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Developing spiral vocabulary teaching model: A communicative and social constructivist-language instruction perspective

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Article Info	Abstract
Type: Original research **Received:** 9 February 2024 **Accepted:** 2 August 2024 **Keywords:** Teaching English as a foreign language Vocabulary teaching Spiral vocabulary teaching model **DOI:** 10.35207/later.1434297 ***Corresponding author** ahmetdolmaci@duzce.edu.tr	The aim of this research is to create a practical model for spiral vocabulary teaching through communicative and social-constructivist approach in order to improve learners' vocabulary learning, and to deal with the problems related to vocabulary teaching. The research was carried out within the framework of a vocational English course involving third-grade students enrolled in a tourism and hotel management school. The specific spiral teaching model which lasted eight weeks and consisted of various communicative activities was originally developed and adapted to the course syllabus by the researcher. Furthermore, an achievement test focusing on vocabulary components outlined in the syllabus was developed. This test served as a pre-test for both the control and experimental groups. Subsequently, the instructional model was implemented for eight weeks with the experimental group, while the control group followed the conventional syllabus utilizing the coursebook. Following the intervention period, the achievement test was administered again to both groups as a post-test, and the results were subjected to statistical analysis for comparison. Additionally, after the implementation, a feedback form with open-ended questions was distributed to the students in the experimental group to gather their opinions and suggestions regarding the instructional model. Based on the results, it could be suggested that the specific spiral vocabulary teaching model developed for this research was efficient in teaching vocabulary items and that it could be adapted to the vocabulary teaching in teaching English as a foreign language.

INTRODUCTION

Vocabulary is defined as the knowledge of meanings of words or a large stalk of words in a language and it is stressed that vocabulary is the indispensable part of a language since it has high importance in language learning (Hiebert & Kamil, 2005; Olijra, 2015; Al Mubarek, 2017). Reviewing the literature and considering general instructional practices, it becomes evident that students often encounter challenges in acquiring vocabulary and grappling with vocabulary-related questions (McCarthy & Carter, 2013). Nevertheless, vocabulary stands as a fundamental element of language proficiency, playing a crucial role in developing the skills of speaking, listening, reading, and writing in the target language (Watkins, 2005). Thus, explicit vocabulary learning should take place in the learning process so that it gives students the greatest chance for acquisition (Schmitt, 2000; Nation, 1995). The term 'spiral' denotes a pedagogical approach wherein the comprehension of concepts and their interconnections is strengthened through repeated exposure in different contexts, with increasing complexity over time (Clark, Dibiasio & Dixon, 2000). This implies that vocabulary items or concepts are revisited within various contexts and materials across subsequent units in a course. A spiral curriculum involves the interactive and consistent revisiting of topics, subjects, or themes throughout the course, moving beyond mere repetition. It necessitates the deepening of vocabulary by progressively building on prior encounters (Harden & Stamper, 1999). In essence, it is not a haphazard repetition of items in diverse contexts; rather, it involves a systematic reinforcement of a given topic using a variety of materials including vocabulary learning strategies.

Spiral curriculum, originally introduced by Jerome Bruner, has found application across various subjects, and this research extends its utilization to vocabulary teaching by developing a specific spiral vocabulary teaching model. The intention is to significantly enhance students' vocabulary learning outcomes through this model. The conventional and linear approach to vocabulary instruction often employed in traditional foreign language classrooms may prove ineffective in new input processing, retention, and spontaneous reuse. One contributing factor to this ineffectiveness is the absence of a systematic, spiraled incorporation of lexical input. Inadequate utilization of vocabulary during interlanguage development can impede syntactic progress and hinder the attainment of communicative proficiency, which are crucial aspects of language mastery.

The research explores the potential development of a model for spiral vocabulary teaching employing a communicative and social-constructivist approach. According to Nation (2001), vocabulary is so crucial in grammar and language frameworks that it serves as a key component in the overall proficiency of foreign language learners and is vital for effective communication. This exploration aims to address challenges such as systematic forgetting, insufficient discourse and language use, and other barriers encountered in English as a Foreign Language (EFL) classes at universities. Consequently, the primary goal of this research is to formulate a practical model for spiral vocabulary teaching through a communicative and social-constructivist lens, intending to enhance learners' vocabulary acquisition and address challenges associated with vocabulary instruction. The research questions guiding this study include:

1. Is vocabulary learning efficient in the given settings?
2. Is there efficient vocabulary intake for learners in these settings?
3. Is the spiral teaching versus traditional vocabulary teaching effective for vocabulary learning and use?
4. Is the social constructivist view efficient within this context?
5. Is the suggested model applicable in teaching English as a foreign language (TEFL)?
6. What are the outcomes of Spiral Vocabulary Teaching Model (SVTM)?

