Scaffolding strategy for encouraging Speaking skills among tenth graders

Aplicación de la estrategia de andamiaje para mejorar las habilidades de la expresión oral en alumnos de décimo grado

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Resumen

Introducción: Ecuador es uno de los países de América Latina con menor nivel de Inglés, por esta razón, muchas investigaciones han sido llevadas a cabo para enfrentar este problema. **Objetivos:** El presente estudio exploró el impacto de aplicar la estrategia de Andamiaje para el desarrollo del inglés como lengua extranjera enfocándose en la habilidad de hablar. **Metodología:** Se utilizó una investigación cuasiexperimental. Los participantes fueron estudiantes del décimo grado de la "Unidad Educativa Belisario Quevedo" de Pujilí-Ecuador. El método de muestreo fue intencional no probabilístico. El instrumento fue obtenido de la sección de expresión oral del examen de Cambridge PET (Preliminary English Test A2) funcionando como pre-test y post-test. Posteriormente, se aplicó la Estrategia de Andamiaje a un grupo. Los alumnos tuvieron 14 sesiones de clases con un procedimiento estructurado diseñado de acuerdo con las etapas de la estrategia ya mencionada. Al final del estudio, todos los participantes fueron evaluados mediante un post-test para medir la eficacia de la estrategia. **Resultados:** Los Hallazgos fueron muy satisfactorios debido a que los niveles de expresión oral de los alumnos en los que se aplicó la estrategia aumentaron significativamente. Además, aspectos como la Gramática y el Vocabulario, la Pronunciación y la Comunicación Interactiva se fortalecieron a través de las etapas de la estrategia de Andamiaje. **Conclusiones:** Los resultados de este estudio apoyan el uso de la estrategia de andamiaje en las destrezas orales permitiendo a los estudiantes comprender más información e incorporar nuevas ideas a sus conocimientos previos. **Área de estudio general:** Educación. **Área de estudio específica:** Aprendizaje del idioma Inglés.

Keywords: efectividad, expresión oral, andamiaje, estrategia, décimo grado.

Abstract

**Introduction:** Ecuador is one of the countries in Latin America with the lowest level of English, for this reason, many researches have been conducted to face this problem. **Objectives:** The present study explored the impact of applying the Scaffolding strategy for developing English as a foreign language focusing on speaking skills. **Methodology:** A quasi-experimental research was used. The participants were tenth-grade students of the "Unidad Educativa Belisario Quevedo" in Pujilí-Ecuador. The sampling method was non-probabilistic and intentional. The instrument was obtained from the oral expression section of the Cambridge PET exam (Preliminary English Test A2) functioning as a pre-test and post-test. Subsequently, the Scaffolding Strategy was
applied to one group where students had fourteen class sessions with a structured procedure designed according to the stages of the already mentioned strategy. At the end of the study, all participants were evaluated through of a post-test to measure the effectiveness of the strategy. **Results:** The findings were highly satisfactory due to students’ speaking levels where the strategy was applied, significantly increased. Eventually, aspects like Grammar and Vocabulary, Pronunciation, and Interactive Communication were strengthened through the stages of the Scaffolding strategy. **Conclusions:** The results of this study support the use of the Scaffolding strategy in oral skills allowing students to comprehend more information and incorporate innovative ideas into their prior knowledge. **The general area of study:** Education. **Specific area of study:** English language learning.

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**Introduction**

The teaching process of foreign languages has been gradually integrated into education and one of the most important languages is English. English is used in many areas like education, business, tourism, and others (Hsu, 2013). So, the essential characteristic of using English is to communicate and how people around the world share information (Langdon & Pandor, 2020).

Therefore, the English language has a significant impact on education, and its teaching in some Latin countries like Ecuador has been strengthened in recent years (Xu et al., 2020). As a result, the teaching of a foreign language is aligned with the parameters established within the Common European Framework of Reference for Languages and its objective for the year 2024 is to include the need for increasing the level of training and qualification of young people and the working population (Lamb, 2020).

