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**THE IMPLEMENTATION OF THE STATION ROTATION MODEL TO TEACH NEW
VOCABULARY IN AN EFL CHILEAN CLASSROOM.**

Tesis para optar al grado de Magister en Innovación de la Enseñanza, Aprendizaje y
Evaluación del Inglés

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List of Acronyms

CLT: Communicative language teaching
L2: Second Language
EFL: English as a foreign language

ABSTRACT

Vocabulary is an important component in second and foreign language acquisition because without it, learners cannot understand others, express their feelings, opinions and develop the English language skills. Different strategies, techniques, methodologies and approaches have been used to teach and improve learners' acquisition of vocabulary because researchers have recognized the importance of vocabulary learning. Thus, the following action research study explores the contribution of the blended learning model of the station rotation to help students learn new vocabulary in an EFL classroom in Chile. The sample of this study was made up of thirty-four learners aged between 13 to 15 years old who study English as foreign language in a subsidized school in Concepcion. Participants learned 25 vocabulary words using the station rotation model in five intervention sessions, administered twice a week. The instruments used in this action research were a pre and post intervention vocabulary test, and a students' questionnaire to analyze students' views. Findings revealed that there was an improvement on students' vocabulary learning, statistically significant according to the Student's T-test. Additionally, learners agreed that using the stations rotation model was a positive experience in terms of learning, types of activities and methodology, use of technology, and work with peers.

Keywords: vocabulary- station rotation model- technology- students' view -collaborative work.

RESUMEN

El vocabulario es un componente importante tanto en la adquisición de segunda lengua como la de una lengua extranjera, ya que sin él los estudiantes no pueden entender a las demás personas, expresar sus sentimientos y/o opiniones y desarrollar las habilidades del Inglés. Diferentes estrategias, técnicas, metodologías y paradigmas se han usado para enseñar y mejorar la adquisición del vocabulario, ya que se ha reconocido la importancia del aprendizaje de éste. Por esta razón, este estudio de investigación acción explora la contribución que tiene el modelo de rotaciones por estaciones de aprendizaje para ayudar a estudiantes a aprender nuevo vocabulario en Inglés como lengua extranjera en un colegio de Chile. Los participantes de este estudio fueron 34 estudiantes quienes tenían una edad entre 13-15, quienes estudian Inglés como lengua extranjera en un colegio particular subvencionado de la comuna de Concepción. Los participantes aprendieron 25 palabras de vocabulario usando el modelo rotaciones por estaciones de aprendizaje en cinco clases, distribuidas en 2 semanas. Los instrumentos utilizados para este estudio fueron una prueba de vocabulario de entrada y de salida a los estudiantes y un cuestionario para analizar el punto de vista de los estudiantes. Los resultados muestran que hubo una mejora estadísticamente significativa según el t-test. Además, los estudiantes concuerdan que usar el modelo de rotaciones de aprendizaje fue una experiencia positiva en términos de aprendizaje, tipo de actividades y metodología, uso de la tecnología y trabajo en parejas.

Vocabulario clave: vocabulario, modelo de rotaciones por estaciones, tecnología, punto de vista de los estudiantes, trabajo colaborativo.

INTRODUCTION

CHAPTER 1: PROBLEM STATEMENT

Learning English in a globalized world is a skill that people need to master in order to make a progress both professionally and personally. In our Chilean educational context, English is taught as a foreign language from 1st to 12th grade expecting that Chilean students can achieve a B1 level of English finishing high school. The Ministry of Education (MINEDUC),(2010) states that “el nivel B1, definido en el Marco como el nivel Umbral (Threshold) o usuario independiente, corresponde a un nivel intermedio y representa el nivel que deben alcanzar los estudiantes en cuarto año de Enseñanza Medio” (p.39). Students need to learn English through the development of the four language skills and its main components such as vocabulary, pronunciation, grammar. Learning vocabulary plays an important role in language learning. Without the sufficient vocabulary knowledge students are not able to express their ideas and to communicate with others. Learning vocabulary is essential to develop the four skills of the language. In this line, Alqahtani (2015) claims-argues that “it is almost impossible to learn a language without words; even communication between human beings is based on words” (p.24). In addition, Akramovna at. (2019) explain that “vocabulary is central to English language teaching because without sufficient vocabulary students cannot understand others or express their own ideas” (p.5).

According to MINEDUC in Chile, in order to help students acquire English vocabulary, this should be presented in different ways where students have multiple exposure to the new lexical items. Moreover, it emphasizes the importance of learning new vocabulary when students develop the four language skills. Consequently, if students do not know sufficient vocabulary words, they may not be able to understand texts and produce the language. In this regard, Viera (2017) points out that vocabulary knowledge is viewed as an essential tool for mastering any language skills; it also contributes to the understanding of written and spoken texts. Therefore, vocabulary learning is as relevant as the four language skills. Additionally, the English teaching programs provided by MINEDUC refer to the contribution of incorporating Information Communication Technology (ICTs) to engage students in vocabulary learning in the English lessons. Some of the problems why students do not learn vocabulary happens because language vocabulary is changing every day, words are written differently as they are spoken. Factors such as the advances in technology have influenced those new words which are incorporated in the English language every day. Another reason is that new words are borrowed from other countries.

In our Chilean educational context, most of the schools have four 45 minutes pedagogical school hours to teach the English subject, which, may hinder students' exposure to the language and the opportunity to develop the vocabulary needed to comprehend texts and produce the language. As a teacher of English, I have gone through the experience of observing demotivated students when they do not know how to express themselves because of the lack of vocabulary knowledge. Furthermore,

teachers of English struggle with the lack of specialized materials and resources to teach vocabulary to a large class of forty students or even more. Finally, the traditional classroom model of teaching makes it difficult to design differentiated learning experiences, which may respond to the different needs of our students. In my personal teaching experiences, I have noticed that students struggle to learn and retained new vocabulary. Additionally, the lack of time and the class size made difficult to monitor all students learning process. It is necessary to keep in mind that there are students who are shy, and they do not like to ask questions or ask for help. This makes it more difficult to identify how many students are having problems learning new vocabulary. Furthermore, in today's classroom there are students who have special learning needs, who need more help than other students. Finally, there are many websites and apps that can help to learn vocabulary in English; however, it is not possible to use due to the lack of technology devices of 40 students. Taking these aspects into consideration, I consider that station rotation model can help to improve the problem described above.

The station rotation model is one of the four blended learning in which the classroom is divided into four or three different groups. These groups rotate through a series of stations, one of which must be technology based (Horn and Staker, 2015). In this regard Tucker, Wycoff, & Green (2012) explain that students deserve to learn about technology as they will inevitably encounter when they enter to college/and workforce" (p.675). Moreover, Sulistyorini (2018) adds that one of the advantages of this model is that teachers have the opportunity to work with smaller groups of students. Additionally, Hassan (2018) stated that "blended learning has the power to engage students and help them take ownership of their learning in ways that are not always possible in a traditional classroom" (p1). Moreover, Islam et al (2018) state that blended learning can increase students' motivation in learning. Finally, Islam et al (2018, p. X) state that "by introducing blended learning into their classrooms, all teachers are able to provide differentiated instruction that responds to students' learning needs and to student interests". It promotes the differentiation when planning for students with special needs.

In conclusion, the following action research attempts to analyze how effective is the implementation of blended learning model of station rotation to teach new vocabulary to a group of students in an age range of 15-17 years old in an EFL classroom in Chile

1.2 Aims

1.2.1 General objective

- Explore the contribution of the station rotation model to help students learn new vocabulary in an EFL Chilean classroom.

1.2.2 Specific objectives

- SO1: To assess participants' level of vocabulary before and after the implementation of the station rotation model.

- SO2: To analyze participants' views towards the implementation of the station rotation model to learn new vocabulary in the EFL classroom.

CHAPTER 2: THEORETICAL FRAMEWORK

2.1 The Blended learning approach

Blended learning is an approach which combines online and face-to-face teaching to facilitate students' learning process at different times, places, and pace. According to Tucker et al (2017), blended learning can be defined as "a formal education program in which a student learns at least in part through online learning, with some elements of student control over time, place, path, and/or pace" (p. 693). In this regard, the same author also points out a more precise definition of blended learning as "the combination of active, engaged learning online activities with engaged learning offline to provide students with more control over the time, place, pace, and path of their learning" (p.272). One of the blended learning's main features is the incorporation of technology to innovate in the process of teaching and learning. Alima and Dangwal (2017) explain that "blended learning is an innovative concept that incorporates the advantages of traditional classroom teaching along with ICT-supported learning including offline learning and online learning" (p.1). Tucker (2011) mentions that teaching is changing and the use of technology is important for our students because they will encounter the use of information and communication technology (ICT) in life. Therefore, blended learning is an approach in which students use technology to innovate in their learning process and where learners have more control over their learning.

Different authors such as Tucker (2017), and Marsh (2012) have studied the advantages of this approach. They have concluded that blended learning responds to some issues that teachers face in their instructional practices. It is well known that teaching is a time-consuming job. Therefore, blended learning may help teachers to optimize their time. Moreover, it is an approach in which students are active in their learning process and they work collaboratively with their peers using different strategies such as peer feedback. In this regard, Tucker (2012) also reinforces the advantages of this approach and expresses that blended learning, for example, saves teachers time and money, makes teachers spend less time grading and it increases interaction with students. The use of an online platform in blended learning allows learners, who are usually, shy to gain confidence in participating in online discussions. Additionally, the same author explains that in this model the teacher is not the only source of information and feedback, as students also participate actively in collaborative groups, helping each other. Blended learning is considered as a student-centered approach where teachers focus their planning around students' needs and abilities to keep them engaged and involved in the learning process. Marsh (2012) explains that "the main idea behind this practice is that learning is most meaningful when topics are relevant to the student's lives, needs, and interests, and when the students themselves are actively engaged in creating,

understanding, and connecting to knowledge” (p.8). In the same line, Graham (2003) states that blended learning increases the level of active learning strategies, peer-to-peer learning strategies, and learner-centered strategies used.

The blended learning approach is divided into four different models; however, all of them have in common the use of technology inside the classroom. The models are 1) the rotation model, 2) the flex model, 3) the lab rotation model, and 4) flipped classroom model (Horn & Staker, 2011). For the purpose of this study, the focus will be on the station rotation model.

2.2 The blended learning model in the EFL language classroom

Learning a new language can be challenging for English language learners. Therefore, there are different approaches, methods, and strategies that may help students learn English as a foreign language or second language. Marsh (2012), Tucker (2009), and Horn and Staker (2009) have been investigating how to help learners to acquire a second or foreign language. In this line, Marsh (2012) points out that “a range of methods and approaches are often used to introduce new language, and a variety of classroom management techniques are employed to maximize practice opportunities” (p.2). She also explained that:

[...] as language teachers, although we may not have been aware of the term, we have always used a “blend” of teaching approaches in order to provide as rich a learning environment as possible for our learners. Blended learning is therefore not a new concept. What is new is the range of different learning opportunities and environments made possible today through the use of technology to support learning and teaching. What is also new is the “expectation” of our learners to use technology in and out of the classroom as part of the learning process...” (p.2).

Moreover, this author has mentioned that blended language learning has some strengths. First, it provides a more individualized learning experience. Second, it provides more personalized learning support. Third, it supports and encourages independent and collaborative learning. Finally, it increases student engagement in learning, accommodating a variety of learning styles. In addition to this, Rios (2014, as cited in, Lim 2015) recommends using the rotational model at the start as it is the teacher-led instruction that would work with English Language Learners (ELLs) when using blended learning for the first time.

2.3 The station rotation model of blended learning

Research in EFL has changed from teacher-centered instruction to student-centered learning. It is reported that student-centered instruction improves students’ academic achievement as well as self-esteem (Lynch, 2010). The station rotation model allows a learning station where students work collaboratively on given projects. Thus,

students are actively engaged in the process of applying the knowledge previously acquired in the face-to-face learning station and the online learning station. The collaborative learning station offers several opportunities to develop students' competencies in solving tasks.

The station rotation model (SRM) is one of the four blended learning models previously mentioned inside the classroom, in which the teacher does a general mini-lesson and then divides the class into groups of three or four stations around which students rotate. Each station has different activities. For example, in one station students use technology to complete a task. In station two, students work with the teacher, and in station three students work with peers to complete a task. Ku & Truitt (2018) explain that "the time is specified by the teacher, the students rotate to the next station and begin working on the task designated at that station" (p.155).