<div align="center">LITERATURE REVIEW</div>

The importance of teaching vocabulary in ELT

Vocabulary is defined as more than just a collection of words available in a language and has a set of various properties such as meaning, association, collocation, grammatical form, written form, spoken form and frequency (Barcroft, Schmitt, & Sunderman, 2011; Alizadeh, 2016; Ur, 2012). Therefore, a language learner needs to know several different aspects of word knowledge like main or core meaning and pronunciation to communicate in the target language (Nation, 2005; Zhang, 2016). According to David Wilkins (1972: 111), "without grammar very little can be conveyed, without vocabulary nothing can be conveyed". Wallace (1982) suggests that the crux of learning a foreign language primarily revolves around acquiring the vocabulary of that language. According to him, having a profound understanding of the language's structural system does not necessarily guarantee effective communication. In contrast, if one possesses the necessary vocabulary, effective communication becomes more achievable. Wallace emphasizes that the inability to recall specific words when attempting to articulate thoughts is one of the most frustrating aspects of speaking a foreign language. And some sentences may be semantically incorrect because of the choice of vocabulary even if they are structurally correct (Cook, 1992). McCarthy (1990) highlights that, based on the experiences of many language teachers, vocabulary stands as the most significant and integral component of any language course. Regardless of how well students grasp grammar or master the sounds of the target language, meaningful communication cannot take place without a substantial vocabulary to express a diverse range of meanings. Barcoft (2004) claims three reasons to illustrate the important role of vocabulary in language learning as follows: the relationship between vocabulary and the ability to communicate, student perceptions about the relative importance of vocabulary, and the critical role of vocabulary knowledge in the development of grammatical competence. However, despite its crucial role, vocabulary often appears to be the least organized and emphasized aspect of foreign language learning. The advent of the communicative approach in the 1970s prompted a reconsideration of the role of words in language teaching, leading to vocabulary becoming an independent learning objective.

In their Cambridge English Course introduction, Swan and Walter (1984) underscored that vocabulary acquisition represents the most substantial and critical task for language learners within an effective language teaching environment. Therefore, according to Porter (1992), maintaining a premium on vocabulary knowledge in foreign language classrooms is essential, and vocabulary instruction should not be neglected if learners are to progress in the target language. Without competence in vocabulary for speaking or writing, language learners may experience frustration during the learning process. Thus, the goal of vocabulary teaching, as noted by Akar (2010), is to expand and enhance vocabulary knowledge. Thornbury (2002) adds that most learners acknowledge the importance of vocabulary learning or acquisition.

Spiral teaching model

The word 'spiral' literally means "winding in a continuous and gradually widening (or tightening) curve, either around a central point on a flat plane or about an axis so as to form a cone" (Oxford Advanced Learner's Dictionary). However, originally, Jerome S. Bruner used this concept in the field of education in 1960s. Bruner's impact on education has always been felt all over the world. His important books like 'the Process of Education' (1960) and 'Towards a Theory of Instruction' (1974) have gained wide popularity. In 'The Process of Education', Bruner (1960) discussed 'spiral curriculum'. He stated that this educational framework should iteratively revisit fundamental concepts, progressively building upon them as the curriculum unfolds so that intricate ideas can be introduced to learners at basic levels and then revisited or reinforced at more advanced levels. This method involves teaching subjects or topics in a gradual and ascending manner, characterized by increasing complexity—a process referred to as spiraling. Knight (2001) describes the spiral curriculum as a repetitive cycle of actions aimed at developing and deepening skills,

concepts, attitudes, and expanding the limits of understanding. This curriculum approach is expected to exhibit coherence and progression while also facilitating various instructional practices such as group work and peer evaluation, thereby broadening the scope of learning. According to Harden and Stamper (1999), spiral curriculum is the one in which there is an iterative and consistent revisiting of topics, subjects or themes throughout the course and it is not the repetition of a topic taught. It also requires the deepening of it by building a successive encounter on the previous one. Harden and Stamper applied spiral curriculum to nursery education and they concluded that it had very useful results in integrated and problem-based learning. According to Harden and Stamper (1999, p. 142), the followings are very important for a spiral curriculum:

(1) Reinforcement: Once a topic or a subject is learned, it is reinforced if there is constant exposure to it.

(2) A movement from simple to complex: topics are introduced to learners in a controlled way at a level at which they are not overwhelmed, and at which they can learn the subject well.

(3) Integration: Traditionally, a curriculum was viewed as a series of courses and each had its own program and assessment. However, this partial or sectional approach is insufficient. We must break down or eliminate the barriers and limits. Furthermore, this integration may greatly become possible with the help of a spiral curriculum.

(4) Logical sequence: The scope and sequence of topics are very crucial in a spiral curriculum.

(5) Higher level objectives: Learners are encouraged to apply their knowledge and skills in a spiral curriculum.

(6) Flexibility: The spiral curriculum is a flexible one. For instance; this curriculum enables students to transfer directly to the second spiral of a course of study if they have learnt the first level in another course or vice versa.

As mentioned above, spiral approach or spiral curriculum was originally created by Bruner and it has been very popular ever since. It has been used in a many fields and coursebooks. Especially, spiral curriculum has been adapted to various subjects ranging from mathematics to medicine. According to Howatt (1974), in language learning there should be a revision of introduced material from time to time instead of just involving linear learning. Martins (1978) asserted that grammar may be spiraled by recycling grammatical constructions in order to provide enough practice in different contexts. Nevertheless, vocabulary applications are rare despite its importance. Thanks to that type of curriculum, students might have the chance to see a word more than once in different and multiple contexts to place it properly in their long-term memories (Stahl, 2005).