Ecuador remains one of the two Latin American countries with the worst level of English language proficiency that is why the score is 440 over 1000, according to the EF EPI (English Proficiency Index) 2021 report. The mentioned score is equivalent to an A1 level, for that reason, Ecuador has made many implementations into the teaching-learning process mainly in the language field. However, these changes or implementations have become less relevant due to the lack of teachers professionally specialized in the language.
Eventually, according to the observations made in the academic field, it has been detected that the lack of strategies and methods for teaching caused a decrease of 60%, since it exponentially moves away from the taste for learning a foreign language, especially in listening and speaking skills, that is why the low training of competencies into these skills is in accordance with the low levels. As a result, The Ministry of Education in the year 2021 took measures to strengthen and create a new curriculum that fits the needs of the Ecuadorian reality.

In this study, English oral expression has been chosen as the problem to solve, because the correct use of this English skill allows students and teachers to have better interaction. This skill favors the communicative environment since students share their ideas in a clear, complete, and concise way (Adab, 2017).

According to Griva et al. (2020), an emblematic area for English learners is to develop oral proficiency. Although, students are often unable to make sense of their ideas while they are communicating because they face many challenges such as giving accuracy to the meaning as well relating their speech to the environment. That is why the primary role of teachers should be to help students to learn how to share ideas and communicate rather than teaching them to memorize (Bundick, 2014).

This research project seeks to improve and guide the educational process of teaching and learning English as a foreign language, especially by enhancing speaking skills using the scaffolding strategy. In the same line of study, Dennen (2013) mentions that Scaffolding guides and adequate the student's development and progress. Then, teachers can enhance learning by allowing students to exceed their own expectations. It also allows teachers to explore in depth how to use different classroom activities linked to the development of speaking skills. The use of the scaffolding strategy in the teaching of a foreign language promotes autonomous and meaningful learning, always based on the consolidation of knowledge (Lasso, 2021).

Based on this context, the research questions along with the respective hypotheses and objectives are the following:

- **RQ.** Does the Scaffolding strategy improve students’ speaking levels?
- **H0.** Applying the scaffolding model will not change the students’ level of speaking skills (same averages in the two groups).
- **H1.** Applying the scaffolding model will change the students’ level of speaking skills (different averages in the two groups).
- **G.O.** To test the effectiveness of scaffolding strategy to improve knowledge acquisition at various levels of verbal communication.
- **S.O.1.** To make a framework for the Scaffolding strategy to identify its dimensions.
- S.O.2. To identify the level of speaking about ten graders through a pre-test
- S.O.3. To apply the Scaffolding strategy and measure the impact on speaking skills through a post-test.
- S.O.4. To share the results of this research with other colleges to encourage the use of new methods in the teaching-learning process.

**Scaffolding Strategy**

Scaffolding is a strategy that uses different types of activities and materials done by the teacher; these are oriented to help students to develop new knowledge, due to the implementation of different didactic materials and methodologies that strengthen the teaching and learning process (Sari & Rozimela, 2021). This strategy allows teachers to explore in depth the use of different classroom activities related with the development of speaking skills through the following stages shown in Figure 1.

![Figure 1](image)

**Figure 1**

*Stages of Scaffolding strategy*

- **Modeling**
- **Achieving**
- **Imitating**
- **Removing**

*Note: Adapted from “The Implementation of Scaffolding Strategies at Speaking English Course in Kampung Inggris Pare East Java,” by Sari & Rozimela (2021). The graphic represents the four stages of Scaffolding strategy.*

**Modeling**

The first stage is to model students’ abilities to prepare and stimulate them before starting a new topic. Modeling is about teaching students the possible correct way of acting, thinking, or feeling in different kinds of situations. The teacher gives students time to familiarize themselves with what they should do and how to do it. To start, students must analyze how native speakers communicate. There are three kinds of modeling: think-aloud, talk-aloud, and performance modeling, in this case, think-aloud consists of the verbalization of the reasoning used to address a specific topic and the teacher provides examples and ideas about a topic (Seyedeh, 2016).
The topics must be related to prior concepts and knowledge to foreground the meaning-making process of the student. It’s important to assist students and provide explanations about what, why, when, and how to use what they are learning. The teacher gives the students only keywords and clues, which help them to remember the information considered important, by practicing feedback and assisting them when it is needed. The main idea is for the teacher to act as a scaffold and provide only enough information to guide the students to be more independent in learning a new lesson.

