post-measurement”:

It was proved that there were statistically significant differences between the mean scores of the pre- and post-test of the experimental group in favor of the post-test; this could be attributed to the experiences gained by

the students of the experimental group, which expanded their vocabulary and made them acquire many new vocabularies very quickly as a result of the adopted educational strategies. As through context, the sentence structure, the topic, and student interaction with the context contribute to expanding the student's knowledge of many new words and vocabulary, which could be enhanced through participation in various activities such as conversation, listening, etc. This result goes in harmony with Dastjerdi and Shirzad (2010) who have confirmed that explicit instruction has been proven to play a huge role in the development and enhancement of students' abilities to write in English as a foreign language. This result is inconsistent with the proposition of Alqahtani (2015, p. 29) indicating that this is related to learning vocabulary through the context: the context including the information related to the pattern and the structure of the word, the semantic and grammatical information of the vocabulary included in the particular text, and the general context including the basic knowledge gained by the student with relation to the presented topics since the domestic context includes the vocabulary and other sentences related to unknown vocabulary. So, context-based learning includes learning through expanded reading, participation in conversations, and listening to stories, films, and media.

It could be said that the explicit vocabulary has contributed to increasing productive vocabulary among students, as it enhanced students' capabilities to gain large vocabulary, which could in turn contribute to their proper use. In consistency with what has been mentioned above, Mega (2012) has confirmed that productive learning allows students to use right vocabularies to express their thoughts in a written form. In this regard, Maskor and Baharudin (2016, p. 264) suggested that vocabulary acquisition includes learning productive vocabulary, understanding and pronouncing words by students, and students' ability to use these words properly while speaking and writing. Productive vocabulary is related to active vocabulary as it enhances the student's ability to produce words in order to express the thoughts and feelings of others. It is also represented in the ability to memorize the structure and meaning of the word or using and pronouncing of the word by the student like his native language. Productive vocabulary is divided into two types: the planned productive vocabulary, which refers to the ability to conclude the combination of the word when providing the keyword; and free productive vocabulary, which refers to the ability to use the words spontaneously without any encouragement to produce particular words, like writing independently.

Conclusion

1. Summary of the results of the first hypothesis, proposing that there were no statistically significant differences at the significance level of 0.01 between the mean scores of the post-test of the control group and the experimental group in the vocabulary test: It was found that there were statistically significant differences at the significance level of 0.01 between the mean scores of the post-test of the control group and the experimental group in the vocabulary test in favor of the experimental group.

2. Summary of the results of the second hypothesis, proposing that there were no statistically significant differences at the significance level of 0.01 between the mean scores of the pre- and post-test of the experimental group in the vocabulary test in favor of the post-test: It was proved that there were statistically significant differences at the significance level of 0.01 between the mean scores of the pre- and post-test applied to the experimental group in favor of the post-test.

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