Communicative language teaching

Communicative language teaching (CLT) is an approach in which the main goal of language teaching is that learners be able to communicate with others in the target language (Savignon, 2001). It is based on the term 'communicative competence' which is a term suggested by Hymes (1967, 1972). According to Hymes (1972) a language learner needs notions of sociolinguistic competence (the rules for using a language appropriately in context) in order to account for language use and acquisition.

Communicative language teaching is thought as an approach rather than a method. It relies on various principles that are related to communicative view of language and language learning. According to Richards and Rodgers (2001: 153-157), these main principles are as follows:

- Learners learn a language with the aim of using it to communicate.
- Authentic and meaningful communication ought to be purpose of classroom activities.
- Fluency is an important element of communication.
- Communication requires the integration of different skills.
- Learning consists of creative construction and requires trial and error.

According to Larsen and Freeman (2000), effective communication in the target language necessitates students' understanding of linguistic forms, meanings, and functions. Learners should

recognize that a single function can manifest in various linguistic forms and meanings, emphasizing the importance of focusing on authentic language use in lessons. The teacher's role is envisioned as that of an advisor, facilitator, and co-communicator, while students take on the role of active communicators. Vocabulary is one of the most important parts of language competency as it affects how properly listeners, speakers, readers, and writers communicate (Abdulrahman & Basalama, 2019; Nguyen & Khuat, 2003). Folse (2008) suggests that while students can convey ideas to a certain degree with a fundamental vocabulary, achieving fluency in speaking, writing, listening, and reading necessitates a more extensive mastery of words. Nation (2013) categorizes word knowledge into three main areas: understanding a word's form, its meaning, and its use. Therefore, the teacher designs and guides activities, and students engage actively with the meaning, working towards effective self-expression. In essence, they bear responsibility for their own learning. Peer interaction is considered vital to this process. Harmer (2007) asserts that communicative language teaching operates on the premise that meaningful engagement in communicative tasks will naturally lead to language learning. Exposure to language in use and ample opportunities for its application are believed to accelerate the development of both knowledge and skills. Communicative language learning entails real or realistic communication, incorporating activities such as role-plays and simulations. Authentic materials, scrambled sentences, and language games are popular tools in this type of learning. Ultimately, the communicative approach aims to enhance the communicative competence of learners.

A social constructivist perspective in language teaching

Yang and Wilson (2006) stated that teacher-centered view theoretically disappeared long ago and increasingly instructors and educationalists believe that their students should participate actively in class activities and join in interactive language learning tasks in order to become autonomous learners. This significant shift in mindset has given rise to a new paradigm in learning and teaching known as social constructivism or social constructivist perspectives. Approaches grounded in social constructivism draw inspiration from the works of Piaget and Vygotsky, gaining widespread acceptance in the realm of second and foreign language learning. Vygotsky's (1978) perspective on learning underscores the critical role of social interaction in the development of language, thinking, and learning. He emphasizes the importance of providing learners with support to enable success in challenging tasks. Vygotsky's viewpoint also underscores the necessity of transferring control of cognitive activity from the teacher to the learner, fostering active participation in the learning process.

Social constructivism brings psycholinguistic explanations or solutions for how learning can be improved effectively through interactive pedagogical practices. According to Mitchell and Myles (1988: 162), it stresses that learning occurs in a socio-cultural environment and sees learners as "active constructors of their own learning environment. Learners cannot learn as isolated individuals, but they learn as active members of society. What is learnt and how the sense of knowledge is made depend on where and when.

According to Pilgrim (2000), contemporary vocabulary instruction in many individualized classrooms is aligned with social constructivist theories and the whole language skills approach. In this context, students actively participate in peer and teacher collaborations, choosing and studying words collectively. Collaborative groups work together to select words for the entire class, with each member contributing to the word selection process. Students articulate word meanings through discussions, elucidate the significance of the word to the group and the class, and then endeavor to use the word in a sentence within a contextual framework. In essence, teachers are tasked with supporting learners to master the language and establish positive learning environments. Encouraging learners to actively engage in class and consistently apply the language they have learned is crucial. Thus, they can utilize both the structures and functions that have acquired for communication (Algahtani, 2015).

In conclusion, a practical model developed by the researcher for Spiral Vocabulary Teaching (SVTM) implemented through communicative and constructivist perspectives holds the potential

to enhance learners' vocabulary acquisition. Such an approach could serve as a valuable solution to address the challenge of developing a low level of vocabulary mastery commonly caused by diverse barriers and linguistic difficulties in EFL classes. By integrating communicative and constructivist principles, this model is likely to provide learners with meaningful and contextually rich experiences, promoting active engagement, collaboration, and a deeper understanding of vocabulary within real-world language use.

METHODOLOGY

Research design

In this research, firstly, a model for spiral teaching through communicative approach was created to teach vocabulary effectively and to argue a solution to the inefficient vocabulary learning, and then the model was applied to the students learning English at a department of a Turkish University for eight weeks. Thus, the mixed method quasi – experimental design with control and experimental groups was adopted for the present study so that the qualitative and the quantitative research methods were included together to evaluate the efficacy of the model (Creswell and Plano Clark, 2018). For the quantitative methods, the achievement test on vocabulary developed by the researcher was administered to the students in the control and experimental groups before and after the implementation of the model as pre- and post-test. When it comes to the qualitative methods, a learner feedback form was applied to the students in the experimental group after the implementation to analyze their opinions on the model.