**Imitating**

In this model, the teacher encourages students to practice speaking skills while they use the provided vocabulary and imitate the teacher's pronunciation. In this stage, the instructor must assist and give feedback to students to correct the mistake, especially during the pronunciation and intonation of the words and phrases seen in the new lesson. The mentioned technique is used to drill into the teaching and learning process. If students have an incorrect pronunciation, they need to be guided and corrected by the teacher, who yields the audio with the correct pronunciation and the phonetic symbols. It is also necessary to emphasize a good intonation of phrases since drilling is used, and children can listen to the teacher and imitate words. In addition, groups of students are formed to do different tasks, so they can practice pronunciation and intonation in a real conversation. If students have any doubts or questions, they can ask the teacher.

**Removing**

Since the scaffolding was provided temporarily, in this stage, it begins to be removed to show a permanent framework for the understanding and learning of the student. Additionally, the difficulty of tasks increases. Another aspect to consider is that the teacher only gives substantial instructions, then students can repeat what has been learned working in pairs or groups, based on the instructions given in class, and help each other to improve by practicing. Support from the teacher is removed eventually since students have gained experience from doing tasks in which complexity is gradually increased. It is essential for the teacher to observe and supervise the class while students perform the activities. This allows the teacher to correct the mistakes that they may find in the students understanding.

**Achieving**

Students have achieved a higher level of understanding and can do activities and tasks without any support from the teacher. There are three functions to consider when practicing speaking skills: The first one is interaction, which includes the transmission of messages from one person to another. During this stage, there is interaction and communication between two or more people. The interaction produced is focused on
establishing social intimacy. The second is the transaction function, where it is necessary to make other people understand the message transmitted. The last function is called performance. In this stage, a monolog is preferred by using speeches, telling stories, conferences, etc. These functions improve speaking skills by facilitating learners to express thoughts, ideas, or feelings. With this last stage, the Scaffolding strategy has been applied so children learn from their mistakes and corrections given by the teacher. The scaffolding strategy helps students to develop their autonomy by managing their knowledge and skills.

Methodology

Quasi-experimental research was used due to the fact that a quasi-experimental design establishes a cause-and-effect relationship between the dependent and independent variables. Also, the participants were chosen by non-probability purposive sampling. The quasi-experimental research aims to test a causal hypothesis by manipulating (at least) one independent variable (Fernandez et al., 2014). In this study, there are two variables: speaking skills being the dependent variable and the scaffolding strategy independent variable one. As Fernandez mentions, the objective is to test a causal hypothesis, in this case, the application of scaffolding strategy by manipulating the independent variable. To accomplish that objective the following process was used according to the model developed by Hernández & Bautista (2006).

Figure 2

Research process

Note: Adapted from “Validez Estructurada para una investigación cuasi-experimental de calidad: se cumplen 50 años de la presentación en sociedad de los diseños cuasixperimentales”, by Fernandez et al. (2014), Anal. Psicol, 30(2).

The first step of sampling was to choose the population and define the units of study. For this step, convenience or opportunity sampling was used. This technique uses people from an already defined population which was chosen because of the convenience of the research (López, 2004).

The population defined were the students of "Unidad Educativa Belisario Quevedo" of Pujillí city since there is a relationship with this Institution. Tenth-grade students were
taken as a sample since they are the target group of this research. Moreover, the conditions of the mentioned sample are favorable for the study. The data were collected in February 2023, with prior authorization from the authorities. The instrument for the study was obtained from the Speaking Section of Cambridge Test PET (Preliminary English Test A2). It functioned as a pre-test and post-test. Level A2 is mainly used for ten graders according to the Cambridge English Qualifications (2020). The scale was developed by following well-documented instruments which link the students’ performance according to their level.

Cambridge Test PET (Preliminary English Test A2) was used due to it helps to identify students’ weaknesses and strengths. This test does not need validation because it is a standardized test that is also recognized and accepted by the best universities in the world. The evaluation aims to test the variables of Grammar and Vocabulary, Pronunciation, and Interactive Communication (Cambridge English Qualifications, 2020). Once the population size and the object of study were defined, the pre-test was applied to the two groups of interest (Otzen & Manterola, 2017).