The station rotation is a model of blended learning as one of the stations must include an activity where students can use technology (Horn & Staker, 2015). Students rotate in small groups within the classroom to stations, including at least one digital component (Powell et al. 2015). Rios (2014, as cited in, Lim (2015) has also proposed that the station rotation model (SRM) is a good model approach to get started for classrooms that have limited access to technology. A blended language course should provide students with the tools and the opportunities to interact with their classmates, and it is important that students learn to take full advantage of the online community. The number of stations will depend on different factors as Ku & Truitt (2018) point out, the classroom can be broken up into two, three, or even four different stations based on the students' and teachers' needs, or based on access to technological devices. The station rotation model can be implemented in a subject or course where students rotate in a fixed schedule planned by the teacher (Staker, 2011). Other stations might include activities such as small-group or full-class instruction, group projects, individual tutoring, and pencil-and-paper assignments. Some implementations involve the entire class alternating among activities together, whereas others divide the class into a small group or one-by-one rotations (Horn, 2014). Therefore, in this model, the teacher plans different stations with activities that one must be technology based.

In the English classroom this methodology can be used to practice grammar, to develop writing and speaking skills, to learn vocabulary, and to create projects.

2.4 The importance of Vocabulary learning in the EFL classroom

In the process of learning English as a foreign language (EFL), learning new vocabulary is a fundamental aspect, because, without sufficient vocabulary knowledge, students cannot understand or produce the language to express their ideas. Vocabulary has been defined by different authors. For example, Ur (1991) states that vocabulary includes "the words we teach in the foreign language" (p.60). Hiebert and Kamil (2005) refer to vocabulary, as the knowledge that the learners should have about the meanings of words. Moreover, they explain that "vocabulary addresses single lexical items words with specific meaning(s) but it also includes lexical phrases or chunks" (p.2). Therefore,

learning new lexical items is more than learning a single word, it is a complex process. Taking this into consideration, Ur (1991) explains that “when teaching vocabulary, it is necessary to teach: pronunciation and spelling; grammar; collocation; aspects of meaning; and word formation. This is known as vocabulary knowledge” (pp.60-61).

In addition, Viera (2017) points out that “vocabulary knowledge is viewed as an essential tool for mastering any language skills; it also contributes to the understanding of written and spoken texts” (p.90). It seems that learning vocabulary is more complex than people may think. Alqahtani (2015) claims that “it is almost impossible to learn a language without words; even communication between human beings is based on words” (p.24). Finally, Ahmad (2012) states that “it enriches learners' integrated language skills such as listening, speaking, reading and writing” (p.71).

According to some authors, Alqathani (2015), and Webb (2009), there are two types of vocabulary: receptive vocabulary and productive vocabulary. The former refers to those words that students can recognize and understand, however, they are not able to use in the productive skills of the language: speaking and writing. Alqathani (2015) says “it is vocabulary that learners recognize when they see or meet in reading a text but do not use it in speaking and writing (p. 25). The latter refers to vocabulary that students can understand and use in writing and speaking. As was found (Webb, 2009, as cited in Alqathani, 2015) “productive vocabulary can be addressed as an active process, because the learners can produce the words to express their thoughts to others” (p.25).

For the purpose of this study, the vocabulary taught was selected from the Chilean national curriculum for the English subject, proposed by the Ministry of Education (MINEDUC). The words correspond to unit number III related to the topic Getting around the city.

Learning new words in English is essential to communicate, express ideas, and develop the language skills. Low vocabulary knowledge poses severe problems to learners, which consequently impedes the learning of the English language (Alqahtani, 2015). The language of human beings depends on the vocabulary used or gained. Thus, without vocabulary, learners will be demotivated to use the language (Richards & Renandya, 2002).

During the last decades different researchers Nation (2001), Morafeh (2015), Pan and Xu (2001) Richards and Renandya (2002) have conducted studies to demonstrate the importance of vocabulary in language learning. The results have shown that vocabulary is an important part when learning English as a foreign language because, without sufficient vocabulary knowledge, mastering the main language skills- speaking, writing, listening, and reading- will be difficult for students to express their ideas. As Nation mentions “there is a relationship between vocabulary knowledge and language use as complementary: knowledge of vocabulary enables language use and, conversely, language use leads to an increase in vocabulary knowledge” (Nation, 2001, as cited in Susanto, 2017, p.183). In the same line, Pan & Xu (2011) explain that “to a great extent, students' ability of listening, speaking, reading, writing and translating is all influenced by the vocabulary” (p.1586). Moreover, students who lack vocabulary will struggle to

understand and produce the language. Akramovna et al. (2019) explain that “vocabulary is central to English language teaching because without sufficient vocabulary students cannot understand others or express their own ideas” (p.5). Furthermore, students who do not have the vocabulary knowledge to complete a task might not be able to communicate with their classmates. Regarding this aspect, Morafeh (2015) points out that “a limited vocabulary in a second language impedes successful communication” (p.22).

Learning vocabulary is important to help students to develop the four language skills in English, to express their ideas and feelings. However, teachers tend to focus their classes on teaching grammar aspects rather than on teaching vocabulary. In this line, Viera (2017), expresses that “language instructors pay more emphasis on learners’ linguistic competence rather than on vocabulary knowledge” (p.91). In addition, he states that “no matter how well the student learns grammar, no matter how successful he or she masters the sounds of the target language, without words to express a wide range of meanings, communication cannot happen in a meaningful way” (p.91). Despite the importance that vocabulary has in learning English, teachers do not value its importance. In this regard, Hurtado (2002), declares that vocabulary is not given the recognition and acknowledgment it fully deserves due to the overwhelming emphasis laid on the syntax for decades. Learning vocabulary has always been a skill taught and evaluated in other language skills such as reading, writing, listening, and speaking (Schmitt, 2000). Instead, it promotes the development of language skills (Mart, 2012).

2.5 Techniques to learn vocabulary in the EFL classroom

Teachers of English use different techniques to help students to study and remember the new lexical items. Alqahtani (2015) claims that “in presenting one planned vocabulary item, the teacher usually combines more than one technique, instead of employing one single technique” (p.26). Some of these techniques used by English teachers are the following:

- A) **Translation:** some researchers do not recommend translating words because students do not think. As was found (Doff, 1998, as cited in Elyas & Alfaki, 2014) “if we only give a direct translation, the students cannot see how the word is used in an English sentence”.
- B) **Giving examples:** when giving an example of words, it is suggested that the meaning needs to be shown in clear and short sentences (Elyas & Alfaki 2014).
- C) **Realia:** using objects when presenting new vocabulary may help students to remember vocabulary through visualization. This strategy is frequently used with young learners.
- D) **Pictures and illustration:** by pictures we mean photos, blackboard drawings, wall pictures, cards, flashcards, wall charts, magazine pictures, board drawings, and stick figures (Elyas & alfaki, 2014; Alqahtani, 2015). Many vocabulary words can be taught using pictures.

- E) **Mime, expressions, and gestures:** the usage of mimes in teaching new words is also considered of great value, especially with actions. Alqahtani (2015) explains that “teaching gestures capture attention and make the lesson more dynamic” (p.27).

2.6 Strategies to learn Vocabulary in English

Learners use different strategies that help them learn new vocabulary—and they can decide which is the most suitable for them. In this line, Elyas and Alfaki (2014) explain that “each learner has his own favorable procedure for coping with new lexis” (p. 45). Some of these strategies are the following:

Guessing from context: there are some elements that need to be present to guess from context, according to Alqahtani (2015). This author explains that to activate guessing in a written or spoken text, there should be four elements available: the reader, the text, unknown words, and clues in the text including some knowledge about guessing. The absence of one of these elements may affect the learner’s ability to guess” (p.27). Learning from context not only includes learning from extensive reading, but also learning from taking part in a conversation, and learning from listening to stories, films, television, or the radio (Nation, 2001).

Inferring meaning: it is different from guessing because to infer it is necessary to activate previous knowledge. Elyas and Alfaki (2014) claim that “inferring is a process that learners would follow when they encounter a difficult or new word either as a written or spoken piece of information in any situation instead of asking someone or opening the dictionary, where it is not possible or appropriate” (p. 46).

Using a dictionary: using a dictionary as a strategy for learning new words in a foreign language is considered one of the most fruitful strategies (Elyas & Alfaki, 2014). Some researchers suggest using monolingual dictionaries because they include a lot of information such as use, collocation, pronunciation, etc. Nation (1990) encourages the use of monolingual dictionaries although there is a need for bilingual ones.

2.7 Vocabulary learning problems students face when learning English

Learning vocabulary may be challenging for English learners because it is a changing, growing reality. As Ur (2012) aptly stated, unlike grammar, “lexical items are an open set, constantly being added to (and lost, as archaic words gradually go out of use)” (p. 3). In addition, Lessard- Clouston (2013) said that “sometimes students learning English as a foreign language (EFL) are weaker at recognizing particular constraints on vocabulary usage, such as the fact that only young people use a particular word or expression, which might be colloquial and not usually deemed appropriate in more formal contexts such as speeches” (p. 5). Because it is a changing, growing reality, English vocabulary is challenging. Afzal (2019) pointed out that “learning the vocabulary usually

causes a heavy burden on the learners. In other words, languages are productive, and they continually create and add new words to their vocabulary stock” (p.82).

Another reason why learning vocabulary might be difficult for learners it is because there are no rules to follow. Oxford (1990) argued that generally, no rules are followed in learning the vocabulary as used when learning grammar. Students usually encounter hundreds of words that they need to learn and practice during their studies. Vocabulary learning is more than the study of individual words. In a recent study carried out by Elttayef and Hussein (2017), ~~the~~ results showed that students have difficulties learning new vocabulary due to insufficient basic knowledge and the lack of attention on behalf of the teacher in the English classroom.

2.8 Vocabulary learning in the EFL Chilean curriculum

Living in a globalized world where people from different countries interact has brought the necessity of having an international language to communicate and English has become this international language. The Ministry of Education in Chile (MINEDUC) has considered that learning English as a foreign language is important for our students to have access to information and knowledge. MINEDUC (2010) stated that “el inglés es una herramienta elemental que les permite acceder a información y a nuevos conocimientos” [it is an essential tool that allow to access to information and to updated knowledge] (p.36). During the last few years, the English subject is a compulsory subject from 5th grade to 12th grade. Therefore, the modification to the English curriculum has stated as its main aim that Chilean students should achieve a B1 level by the end of 12th grade, following the Common European Framework (2011). In this line, Mineduc (2010) expressed that “...para lograr finalmente tener un dominio del idioma inglés equivalente al nivel B1 en cuarto medio” (p.39) [to finally achieve an English proficiency level equivalent to B1 in 12th grade]. Therefore, due to the importance of the English language in a globalized world, the teaching of English in the school curricula in Chile becomes compulsory from 5th grade to 12th grade and students are expected to achieve a B2 level of proficiency of English in both receptive and productive skills.

MINEDUC in its English language curriculum states that the main objective is the development of the communicative competence where students can use vocabulary to interact with people. There is awareness regarding the importance of teaching and learning vocabulary. Therefore, the English programs for the different levels give some suggestions on how to teach vocabulary. For example, one suggestion presented in the English program (2010) to teach vocabulary states that students need to be exposed to the language as many times as possible. Therefore, students need to see the words, and listen to the words, to acquire vocabulary knowledge. It declares that “el aprendizaje de vocabulario debe considerar aprender su significado, su forma escrita y oral, su uso gramatical, sus colocaciones, su registro, las asociaciones y la frecuencia con que ocurra”. (p. 54) [learning vocabulary must consider learning the meaning, written and oral form, its grammatical use, collocations, register, associations, and its frequency].

2.9 Empirical studies related to the topic research.

An action research study conducted by Sulistyorini (2018) provided data regarding station rotation model for those who were interested in applying active learning strategies into the station rotation model in language classrooms with large student enrollment. This study was divided into two cycles in the first one, there were three different stations, and in the second cycle two stations. The stations focus on vocabulary, writing and speaking. Moreover, different active learning strategies were infused to maximize students' performance during the stations. The instruments to gather data were a pre-test question and a post-test question, which were applied to 54 participants. The results showed that there was a significant difference between the pre – and post-question tests. The hypothesis used was the two-way. The result of the two tails was 1.67. As this value was less than $\alpha = 5$, the null hypothesis was rejected, which meant that there was a significant difference between the tests.

A qualitative case study was developed to investigate a blended learning approach that could be implemented for English language teaching in listening and speaking skills. Lim (2015)-selected the station rotation model to study in a high school in Phayao. Forty-five students participated in this research; their age ranges were 15 to 16 years old. Four instruments were applied to collect data: classroom observation, observational reports, quizzes, and focus group reviews. The results showed that the student's English proficiency level affected the stage of the rotation task, students were dependent on their teachers, students revealed to have good attitudes towards the methodology, the teacher had the opportunity to monitor all the students in the classroom, students had a sense of achievement after completing the rotations and students were able to express themselves during group discussion and use more language functions.

