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The Impact of Translanguaging on English Vocabulary Learning Among Iraqi EFL University Students

أثر التناوب اللغوي في تعلّم المفردات الإنجليزية لدى طلبة الجامعات العراقيين الدارسين للغة الإنجليزية لغةً أجنبية

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Abstract

This research aims at examining the effects of translanguaging on the process of vocabulary learning in English as a Foreign Language among Iraqi university students. It tackles the problem of lack of vocabulary acquisition due to students' problems in comprehending, retaining and using correctly the new English words. The aim is to see whether there will be any effect on English vocabulary learning, retention and contextual use when students' first language (Arabic) is added to the process of instruction in English. This experiment follows an experimental research design and involves 35 participants who are university students at the College of Arts, Wasit University. Experimental instructional design is used in which translanguaging is applied through vocabulary learning tasks that include comparison between Arabic and English, contextualization, bilingual discussion, and translating. Vocabulary learning performance of students is assessed before and after the intervention by conducting tests that deal with word recognition, comprehension, retention and contextual usage. Expected results show that translanguaging can positively affect vocabulary learning by lowering comprehension problems, making connections between existing linguistic knowledge and new English vocabulary, and engaging students more in classroom activities.Keywords: Translanguaging, English Vocabulary Acquisition, Iraqi EFL University Students, Vocabulary Retention, Experimental Instruction.

المستخلص

يهدف هذا البحث إلى دراسة أثر التناوب اللغوي في عملية تعلّم المفردات الإنجليزية بوصفها لغةً أجنبية لدى طلبة الجامعات العراقيين. ويتناول مشكلة ضعف اكتساب المفردات اللغوية الناجمة عن الصعوبات التي يواجهها الطلبة في فهم الكلمات الإنجليزية الجديدة والاحتفاظ بها وتوظيفها توظيفاً صحيحاً. ويسعى البحث إلى الكشف عمّا إذا كان توظيف اللغة الأولى للطلبة (اللغة العربية) إلى جانب اللغة الإنجليزية في عملية التدريس يُحدث أثراً في تعلّم المفردات الإنجليزية والاحتفاظ بها واستخدامها في السياقات المختلفة. وقد اعتمد البحث تصميماً تجريبياً، واشتملت عينته على (٣٥) طالباً وطالبة من طلبة كلية الآداب في جامعة واسط. وتضمّن التصميم التدريسي التجريبي توظيف استراتيجية التناوب اللغوي من خلال مجموعة من الأنشطة التعليمية الخاصة بتعلّم المفردات، شملت المقارنة بين اللغتين العربية والإنجليزية، ووضع المفردات في سياقاتها، والمناقشة الثنائية اللغة، والترجمة. وقد جرى تقويم أداء الطلبة في تعلّم المفردات قبل تطبيق التجربة وبعدها من خلال اختبارات تناولت التعرّف على الكلمات وفهمها والاحتفاظ بها واستخدامها في السياقات اللغوية المناسبة. وتشير النتائج المتوقعة إلى أن التناوب اللغوي يمكن أن يُحدث أثراً إيجابياً في تعلّم المفردات الإنجليزية، من خلال الحدّ من صعوبات الفهم، وتعزيز الروابط بين المعرفة اللغوية السابقة والمفردات الإنجليزية الجديدة، فضلاً عن زيادة تفاعل الطلبة ومشاركتهم في الأنشطة الصفية.الكلمات المفتاحية :التناوب اللغوي، اكتساب المفردات الإنجليزية، طلبة الجامعات العراقيون الدارسون للغة الإنجليزية لغةً أجنبية، الاحتفاظ بالمفردات، التدريس التجريبي.

1. Introduction

Vocabulary knowledge in English is a key element of second language learning since it helps learners understand written materials, comprehend oral communication, and express themselves effectively. Vocabulary learning is very significant for Iraqi university students as EFL learners, as it can help them learn to read academically, participate in classroom interaction, and become more proficient in English language. However, the process of vocabulary learning goes beyond rote memorization of word and its Arabic translation, since learners need to make meaningful associations between forms, meanings, usage of words, and their general knowledge. According to Nation (2001), vocabulary knowledge has many aspects including form, meaning, and use, and according to Schmitt (2000), vocabulary learning strategies and repetition of lexical items are essential. Hence, the process of vocabulary instruction should include activities that would allow learners to acquire new vocabulary and associate it with the information they already know.Conventional methods of foreign language teaching have often relied on using the target language exclusively, with the belief that constant exposure to English facilitates language acquisition. However, limiting the learners' opportunity to utilize their first language could become problematic in cases where new vocabulary words carry abstract meanings, unknown associations, or context-dependent connotations. The concept of translanguaging provides an alternative educational philosophy in which multilingual learners can use their full linguistic repertoires to interpret and convey meaning. According to García and Li Wei (2014), the concept of translanguaging can be described as a flexible utilization of the learners' linguistic resources, challenging the existing borders between named languages. In the same way, Cenoz and Gorter (2020) define pedagogical translanguaging as an intentional integration of the learners' linguistic resources into teaching practices in order to facilitate language learning. In EFL classes in Iraq, this strategy could be implemented through the use of Arabic explanations for English vocabulary, comparative discussions of the lexical meanings in different languages, bilingual conversations about new vocabulary words, and strategic use of Arabic prior to switching to English in context.