In this quasi-experimental study, the convenience sampling method was used to determine the subject groups (Dörnyei, 2007), and one of the classes was assigned as the control group while the other was assigned as the experimental group. Before the implementation, the achievement test was applied to both groups to determine their level of success and to compare the results afterwards. During the two-month implementation period the control group was exposed to the traditional methods and no extra efforts were made in this group. However, the experimental group was exposed to the spiral teaching model specially developed to enable the students to learn the vocabulary offered in spiral fashion throughout the two-month model application. The same tests were applied to both groups after the implementation process and the statistical measurements were performed. At the end of the application, the learner feedback form consisting of five open-ended questions was administered to the students in the experimental group to obtain the detailed information about the effects of the model on the students and their ideas about the model.

Participants

The subject group consisted of 100 junior students in total from two different classes attending the Vocational English Course at the tourism department at a Turkish state university. The control and the experimental groups included 50 students each. The students attended the compulsory preparation classes for one year before they began to study in their undergraduate program at the tourism department. They were assumed to be at intermediate level when the study began and they were attending the third-grade. The vocational English was the only third year course in their program regarding foreign language education. The level of the coursebook used was between A2 and B1 according to Common European Framework. The suggested vocabulary teaching model was applied in this course.

Data collection instruments

Achievement test

The achievement test was prepared as the primary measurement tool. To prepare this test, the coursebook, the syllabus of the course and the course objectives were taken into consideration. The level of the main course material was between A2 and B1 according to Common European Framework. The vocabulary items to be empasized were chosen from the coursebook. The important vocabulary items to be learned were determined with the help of three field experts.

They were the lecturers who had taught vocational English at the tourism department. Then, the achievement test was developed to observe whether the students learned the target vocabulary items. Initially, a question pool consisting of 60 questions was formed. Next, these questions were reviewed and provided with feedback by three field experts and one expert in assessment and evaluation. Based on their suggestions, some questions were removed and some questions were rewritten. Ultimately, a multiple-choice test consisting of 50 items was created. As for the validity of the test, the feedback from the field experts was taken into consideration again. For the reliability check, the final version of the test was applied to 45 senior students who took this course in the previous years. The ITEMAN (Item and Test Analysis Program) Reliability Analysis was utilized to assess both the difficulty and discrimination levels of individual items within the test. Following this analysis, the KR-20 Reliability Coefficient for the multiple-choice achievement test was computed at 0.71. The mean difficulty level of the test items was determined to be 0.49. The discrimination coefficients across the test items varied, ranging from 0.24 to 0.62.

Learner feedback form

In the final segment of the study, a learner feedback form was administered to the students in the experimental group, comprising five semi-structured and open-ended questions. The primary aim of this form was to capture the perspectives of the students regarding the implementation process and the activities conducted throughout this period. In formulating the semi-structured questions, the researcher considered the content of the vocational English course, the research objectives, and feedback received from three field experts. The questions in the form were designed to address the most crucial aspects of the spiral teaching model. Subsequent to the implementation of the SVTM, the learner feedback form was distributed to 50 students in the experimental group, and their responses were collected as they shared their thoughts and opinions on the implementation and the activities carried out during the process.

Data analysis

The quantitative component of the study involved administering the achievement test as both a pre-test and post-test to the groups. The pre-test and post-test results were subjected to analysis using the statistical software SPSS 21.0. The performance of the control and experimental groups was compared through the independent samples t-test and the dependent samples t-test, and the findings were subsequently interpreted. In the qualitative aspect of the study, data from the learner feedback form were analysed employing the content analysis method, and was categorized under certain themes and presented with the help of tables. In content analysis, qualitative data is defined, and the meanings and facts hidden in the data are tried to be extracted (Patton, 2014). The qualitative data was analyzed through technical consultation with a different expert in order to ensure the reliability of the research data. The formula (P (agreement percentage) = (Na (Agreement/Na (Agreement) + Nd (Disagreement)) x 100)) which was developed by Miles and Huberman (1994) was used. According to this formula, the reliability between the researchers was found to be 92% and the data was accepted as reliable.

Application of the suggested SVTM

During the eight-week SVTM application period, different vocabulary activities were designed and used within the suggested procedure. These activities revised the material in previous units spirally. For instance, generally when a unit or a chapter is over, the teacher goes on to the next unit or the chapter and may not always systematically come back to the vocabulary presented in the previous classes. In this instructional model, once a unit is concluded, the teacher proceeds to the next chapter while incorporating various Spiral Vocabulary Teaching Model (SVTM) techniques that emphasize the vocabulary covered in the preceding units. This approach ensures that students encounter and engage with the words from previous units repeatedly, fostering a cyclical reinforcement of the lexicon throughout the course. As stated above, the SVTM attempted to develop different spiral activities for each week during the implementation. For instance, a text about accommodation types was presented and out of class work about the hotels abroad was

assigned as they studied a unit about accommodation in the previous week. The SVTM work program is shown in Table 1.