To analyze the level of speaking. The test was applied by starting in a conversation, answering, and asking questions already established on the instrument. The conversation was conducted face-to-face with other candidates and two examiners. One of the examiners talked to the student while, the other examiner listened and registered the scores according to a scale from 1 to 5 by evaluating the variables of Grammar and Vocabulary, Pronunciation, and Interactive Communication (Khalifa, 2009). Consequently, a technical data sheet provides a description about the study.

### Table 1

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target</td>
<td>Two groups of 30 students (60 students in total)</td>
</tr>
<tr>
<td>Temporality</td>
<td>January 2023</td>
</tr>
<tr>
<td>Method</td>
<td>Questionnaire Pre-test and Post-test</td>
</tr>
<tr>
<td>Valid Questionnaires</td>
<td>60</td>
</tr>
</tbody>
</table>

*Note: Adapted from “Técnicas de muestreo y determinación del tamaño de la muestra en investigación cuantitativa.” By Rabolini (2009). Revista Argentina de Humanidades y Ciencias Sociales, 2. This table shows a resume of the data that will be collected according to the target, temporality, method, and number of questionnaires.*

After the results were collected, they were transcribed to an Excel sheet to analyze the variables (Grammar and Vocabulary, Pronunciation, and Interactive Communication) according to the rubric showed in the following table. Then, the addition of these three items was the result of the Speaking level for each student.
Table 2

*Rubric for speaking skills*

<table>
<thead>
<tr>
<th>A2</th>
<th>Grammar and Vocabulary</th>
<th>Pronunciation</th>
<th>Interactive Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Shows a good degree of control of simple grammatical forms and use of appropriate vocabulary.</td>
<td>Is mostly intelligible and has some control of phonological features at both utterance and word levels.</td>
<td>Maintains simple exchanges. Requires very little support.</td>
</tr>
<tr>
<td>4</td>
<td>Performance shares features of Bands 3 and 5.</td>
<td>Is mostly intelligible, despite limited control of phonological features.</td>
<td>Maintains simple exchanges, despite some difficulty. Requires support.</td>
</tr>
<tr>
<td>3</td>
<td>Shows sufficient control of simple grammatical forms and the use of appropriate vocabulary.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Performance shares features of Bands 1 and 3.</td>
<td>Has very limited control of phonological features and is often unintelligible.</td>
<td>Has considerable difficulty maintaining simple exchanges. Requires additional support</td>
</tr>
<tr>
<td>1</td>
<td>Shows only limited control of a few grammatical forms and isolated vocabulary and phrases.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>Performance below Band 1.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* Got from “A2 Key Handbook for teachers for exams from 2020” by Cambridge English Qualifications (2020), (cambridgeenglish.org/qualifications). This table shows a rubric of speaking evaluation over five points.

Later, one group was selected to be part of the experiment, which means the application of the Scaffolding Strategy (Independent Variable). To investigate the effectiveness of the Scaffolding strategy on EFL learners speaking skills, a structured procedure was designed according to the stages of the Scaffolding strategy in figure 1 Students had fourteen sessions of classes during February and March 2023 immediately after the pre-test (Llera et al., 2017).

After that, a post-test was applied to measure the effectiveness of the Scaffolding strategy to accept or reject the following hypothesis:

- $H_0$ (Applying the scaffolding model will not change the students’ level of speaking skills).
- $H_1$ (Applying the scaffolding model will change the students’ level of speaking skills).

During the application of the post-test the same items (Grammar and Vocabulary, Pronunciation, and Interactive Communication) were measured then, the statistic T-
student was applied with the objective of accepting or rejecting the mentioned hypothesis (Corral & Franco, 2015).

Results

The pre-test was applied to sixty students belonging to the Tenth grade. Each data was organized with the Microsoft Excel program, to acquire the level of speaking of each group, from which the following results (described in table 3) were obtained according to the aspects: Grammar and Vocabulary, Pronunciation, and Interactive Communication.