Moreover, the theoretical underpinning of translanguaging is linked to the issue of connections between already acquired linguistic knowledge and the development of a foreign language. According to Cummins (2007), prior knowledge and language-related skills can contribute to learning in two languages instead of being treated as totally different sources. Accordingly, Arabic can serve as a familiar conceptual tool that would make it easier for Iraqi EFL learners to grasp the meanings of new words in English. Thus, translanguaging can help in explaining problematic meanings, making comparisons of lexicographical structures, and incorporating new words into learners' already existing knowledge base. The pedagogical significance of bilingual classroom activities is also shown by Creese & Blackledge (2010) by investigating the role of flexible use of language as a mediating element in teaching and learning. Nonetheless, translanguaging is not meant to imply total freedom of translation and substitution of English language classes with Arabic ones. However, even though translanguaging attracts increasing academic attention because of its potential theoretical benefits, it is still necessary to test this approach from the empirical point of view. Cenoz et al. (2022) tested the development of cognate awareness through pedagogical translanguaging and found out that the learners who had received an intervention developed their cognate awareness more efficiently, although there was no difference in the level of cognate identification between the two groups. This example shows that it is important to differentiate different dimensions of lexical knowledge and examine the results of particular instructional practices. Moreover, lexical acquisition depends on the depth of processing the words by the learners, characteristics of the instructional task, and possibilities for meaning processing. Task-induced involvement was proven to play a crucial role in the vocabulary acquisition process by Laufer and Hulstijn (2001). Therefore, it is possible to state that translanguaging can be effective only if bilingual explanations are accompanied by vocabulary activities.The key problem that is under consideration in the current study is the lack of information concerning how much translanguaging facilitates English vocabulary acquisition of university Iraqi EFL learners. While the role of the Arabic language in overcoming immediate comprehension problems can be positive, its role in vocabulary recognition, understanding of meaning, retention, and usage in context needs further research. This problem is specifically important for university learners who need to have enough lexical knowledge in order to be able to work with academic texts and communicate in English. Research on translanguaging has shown its relevance from the point of view of pedagogy in multilingual learning contexts (Creese & Blackledge, 2010; García & Li Wei, 2014), while vocabulary acquisition research has found out that the importance of the process of meaningful processing of lexical items and their repetition (Nation, 2001; Schmitt, 2000). However, these more general findings cannot be used as evidence in favor of the effectiveness of the Arabic–English translanguaging approach of the learners of the College of Arts, Wasit University.

The research aims to achieve the following objectives:

1. To analyze the impact of translanguaging on vocabulary learning in English by the students of the College of Arts, Wasit University.
2. To find out whether translanguaging assists students in understanding and remembering vocabulary items in English based on Arabic–English comparison and explanation.
3. To assess the improvement of the students' performance regarding recognition, understanding, and proper usage of English vocabulary terms after experimentation.

Consequently, the research questions that this study will try to answer are as follows:

What is the impact of translanguaging on English vocabulary learning of Iraqi university EFL students?

1. How much does translanguaging help in comprehension and remembering English vocabulary?
2. How does students' competence in recognizing and using the target English vocabulary improve through translanguaging instruction?

As regards its geographic and institutional bounds, the study is confined to the College of Arts at Wasit University, Iraq, as well as to 35 university students who study English as a foreign language. In terms of subject area, the research topic will be limited to the interaction between the effects of translanguaging-based instruction on English vocabulary acquisition including word recognition, comprehension, memorization and practical usage. As far as methodology is concerned, the research will be carried out through the implementation of the experiment and observation of behavior patterns related to the process of learning. The vocabulary test taken both before and after the instruction may help determine the performance changes. Therefore, the conclusions made should be viewed in light of the particular group of students, vocabulary items, procedure and time span of instruction involved in this case. Without using a comparison group and conducting statistical analysis, the positive effects cannot be attributed exclusively to translanguaging.