A quasi-experimental study was conducted in a preparatory school in New Cairo, Egypt by Nagy (2015). The purpose of this study was to examine the effect of the station rotation model on developing writing. The participants of this study were twenty-five students, their ages ranged from 12 to 13 years old. The researchers trained the participant for four hours to explain the methodology. The instruments to gather data were a pre and a post-writing test, an internet usage survey, a self-assessment writing checklist, and a writing analytical scoring rubric. The data was analyzed using the t-test Eta-squared formula. The findings revealed there there was statistically significant differences between the pre-test and post-test in terms of content, writing organization, reflection, accuracy, and fluency on the writing. Therefore, the station rotation model was an effective model to improve students' writing.

CHAPTER 3: METHODOLOGY

3.1 Type of research

The purpose of this study was to explore the contribution of the station rotation model to help a group of students learn new vocabulary in an EFL Chilean classroom. In action research, a researcher identifies an issue to investigate through a cycle of planning, acting, observing, and reflecting (Burns, 2009). Moreover, Elliott (1991) describes action research as “the study of a social situation with the view to improving the quality of the action in it” (p. 6). In addition, Van Lier (1994) explains that it is a “... small-scale intervention in the functioning of the real world and a close examination of the effects of such intervention (p. 32). In this case, a specific group of 45 elementary students from a subsidized school struggled to learn vocabulary in English as a foreign language class. To solve this issue, the researcher decided to implement the station rotation model in the classroom to help students learn vocabulary from unit III related to getting around the city by giving them the different opportunities to be exposed to the target vocabulary during the English lesson and to analyze if this approach had any contribution in their vocabulary learning as well as in their perceptions. This AR study is within the sphere of the qualitative paradigm.

3.2 Research problem

In our Chilean educational context, most of the schools have four hours of English per week, divided into forty five-minute sessions each, which, may hinder students' exposure to the language and the opportunity to develop the vocabulary needed to comprehend texts and produce the language.

As a teacher of English, I have gone through the experience of observing demotivated students when they do not know how to express themselves because of their lack of vocabulary knowledge. Additionally, the lack of time and the class size make the monitoring of the learning process difficult. It is necessary to keep in mind that there are students who are shy and they do not like to ask questions or ask for help. This makes it more difficult to identify how many students are having problems with new vocabulary learning. Furthermore, in today's classroom, there are students who have special learning needs who need more help than other students. The traditional classroom model of teaching makes it difficult to design differentiated learning experiences, which may respond to the different needs of our students. Besides this, there is a lack of time for planning lesson with differentiation, and resources to create specialized materials to teach English vocabulary to a large class of forty- five students. Finally, some many good websites and apps can help students to learn vocabulary in English; however, it is not possible to use them in class due to the lack of technology devices for 45 students at the same time. Taking these aspects into consideration, I as a teacher-researcher consider that the station rotation model can help to address the problem described above.

This research is an opportunity to show the potential of the station rotation model as an effective approach to teach new vocabulary and to analyze how this pedagogical experience may influence upon students' vocabulary learning -improvement.

3.3 Research question

How does the implementation of the station rotation model help students learn new vocabulary in an EFL classroom in Chile?

3.4 Participants

This action research was conducted in a subsidized high school in Concepción. In total, thirty-four students participated in this study, sixteen girls and eighteen boys. Regarding age range, the majority of students were between 13 to 14 years old, and they were in 8th grade. Their level of English, corresponds to an A1 level of English, which is the most basic level according to the Common European Framework of Reference (2011).

The participants of this study had 4 hours of English per week, which lasts 45 minutes each session divided in two different days Mondays and Tuesdays. Moreover, they were exposed to 114 horas of English during the year. Therefore, they have had 798 hours of English from 5th grade to 7th grade. Since, the English subject is not compulsory from kindergarten to 4th grade, those hours were not considered because some students did not have English during those years. It is important to mention, that the participants were demotivated to learn, they did not feel interested in the English classes, they did not participate in activities, and they were talkative. This attitude towards their learning has been observed since they returned to face-to-face classes after the pandemic.

The sample chosen corresponds to a convenience sample because the participants were reachable and willing to participate in this action research. According to Ilker et al. (2016), a convenience sampling "...referred to the researching subjects of the population that are easily accessible to the researcher" (p.18). Stratton (2021) explains that in this type of sampling "researcher uses sampling that does not provide for each member of a target population to participate in a study and rather the participants are selected by the researcher, are referred to the researcher, or self-select to participate in a study" (p.373).

The sample was made up of thirty- four participants in total, in an age range between 13 to 14 years old. As the students were under age, their parents signed a consent form to participate in the study (see Appendix 1 and Appendix 2).

3.5 Research objectives

3.5.1 General objective

To explore the contribution of the blended-learning model of station rotation to support a group of eight graders vocabulary learning in an EFL Chilean classroom.

3.5.2 Specific objectives

- To assess participants' vocabulary learning before and after the implementation of the blended-learning model of the station rotation model.
- To analyze participants' views towards the implementation of the blended-learning model of the station rotation to learn new vocabulary in the EFL classroom.

3.6 Data collection techniques

During the action research implementation of the intervention plan, three instruments were used for data collection, which are described below.

3.6.1 A Pre intervention vocabulary test (see Appendix 3)

The pre-intervention vocabulary test was designed to assess participant's vocabulary learning before the implementation of the station rotation model. The tests had four different items: matching, fill in the gap, true and false, and multiple choice. There were 25 vocabulary words selected for this test chosen from the target vocabulary suggested in Unit 3 "Going Places" from the English National Program for eighth graders (13-14 years old). The vocabulary was classified into nouns and verbs. The words were the following: museum, bookshop, airport, market, restaurant, theater, catch the bus, get off, go on, get on, catch, travel itinerary, travel light, accommodation, budget, travel abroad, cable car, subway, bike share, railroad, bus, department store, cinema, bus station, mountain.

The test score was 25 points in total which correspond to one point for each vocabulary word assessed. The items matching, fill in the gap, and true and false assessed 5 vocabulary words each one. Therefore, those items had a score of 5 points. The item multiple choice evaluated 10 vocabulary words therefore, it had 10 points.

3.6.2 A Post-intervention vocabulary test (see Appendix 4)

The post intervention vocabulary test assessed participants' vocabulary learning after the implementation of the blended-learning model of station rotation. This test was exactly as the same pre-vocabulary test applied at the beginning of the intervention.

3.6.3 A students' questionnaire (see Appendix 5)

To analyze students' views towards the implementation of the blended-learning model of station rotation to learn new vocabulary in the EFL classroom, a questionnaire was applied to the students. The questionnaire was used to gather data about how students felt after using the station rotation model. This questionnaire was conducted in Spanish to get deeper information about the students' opinions and also to create a less stressful environment. The students' questionnaire consisted of 7 questions, 3 of them were semi-open questions and 4 open questions. These questions were adapted from Ku & Truitt's study (Ku & Truitt 2018). The questions were the following:

- 1) Do you like to learn new words in English?
- 2) Did you like to learn, using the station rotation model?
- 3) Do you think that you learned new words using the station rotation model?
- 4) What did you like about this methodology, the station rotation model?
- 5) What did you not like about this methodology, the station rotation model? Write at least two different ideas. You can refer to activities, topics, games, applications, etc.
- 6) What do you think you learned using the station rotation model? Write at least two different ideas.
- 7) What would you improve or change about the station rotation model? Write at least two different ideas. You can refer to activities, topics, games, applications, etc.

The answers provided by the students were analyzed in terms of the following categories: I) motivation for learning new vocabulary, II) students' experiences of the station rotation model which was divided into two different sub-categories: advantages of the station rotation model, disadvantages of the station rotation model, III) learning instance, and IV) students' suggestions for future application of the station rotation model.

3.7. Data analysis techniques

The data gathered in this research included: quantitative data, which emerged from the pre and post-intervention vocabulary test and qualitative data from the students' questionnaire.

To analyze the results of the pre and post-intervention vocabulary tests the Student's T-test was applied to see if there was a statistically significant difference before the initial and final application of both tests. Additionally, pre- and post-intervention vocabulary tests results were analyzed through measures of central tendency like the mean scores, modes, and it also considered the standard deviations. The purpose of this analysis was to inquire about the vocabulary items which students improved the most. All the data obtained from pre and post-intervention vocabulary tests were gathered and graphically displayed in tables and figures.

In the case of the students' responses to the questionnaire, all the comments were translated into English. During this process the data was analyzed and triangulated so

the data from each question could be as reliable as possible. All the students' comments were written in a excel sheet divided into the different questions. The triangulation consisted of comparing participants' answers to find divergencies and convergencies. During this stage, the answers were classified into categories and subcategories. After this process, the data gathered was analyzed and supported by different authors who had conducted similar studies.

To analyze the data which emerged from the student's open questions of the questionnaire, the **thematic analysis technique** was used. Kiger & Lara Varpio (2020) explained that "thematic analysis is an appropriate method of analysis for seeking to understand experiences, thoughts, or behaviors across a data set" (p.2). Castleberry and Nolen (2018) stated that thematic analysis, such as responses from surveys or transcribed interviews, allow the researcher to explore the context of teaching and learning at a deeper level than quantitative analysis since the last one lacks flexibility and interpretation when analyzing data. From the thematic analysis, different themes and subthemes arose and the responses frequency with which those themes and sub-themes appeared was determined by the number of times the participants referred to them in their answers.

Also, to provide a more detailed analysis of the students' opinions in the open questions of the questionnaire, a **word cloud technique** was used as a deeper tool to analyze the transcriptions and retrieve the frequency of each word. According to Kalmukov (2021) word clouds are "a powerful data visualization technique that allows people to get easily acquainted with the content of a large collection of textual documents and identify their subject domains for a matter of seconds" (p.114).

3.8. Stages of the action plan

The intervention planned developed in this study was conducted in four-weeks' time. It aimed at showing how the implementation of the blended-learning model of station rotation could help students learn new vocabulary. The intervention was divided into seven sessions and each session lasted ninety minutes. Each lesson had three stations the teacher lead station, the collaborative station, and the technology station. In the first one, students worked with the teacher to produce short sentences using the vocabulary. In the second one the students played board games to practice vocabulary with a peer. In the last station, students played vocabulary games in quizzes using their mobile phones.

During the first session, the pre- intervention vocabulary test was given to students to gather data for Specific Objective 1. The next five sessions, the station rotation model was implemented to teach 5 vocabulary words in each session. Finally, in the last session, the post-intervention vocabulary test was taken by students to gather data about Specific Objective 1 and Specific Objective 2. The objective of each session is shown in Table 1.

Table 1 Sessions of the intervention

N° of sessions and date	Learning objective of the session	Procedure	Instrument	Specific objectives
1st session (3/10/2022)	Students will be able to answer a pre intervention vocabulary test	Students answered 25 questions in the pre-intervention vocabulary test	pre-intervention vocabulary test	To assess participants' vocabulary learning before the implementation of the station rotation model.
2nd sesión (4/10/22)	Students will be able to identify vocabulary related to places of the city using the rotating station model.	<p>A 10-minute lesson was developed to present the key vocabulary about places in the city.</p> <p>Students were divided into three different stations. 1) teacher lead stations where students work writing short sentences and are monitored by the teacher. 2) collaborative station where students in pairs play board games such as <u>as</u> scrambles, connect four to practice vocabulary and 3) technology station where students individually practice vocabulary games in quizzes.</p> <p>The teacher arranged the groups to have students with different English levels in each one. The purpose of this decision was to</p>		To assess participants' vocabulary learning before the implementation of the station rotation model.

		<p>have students with good level of English working with students who had difficulties in English.</p> <p>Teacher explained to the students the procedure of how and when they had to rotate to different stations.</p> <p>Group 1 Teacher leads-station.</p> <p>Students practice the five words taught in the mini lesson. Write sentences using the words. Teacher monitors students writing and provides feedback.</p> <p>Group 2 Collaboration station</p> <p>Students in pairs completed a task by using the vocabulary learned. After finishing, they compared their answers with another pair of students. One of the students was given the key answer.</p> <p>Group 3 Technology station</p> <p>Using their cellphones students entered to an online application to play an online game in Quizziz to practice</p>		
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		<p>the vocabulary learned.</p> <p>Teacher did a wrap-up activity to finish the class.</p> <p>Students wrote at least 3 sentences using the target vocabulary.</p> <p>Students took a formative quiz about the vocabulary.</p>		
3rd session (11/10/2022)	Students will be able to identify vocabulary to write short sentences using station rotation model	<p>A mini 10-minute lesson was developed to present the key vocabulary.</p> <p>Students were grouped into the three different stations. Students were all mixed up in terms of the English level.</p> <p>Teacher explained to the students the procedure of how and when they had to rotate to a different station,</p> <p>Group 1 Teacher leads-station.</p> <p>Students completed a writing task where they needed to apply the vocabulary learned in a sentence. The teacher supported students in this process and helped them with their doubts</p> <p>Group 2 Collaboration station</p>	Quiz	To assess participants' level of vocabulary before the implementation of the station rotation model.