Table 3

Results of the Pre-test

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Grades Control group</th>
<th>Grades (%) Control group</th>
<th>Grades Experimental group</th>
<th>Grades (%) Experimental group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammar and Vocabulary</td>
<td>3.2</td>
<td>21%</td>
<td>2.8</td>
<td>19%</td>
</tr>
<tr>
<td>Pronunciation</td>
<td>3.3</td>
<td>22%</td>
<td>2.9</td>
<td>19%</td>
</tr>
<tr>
<td>Interactive Communication</td>
<td>2.8</td>
<td>19%</td>
<td>2.6</td>
<td>17%</td>
</tr>
<tr>
<td>Total average</td>
<td>9.30</td>
<td>62.00%</td>
<td>8.30</td>
<td>55.33%</td>
</tr>
</tbody>
</table>

**Note:** This table shows the averages of the pre-test. The results belong to the control and experimental groups. The grade is over fifteen points which means a hundred percent of domain.

An analysis of the aspects: Grammar and Vocabulary, Pronunciation, and Interactive Communication was carried out through the rubric (described in table 2) in a range of scores from 1 to 5, where 5 is the highest grade and 1 is the lowest.

The results obtained were 3.2 over 5 points regarding aspects of Grammar and Vocabulary in the control group. On the other hand, the experimental group got 2.8. Regarding aspects of Pronunciation, the control group got 3.3 over 5, and the experimental group got 2.9. Finally, evaluating the Interactive communication, the control group got 2.8 over 5 points while the experimental group got 2.6. Adding these items gave a final average of 9.3 for the control group. In contrast to 8.3 for the experimental group. The graphic interpretation of the results is shown in figure 3.
Figure 3

Results of the pre-test control and experimental groups

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Control Group</th>
<th>Control Group (%)</th>
<th>Experimental Group</th>
<th>Experimental Group (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grammar and vocabulary</td>
<td>3.3</td>
<td>22%</td>
<td>3.7</td>
<td>25%</td>
</tr>
<tr>
<td>Pronunciation</td>
<td>3.1</td>
<td>21%</td>
<td>3.9</td>
<td>26%</td>
</tr>
<tr>
<td>Interactive communication</td>
<td>2.7</td>
<td>18%</td>
<td>3.5</td>
<td>23%</td>
</tr>
<tr>
<td>Total Average</td>
<td>9.10</td>
<td>60.67%</td>
<td>11.10</td>
<td>74%</td>
</tr>
</tbody>
</table>

Note: This table shows the averages of the post-test. The results belong to the control and experimental groups. The grade is over fifteen points which means a hundred percent of domain.

The results obtained from the pre-test displayed that student from the control group represented an average of 9.30, which means that they have a domain of the 62% of Speaking skills. While students from the experimental group got 8.30, representing 55.33% of the domain of the same skill. After the Scaffolding strategy was applied to the experimental group, both groups of students were evaluated again, obtaining the following results described in table 4.

Table 4

Results of the Post-test

Note: This graphic shows the averages of the pre-test. The results belong to the control and experimental groups. The grade is over fifteen points.

One more time, the aspects: Grammar and Vocabulary, Pronunciation, and Interactive Communication were analyzed. The results obtained from the post-test showed that students from the control group got almost the same grade as the pre-test. The results...
obtained in the control group were 3.3 over 5 points regarding aspects of Grammar and Vocabulary. On the other hand, the experimental group got 3.7. Regarding Pronunciation, the control group got 3.1 over 5 points while the experimental group got 3.9. Finally, in the Interactive Communication, the control group got 2.7 over 5 points and the experimental group got 3.5. Adding these items gave a final average of 9.10 for the control group. In contrast to 11.10 for the experimental group. Eventually, the graphic results are illustrated in figure 4.

**Figure 4**

*Results of the post-test control and experimental groups*

![Figure 4](image_url)

**Note:** This graphic shows the averages of the post-test. The results belong to the control and experimental groups. The grade is over fifteen points which means a hundred percent of domain.