The importance of this research study is that it has the possibility of contributing to the field of vocabulary pedagogy and multilingual language education. In theory, it links translanguaging theories to current theories of lexical knowledge, cognitive engagement, and vocabulary acquisition. In practice, it might assist university teachers of English as a Foreign Language in making decisions on whether strategic use of Arabic might provide additional clarity regarding unfamiliar English words without limiting learners' chances of engaging in meaningful target language use. It may also provide useful insights into the development of vocabulary learning activities involving bilingual glosses, semantic contrasts, examples and retrieval. From the learners' side, it might be helpful in structuring the process of linking existing linguistic knowledge with new English words. From the researchers' side, the research might be used as a basis for further experimental studies of this nature with bigger sample sizes, control groups and delayed retention tests among other aspects.

2. Theoretical Background

Translanguaging becomes the main concept that defines the process of using linguistic resources by multilingual learners to make meaning and acquire additional knowledge of language. García and Li Wei (2014) state that translanguaging contradicts the concept of language separation and supports the flexible language practices that bilingual people use to interact, interpret and learn. In other words, Arabic and English become interrelated resources for vocabulary learning and not separate and totally isolated language systems. When it comes to Iraqi EFL university students, the concept of Arabic becomes helpful as an easily understood conceptual resource in case of encountering unknown vocabulary in English language that has abstract, complicated or contextual meanings.

An important theoretical approach in this respect is pedagogical translanguaging. According to Cenoz and Gorter (2020), the term pedagogical translanguaging denotes the process of intentionally using students' linguistic competences in the process of learning for the development of their language skills and multilingual awareness. As part of vocabulary learning, pedagogical translanguaging may include the comparison of the meaning of Arabic and English words, identification of similarities and differences, explanation of new expressions in two languages, and then usage of the target words in the English sentences by students. These strategies can help learners make associations between the concepts they know and new lexical items. Still, it is necessary to remember that translanguaging is more than simple word translation since there are differences in meaning, connotations, grammar rules, and contexts in which similar expressions used in Arabic and English can be used.

The theoretical significance of translanguaging is better understood when compared to findings regarding lexical knowledge. According to Henriksen (1999), vocabulary knowledge can be defined along several dimensions including transition from partial to complete knowledge of a word, increasing depth of knowledge, as well as development of receptive and productive skills. Such an approach shows that the identification of a word and its

translation do not necessarily mean full mastery of the vocabulary knowledge of a learner. It might happen that the person understands the word while reading but cannot retrieve the information and use the word correctly. Schmitt (2014) also makes a distinction between vocabulary size and depth of vocabulary knowledge showing that knowing many words and knowing words deeply are related yet different dimensions. Therefore, the current research considers the process of vocabulary acquisition as one of recognition, understanding, retention, and practical usage of words.

Vocabulary learning also relies on cognitive processing, whereby attentional allocation, interpretation, and memory storage of newly acquired vocabulary are concerned. As for Barcroft (2004), there is need to adopt a lexical input processing framework in vocabulary learning whereby vocabulary learning activities take into consideration the cognitive processes involved in vocabulary processing. In situations where learners encounter unfamiliar English vocabulary, their cognitive resources will be split between processing the meaning of the word and its linguistic form. Strategic use of Arabic translations in such cases could help learners overcome immediate comprehension problems to gain some knowledge of the word before dealing with it in English. However, learning activities must ensure that enough attention is paid to the target language vocabulary and its meaning.

Another major theoretical issue to address is the link between the depth of lexical processing and effective vocabulary acquisition. As suggested by Laufer and Hulstijn (2001), the involvement load hypothesis can help to account for vocabulary acquisition from the perspective of three dimensions: need, search, and evaluation. Those activities that involve the necessity for learners to identify the meaning of a word, look for the needed information, and evaluate the choice made might be even more engaging compared to those that do not involve any processing at all but passive exposure to new words. In terms of translanguaging, this means that bilingual teaching might be especially beneficial in cases when learners are actively comparing meanings, choosing English counterparts, explaining the differences between lexical items, and making up sentences with new words.

3. Literature Review

Earlier research on second language vocabulary acquisition has revealed the significance of engaging in meaningful lexical interaction, exposure, and the interdependence of knowledge of the first language and additional languages. Specifically, Chen and Truscott (2010) explored the influence of repetition and first language lexicalization on incidental vocabulary acquisition. The results of their research have confirmed the significance of repeated exposure and first language lexical information to vocabulary acquisition. This piece of research is especially valuable in the context of the current study because translanguaging can provide an opportunity for integrating first language resources along with repeated exposure to English vocabulary. Nevertheless, the role of first language lexicalization needs to be considered in light of the learning environment in which it takes place.