Table 1. SVTM work program

Weeks	Activities
First	Students engaged in two activities. Firstly, they wrote a summary of a text similar to the one studied the previous week, incorporating the newly acquired vocabulary. Additionally, they completed a homework assignment where they selected a hotel abroad, introducing it in a paragraph accompanied by visual aids.
Second	Students shared information about local hotels with the class. The teacher provided details about various nearby hotels, and students worked in pairs to organize this information and craft an introduction about one of the hotels. Another individual task involved writing about tourist accommodation in their hometown, initiated in class and completed afterward.
Third	This week began with a fill-in-the-blanks activity, followed by a dialogue completion task centered around crucial functions in vocabulary learning. The week concluded with a speaking activity designed for students to practice the acquired language.
Fourth	Students were tasked with completing questions using words from the previous unit, focusing on specific functions. Subsequently, they engaged in a role-play activity based on these questions, concluding with a matching activity where students paired words and constructed sentences.
Fifth	Students collaborated to develop an accommodation plan for a chosen city, presenting it to the class along with a SWOT analysis. This task served as a comprehensive review of the last three units.
Sixth	This week involved a fill-in-the-blanks activity to reinforce important words from the previous unit. Working in groups, each assigned a different unit, students selected ten crucial words, exchanged papers with other groups, and crafted sentences using the received words, verifying language use with the teacher's guidance.
Seventh	This week started with a multiple-choice vocabulary test, incorporating words from previous units for a spiral aspect. The subsequent activity focused on word forms, requiring students to complete a table with correct parts of speech and create sentences using those words.
Eighth	Students, working in groups, were assigned different units, each group selecting ten important words of the same part of speech. The exchange of papers between groups facilitated sentence construction, and the teacher assisted in language verification. The second activity involved categorizing various holiday types into appropriate tourist categories and writing a paragraph about one of the categories.

FINDINGS AND RESULTS

The following part discloses the analysis and interpretation of all the data achieved from the achievement test and the learner feedback.

The success levels of the students in the control and experimental groups before the implementation

Before the implementation of SVTM, the achievement test was applied to both groups as the pre-test in order to determine their levels of success and also to display the differences between the groups. To analyze the pre-test scores of the students, the independent samples t-test was conducted and the t-test results are given in Table 2.

Table 2. The independent samples t-test results for the pre-test scores of the students in the control and experimental groups

Group	N	$\bar{x}$	S	Sd	t	p
Experimental group	50	20.70	6.40	78	.339	.623
Control group	50	20.22	6.12			

As it is shown in Table 2, it was determined that there was no significant difference between the control and the experimental groups in terms of their scores in the pre-test that was administered to determine their levels of success before the beginning of the implementation in

the vocational English course (t(78)=.339, p>.05). It was found out that the average pre-test score was ($\overline{x}$ =20.70) in the experimental group whereas the average pre-test score was ($\overline{x}$ =20.22) in the control group. These findings suggest that initially, the scores of students in both the control and experimental groups exhibited similarities.

The effect of the spiral vocabulary teaching model through the social constructivist perspective on the vocabulary learning success in the vocational English course

Following the conventional teaching process in the control group and the eight-month implementation process in the experimental group, the post-test was administered to both groups. The vocabulary learning accomplishment levels of the students in the control and the experimental groups were determined considering their post test scores. The independent t-test results about whether their levels showed significant differences between groups are given in Table 3.

Table 3. The independent samples t-test results for the post-test scores of the students in the experimental and the control groups

Group	N	$\overline{x}$	S	Sd	t	p
Experimental group	50	30.72	6.34	78	2.11	.03
Control group	50	24.00	5.71			

As it is shown in Table 3, it was found out that a significant difference between the experimental and the control group existed regarding their scores in the post-test that was done to determine their academic levels of achievement after the intervention process (t(78)=2.11, p<.05). It indicated that the average of the post-test scores of the students in the experimental group in which the spiral vocabulary teaching model through the social constructivist perspective was used to support the students' vocabulary learning was ($\overline{x}$ =30.72). The average of the post-test scores of the students in the control group in which the conventional teaching methods was utilized to teach vocabulary was ($\overline{x}$ =24.00).

The comparison of the pre-test and the post-test scores of the students in the experimental group

The pre-test and post-test scores of the students in the experimental group were subjected to a comparison using the dependent samples t-test. The dependent samples t-test results about whether there is a significant difference between the pre-test and the post-test scores of the students in the experimental group are presented in Table 4.

Table 4. The dependent samples t-test results of the pre-test and the post-test scores of the students in the experimental group

Experimental Group	N	$\overline{x}$	S	Sd	T	P
Pre-test	50	20.70	6.40	39	13.769	.000
Post - Test	50	30.72	6.34			

As indicated in Table 4, the dependent samples t-test was conducted to assess whether a significant difference existed between the pre-test and post-test scores of the experimental group. The results revealed a significant difference between the pre-test and post-test scores of the students in the experimental group, indicating the effectiveness of the Spiral Vocabulary Teaching model employed during the eight-month implementation process (t(39)=13.769, p<.05).

This significant difference showed that spiral vocabulary teaching model might be more successful and efficient in teaching vocabulary than conventional methods. According to the data, it is understood that there is a significant difference between the achievement test scores of the students in the experimental group before and after the application.

The comparison of the pre-test and the post-test scores of the students in the control group

The comparison between the pre-test and post-test scores of the students in the control group was conducted. Table 5 displays the outcomes of the dependent t-test, examining whether there is a notable distinction in the pre-test and post-test scores of the students within the control group.