		<p>Students in pairs completed a task using the vocabulary learned. After finishing, they compared their answers with another pair. One student had the key answer.</p> <p>Group 3 Technology station</p> <p>Students using the mobile phone practiced the vocabulary learned in an online game,</p> <p>Teacher wrapped-up the class. Students were asked to write at least 3 sentences using the target vocabulary learned. Students took the second formative vocabulary quiz.</p>		
4th sesión (17/10/2022)	Students will be able to recognize key vocabulary by using the station rotation model	<p>A 10-minute lesson was developed to present the key vocabulary. Students were divided into three different stations.</p> <p>Students were all mixed up in terms of the English level.</p> <p>Teacher explained to the students the procedure of how and when they had to rotate to a different station.</p> <p>Group 1</p>	Quiz	

		<p>Teacher leads-station. Students did a writing activity where they had to apply the vocabulary learned. The teacher helped and monitored the activity.</p> <p>Group 2 Collaboration station</p> <p>Students in pairs completed a task using the vocabulary practiced. After finishing, they compared their answers with another pair. One student had the key answer.</p> <p>Group 3 Technology station</p> <p>Using the cellphones students entered an online task using an app to practice the vocabulary learned.</p> <p>Teacher did a wrap-up activity for the class. Students wrote at least 3 sentences using the target vocabulary Students took the formative vocabulary quiz.</p>		
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<p>5th sesión (18/10/22)</p>	<p>Students will be able to identify vocabulary using station rotation model.</p>	<p>A 10-minute lesson was developed to present the key vocabulary. Students were divided into three different stations.</p> <p>Students were all mixed up in terms of the English level.</p> <p>Teacher explained to the students the procedure of how and when they had rotate to different station,</p> <p>Group 1 Teacher leads-station. Students did a writing activity where they had to apply the vocabulary learned. The teacher helped and monitored the activity.</p> <p>Group 2 Collaboration station</p> <p>Students in pairs completed a task using the vocabulary. After finishing, they compared their answers with another pair. One student had the key answer.</p> <p>Group 3 Technology station</p> <p>Using the cellphones students entered an online app to do a task</p>		
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		<p>to practice the vocabulary learned.</p> <p>Teacher wrapped-up the class. Students wrote at least 3 sentences using the target vocabulary Students took the formative vocabulary quiz.</p>		
6th sesión (25/10/22)	Students will be able to identify vocabulary orally using station rotation model	<p>A 10-minute lesson was developed to present the key vocabulary Students were divided into three different stations.</p> <p>Students were all mixed up in terms of the English level.</p> <p>Teacher explained to the students the procedure of how and when they had to rotate to different station.</p> <p>Group 1 Teacher leads-station. Students did a writing activity where they had to apply the vocabulary learned. The teacher helped and monitored the activity.</p> <p>Group 2 Collaboration station</p> <p>Students in pairs completed a task using the vocabulary. After finishing, they</p>		.

		<p>compared their answer with another pair. One student was given the key answer.</p> <p>Group 3 Technology station</p> <p>Using the cellphones students entered to the online task by using an app too practice the vocabulary learned.</p> <p>Teacher wrapped-up the class. Students wrote at least 3 sentences by using the target vocabulary</p>		
7th session (25/10/22)	Students will be able to answer a post intervention vocabulary test and complete the students' questionnaire	<p>-Students completed the students' questionnaire to gather data about Specific Objective 2</p> <p>-Students answered 25 questions in the post-intervention vocabulary test.</p>	<p>post-intervention vocabulary test</p> <p>Students' questionnaire</p>	<p>To assess participants' vocabulary learning after the implementation of the station rotation model.</p> <p>To analyze participants' perceptions towards the implementation of the station rotation model to learn new vocabulary in the EFL classroom.</p>

CHAPTER 4: FINDINGS

The purpose of this chapter is to analyze the main findings that emerged related to the two specific objectives stated for this action research.

4.1 Specific objective 1: to assess participants' vocabulary learning before and after the implementation of the blended-learning model of station rotation.

To gather the necessary data, a pre and post intervention vocabulary test was given to the participants before and after the implementation. These instruments aimed to assess participants' vocabulary learning of the 25 words.

4.1.1 Pre and post intervention vocabulary tests results

The pre-test and post intervention test scores from the 34 students are presented in Table 2. Mean and Standard deviation scores are also included. In relation to the pre and post intervention vocabulary test, it can be observed that most of the students showed improvements with respect to vocabulary learning after using the station rotation model. Taking into account the global score of the 34 students, it was observed that the standard deviation (SD) from the mean score was 62,23. Therefore, there was an improvement between the pre- and post-intervention vocabulary test.

As shown in Table 2, from the 34 participants, 32 (94%) improved their results after the implementation of the station rotation model. Of those who improved, 16 (50%) participants made an improvement of 2-3 points in the final post test, 7 (22%) students increased their score in 1 point in comparison to the pre intervention vocabulary test. Five students (16%) improved 4 points and three students (9%) 5 points. One student (3%) made a significant improvement in his post vocabulary test achieving 10 points of difference in regard to the pre intervention vocabulary test. Two participants kept their initial results showing no improvement yet they did not lower their results. This may be due to the fact that some participants already knew the vocabulary taught; therefore, they did not consider the methodology was relevant to learn new vocabulary.

Table 2

Pre and post intervention tests results

Student	Pre intervention test Test score= 25 points	Post intervention test test score= 25 points	Mean score	Standard Deviation Score
Student 1	18	21	19,5	2,12
Student 2	23	24	23,5	0,71
Student 3	18	19	18,5	0,71

Student 4	20	25	22,5	3,54
Student 5	15	18	16,5	2,12
Student 6	16	17	16,5	0,71
Student 7	20	22	21	1,41
Student 8	17	20	18,5	2,12
Student 9	21	24	22,5	2,12
Student 10	20	22	21	1,41
Student 11	17	19	18	1,41
Student 12	18	19	18,5	0,71
Student 13	18	21	19,5	2,12
Student 14	24	22	23	1,41
Student 15	15	19	17	2,83
Student 16	16	20	18	2,83
Student 17	16	20	18	2,83
Student 18	17	19	18	1,4
Student 19	15	25	20	5,00
Student 20	18	18	18	0,00
Student 21	17	19	18	1,41
Student 22	17	22	19,5	3,54
Student 23	19	22	20,5	2,12
Student 24	17	20	18,5	2,12
Student 25	16	19	17,5	2,12
Student 26	19	20	19,5	0,71
Student 27	16	17	16,5	0,71
Student 28	17	22	19,5	3,54
Student 29	19	23	21	2,83
Student 30	10	14	12	2,83
Student 31	19	21	20	1,41
Student 32	17	18	17,5	0,71
Student 33	20	20	20	0,00
Student 34	17	19	18	1,41
Average	17,7	20,29	19	1,83

Source: self-elaboration

To measure if there was significant difference between the pre intervention vocabulary test and the post intervention vocabulary test, the t-student test was applied to determine if there was any statistically significant difference between the pre and post vocabulary tests scores. Table 3 shows the results obtained in the Student's T- test.

Table 3

Student's T- test results		
	Pre intervention test	Post intervention test
Mean	17,70588235	20,29411765
Variance	6,274509804	5,729055258
Observations	34	34
Pearson Correlation	0,65169784	
Hypothesized Mean Difference	0	
Df	33	
t Stat	-7,373789118	
P(T<=t) one-tail	9,05501E-09	
t Critical one-tail	1,692360309	
P(T<=t) two-tail	1,811E-08	
t Critical two-tail	2,034515297	

Source: self-elaboration.

Thirty-four students participated in this study. The p-value represents the statistical significance of the data obtained. As shown in Table 3, the p-value in two tails was 1,811E-08 which proved that there was a significant difference between the students 'results between the pre and post vocabulary test after using the blended-learning model of the station rotation.

4.1.2 Analysis of mean scores, median and mode between the pre- test and post test

Table 4

Mean score, median and mode in the pre intervention vocabulary test

Student	Pre intervention test global score	Minimum possible score	Maximum possible score	Mean	Median	Mode
Total	602	0	25	17,706	17	17

Source: self-elaboration.

Table 4 shows students' tests scores in terms of mean scores, median and mode in the pre- intervention vocabulary test. Table 4 shows that the global score achieved by all students was 602 (17,7 points in average out of 25 points the test had) in the pre intervention vocabulary test whose minimum possible score was 6 and the maximum possible score was 25. The mean score achieved by the 34 students in the test which had 25 points in all was 17,70 and the median was 17. Therefore, it can be said that there was a normal distribution in the students' results. Regarding the mode, the score 17 was repeated eight times, since 8 participants achieved the same score.

4.1.3 Mean score, median and mode in the post intervention test.

Table 5 shows students' scores in terms of the mean scores, median and mode in the post-reading intervention test. Table 5 shows that the global score achieved by the 34 students was 690 (20,29 points in average out of the 25 points the test had) from a vocabulary test whose minimum possible score was 0 and the maximum possible score was 25 pts. The mean score in this group was 20,3 from the 25 points the test had, and the media was 20. Therefore, it can be said that there was a normal distribution among students' post test results. Regarding the mode, the score mostly repeated was 20 in six different students' test. Additionally, it is important to mention that five students who scored 20 points in the post intervention test had a standard deviation between 1,5 to 2,0, which means that their pre vocabulary test score differed from the post vocabulary in 3 or 4 points.

Table 5

Mean, median and mode from the post intervention test

Student	Post intervention test	Minimo possible score	Maximun possible score	Mean	Median	Mode
Total	690	0	25	20,294	20	19

Source: self-elaboration.

4.1.4 Comparison of mean, median and mode between the pre and post intervention vocabulary tests

Table 6 shows students' scores in terms of the mean, median and mode, in both the pre and post intervention vocabulary test. It can be observed that the difference- of the global scores between both tests was 88 points. This sample included thirty-four participants. Therefore, it can be noticed a higher score in the post intervention vocabulary test, because the global score in the pre- intervention test was 602 and the global score in the post test was 690. However, it is important to mention that one of the students, participant 20, did not improve his score yet he did not lower his results. The mean is 19, the median 19 and mode 19 between the pre intervention vocabulary test and the post intervention vocabulary test. Therefore, it can be said that despite of students improved their results in the post intervention, the mean, the median and the mode are

still the same. Therefore, from the statistical point of view it can be said that there is a perfectly symmetrical distribution in the test. This happened because those participants who achieved lower scores in the pre intervention test achieved a score of 19 points in the post intervention test and those who had achieved 19 points in the pre-intervention test improved their results.

Table 6

Mean, median and mode in the pre and post intervention test

Student	Pre intervention test	Post intervention test	Mean	Median	Mode
Total	602	690	19	19	19

Source: self-elaboration.

4.1.5 Items analysis in the pre and post vocabulary tests

The pre and the post-intervention tests assess students' vocabulary learning through 4 different items: multiple choice, true and false, filling in the gap, and matching exercises. The items analysis done in terms of Minimum score, Maximum score, Mean, Mode and Media is presented in Table 7.

Table 7

Items analysis in the pre and post- intervention vocabulary test

Matching						
Student	Pre test	Minimum Score	Maximun Score	Mean	Median	Mode
Total	164	0	5	4,82352941	5	5
Student	Post test	Minimum Score	Maximun Score	Mean	Median	Mode
Total	168	0	5	4,94117647	5	5
True and false						
Student	Pre test	Minimum Score	Maximun Score	Mean	Median	Mode
Total	78	0	5	2,29411765	2	2
Student	Post test	Minimum Score	Maximun Score	Mean	Median	Mode
Total	122	0	5	3,58823529	4	4
Fillin the gap						
Student	Pre test	Minimo Score	Maximun Score	Mean	Median	Mode

Total	44	0	5	1,29411765	1	0
Student	Post test	Minimo Score	Maximun Score	Mean	Median	Mode
Total	63	0	5	1,85294118	2	0
Multiple choice						
Student	Pre test	Minimo Score	Maximun Score	Mean	Median	Mode
Total	316	0	10	9,29411765	10	10
Student	Post test	Minimo Score	Maximun Score	Mean	Median	Mode
Total	337	0	10	9,91176471	10	10

4.1.5.1 True / False item analysis (See Appendix 7)

As shown in Table 7, the item that had the most significant improvement was the True and False item. The global score for this item in the pre intervention vocabulary test was 78 and in the post intervention vocabulary test was 122. Therefore, there was a difference of 44 points, which is a significant statistically improvement. Moreover, the mode of this item in terms of correct answers was 2 in the pre intervention vocabulary test, and 4 in the post vocabulary test which means that this score was the most repeated. Additionally, it is important to mention that 15 students increased their results in two or three points, and this was observed in the standard deviation as it showed a change of 1,500 to 2.00 (see Appendix 7) and 6 of these participants achieved the total score in this item. Therefore, students improved their results from the pre intervention test because the standard deviation was not close to zero.