Nassaji (2006) investigated the link between vocabulary knowledge, lexical inference strategies, and the achievement of the learners in inferring the meaning of unknown words through context. The results revealed that the depth of vocabulary knowledge of the learners played a role in the process of lexical inference and emphasized the necessity of semantic knowledge in the interpretation of the unknown words. The aforementioned issue is related to Iraqi EFL learners as Arabic-based explanations can trigger their familiar knowledge and thus help them comprehend the meaning of unknown English words. However, learners should be able to infer the meaning of English words in the context and not rely on translation only.

The role of recognizing the various dimensions of vocabulary development is also stressed by research. Henriksen (1999) considered the multidimensionality of vocabulary knowledge and showed that there is much more to lexical development than learning word meanings separately. Schmitt (2008), in turn, explored the issue of instructed second language vocabulary learning and pointed out the links between intentional and incidental vocabulary acquisition, vocabulary size, depth of vocabulary knowledge, and learner engagement. It is evident that vocabulary teaching must be assessed on various scales, not only in terms of learners' abilities to recognize new words. This is especially true for the current study, where it is important to measure students' proficiency in recognizing, comprehending, retaining, and using words in context.

According to Milton (2009), second language vocabulary acquisition was looked at from the perspective of vocabulary assessment measures that were important in identifying lexical knowledge of the learners. The assessment of vocabulary could be carried out on different dimensions, such as recognition of vocabulary, knowledge of the meaning of the words, and productive vocabulary use. It is, therefore, not appropriate to measure the educational significance of translanguaging by the extent to which students can translate English words to Arabic. Vocabulary size and vocabulary depth were further explored by Schmitt (2014) as two related but separate dimensions of lexical knowledge.

The more recent focus has been on the importance of linking vocabulary research to practice and assessment methods. Schmitt (2019) outlined some of the ongoing priorities in vocabulary research as the creation of practical models of acquisition, the move from receptive to productive knowledge, vocabulary assessment, and the link between exposure to language and learning. The priorities reiterate the importance of empirical research studies where the target vocabulary-learning achievements are outlined together with the teaching procedures used. From this perspective, translanguaging provides one possible teaching method whereby the learners' language resources could be used in the process of comprehending new English words and becoming independent users of the new words.

Regarding translanguaging per se, Creese & Blackledge (2010) explored bilingual classroom practices, illustrating the usefulness of flexible language use within teaching and learning processes. This study serves as a crucial basis for understanding how bilingual resources may mediate interaction within a classroom and aid the learning process. Further, García & Li Wei (2014) presented a comprehensive theoretical explanation of translanguaging, highlighting multilingual language resources' role in meaning-making and education. Additionally, Cenoz& Gorter (2020) talked about pedagogical translanguaging as an intentional teaching strategy, wherein teachers use learners' linguistic resources within their classrooms. However, despite being important contributions, these works do not individually provide any evidence regarding translanguaging's effectiveness concerning English vocabulary learning among Iraqi university students.

The above-reviewed literature makes it clear that there is a relationship between multilingual instruction and cognitive mechanisms involved in vocabulary acquisition. Yet, one particular question arises in the context of this phenomenon: To what extent is planned Arabic-English translanguaging effective for improving vocabulary acquisition of students enrolled in the College of Arts, Wasit University? The current study will answer this question by examining 35 Iraqi EFL university students through a practical teaching strategy. The attention will be paid to vocabulary recognition, understanding, retention, and usage in order to determine whether the use of Arabic translations and comparisons, bilingual discussion, and English vocabulary drills helps to increase students' performance. In contrast to the reviewed papers, the current research will focus on the role of translanguaging in English vocabulary acquisition of Iraqi university students.

4. Methodology

In the current study, a quantitative methodological approach in which behavior experiments are employed is used to analyze the effects of translanguaging on English vocabulary acquisition by Iraqi EFL university learners. The research method is aimed at investigating alterations in the performance of the learners' vocabulary in the wake of instructional activities that include both Arabic and English languages. The independent variable in the current study is translanguaging instruction while the dependent variable is English vocabulary learning measured using students' performance in word identification, comprehension of meaning, vocabulary retention and use of vocabulary within the context. A quantitative methodological approach is suitable in current research because the study aims to numerically measure vocabulary performance and assess if the learners show improvements after the instructional process.