Table 5. The dependent samples t-test results of the pre-test and the post-test scores of the students in the control group

Control Group	N	$\bar{x}$	S	sd	T	P
Pre-test	50	20.22	6.12	39	.894	.38
Post-test	50	24.00	5.71			

As it is indicated in Table 5, the dependent samples t-test was conducted to determine whether a significant difference between the pre-test and the post-test scores of the control group existed. Following the implementation, it was found out that there was also an recovery in the average post-test scores of the students in the control group but not better than that in the experimental group; (t(39)=.894, p<.05). It is clear that such a difference cannot be considered significant.

Based on the gathered data, this research asserts that the application of the Spiral Vocabulary Teaching model and the utilization of traditional methods yield different effects on enhancing vocabulary learning success. The data also indicates that students in the experimental group attained higher scores compared to the control group, suggesting that the Spiral Vocabulary Teaching model can be argued to be more effective in teaching vocabulary items.

The analysis of the learner feedback form

As mentioned in the beginning, the open-ended learner feedback form was employed in the experimental group and the data obtained was analyzed thanks to the content analysis method, and they were categorized under three main thematic frames as shown in Table 6:

Table 6. Thematic frames for the analysis of student forms

Past Experiences of the Students	Students' Opinions on the Model	Suggestions from the Students for the Model
Having an exam every week		Adding visual elements
Studying Turkish-English examples	Positive ideas like "didactic", "creative", "catchy", "interesting", "effective"	Practices planned as group work
		Short texts and accordingly duration
Some practices and speaking activities	Making vocabulary learning easier	More fill – in – the – blanks activities
Deriving new words	Arousing interest in the lesson	Much more games
Using words in new sentences	Remembering vocabulary items more easily	Applying the model in a longer term

Past experiences of the students

One of the items in the form questioned whether the students had any previous experiences about the special vocabulary teaching practices in the previous English courses. Only six students claimed that they had such experiences and the others reported that they had no experiences of this sort. The fact that the students had no such previous experiences can be evaluated as a positive result in terms of the research dynamics as this type of readiness and lack of exposure to spiral

activities before give learners a non-false-beginner advantage. The responses of the students who had some experiences about the special vocabulary teaching practices are as follows:

8F   *"Our teacher gave us a one – paragraph text at the end of every lesson and we had an exam about these texts in the last lesson of every week. Also, our teacher rewarded the winner."*

17M   *"We had a kind of vocabulary teaching practice in the preparation class. We studied Turkish – English examples with 20 – 25 words in every lesson."*

12F *"We only had some practices on vocabulary for revision in the Reading and Writing course in the preparation class. Also, we had speaking activities using the related words, playing games and singing songs in the Listening and Speaking Course."*

Students' opinions on the model

The second item was about what they thought about the spiral vocabulary teaching model. It was seen that all of them had positive opinions on the model and found it very useful. This group generally evaluated this model as "didactic", "creative", "catchy", "interesting" and "effective". The statements of some students are as follows:

21F *"The spiral Vocabulary Teaching Model makes topics more active. It is very useful to reinforce what we have learned after studying the unit. Some topics in the coursebook can be confusing and boring yet this model makes the so – called topics more interesting."*

7M *"This model made it easier to remember vocabulary items. We learned new words and our vocabulary expanded. By the way, we understood how some vocabulary items should be used or can be used."*

14F *"Thanks to this practice, the words to be learnt are being repeated continuously and this enables vocabulary items to more catchy."*

The students in the experimental group were asked about the benefits derived from the Spiral Vocabulary Teaching model. Every student in the experimental group emphasized the significant advantages of the model. Their collective feedback suggested that the model facilitated easier vocabulary learning, sparked their interest in the lesson, and enhanced their ability to remember vocabulary items more effectively through practical application. The statements of some students are as follows:

6F *"Thanks to this practice, the words appear more quickly in my mind. I believe that this model is really useful because we comprehend the vocabulary items completely and properly."*

26F *"From now on, I can make sentences more comfortably with the different words that we have learned by going beyond ordinary patterns while chatting in English."*

11M *"The biggest factor in learning foreign language is learning vocabulary. A language is forgotten immediately unless it is repeated or used, so the biggest effect of this practice on me is its vocabulary teaching in a permanent way."*

In the next part, the students were asked to specify which activities in the spiral vocabulary teaching model they found most useful and why. Even though they stated that they utilized from all the activities, the activities that they highlighted 'most' included the activities in 2nd, 4th, 5th, 7th and 8th weeks which were explained above. The statements of some students are as follows:

1M *"I benefited from the activities in the 2nd, 4th and 5th weeks most because these were the activities that we could benefit from for our vocational life and I believe that these activities were useful for the students in the tourism department to improve the communication inside hotels."*

6F *"The activity that I most benefited from was the 7th week activity in which we learned the adjective, noun and the verb form of a word. Thanks to it, I understood the meanings of many words when used in adjective, noun and verb forms."*

10M *"The activity in the 7th week was very beneficial. I think that the words will stick in our mind better by repeating the words we use in the lessons because the words has come to my mind more quickly. By the way, it enabled us to learn more words."*

Suggestions from the students for the model

In the recommendations section, students claimed several suggestions, including the addition of visual elements such as video or film, planning more practices as group work, keeping the duration and texts short, incorporating more fill-in-the-blanks activities, and introducing more games into the activities. Additionally, a common recommendation among the students was to implement the Spiral Vocabulary Teaching model more comprehensively and over an extended period. The statements of some students are as follows:

7F *"To me, small videos can be added to make it more effective. Thus, I think vocabulary items can be learnt better and remembered more with these videos."*

18M *"I guess that learning the words by playing a game like taboo is more enjoyable, so we not only spend enjoyable time by playing games but also see the connotations of different words while trying to find the words."*

27F *"The spiral vocabulary teaching model includes highly motivating activities. I think it should be applied every semester and be more comprehensively but I think the words and the texts shouldn't be too long as well because as the time goes by, the motivation gets lower."*

13M *"I believe that visual practices will be more useful. For example, the films in English could be watched. Audio - visual elements in vocabulary practices raise the attention."*

The research questions are also addressed comprehensively in the light of the findings explained above as follows.

Research Question 1. Is vocabulary learning efficient in the given settings?

Based on the analysis of pre-test and post-test scores in the subject groups, along with the understandings gained from interviews conducted with students in the experimental group, it can be concluded that vocabulary learning in the given settings is not efficient and falls below the desired level. A majority of students express considerable difficulty and find the process of studying and learning vocabulary items to be challenging.

Research Question 2. Is there efficient vocabulary intake for learners in these settings?

The researcher administered an achievement test consisting of 50 questions as both pre-test and post-test to the subject groups. The pre-test scores revealed that the average score for students in the control group was 20.22, while the average score for students in the experimental group was 20.70. Furthermore, the post-test scores indicated that the average score for students in the control group, where traditional methods were employed, was 24.00. This outcome suggests that the students' success levels in the control group did not exhibit any significant difference between the pre-test and post-test. It implies that there is ineffective vocabulary intake for learners in these settings.

Research Question 3. Is the spiral teaching versus traditional vocabulary teaching effective for vocabulary learning and use?

The Spiral Vocabulary Teaching model was developed by the researcher and was applied to students in the experimental group over an eight-week period in the second semester of the 2014-2015 academic year. Following this implementation, the achievement test was administered as the post-test. The average post-test score for students in the control group, where traditional methods were applied, was 24.00. In contrast, the average post-test score for students in the experimental group was notably higher at 30.72. This significant difference in scores between the control and experimental groups suggests that the Spiral Vocabulary Teaching model had a more pronounced impact on vocabulary learning. Furthermore, the student interviews revealed that the model was highly beneficial for learning vocabulary. As a result, it can be concluded that the Spiral Teaching model is more effective for vocabulary learning and application compared to traditional vocabulary teaching methods.

Research Question 4. Is the social constructivist view efficient within this context?

The activities were designed by the researcher within the Spiral Vocabulary Teaching Model in alignment with social constructivist perspectives. These activities emphasized extensive group work, communicative tasks, and required students to utilize the target language with the provided vocabulary items. Upon analysis and interpretation of the data, it was evident that the Spiral Vocabulary Teaching model was successful in enhancing students' vocabulary levels more effectively than the traditional method. Specifically, following the implementation process, the average post-test score for students in the control group was 24.00, whereas it was determined to be 30.72 for students in the experimental group. Consequently, it can be asserted that the social constructivist approach proves to be effective within this particular context.

Research Question 5. Is the suggested model applicable in teaching English as a foreign language (TEFL)?

The proposed model was implemented over an eight-week period with junior students enrolled in the vocational tourism English course at the School of Akçakoca Tourism and Hotel Management, Duzce University. The average score of students in the experimental group was 20.70 before the implementation, which significantly increased to 30.72 after the process. The analysis of learner feedback forms indicated that students held highly positive views and opinions regarding the Spiral Vocabulary Teaching model. The successful integration of the model into the syllabus by the researcher supports the conclusion that the suggested model is highly applicable in a Teaching English as a Foreign Language (TEFL) setting.

Research Question 6. What are the outcomes of SVTM?

This study demonstrated highly positive outcomes for the Spiral Vocabulary Teaching model in terms of effective vocabulary instruction. Implemented over eight weeks with the experimental group, a significant difference was observed between the average scores of the control group and the experimental group ($t(78)=2.11$, $p>.05$). The ata analysis indicated higher levels of vocabulary success among students in the experimental group. The model, successfully integrated into the course syllabus by the researcher, received favorable feedback from learners. According to learner feedback forms, students in the experimental group found the model beneficial, facilitating easier vocabulary learning, enhanced retention, and overall positive learning experiences.

The primary aim of this study was to develop a specific spiral model for vocabulary teaching within the target language framework, utilizing social and constructivist perspectives, and assess its effectiveness in practice. Consequently, control and experimental groups were established with junior students at a state university, and the spiral model was applied to the experimental group for eight weeks, seamlessly integrated into the course syllabus. The control group adhered to the department's standard curriculum. The mixed method approach, incorporating pre-tests, post-tests, and learner feedback forms, was employed for data analysis. The results confirmed the effectiveness of the employed model, with the experimental group exhibiting higher success.