4.1.5.2 Matching item (See Appendix 8)

Regarding the Matching item, it can be observed that it was the one, which achieved the lowest level of improvement. In the pre-intervention vocabulary test the mean was 4,82, the median was 5 and mode 5, this was the most repeated score achieved by students. This result did not differ much from the post test, except for the mean that was 4,94 in the post intervention test.

4.1.5.3 Fill in the gap item (See Appendix 9)

In relation to this item, students showed an improvement of 19 points between the pre and the post vocabulary test regarding the global score: global score pre-intervention test 44 and global score post-intervention test 63. In the post intervention vocabulary test, 11 participants increased their results 2-3 points. The media increased from 1 to 2 points. Moreover, it can be observed that in both tests the mean score was 0. However, during the pre-vocabulary test 14 participants obtained 0 points in this item, and during the post vocabulary test 9 participants achieved 0 points (See Appendix 7). The median in each test was 2. Therefore, there was no change in this item from a statistical point of view.

4.1.5.4 Multiple choice item (See Appendix 10)

In relation to the Multiple-choice item, there was an improvement between the pre and the post vocabulary test. However, it was not a significant improvement. In the pre vocabulary test the mean was 4.89, the median was 10 and the mode 10. This result did not differ much from the ones in the post intervention vocabulary test, except for the mean that was 4.94 in the post intervention test. The most repeated score achieved by the students was 10 points in both tests.

4.2 Specific Objective 2: to analyze participants' views towards the implementation of the station rotation model.

A questionnaire was applied to assess the same 34 students' views about the experience of participating in the blended-learning model of rotating station and their vocabulary learning. The questionnaire consisted of 3 semi-open multiple-choice questions and 4 open-ended questions. This questionnaire was conducted in Spanish in order to obtain more complete data from students' opinions and also to provide a less stressful environment. The data from the questionnaire is presented according to each category of analysis in Table 8.

Tabla 8

Categories in the students' questionnaire

Category	Sub-categories
1 Motivation	
2 Experience of the station rotation model	2.1 Advantages of the station rotation model 2.2 disadvantages of the station rotation model
3 Learning instance	
4 Improvement for future application	

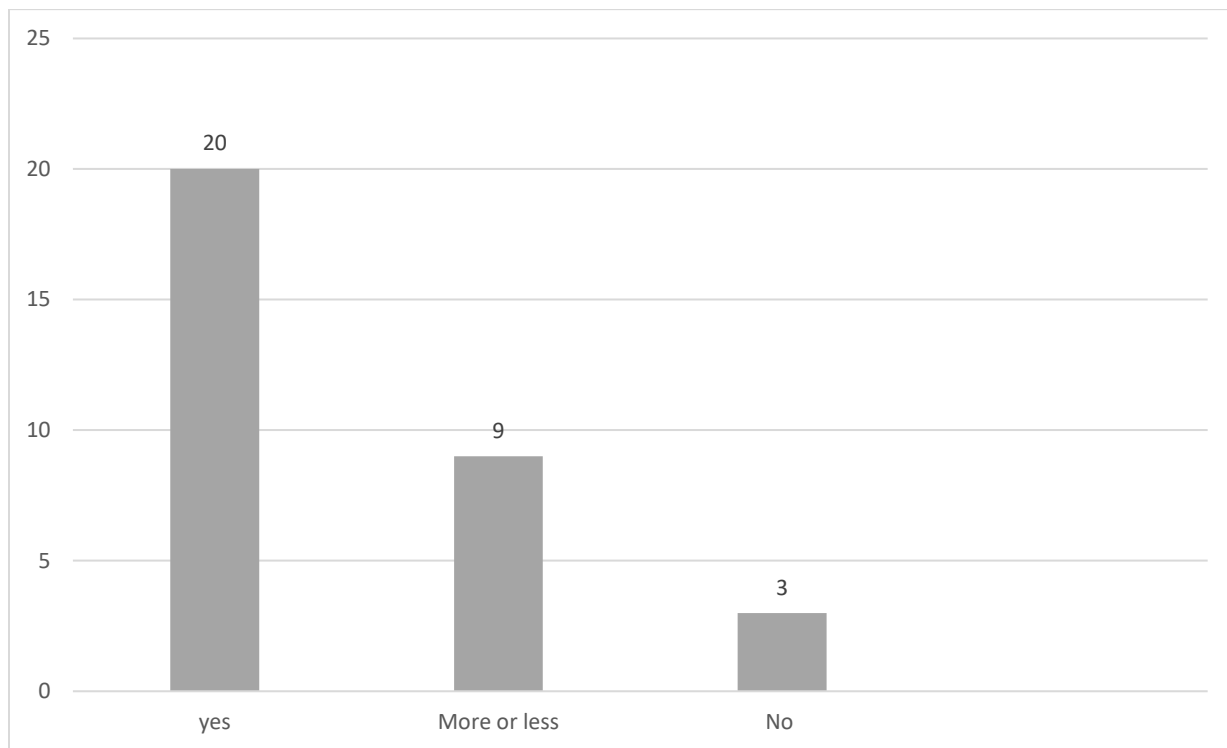
Source: self-elaboration.

4.2.1 Category: Students' motivation

The objective of this category was to show findings regarding students' motivation for learning new vocabulary. The data is presented in Figure 1.

Figure 1

Students' motivation to learn new vocabulary in English



Source: self-elaboration

Note. 32 participants out of the 34 answered the question. Two participants were absent (Participant 2 and participant 33).

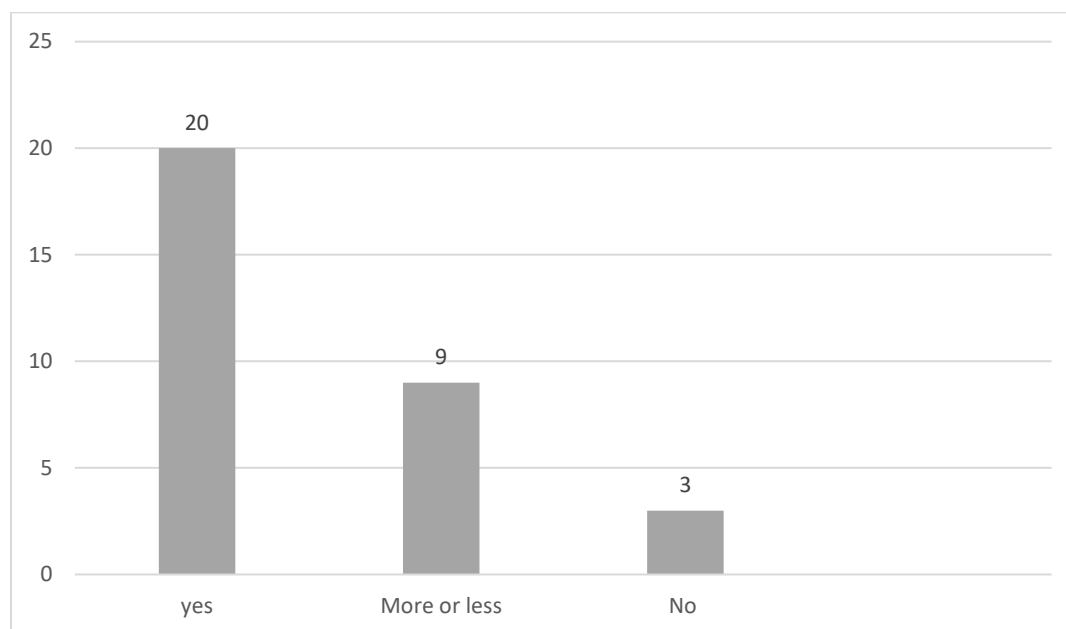
Figure 1 represents students' answers to question: *Do you like learning new vocabulary?* Most of the students (75%) evidenced that they liked to learn new vocabulary in English. Some participants (25%) also declared that they more or less liked learning new vocabulary. It is important to mention that none of the participants who answered the questionnaire chose the option NO. Therefore, it can be said that students were highly motivated to learn new vocabulary in the English subject.

4.2.2 Category: Experience of the station rotation model to learn new vocabulary

The objective of this category was to inquire about participants' views regarding the experience of participating in the station rotation model implemented to learn new vocabulary. The data is presented in Figure 2.

Figure 2

Students' views about the experience of the station rotation model



Source: self-elaboration.

Responses about the experience of using the station rotation model as a methodology to learn new vocabulary were generally positive. Most of the students (20=63%) evidenced that they liked the experience of working with the model to learn the new vocabulary, 8 participants (28%) chose the option “*more or less*” and 3 (9%) students did not like the experience of learning vocabulary using station rotation model.

4.2.2.1 Subcategory: advantages of the station rotation model

In relation to question number 4, the students were inquired regarding **the advantages of using the station rotation model to learn new vocabulary**. In general, responses about the benefits of this methodology were positive. Most of students (12) believed that the main advantage of learning vocabulary by using the station rotation model was that they learned while they were having fun. For instance, participant 2 declared: “*me gustó que aprendí de una forma entretenida, osea me divertía jugando mientras aprendía*” [I liked that I learned in a fun way. I mean, I had fun while I was learning]. In this regard, participant 26 also stated “*lo que mas me gustó fue que aprendí el contenido de una manera divertida*” [what I liked the most was that I learned the content in a fun way]. One participant explained that he enjoyed the activities but he had difficulties in understanding them. He wrote: “*Las estaciones me facilitaban para aprender, era entrete y fácil, pero me costó entender*” [The stations made learning easier the learning, it was fun and easy, but I was difficult to understand (the procedure)].

Nine participants also referred about the **types of activities** that they did, using the station rotation model. They commented explicitly about the use of board games in one of the stations. For example, participant 13 wrote *“me gustó los juegos de dados me divertían”* [I liked the dice games, they were fun]. Moreover, the same participant mentioned the variety of activities he did during the lessons. For instance, *“la variedad de actividades”*. [the different types of activities]. Participant 24 declared *“que eran distintas formas de aprender y como eran distintas formas mas entretenidas”* [That they were different ways of learning and since they were different, they were more enjoyable]. Participant 1 pointed out about the importance of doing the activities in one station to resolve the other one. Therefore, he noticed the connection between each activity and the corresponding station. For instance, he declared: *“me gustó porque algunas estaciones te ayudaban a resolver en otras estaciones y además la profesora siempre estaba dispuesta a responder”*. [I liked it because some of the stations helped you to work in other stations. Beside this, the teacher always was willing to help us]. One participant commented about the possibility of doing more than one activity in the class and having the chance of playing, writing and using technology. For instance, participant 31 stated that *“me gustó que todos podíamos hacer de todo y no solo una actividad”* [I like that everybody could do everything and not just one activity].

Moreover, 5 students highlighted the experience of doing something different in class. They commented about the new approach to learn vocabulary and how easy it was for him to learn by using this methodology. For example, participant 19 declared: *“lo que más me gustó sobre las rotaciones fue aprender de una forma totalmente nueva”*. [what I liked the most about the rotation was to learn in a completely different way]. In addition to this, participant 34 stated: *“lo que me gustó fue que fue algo nuevo ya que siempre era lo mismo”* [what I like the most was that it was something new, because we do the same thing all the time]. He tried to explain that they liked the methodology because they were not used to play during classes, doing activities outside classroom, using technology as a learning tool, and have another sitting arrangement in the classroom.

Furthermore, some participants agreed that they liked to have the **opportunity to work in pairs and groups** during the rotations which did not have technology. They expressed that they liked to do the activities with different classmates, and friends. Participant 6 pointed out that *“lo que más me gustó es que pudimos trabajar en grupos”*. [what I liked the most was that we could work in groups]. In addition to this, student 7 referred to *“el poder compartir con más compañeros”* [to be able to share with more classmates].