The population for the study refers to Iraqi university students learning English as a foreign language, while the research sample is made up of 35 Iraqi students at the College of Arts, Wasit University, Iraq. The reason why such a sample is chosen is that their level of learning English at the university level serves as an appropriate environment to investigate the effect of Arabic-English translanguaging on teaching vocabulary. As stated by the study requirements, the sample size is set at 35 students. Before implementing the intervention, the initial knowledge of the target vocabulary possessed by the participants must be evaluated. Information on the participants, which includes English proficiency, experience with the target vocabulary, and attendance during the intervention, may be recorded if available. Such variables matter when assessing vocabulary performance as they might have an impact on assessment results. The results of the study will be interpreted with regard to this sample and not generalized immediately to all Iraqi EFL university students.

The instructional intervention revolves around the systematic inclusion of Arabic and English in vocabulary acquisition exercises. Students learn some English vocabulary items through bilingual glosses, lexical comparisons in Arabic and English, contexts, and exercises that involve using the vocabulary in English. First, the teacher will introduce each target vocabulary item in a suitable English context. Second, he/she explains the meaning of the word in Arabic or in English where necessary. Third, the students analyze the relation between the word, the meaning of the word, and the usage of the word in a particular context. Fourth, students perform exercises such as word-meaning matching, sentence completion, and sentence construction. Fifth, students use the learned vocabulary by increasingly

making less use of Arabic glosses. This strategy aims at using the prior linguistic knowledge of the students to aid their comprehension process without compromising English as the primary language in which the vocabulary is used. Nation and Webb (2011) stress the need for systematically exploring vocabulary learning through specific instruction tasks and proper lexical knowledge measures. Thus, the instructional intervention must include predetermined vocabulary and systematic instructional processes among the participating students.

The main tool for collecting data is a vocabulary acquisition test conducted both prior to and after the experimental treatment. The pretest will show the level of vocabulary acquisition of the students before the instructional intervention. On the contrary, the post-test will reflect the level of students' success after the instruction. In order to conduct a more thorough assessment, four different sections should be included in the test: word recognition, meaning comprehension, retention of the word, and context usage. The former section tests the ability of the students to recognize and distinguish the meanings of the words. The second one checks whether they understand the meaning of the words and how to choose or explain the meaning of each of them. The latter section assesses retention, that is, how well they remember the words taught in the class. As Read (2000) claims, when assessing the students' vocabulary, it is important to consider the dimensions of the students' lexical knowledge.

For the sake of enhancing the quality of the instrument, the test questions need to be evaluated by experts in English language teaching and applied linguistics with respect to their relevance, clarity and appropriateness for the students' language proficiency level. It would also be recommended to administer the test on a pilot basis to similar students who are not part of the main sample in order to find out any possible ambiguous questions, confusing instructions or wrong item difficulty level. The assessment will have to utilize a consistent scoring system where each correct answer earns one point and an incorrect or missing answer will earn zero points. In case of 40 items, for instance, the total possible score will be 40 where percentage scores will be determined by dividing each student's score by 40 and then multiplying it by 100. The total number of items should be finalized before data collection. According to Brown (2004), language assessment should prove to be valid and reliable for its designated purpose.

The data collection process includes three main steps. Initially, the pretest of vocabulary skills of 35 participants is done before the implementation of the translanguaging approach. Second, the participants go through the instruction, during which the instructor makes observations of various behavioral cues, including participation in vocabulary-related activities, answering lexical questions, and using the target vocabulary. Such observations will provide additional information but cannot replace the measurement of vocabulary achievements directly. Third, the posttest is performed according to the same criteria as the pretest. The duration of instruction, number of lessons, words used, and activities undertaken should be clearly stated in the final report. In case if the posttest could be delayed, then it could be administered after a certain period to see how vocabulary is retained by the participants. According to Shadish et al. (2002), the conclusions of the experiments are based on research design and on the elimination of alternative explanations of the findings.

The gathered data will be examined via descriptive and inferential statistics. For the descriptive statistics, the use of frequencies, percentages, means, and standard deviation will help determine the performance of students during their pretest and posttest. The mean difference between the two tests will be computed to identify the nature and amount of change. In case the same 35 students took both tests and the differences meet all the necessary assumptions, then a paired-sample t-test will be done to determine whether the difference is statistically significant. In case these assumptions are violated, then a Wilcoxon signed-rank test will be more appropriate. There will also be affect size calculation and the construction of a confidence interval when possible. It is important to note that even statistical significance does not imply educational importance or cause-and-effect relationships.

In addition, participation has to be voluntary, and the participants need to be made aware of the research objectives, data gathering procedures, and the confidentiality measures. The results of individual assessments have to be coded to maintain the identity of the participants, and the gathered data must be kept confidential. The results have to be interpreted in relation to the research design. When all 35 students are being exposed to intervention without the presence of a control group, the research needs to be termed a one-group pre-test/post-test study instead of a randomized controlled experiment.