The study's outcomes suggest that students require additional vocabulary activities and innovative models for more efficient vocabulary acquisition. Traditional methods, syllabi, and materials may not suffice for achieving the desired level of vocabulary development. Students benefit from various opportunities for practicing new vocabulary items and spirally revisiting words through specially designed work packs for retention. Therefore, teachers should consistently allocate time for vocabulary activities in class sessions. Moreover, these activities and models should align with social-constructivist perspectives to positively impact the classroom atmosphere, motivating students to engage more effectively in learning by constructing their own understanding and connection with the material.

DISCUSSION

The study assesses the effectiveness of a Spiral Vocabulary Teaching model compared to traditional methods in teaching vocabulary in a vocational English course. Initial tests revealed that traditional methods resulted in low scores, indicating inefficiencies in vocabulary acquisition.

Students struggled with vocabulary learning and expressed dissatisfaction with traditional techniques. In contrast, the experimental group, exposed to the Spiral model over eight weeks, demonstrated a significant improvement in vocabulary scores, increasing from an average of 20.70 to 30.72. This model, rooted in social constructivist principles, utilized various activities that emphasized group work and communicative tasks, leading to better vocabulary retention and a more positive learning experience. This is crucial because while repetition is often effective for learning, it can become monotonous so that presenting words through various methods not only accommodates different learning styles but also provides the necessary repetition to reinforce vocabulary retention (Kaya, 2016). Also, Kacani and Cyfeku (2015) claim that vocabulary teaching activities can be done by enhancing listening and speaking abilities. The development of vocabulary is very important for effective foreign language usage to be able to create full spoken and written texts according to the researchers such as Nation (2001; 2005) and Susanto (2016). Ultimately, all of language skills depend on learning vocabulary, and vocabulary comprehension can enhance as a result of language use (Nation, 2001).

Student feedback on the Spiral model was overwhelmingly positive, citing enhanced ease of vocabulary learning and improved retention. The study concludes that innovative approaches like the Spiral model are essential for effective vocabulary instruction, outperforming traditional methods. This conclusion is consistent with the idea that for most students, acquiring vocabulary is a branching process rather than a linear process because they need to link new words to their existing knowledge, other terms, or concepts (Morgan and Rinvolucri, 2004). The findings suggest that vocabulary teaching should incorporate frequent practice opportunities and align with social constructivist perspectives to foster a more engaging and effective learning environment. Therefore, incorporating activities that ensure students retain their learning by reinforcing their memories will enhance the quality of teaching and also make introducing new concepts easier, as effective learning should build on prior knowledge (Schmitt, 2000). In the meantime, Thornbury (2002) explains three memory systems: short-term store (STS), working memory, and long-term memory. STS temporarily holds information for a few seconds, as seen when a child repeats a shopping list until the items are bought. Working memory retains information for up to 20 seconds and allows for manipulation and deeper processing, helping learners understand and connect new information to long-term memory. Long-term memory has a vast capacity and stores information more permanently, but to ensure retention, learners should use strategies such as repetition, retrieval, personalizing, visualizing, and employing mnemonics, while maintaining motivation and focus. According to Schmitt (2000), the goal of vocabulary learning is to move lexical information from short-term memory, where it is held temporarily while processing language, to long-term memory for more lasting retention, which is supported by the Spiral Vocabulary Teaching Model. Consequently, this model's integration into the curriculum demonstrates its applicability and effectiveness in a Teaching English as a Foreign Language (TEFL) setting.

SUGGESTIONS

The results of the study suggest that students require additional vocabulary activities or models for effective vocabulary acquisition and success. Traditional syllabi or coursebooks used by teachers may not be enough for achieving the desired level of vocabulary mastery in a given context. Students benefit from numerous opportunities to practice and use new vocabulary items, emphasizing the need for repetitive exposure to enhance retention. Therefore, teachers should prioritize vocabulary teaching and consistently allocate time for vocabulary activities during class. Furthermore, these activities and models should be crafted in accordance with social-constructivist perspectives to positively influence the classroom atmosphere and motivate students to actively participate in learning

This study tried to create an unexplored spiral teaching model for vocabulary instruction, demonstrating its effectiveness in the given context. The results indicated significant improvement in students' vocabulary skills and knowledge through the application of the spiral vocabulary

teaching model. Hence, language teachers should underscore the importance of integrating new vocabulary into their courses. Additionally, the model can be further developed, expanded, and adapted to courses in English Language Teaching (ELT) programs.

The research has been done to highlight the development of a spiral teaching model through a communicative and social-constructivist approach, specifically adapted to vocabulary teaching. The study has uncovered certain insights, and it suggests that further research may draw benefits from the current findings. Notably, the spiral model was crafted for enhancing vocabulary learning. As a next step, future studies could explore the development of a similar spiral model tailored for grammar teaching, with a focus on analyzing its practical effectiveness. This expansion could contribute to a more comprehensive understanding of the applicability and impact of spiral teaching approaches across various language learning components.

Conducted with 100 third-grade undergraduate students in the Department of Tourism and Hotel Management at a Turkish state university, this study suggests possibilities for future research. Further studies could involve larger sample sizes to enhance the reliability and validity of results. Exploring students from different departments across various universities can provide a more comprehensive understanding. The subjects who participated in this research were at intermediate level. Thus, a similar study could be carried out among students at higher or lower levels.

Due to time constraints, the spiral vocabulary teaching model was applied for eight weeks in this study. Future research could adopt a longitudinal research design spanning at least one academic year to provide a more in-depth understanding of the model's long-term impact.

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