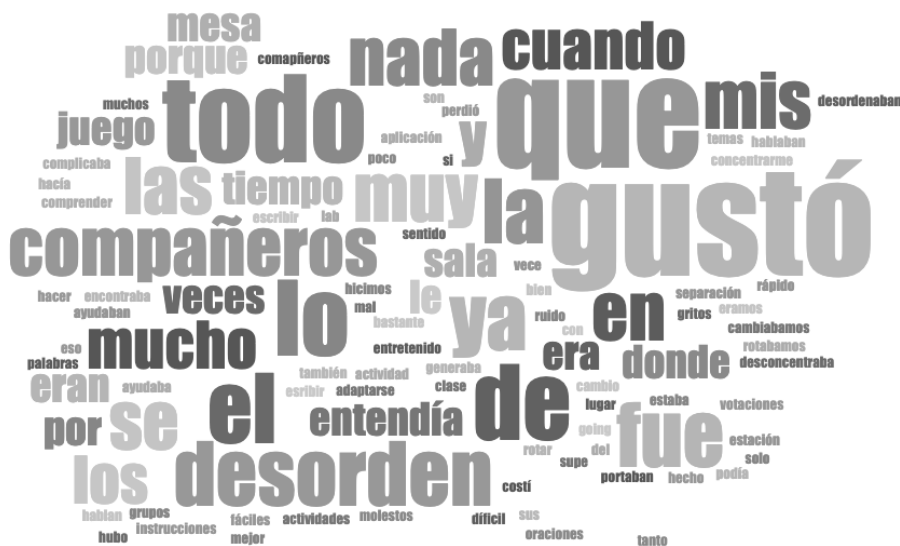
Finally, 7 participants based their comments on **the use of technology** to practice vocabulary as part of one station. For instance, participant 14 said that *“lo que más me gustó fue lo de las aplicaciones ya que debíamos meternos a la página y responder preguntas”*. [What I liked the most about the stations was the applications, because we had to enter the webpage and answer questions]. Moreover, one student commented about the importance of another station to resolve the activities in the technology station. For example, participant 22 stated that *“las aplicaciones ya que podía escribir algo que fuera en base a lo que estaba pasando”* [the applications because I could write something based on what I was learning]. Finally, one student referred to **the use of formative**

mis compañeros se portaban mal porque a veces no entendía las instrucciones donde hablaban tanto [when my classmates misbehave because, sometimes I did not understand the instructions]. Moreover, some participants commented about the time between each rotation, which was 15 minutes. Participant 6 stated that *“que hubo muy poco tiempo”* [that there was little time]. In this line, participant 9 also pointed out about the time but he argued that it was not enough due to the time to understand the procedure. For instance, he stated *“no me gustó que podía rotar muy rápido. No me gustó porque era muy difícil de adaptarse”* [what I did not like was that I rotated from station to station very fast]. Two students mentioned the mess that was caused when they needed to rotate. One of them associated this to the class size. For instance, he explained that *“que eramos muchos por estación, ya que eso hacía desorden”* [we were many in the station that this made a mess].

It is important to mention that 14 participants answered this question by saying that they had liked everything so they did not find any disadvantage. Figure 4 shows the word cloud analysis about the question in the students’ questionnaire. What didn’t you like about the station rotation model? It represents a summary of the most frequent concepts and ideas given by the participants throughout their responses.

Figure 4

Students’ most frequent concepts about disadvantages of the station rotation model



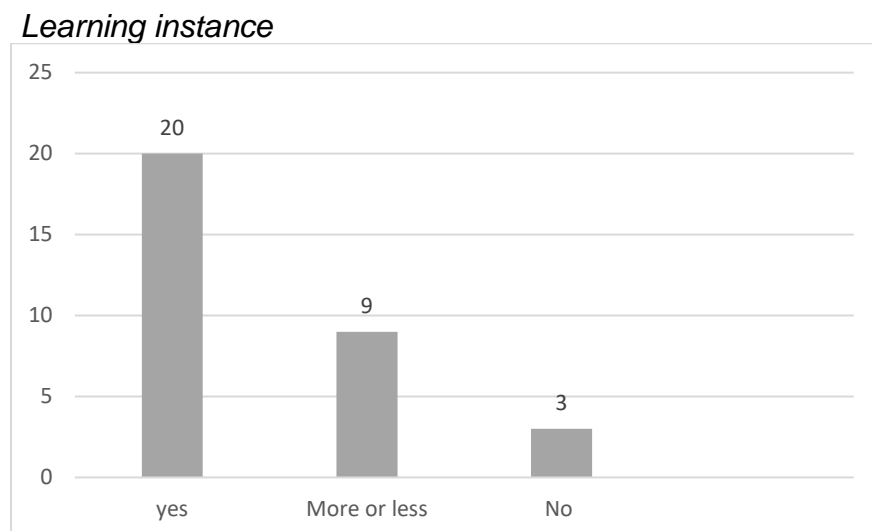
As shown in Figure 4, the most used word by the participant was *gustó* [like] repeated 19 times, they expressed that they had liked the methodology as it was implemented. The second word was *todo* [everything] used 10 times, referring to that they had liked everything done in classes. The third most frequent word was *desorden* [mess] repeated 5 times, referring to both situations: when they had to rotate from one station to another, and their classmates’ behavior.

Therefore, those students expressed that there were disadvantages in using the station rotation model to learn vocabulary: the lack of time to work in the stations, the mess when they had to rotate from one station to another.

4.2.3 Category: learning instance

To gather data about the use of the station rotation model as a learning instance, two questions were asked to students.

Figure 5



Source: self-elaboration.

The first question was *Do you think that you learned new words using the station rotation model?* As shown in Figure 5, most of the students (61%) answered that they had learned new words by using the model. 3 participants (9%) declared that they had not learned from this methodology. 9 (29%) participants chose the option “*more or less*” to answer the question. In addition, an open-ended question was asked about this topic: *Do you believe that you learned new vocabulary using the station rotation model? Write 2 different ideas.* Most of the students declared that they had learned new vocabulary words by using the station rotation model. For instance, participant 6 stated that “*lo que mas aprendí fueron más palabras en inglés*” [what I learned the most was more words in English]. One participant commented that he had learned about word pronunciation. He pointed out that “*aprendí pronunciación*” [I learned pronunciation]. One student answered that he had learned the words because he had had a lot of opportunities to interact with them. For instance, he wrote that “*si, porque como jugabas con las palabras las veías en todas partes y te las aprendías*” [yes, because as you were playing with the words, you looked at them everywhere and you learned them].

One participant said that he had learned about reading sentences. It can be the result of practicing vocabulary using True and False activities. He stated that “*si aprendí muchas*

4.2.4 Category: improvement for future application

The objective of this category was to reveal students' suggestions to improve the implementation of the station rotation model to learn new vocabulary in future applications.

Most of the students declared that they would not change anything. One of them declared that he did not have to study a lot to understand the words. Participant 1 stated that *“nada, yo entendí mejor y sin tener que estudiar tanto como otras veces”* [nothing, I understood better without having to study as much as other times]. Participant 31 added that *“la verdad es que no cambiaría nada así que me gustó entendí más la materia”* [the truth is that I would not change anything, I like this way, I understood the content better]. Another convergence found was that they would change the place where the rotation model implementation took place. For example, participant 3 pointed out that *“que las actividades tuvieran más tiempo y que hicieramos algo al aire libre”* [that the activities have more time and to do something outside]. Participant 13 agreed on this, commenting *“salir afuera hacer mas actividades como juegos en app”* [go outside, do more activities such as games using apps]. Three participants declared that they would have liked to have more time to do the activities. For example, participant 10 said that *“que tenga más tiempo y guías un poco más largas”* [more time and worksheets that are a little bit longer]. Two students commented they would like to change their classmates' behaviour. For instance, participant 19 pointed out that *“yo creo que lo que se tiene que mejorar somos nosotros ya que mayormente hacemos mucho ruido en la sala y no dejamos llegar los contenidos”* [I think that what must be improved is us because we most of the time make a lot of noise, we don't pay attention to the content]. Participant 12 added that *“el comportamiento de mis compañeros, tener más tiempo y hacer rotaciones fuera”* [my classmates' behavior and to do the rotations outside the classroom].

Figure 7 shows the results from the word cloud analysis of the question in the students' questionnaire. It represents a summary of the most frequent concepts and ideas given by the participants throughout their responses.

Figure 7

Students' most frequent concepts about improvement for future application

before and after the implementation of the station rotation model. The p-value in two tails was 0.08. Therefore, it was proved statistically that the sample of 34 students who participated in this action research improved the learning of vocabulary, using the station rotation model. The effectiveness of the station rotation model in an EFL classroom has also been explored by Nisa (2018), to improve students' reading skill. This experimental study revealed statistically significant differences on those students who participated using the station rotation model in comparison to the control group who did not. This relates to the results in Safira (2022)'s study, who implemented the station rotation model to improve stress and intonation. Safira (2022) also concluded that there was a significant difference between the pre-posttests applying the student's T-test to prove his hypothesis that the implementation of the station rotation model had a good effect on English pronunciation skill.

5.1.2 Specific objective 2: To analyze participants' views towards the implementation of the station rotation model.

To analyze specific objective number two, a questionnaire was applied to students at the end of the implementation of this action research. The instrument contained 7 different questions to gather data, which were divided into 4 categories and 2 sub-categories. Regarding the category **motivation**, most of the students claimed that they had felt motivated to learn new vocabulary in English. Indeed, 28 participants out of 34 declared that they had enjoyed learning new words in English. As said by Escobar et.al (2019) motivation is the main factor affecting foreign language learning since it mediates the attitudes toward the target language and the outputs in the process of learning it (p.1). By answering these questions, the teacher could have access to check if the students had intrinsic motivation in learning English.

Research participants' perceptions on the experience of the station rotation model to learn new vocabulary were generally positive. Twenty-one students answered that they had liked the learning process through this methodology. They declared that the main advantage of the station rotation model was to be able to learn while having fun. They mentioned that they had liked to learn using board games, technology and having the opportunity to work with their peers. Some students also stated that they had enjoyed the experience of doing something different in class. Similar advantages of the station rotation model such as having fun, working in groups, use of technology and playing games are mentioned by Ku & Truitt (2018); Ahmed (2021) and Varghese and Ranjith (2019).

To gather data on the disadvantages of the station rotation model, students were asked to answer what they did not like about the methodology. It is important to mention that fourteen students declared that they did not find any disadvantage. Based on this response, it can be observed, there is an agreement with their previous comments. Out of thirty-four who participated in this study, only four declared that the main disadvantages were their classmates' behavior and the time provided to complete activities in different stations. These drawbacks stated by students are similar to a study applied to teachers in USA who were asked what impeded the implementation of the methodology (Atchison et.al ,2020).

To gather data regarding the implementation of the station rotation model as a learning instance, two different questions were asked to the participants. The first question was: Do you think that you learned new words using the station rotation model? Nineteen students declared that they had learned by using this methodology. Nine students declared that they had kind of learned and three students answered that they had not learned. Of those who declared that had not learned any new word, they declared that it was because they already knew the vocabulary words. In terms of suggestions for future application of this methodology, they referred about the time given to complete the activity in the different stations, a similar suggestion was giving by the participant of Belazi and Ganapathy's study (2021). They found that "a sizeable proportion of the participants (18) pointed at the short duration of the SRM intervention in terms of the number of sessions. 16 learners in parallel underscored the short time length of each session as a second drawback for the program" (p.121).

5.2 Limitations

During the implementation of this action research, some limitations emerged. The main drawback encountered had to do with the fact the teacher-researcher had not had the opportunity to teach participants before the implementation, therefore, she did not know them, their interests, and their names. She considered that this had an impact on implementing the action plan to put into practice the methodology, and to manage the class. On one hand, the researcher did not know the participants' interests, their English level, and their previous experiences on playing games to learn English. As part of one station of the methodology related to playing games, it can be mentioned that at the beginning it was difficult for them to follow the procedure of the game because they had not played it before. On the other hand, at the beginning of the implementation, there were some issues with classroom management because as the teacher-researcher did not know the students' names, therefore, when some students were not doing what they were supposed to, they could not be reached immediately. It is important to mention that they were forty-six students in this grade.

Moreover, during the first two classes, the implementation took place in a laboratory which made the implementation of the methodology hard. To begin with, it did not have access to internet connection and one of the stations of the rotating method required the use of technology. To solve this problem, students had to go outside the lab to be able to do the online activities. Secondly, the laboratory has huge which made it difficult to talk to students who were sitting at the end of the room and to see the whiteboard to take notes during the whole lesson time. Thirdly, being in a different room, the students were distracted because they had some behavioral problems; therefore, they were not used to going to other school's facilities to have their classes. For all these reasons, implementing the lessons was a hard work as the students were over excited and did not pay attention to class.