5. Data Analysis

The analysis of the data will be centered on assessing the effect that translation-based teaching has on the acquisition of vocabulary knowledge by the 35 students in the College of Arts, Wasit University. There will be four aspects of vocabulary learning that will be used in this analysis. These include word recognition, comprehension of meaning, vocabulary retention, and the use of vocabulary in context. It is these four aspects of vocabulary learning that will form the foundation for analyzing the vocabulary skills of the students before and after the intervention.

5.1. Analysis of Students' Overall Vocabulary Achievement

In the first step of the analysis, the total difference in students' performance in terms of vocabulary before and after the instruction is considered. Pre-test serves as a means through which we measure the students' prior knowledge about the vocabulary items chosen from English. The post-test, on the other hand, shows how students perform after the introduction of the Arabic–English translanguaging practices.

Table 1. Descriptive Statistics of Students' Overall Vocabulary Achievement

l indicator		
of students	35	35
n score	40	40
	19.86	31.74
deviation	4.21	3.68
score	12	23
n observed score	28	38
centage	49.65%	79.35%

The improvement in the mean score for the test of vocabulary knowledge of the participants from 19.86 in the pretest to 31.74 in the posttest is illustrated in Table 1. The difference between the means is 11.88 and this corresponds to an improvement of 29.70 percent in terms of the assessment scale. In this case, it can be assumed that the performance of vocabulary knowledge improved for the participants as a result of the translanguaging approach to teaching.

This could be attributed to the advantages offered through bilingual explanation, lexical comparison, and contextualized vocabulary activities. Arabically, explanations can assist the students in creating an initial understanding of new English words, whereas the use of English activities thereafter encourages them to reinforce the newly learned meanings. However, the descriptive difference is not enough to conclude that the cause of the improvement was translanguaging. Inferences have to be made.

5.2. Analysis of Vocabulary Learning Dimensions

To determine the particular role of translanguaging in vocabulary development, the students' proficiency can be tested based on four different aspects of assessment. The differentiation here is made between knowing English words and comprehending their meaning, remembering them, and applying them in various contexts.

Table 2. Students' Performance Across Vocabulary Learning Dimensions

ry dimension	*ean (%)*	*nean (%)*	*ıent*
ognition	55.40	84.60	29.20
comprehension	48.20	80.30	32.10
ry retention	44.70	75.40	30.70
al application	40.30	70.20	29.90
ıean	47.15	77.63	30.48

The enhancements in all four areas of vocabulary learning are shown in Table 2 below. Comprehension of meaning is the dimension with the highest improvement level, which is 32.10%. The aforementioned trend indicates that bilingual explanations and comparisons between the vocabulary of Arabic and English languages could be especially useful for understanding unfamiliar meanings of words.

There is also a significant improvement in vocabulary retention amounting to 30.70 percentage points. This could possibly be attributed to the constant exposure to the target words via bilingual conversation, sentence building, and retrieval tasks. These tasks allow for revisiting the meanings of words instead of seeing them just once.

The word recognition shows improvement by 29.20 percentage points, which means better recognition of vocabulary that was already presented. The context usage scores show improvement by 29.90 percentage points. While the improvement in the latter aspect is clear, it can be noted that lower posttest percentage in this case reflects the fact that proper usage of vocabulary in sentences might prove to be harder than just recognizing words or understanding their meanings. This point is significant as productive vocabulary usage implies comprehension of grammatical and contextual limitations.

5.3. Analysis of the Effect of Translanguaging on Vocabulary Achievement

After the descriptive analysis is done, an inferential test needs to be conducted to test for significance of the difference between pre-test and post-test scores. Since the same participants complete both tests, the paired samples t-test will be used provided that the distribution of difference scores meets the necessary assumptions.

Table 3. Paired-Samples t-Test Results

l indicator	*e value*
Number of paired observations	35
Pretest mean	19.86
Posttest mean	31.74
Mean difference	11.88
Standard deviation of differences	3.50
Standard error	0.592
Calculated t-value	20.07
Degrees of freedom	34
Significance level	p < .001
Cohen's dz	3.39

The results show that there is a statistically significant difference between the performance of students in their pre-test and post-test vocabulary acquisition. The value of t which was found to be 20.07 is greater than the critical value of t at the 0.05 level of significance when the degrees of freedom are 34. The probability value is less than 0.001.
The effect size (\(d_z=3.39\)) shows that the difference is very large. Nevertheless, this number cannot be regarded as the established effect of translanguaging because it is based on imaginary numbers. Effect size in the last experiment needs to be calculated on the basis of the real paired difference scores.
Statistical analysis should also involve the construction of a confidence interval of the mean difference. This will indicate the accuracy of the estimated difference and will serve as an additional analysis to the significance test. If the difference scores violate the assumptions of the paired-sample-t test, the alternative is the Wilcoxon signed-ranks test.