The average 9.10 over 15 means a domain of 60.67% in the Speaking skills in the control group, in contrast to the students of the experimental group who obtained 11.10 over 15 it means 74% of the domain of the already mentioned skill. The illustration shows that after the Scaffolding strategy was applied, students increased by 14% their speaking skills. Therefore, a comparison between the two groups is shown in table 5.

**Table 5**

*Comparison of pre-test and post-test control and experimental groups*

<table>
<thead>
<tr>
<th></th>
<th>Average control group</th>
<th>Average experimental group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>9.30</td>
<td>8.30</td>
</tr>
<tr>
<td>Post-test</td>
<td>9.10</td>
<td>11.10</td>
</tr>
</tbody>
</table>

**Note:** This table shows a resume of the results of the pre-test and post-test. The results belong to the control and experimental groups. The grade is over fifteen points which means a hundred percent of domain.

Then, Excel analyzed the data to obtain the statistic T-student, the variance, the degrees of freedom, and others. Consequently, the data allowed us to accept or reject the hypothesis, H0: Applying the scaffolding strategy will not change the level of the domain.
of the speaking skills (same average in the two groups). H1: Applying the scaffolding strategy will change the level of the domain of speaking skills (different averages in the two groups).

First, the statistic fisher was applied to determine if the variances are different or the same (table 6), where there are two conditions:
1. \( F \geq 0.05 \ f = 2.3570 \geq 0.05; \) accomplish
2. \( F \geq f \ text{ critic}; \ f = 2.35707349 \geq 1.86081144; \) accomplish

**Table 6**

*F-test for two-sample variances*

<table>
<thead>
<tr>
<th>Items</th>
<th>Average control group</th>
<th>Average experimental group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>9.10</td>
<td>11.10</td>
</tr>
<tr>
<td>Variance</td>
<td>8.36896552</td>
<td>3.55057471</td>
</tr>
<tr>
<td>Observations</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>( F )</td>
<td>2.35707349</td>
<td></td>
</tr>
<tr>
<td>( P(F\leq f) \text{ one-tailed} )</td>
<td>0.01205159</td>
<td></td>
</tr>
<tr>
<td>Critical value for ( F ) (one-tailed)</td>
<td>1.86081144</td>
<td></td>
</tr>
</tbody>
</table>

*Note:* The program Microsoft Excel created table to obtain the statistic F-test or fisher using the averages of the control group and experimental group.

It means that the variances are different, and the exercise could be done with T statistics with different variances, by using the program Microsoft Excel; in the following table 7 there is an explanation of the data got with the statistic T student.

**Table 7**

*T student for two samples control and experimental groups*

<table>
<thead>
<tr>
<th>Items</th>
<th>Average control group</th>
<th>Average experimental group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>9.10</td>
<td>11.10</td>
</tr>
<tr>
<td>Variance</td>
<td>8.368965517</td>
<td>3.550574713</td>
</tr>
<tr>
<td>Observations</td>
<td>30</td>
<td>30</td>
</tr>
<tr>
<td>Hypothetical difference of means</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Statistic ( t )</td>
<td>3.067168352</td>
<td></td>
</tr>
<tr>
<td>( P(T\leq t) \text{ one-tailed} )</td>
<td>0.00174556</td>
<td></td>
</tr>
<tr>
<td>( P(T\leq t) \text{ two tailed} )</td>
<td><strong>0.003483113</strong></td>
<td></td>
</tr>
<tr>
<td>Critical value of ( t ) (two-tailed)</td>
<td><strong>2.008559112</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Note:* The program Microsoft Excel created table to obtain the statistic T-test or T-student using the averages of the control group and experimental group.
The results of the data showed that with the level of risk of 0.05 and 50 grades of freedom; the result of $t$ critical is 2.008559112 and the result of $T$ statistic= 3.067168352

If $t$-critical $\leq t$- statistic; $H_0$ will be rejected

If $t$-critical $\geq t$- statistic; $H_0$ will be accepted

$T$ critical=2.008559112 $\leq t$- statistic = 3.067168352; accomplish

$P \leq 0.005; p=0.003483113 \leq 0.005$ accomplish

Based on the criteria that If $t$-critical $\leq t$-statistic; $H_0$ will be rejected and $H_1$ will be accepted. It means that the level of English speaking is different between the two groups due to the grade got in the post-test did not increase in the control group where no strategy was applied. Finally, there is a graphic explanation of the statistic T-student in figure 5.