Furthermore, the methodology had to be adapted to the class size and the classroom space. In our Chilean schools, it is common to use rows as the traditional seating arrangement due to the number of students and the classroom size. Therefore, making

the students rotate in their classroom was impossible. To overcome this, it was decided that the material and resources would rotate in the different rows instead of having students rotating. Consequently, the students kept on seating in the traditional seating; however, the different stations rotate through the rows.

Finally, participants were not used to play board games in class and to use concrete material instead of worksheets. Therefore, the two first classes of the implementation, the independent station where students needed to play games, took longer than it was expected. Once they received the material, they spent time just playing with the dices or cards, without a learning purpose. After that, they realized that they had not comprehended the purpose of the game when it was explained. Therefore, it was decided to do this station by using two different kinds of board games, and connect four. Consequently, during the third day of the implementation, they were able to play the game properly without a lot of guidance and work independently.

5.3 Implications

Despite the limitations, there were some methodological implications that are worth considering. Not many Chilean teachers use the station rotation model in their classroom instruction because of the lack of evidence in their effectiveness in our Chilean educational context. The findings of this study may encourage teachers to implement the methodology not only in private schools but also in public schools. The station rotation model is a realistic teaching method that can be applied in Chilean school despite of class size. The key requirements to implement the methodology are strong instructions and internet-connected devices rather than small class size.

Moreover, the findings showed that students were willing to participate and try a new methodology to learn English as a foreign language. They felt engaged during the process of the implementation of the station rotation model. The participants mentioned in the questionnaire that they had like the method because their classes were always the same. Additionally, along the intervention, they noticed that they needed to work in each station to go to the next one. They understood that the stations were pedagogically connected.

Finally, it is important to mention that this methodology not only kept the participants engaged in the classes. The findings showed a statistical difference between the pre-vocabulary test and the post- vocabulary test. Consequently, it is concluded that by using the station rotation model students did learn new vocabulary in the English subject.

CHAPTER 6: CONCLUSIONS

6.1 Summary of the main findings

With respect to the first specific objective, which was to assess participants' level of vocabulary before and after the implementation of the station rotation model, it can be said that there was an improvement in students' results after the application of the methodology from a statistically significant difference as indicated by the student's T-test. Out of thirty- four participants of this action research study, thirty-two were able to improve their score compared to the ones from the pre- vocabulary test conducted before the implementation of the station rotation model. Two students kept their initial scores. Regarding the group of students who improved their results. Most of them showed an improvement in the **item True and False**. The total score for this item in the pre-intervention vocabulary test was 78 and in the post-intervention vocabulary test was 122. Therefore, there was an increase of 44 points. In contrast, the item which had the lowest improvement was the **Matching item** due to most of the students correctly responded this question in the pre-test. Therefore, this item did not show a score difference between the pre and post-intervention test. Regarding the items evaluated in the pre and post-vocabulary test, it can be said that the items which evaluated receptive vocabulary: matching and multiple choice were the ones with higher scores. The item **Fill in the gaps** where students needed to apply the vocabulary learned was the one with the lowest results in both tests. I believe that one the reason why this item was the most difficult for them is because students needed to read sentences and to apply the vocabulary in a context. It is important to mention that in this item 14 student were not able to answer in contrast to the 9 in the post intervention test who did answer the exercise. Therefore, despite it was the item with the lowest score there was also an improvement.

Regarding the second specific objective, to analyze participants' perceptions towards the implementation of the station rotation model, it can be pointed out that the vast majority of the students who participated in this study felt comfortable using this methodology. As expressed in the student questionnaire, many students declared that they had learned while playing and having fun. Some participants declared that they had enjoyed the type of activities, to play games in classes, and use different applications to practice new words. Most of the participants declared that they had learned new words using the station rotation model. One student declared that he had learned new words because they (words) were everywhere referring that they were present in each station. Two participants who declared that had not learned new words because they already knew them; however, they expressed in their answers that they had enjoyed using the methodology and they believed that their classmates had learned. Moreover, students were able to give suggestion for future applications which agreed with the main disadvantage that they expressed related to having more time between each rotation and to improved their behavior.

6.2 Personal reflection

Conducting this action research has been a very significant experience for the teacher-researcher and the participants for several reasons.

Firstly, it was a challenge for the researcher to implement a new methodology with a large group of students, forty-six in total. Designing the intervention for this group in particular made the teacher researcher realize the importance of knowing the context and the students in order to plan a lesson and to use effective classroom management strategies. Moreover, as an educator, it was very satisfying to overcome some limitations and take the right decisions to implement the methodology. It was also rewarding to watch the participant after three lessons to be into the methodology and enjoy each station as it was planned. The researcher realized how valuable it was to trust on students' capacity to do the tasks. As an English teacher, I appreciate having had the opportunity to apply this methodology in a context similar to context that an English teacher teaches in Chile: large class size, internet connection problems, limited classroom space, and lack of resources to name a few. I feel proud that I took the right and appropriate decision when it was necessary to help my students to feel more comfortable with the station rotation model and without giving up on the methodology.

Considering that this was the first time they had been taught by the teacher researcher, I believed that they were very committed and had a positive attitude towards the station rotation model. They decided to participate in this action research voluntarily, they did the activities each class, and despite there were some disrupted students, most of the students behaved well and helped during implementation. Most of the students mentioned during the sessions that they were not used to work in pairs, and do different activities. They appreciated to have had a different class and had fun while learning.

6.3 Recommendations

As recommendations for further research, I can conclude that the implementation of this methodology would be a great help if applied at the beginning of the semester rather at the end, like it was applied in this research. By doing this, probable the results would have been much better than the ones obtained.

I also believe that this methodology should be kept as permanent practice in this English course. For instance, it should be a model of planning during the semester as well as it is the PPP lesson plan to teach vocabulary. I believe that implementing the station rotation model in the English class will help those students who have different learning styles, students with special needs and to personalize the teaching and learning process. Due to the fact in Chile most of the teachers face large size class, it is difficult to notice the challenges that students face when learning, however, implementing the station rotation model can give an insight of it when working on the teacher-lead station.

I also believe that it would be great to spend extra time to teach the procedure of the methodology and the games that are used in the intervention. In order to avoid misunderstandings and have the participants concentrated on the purpose of each station.

For further research, I think that I would be interested in studying the effect of the station rotation model upon the different language skills in different contexts.

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APPENDICES

APPENDIX 1: Participants' assent form

ASENTIMIENTO INFORMADO

Título de proyecto: Implementación de estaciones de rotaciones para el aprendizaje de vocabulario en Inglés
--

Hola mi nombre es Nayareth Hernández y soy profesora de Inglés. Actualmente estoy realizando un estudio para conocer acerca de una metodología de rotaciones para aprender vocabulario en inglés.

Tu participación en el estudio consistiría en participar activamente en clases, realizar evaluaciones formativas (sin notas), un test y post test y finalmente completar un cuestionario escrito.

Tu participación en el estudio es voluntaria, es decir, aún cuando tus apoderado haya dicho que puedes participar, si tú no quieres hacerlo puedes decir que no. Es tu decisión si participas o no en el estudio. También, es importante que sepas que si en un momento ya no quieres continuar en el estudio, no habrá ningún problema, o si no quieres responder a alguna pregunta en particular, tampoco.

Toda la información que nos proporcionas/ las mediciones que realicemos nos ayudarán a mejorar tu aprendizaje de vocabulario en la asignatura inglés y analizar si la metodología es efectiva.

Esta información será confidencial. Esto quiere decir que no diremos a nadie tus respuestas (O RESULTADOS DE MEDICIONES), sólo lo sabrán las personas que forman parte del equipo de este estudio. Tampoco serás grabado ni te sacaremos fotos.

Si aceptas participar, te pido que por favor pongas una (✓) en el cuadro de abajo que dice “Sí quiero participar” y escribe tu nombre.

Si no quieres participar, no pongas ninguna (✓), ni escribas tu nombre.

Sí quiero participar

Nombre: _____

Nombre y firma de la persona que obtiene el asentimiento:

Fecha: _____ de _____ de ____

APPENDIX 2: Parent/ tutor consent form

Carta de consentimiento para padres, madres y/o apoderados

Proyecto de investigación implementación de estaciones de rotaciones para el aprendizaje de vocabulario en Inglés

Estimados padres, madres y/o apoderados:

Junto con saludarles, tenemos el agrado de informarles que el curso su pupilo/a, ha sido seleccionado para participar en un proyecto de investigación-Acción para mejorar el aprendizaje del vocabulario en la asignatura de Inglés, realizado por la facultad de Educación de la Universidad de Concepción en alianza con el establecimiento educación Padre Luis Amigó. Esta investigación tiene como objetivo implementar una metodología de rotaciones de trabajo para mejorar el aprendizaje del vocabulario en la asignatura, y busca analizar las percepciones de los estudiantes en cuento a la nueva metodología. Considerando lo anterior, solicitamos su autorización para que las evaluaciones, actividades que su pupilo/a realice en clases puedan ser usados fines de investigación. Su participación en este programa es completamente voluntaria y no implica ningún riesgo ni costo directo hacia su persona y/o pupilo/a. Por último, en ningún momento durante la investigación se hará grabación de los estudiantes, ni tampoco se tomarán fotos de ellos. En caso de que tenga dudas sobre su participación en esta instancia, puede dirigirse a la investigadora, cuyo correo electrónico es nayahernandez@udec.cl

Consentimiento Informado Implementación de estaciones de rotaciones para el aprendizaje de vocabulario en Inglés

Yo, _____, RUT, _____ autorizo voluntariamente a mi pupilo/a _____, RUT, _____, a participar en el proyecto de investigación-acción sobre implementación de estaciones de rotaciones para el aprendizaje de vocabulario en Inglés y autorizo que las evaluaciones y actividades que su pupilo/a realice en clases puedan ser usados fines de investigación. Comprendo que dicha participación no tiene costos ni riesgos para mi pupilo/a.

Firma Estudiante

Firma Apoderado

APPENDIX 3: Pre-intervention vocabulary test

Pre intervention vocabulary test

Student's name:		Grade: 8th grade
Learning Objective: - To identify vocabulary related to travelling around the city.		
Date:	Ideal Score: 25	Total Score:

Matching

- I. Look at the images. Read the vocabulary words. Match by writing the correct number in the parenthesis. There are two extra words. (___/5 pts)

1) museum (___)

2) bookshop

3) airport (___)

4) market

5) restaurant (___)

6) theater

7) station (___)



()



True or false

II. Look the pictures. Read the sentences and answer true or false. Circle your option. (/5pts)

1.- The children are catching the bus.



- a) True
- b) False

2.- The people are getting off the train.



- c) True
- d) False

3.- The man is going on holiday.



- a) True
- b) False

4.- The girl is getting on the plane.



- a) True
- b) False

5.- The people are catching the train.



- a) True
- b) False

Fill in the gap

1. Look at the words in the box. Read the sentences presented below choose the correct word to fill in the gap. There is one extra word. (_/5pts)

travel itinerary- travel light- accommodation- budget- travel abroad - trip

- 1) She likes to _____ she always takes the essentials.
- 2) They are going to Santiago. Their _____ includes: location, food, things to do.
- 3) I cannot buy many things. My _____ does not include souvenirs.
- 4) You need a visa to _____.
- 5) This hotel is huge. We chose this _____ for this trip.

Multiple choice

1. Look at the images. Read the options. Circle the correct answer. (_/5pts).

1.-



- a) tour bus
- b) cable car
- c) rail road

2.-



- a) subway
- b) rail road
- c) bike share

3.-



- a) bike share
- b) subway
- c) rail road

4.-



- a) cable car
- b) subway
- c) rail road

5.-



- a) subway
- b) tour bus
- c) theater

6.-



- a) subway
- b) department store
- c) market

7.-



- a) theater
- b) cinema
- c) bookshop

8.-



- a) department store
- b) bus tour
- c) bus station

9.-



- a) rail road
- b) bookshop
- c) mountain

10.-



- a) theater
- b) museum
- c) cinema

APPENDIX 4: Post intervention vocabulary test

Post intervention vocabulary test

Student's name:		Grade: 8th grade
Learning Objective: - To identify vocabulary related to travelling around the city.		
Date:	Ideal Score: 25	Total Score:

Matching

III. Look at the images. Read the vocabulary words. Match by writing the correct number in the parenthesis. There are two extra words. (___/5 pts)

8) Museum (___)

9) Bookshop

10) Airport (___)

11) Market

12) Restaurant (___)

13) Theater



14) Station

()



()



True or false

IV. Look the pictures. Read the sentences and answer true or false. Circle your option. (/5pts)

1.- The children are catching the bus.



- e) True
- f) False

2.- The people are getting off the train.



- g) True
- h) False

3.- The man is going on holiday.