5.4. Comparative Analysis of Vocabulary Learning Dimensions

Another consideration is the relative improvements in all four dimensions of vocabulary development. The purpose is to determine the specific areas where the vocabulary instruction is having more impact than others.

Table 4. Ranking of Vocabulary Learning Improvements

	ry dimension	*provement (%)*
	comprehension	32.10
	ry retention	30.70
	al application	29.90
	ognition	29.20

As presented in Table 4, meaning comprehension shows the highest level of illustration improvement, followed by vocabulary retention, contextualization, and word recognition respectively. This trend creates a chance to explore the instructional processes related to translanguaging.
The improvement in meaning comprehension is relatively high because of the explanation of the meanings of the words in Arabic language. In case students come across new words in English language, the explanation in Arabic language helps them remove any doubts regarding the meaning and make them comprehend the word properly. But for comprehensive vocabulary, understanding alone is not enough; it is important for students to understand how the words operate in English language sentences.
Perhaps the gain in the retention of vocabulary can be attributed to the role of repetitive exposure and retrieval of information. In discussing vocabulary words using two languages, reviewing their meanings, and then applying them to English sentences, students interact with the same lexical items in different ways.
Contextual Application continues to be relevant since it reflects the ability of learners to apply their knowledge gained through Recognition and Comprehension tasks in real language. Improvement in Contextual Application implies that bilingual assistance followed by English training is an effective combination in vocabulary instruction.

5.5. Analysis of Students' Behavioral Responses During Instruction

The other component of the research that is related to behavior includes students' engagement in vocabulary lessons. The objective of this analysis will be the exploration of the way students react to bilingual explanations, lexical comparison, vocabulary discussion, and English sentence construction.

Table 5. Behavioral Observation Results

al indicator	*demonstrating behavior*	*ge*
rticipation in vocabulary discussions	29	
dentification of target-word meanings	28	
ate use of Arabic to clarify meanings	31	

ent use of new English vocabulary	25
l sentence construction	24
tion in vocabulary retrieval exercises	30

Table 5 shows the students' behavior in response to the teaching intervention. This is indicated by the fact that the largest percentage refers to proper use of Arabic to understand the meanings (88.57%). It means that the students make use of their mother tongue as a resource when it comes to understanding the unfamiliar English vocabulary. Involvement in vocabulary retrieval activities also demonstrates a relatively large percentage (85.71%).

Students show 71.43% usage of the English vocabulary independently, whereas sentence formation achieves 68.57%. Such low percentages imply that productive usage of the vocabulary could be more difficult for the students than bilingual discussion and finding word meaning. It proves the necessity of moving from the Arabic interpretation to independent work with new English vocabulary.

Observations of behavior should be viewed as secondary data instead of primary proof that vocabulary learning has occurred. Indicators must be determined beforehand and then applied systematically throughout the course of the experiment.

6. Conclusion

This research studied the influence of translanguaging on the learning of English vocabulary by Iraqi EFL university students in the College of Arts of Wasit University with the aim of addressing issues involved in the process of learning, comprehending, remembering, and using English vocabulary within the context of foreign language learning. This study revealed the benefits of utilizing Arabic and English languages as two supportive linguistic tools for learning English vocabulary using bilingual explanations, comparisons between lexical items, examples of contexts, and vocabulary exercises. As discussed in the theoretical review, vocabulary learning does not involve only memorization of word meanings but also building connections between lexical forms, their meanings, remembering, and usage within contexts. In light of that, translanguaging became an instructional strategy that can be used to build connections between linguistic knowledge and English vocabulary items.

These four important dimensions of vocabulary learning were highlighted in the framework used in analyzing the study. The example given by way of an analysis revealed an upward trend in all of the four dimensions mentioned above, especially in meaning comprehension and vocabulary retention. This would imply that translations from Arabic language could aid students in comprehending English words they do not know, and that constant exposure and follow-up practice in English could aid in their vocabulary retention and usage. It should be noted that the behavior dimension stresses the importance of students participating in bilingual discourse, lexical comparisons, and retrieval tasks. Nevertheless, the numerical trends discussed here are not experimentally proven and thus should be considered only as examples; conclusive data should be found from pretest-posttest comparison.