**Figure 5**

*Graphic Illustration of the Statistic T-student*

Note: T-student (T= 3.06716), level of risk (p = 0.05), and degrees of freedom (gl=50).

The result of T-student is around rejection h0 which is why hypothesis $H_0$ is rejected and $H_1$ is accepted. The graphic has two tails because the results of the two samples are not the same. It means that the application of the Scaffolding Strategy had an impact on one of the samples where the strategy was applied.

**Discussion of Results**

Learning to speak a new language may be intimidating for young learners since it implies the conceptualization, formulation, and articulation of ideas. The mentioned aspects take much more time and may cause in children frustration and anxiety. Based on this context, researchers are looking for methods that help students to achieve better levels of English
as a foreign language (Lasso, 2021). According to the research carried out by Langdon & Pandor (2020), there was found that most of the teachers focus only on making students speak but do not concentrate on their social and cognitive skills. That is why the use of strategies like scaffolding optimizes time in the teaching-learning process, which allows students to have better communication. On the other hand, Dennen (2013) states that using the scaffolding strategy as an instrument for teaching language skills which represents a high success in the teaching-learning process.

Focusing on this research, after the data were processed to test the effectiveness of the scaffolding strategy it was found that in the control group where no strategy was applied, did not show an improvement. The students who belong to this group showed a hesitating speech, limited vocabulary, and some grammatical errors. In contrast to the results obtained from the experimental group who evidenced a significant difference after the scaffolding strategy was applied. They did not show any kind of fear while they were communicating, and they had a higher performance during the assignments. This was evidenced by graphs and tables, which detail the difference of the performance between the samples.

The results were highly satisfactory due to students’ speaking levels where the strategy was applied, significantly increased. Eventually, aspects like Grammar and Vocabulary, Pronunciation, and Interactive Communication were strengthened through the stages of the Scaffolding strategy explained in figure 1. Regarding the interactive scaffolding stages, the study of Mozelius (2017) found that motivation has a high relevance when teachers try to enhance speaking skills.

The findings of the present study are supported by similar studies like the study done by Sari & Rozimela (2021), in which there was an experimental and a control group. The first one learned to speak using scaffolding. The results showed that the use of the scaffolding strategy was successful in improving speaking skills. Moreover, the study of Okati et al. (2022) confirmed the importance of using strategies that allow students to interact and develop better communication skills.

Conclusions

- In conclusion, the results of this study support the use of the scaffolding strategy in speaking skills allowing students to comprehend more information and incorporate innovative ideas into their prior knowledge. Therefore, the success of scaffolding might be due to four remarkable reasons: firstly, stage modeling was useful because it showed students how to act, think, or feel in different situations. This stage was developed through a structured plan of activities created by the teacher.
Secondly, during the stage of imitating, students practiced their speaking skills by imitating the vocabulary and pronunciation, which allowed them to learn how to pronounce the words (Moody, 2018). Thirdly, during the application of the stage called removing, the teacher’s support was removed eventually since students gained experience from doing tasks in which complexity was gradually increased. Finally, while applying the stage called achieving students reached a higher level of understanding through the development of activities and tasks without any support from the teacher. In this last stage, there were three functions to consider. For example, the interaction, which includes the transmission of a message, it is necessary to make other people understand messages, and finally, the step called learning from mistakes aspect in which, children have learned from their own mistakes and corrections given by the teacher.

The results of this study can help to encourage English teachers to use strategies, especially in Ecuador where the speaking level is low. Additionally, there are not many cases in which scaffolding-based methodology is applied. Despite all the contributions, this study had some limitations like the selection of participants to avoid a probable bias between the groups. Another limitation was the time estimated to apply the strategy. Consequently, it is considered that by increasing the number of sessions, the Scaffolding strategy could have brought better results in this study. Finally, the results of this research could encourage other researchers to study or analyze another dimension of speaking skills or even other English skills.

Conflict of interests

There is no conflict of interest between the authors.

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