- c) True
- d) False

4.- The girl is getting on the plane.



- c) True
- d) False

5.- The people are catching the train.



- c) True
- d) False

Fill in the gap

II. Look at the words in the box. Read the sentences presented below choose the correct word to fill in the gap. There is one extra word. (_/5pts)

travel itinerary- travel light- accommodation- budget- travel abroad - trip

- 6) She likes to _____ she always takes the essentials.
- 7) They are going to Santiago. Their _____ includes: location, food, things to do.
- 8) I cannot buy many things. My _____ does not include souvenirs.
- 9) You need a visa to _____.
- 10) This hotel is huge. We chose this _____ for this trip.

Multiple choice

II. Look at the images. Read the options. Circle the correct answer. (__/5pts).

1.-



- a) tour bus
- b) cable car
- c) rail road

2.-



- a) subway
- b) rail road
- c) bike share

3.-



- a) bike share
- b) subway
- c) rail road

4.-



- a) cable car
- b) subway
- c) rail road

5.-



- a) subway
- b) tour bus
- c) theater

6.-



- a) subway
- b) department store
- c) market

7.-



- a) theater
- b) cinema
- c) bookshop

8.-



- a) department store
- b) bus tour
- c) bus station

9.-



- a) rail road
- b) bookshop
- c) mountain

10.-



- a) theater
- b) museum
- c) cinema

APPENDIX 5: Student questionnaire

Cuestionario

Nombre estudiante:	Curso
Edad :	

Usa lápiz pasta o mina. Usa letra legible. Lee cuidadosamente las preguntas y responde cada una de ellas.

1. ¿Te gusta aprender nuevas palabras en inglés? Marca una sola respuesta.
 - a) Si
 - b) No
 - c) Más o menos

2. ¿Te gustó aprender usando estaciones de trabajo? Marca una sola respuesta.
 - d) Si
 - e) No
 - f) Más o menos

3. ¿Sientes que aprendiste nuevas palabras usando rotaciones? Marca una sola respuesta.

- g) Si
- h) No
- i) Más o menos

4. ¿Qué fue lo que más te gustó de la metodología de rotaciones de estaciones? Por favor, escribe al menos 2 ideas distintas. Te puedes referir a las actividades, los temas, juegos, aplicaciones, etc.

5. ¿Qué fue lo que no te gustó de la metodología de rotaciones? Por favor, escribe al menos 2 ideas distintas. Te puedes referir a las actividades, los temas, juegos, aplicaciones, etc.

6. ¿Qué mejorarías o cambiarías de esta metodología rotaciones de estaciones? Por favor, escribe al menos 2 ideas distintas. Puedes referirte a los tiempos, actividades, etc

7. ¿Crees que aprendiste vocabulario nuevo usando la metodología rotaciones en estaciones? Por favor, escribe al menos 2 ideas distintas.

AP

N° and date	Objective of the session			
1st sesión	Students will be able to answer a pre intervention vocabulary test	Students answer 25 questions in the pre-intervention vocabulary test	pre- intervention vocabulary test	To assess participants' level of vocabulary before the implementation of the station rotation model.
2nd session	Students will be able to identify vocabulary related to places of the city.	<p>Mini lesson 10 minutes to present the key vocabulary</p> <p>Students are divided into three different stations.</p> <p>The teacher assigned the groups in order to have different level of English in each one. The purpose of this decision is that students who have good level of English can help students who have difficulties in English.</p>		To assess participants' level of vocabulary before the implementation of the station rotation model.

		<p>Teacher explains to the students the procedure of how and when they will rotate to different station,</p> <p>Group 1 Teacher leads-station. It starts with the language in order to provide them a support before starting the activities.</p> <p>Group 2 Collaboration station</p> <p>Students in pairs complete a task using the vocabulary. After finishing, the compare their answer with another pair. 1 student will be delivered the key answer.</p> <p>Group 3 Technology station</p> <p>Using the cellphones students enters to the online task using an app.</p> <p>Teacher wrap-up the class Students write at least 3 sentences using the target vocabulary Students take the vocabulary quiz</p>		
3rd session	Students will be able to identify vocabulary to write short	Mini lesson 10 minutes to present the key vocabulary	Quiz	To assess participants' level of vocabulary before the

	sentences using station rotation model	<p>Students are divided into three different stations.</p> <p>The teacher assigned the groups in order to have different level of English in each one. The purpose of this decision is that students who have good level of English can help students who have difficulties in English.</p> <p>Teacher explains to the students the procedure of how and when they will rotate to different station,</p> <p>Group 1 Teacher leads- station. It starts with the language in order to provide them a support before starting the activities.</p> <p>Group 2 Collaboration station</p> <p>Students in pairs complete a task using the vocabulary. After finishing, the compare their answer with another pair. 1 student will be delivered the key answer.</p> <p>Group 3 Technology station</p>		implementation of the station rotation model.
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		<p>Using the cellphones students enters to the online task using an app.</p> <p>Teacher wrap-up the class Students write at least 3 sentences using the target vocabulary Students take the vocabulary quiz</p>		
4th session	Students will be able to identify vocabulary to produce short sentences orally using station rotation model	<p>Mini lesson 10 minutes to present the key vocabulary Students are divided into three different stations.</p> <p>The teacher assigned the groups in order to have different level of English in each one. The purpose of this decision is that students who have good level of English can help students who have difficulties in English.</p> <p>Teacher explains to the students the procedure of how and when they will rotate to different station,</p> <p>Group 1 Teacher leads-station. It starts with the language in order to provide them a support before starting the activities.</p> <p>Group 2</p>	Quiz	

		<p>Collaboration station</p> <p>Students in pairs complete a task using the vocabulary. After finishing, the compare their answer with another pair. 1 student will be delivered the key answer..</p> <p>Group 3</p> <p>Technology station</p> <p>Using the cellphones students enters to the online task using an app.</p> <p>Teacher wrap-up the class Students write at least 3 sentences using the target vocabulary Students take the vocabulary quiz.</p>		
5th session	Students will be able to identify vocabulary to produce short sentences orally using station rotation model	<p>Mini lesson 10 minutes to present the key vocabulary Students are divided into three different stations.</p> <p>The teacher assigned the groups in order to have different level of English in each one. The purpose of this decision is that students who have good level of English can help students who</p>		

		<p>have difficulties in English.</p> <p>Teacher explains to the students the procedure of how and when they will rotate to different station,</p> <p>Group 1 Teacher leads-station. It starts with the language in order to provide them a support before starting the activities.</p> <p>Group 2 Collaboration station</p> <p>Students in pairs complete a task using the vocabulary. After finishing, the compare their answer with another pair. 1 student will be delivered the key answer..</p> <p>Group 3 Technology station</p> <p>Using the cellphones students enters to the online task using an app.</p> <p>Teacher wrap-up the class Students write at least 3 sentences using the target vocabulary Students take the vocabulary quiz.</p>		
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<p>6th session</p>	<p>Students will be able to identify vocabulary to produce short sentences orally using station rotation model</p>	<p>Mini lesson 10 minutes to present the key vocabulary Students are divided into three different stations.</p> <p>The teacher assigned the groups in order to have different level of English in each one. The purpose of this decision is that students who have good level of English can help students who have difficulties in English.</p> <p>Teacher explains to the students the procedure of how and when they will rotate to different station,</p> <p>Group 1 Teacher leads-station. It starts with the language in order to provide them a support before starting the activities.</p> <p>Group 2 Collaboration station</p> <p>Students in pairs complete a task using the vocabulary. After finishing, the compare their answer with another pair. 1 student will be delivered the key answer..</p> <p>Group 3</p>		
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		<p>Technology station</p> <p>Using the cellphones students enters to the online task using an app.</p> <p>Teacher wrap-up the class Students write at least 3 sentences using the target vocabulary</p>		
7th session	Students will be able to answer a post intervention vocabulary test and complete the students questionnaire	<p>-Students complete the students questionnaire</p> <p>-Students answer 25 question in the pre- intervention vocabulary test</p>	<p>pre- intervention vocabulary test</p> <p>Students questionnaire</p>	<p>To assess participants' level of vocabulary after the implementation of the station rotation model.</p> <p>To analyze participants' perceptions towards the implementation of the station rotation model to learn new vocabulary in the EFL classroom.</p>

5	5	5	0,0
5	5	5	0,0
5	5	5	0,0
5	5	5	0,0
5	5	5	0,0
5	5	5	0,0
2	4	3	1,0
5	5	5	0,0
5	5	5	0,0
5	5	5	0,0
5	5	5	0,0
Total: 164	168	166	2,00

APPENDIX 8: Results true and false item

Student	Pre test	post test	mean	standard deviation
	true and false	true and false		
student 1	1	3	2	1,00
student 2	5	5	5	0,00
student 3	3	4	3,5	0,50
student 4	3	5	2	1,00
student 5	2	2	2	0,00
student 6	3	2	2,5	0,50
student 7	3	5	4	1,00
student 8	2	3	2,5	0,50
student 9	4	4	4	0,00
student 10	2	5	3,5	1,50
student 11	2	3	2,5	0,50
student 12	2	2	2	0,00
student 13	3	4	3,5	0,50
student 14	5	4	4,5	0,50
student 15	0	4	2	2,00
student 16	2	4	3	1,00
student 17	1	2	1,5	0,50
student 18	2	4	3	1,00
student 19	1	5	3	2,00
student 20	2	3	2,5	0,50
student 21	2	4	3	1,00
student 22	2	5	3,5	1,50
student 23	4	4	4	0,00
student 24	2	4	3	1,00
student 25	1	4	2,5	1,50

student 26	3	2	2,5	0,50
student 27	1	2	1,5	0,50
student 28	2	4	3	1,00
student 29	3	5	4	1,00
student 30	1	1	1	0,00
student 31	2	4	3	1,00
student 32	2	3	2,5	0,50
student 33	3	4	3,5	0,50
student 34	2	3	2,5	0,50
Total	78	122	100	22,00

Appendix 9: Filling the gap

Student	Pre test	post test	mean	Standard deviation
	fill in the gap	fill in the gap		
student 1	3	3	3	0,00
student 2	3	4	3,5	0,50
student 3	0	0	0	0,00
student 4	2	5	3,5	1,50
student 5	2	1	1,5	0,50
student 6	2	0	1	1,00
student 7	3	2	2,5	0,50
student 8	0	3	1,5	1,50
student 9	3	5	4	1,00
student 10	4	3	3,5	0,50
student 11	0	0	0	0,00
student 12	1	2	1,5	0,50
student 13	0	2	1	1,00
student 14	4	3	3,5	0,50
student 15	0	0	0	0,00
student 16	0	1	0,5	0,50
student 17	0	3	1,5	1,50
student 18	0	0	0	0,00
student 19	0	5	2,5	2,50
student 20	0	2	1	1,00
student 21	0	0	0	0,00
student 22	2	2	2	0,00
student 23	2	3	2,5	0,50
student 24	2	1	1,5	0,50
student 25	0	0	0	0,00
student 26	4	2	3	1,00

student 27	0	0	0	0,00
student 28	0	3	1,5	1,50
student 29	1	3	2	1,00
student 30	0	1	0,5	0,50
student 31	2	2	2	0,00
student 32	0	0	0	0,00
student 33	2	1	1,5	0,50
student 34	2	1	1,5	0,50
Total	44	63	53,5	9,50

Appendix 10: Results multiple choice item

Student	Pre test	post test	mean	Standard deviation
	multiple choice	multiple choice		
student 1	9	10	9,5	0,50
student 2	10	10	10	0,00
student 3	10	10	10	0,00
student 4	10	10	10	0,00
student 5	7	10	8,5	1,50
student 6	6	10	8	2,00
student 7	10	10	10	0,00
student 8	10	10	10	0,00
student 9	9	10	9,5	0,50
student 10	9	9	9	0,00
student 11	10	10	10	0,00
student 12	10	10	10	0,00
student 13	10	10	10	0,00
student 14	10	10	10	0,00
student 15	10	10	10	0,00
student 16	10	10	10	0,00
student 17	10	10	10	0,00
student 18	10	10	10	0,00
student 19	9	10	9,5	0,50
student 20	8	10	9	1,00
student 21	10	10	10	0,00
student 22	9	10	9,5	0,50
student 23	8	10	9	1,00
student 24	8	10	9	1,00
student 25	10	10	10	0,00
student 26	9	10	9,5	0,50
student 27	10	10	10	0,00

student 28	10	10	10	0,00
student 29	10	10	10	0,00
student 30	7	8	7,5	0,50
student 31	10	10	10	0,00
student 32	10	10	10	0,00
student 33	10	10	10	0,00
student 34	8	10	9	1,00
Total	316	337	326,5	10,50