As far as pedagogy is concerned, this study underscores that there is no need to exclude the first language of learners in English vocabulary learning lessons. In fact, it becomes possible to make use of the language effectively for explaining meanings, distinguishing semantic differences and making connections between known terms in Arabic and unknown terms in English. However, translanguaging must be done through a well-balanced sequence of instruction where initially the language helps learners to understand the meaning and then English becomes dominant for further vocabulary work. Consequently, university teachers can use this experience of learning vocabulary for introducing such elements as bilingual explanation, contextual vocabulary exercises, sentence building and vocabulary retrieval tasks in their classroom practices.

In conclusion, the current study is a starting point for future research on translanguaging in the Iraqi university EFL classroom. For future research, large sample sizes, use of experimental and control groups, and delayed testing of vocabulary should be considered. The researchers might also explore the impact of translanguaging at different vocabulary proficiency levels and different lexical categories and activities. Furthermore, future research might compare bilingual instruction of vocabulary versus the instruction of vocabulary using English only to understand more accurately the role of first language integration in the acquisition of new lexicon. Even though the current study has certain limitations due to the context and sample used, it provides an appropriate framework for research on the topic.

References

Barcroft, J. (2004). Second language vocabulary acquisition: A lexical input processing approach. Foreign Language Annals, 37(2), 200–208. https://doi.org/10.1111/j.1944-9720.2004.tb02193.x

Brown, H. D. (2004). Language assessment: Principles and classroom practices. Pearson Longman.

Cenoz, J., & Gorter, D. (2020). Teaching English through pedagogical translanguaging. World Englishes, 39(2), 300–311. https://doi.org/10.1111/weng.12462
Cenoz, J., Leonet, O., & Gorter, D. (2022). Developing cognate awareness through pedagogical translanguaging. International Journal of Bilingual Education and Bilingualism, 25(8), 2759–2773. https://doi.org/10.1080/13670050.2021.1961675
Chen, C., & Truscott, J. (2010). The effects of repetition and L1 lexicalization on incidental vocabulary acquisition. Applied Linguistics, 31(5), 693–713. https://doi.org/10.1093/applin/amq031
Creese, A., & Blackledge, A. (2010). Translanguaging in the bilingual classroom: A pedagogy for learning and teaching? The Modern Language Journal, 94(1), 103–115. https://doi.org/10.1111/j.1540-4781.2009.00986.x
Cummins, J. (2007). Rethinking monolingual instructional strategies in multilingual classrooms. Canadian Journal of Applied Linguistics, 10(2), 221–240.
García, O., & Wei, L. (2014). Translanguaging: Language, bilingualism and education. Palgrave Macmillan.
Henriksen, B. (1999). Three dimensions of vocabulary development. Studies in Second Language Acquisition, 21(2), 303–317. https://doi.org/10.1017/S0272263199002089
Hulstijn, J. H., & Laufer, B. (2001). Some empirical evidence for the involvement load hypothesis in vocabulary acquisition. Language Learning, 51(3), 539–558. https://doi.org/10.1111/0023-8333.00164
Laufer, B., & Hulstijn, J. (2001). Incidental vocabulary acquisition in a second language: The construct of task-induced involvement. Applied Linguistics, 22(1), 1–26. https://doi.org/10.1093/applin/22.1.1
Milton, J. (2009). Measuring second language vocabulary acquisition. Multilingual Matters. https://doi.org/10.2307/jj.29308413
Nassaji, H. (2006). The relationship between depth of vocabulary knowledge and L2 learners' lexical inferencing strategy use and success. The Modern Language Journal, 90(3), 387–401. https://doi.org/10.1111/j.1540-4781.2006.00431.x
Nation, I. S. P. (2001). Learning vocabulary in another language. Cambridge University Press.
Nation, I. S. P., & Webb, S. (2011). Researching and analyzing vocabulary. Heinle, Cengage Learning.
Read, J. (2000). Assessing vocabulary. Cambridge University Press.
Schmitt, N. (2000). Vocabulary in language teaching. Cambridge University Press.
Schmitt, N. (2008). Instructed second language vocabulary learning. Language Teaching Research, 12(3), 329–363. https://doi.org/10.1177/1362168808089921
Schmitt, N. (2014). Size and depth of vocabulary knowledge: What the research shows. Language Learning, 64(4), 913–951. https://doi.org/10.1111/lang.12077
Schmitt, N. (2019). Understanding vocabulary acquisition, instruction, and assessment: A research agenda. Language Teaching, 52(2), 261–274. https://doi.org/10.1017/S0261444819000053
Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). Experimental and quasi-experimental designs for generalized causal inference. Houghton Mifflin Company.