

Tech-Interactive Strategies to Strengthen Proficiency in English

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Abstract

The objective of the research was to determine the influence of tech-interactive strategies to strengthen the competence to communicate orally in English in high school students of an educational institution, 2023. Likewise, the research addressed the positivist paradigm, of an applied type, with a quantitative approach, quasi-experimental sub-design, of longitudinal section. The population was 96 students, with a sample of 92, calculated through non-probabilistic sampling for convenience, there were two groups, control and experimental, in the latter the application of the strategies tech-interactive, mentilluvi, genigames, canvamap, aprendizaje coopejam, comparacany, jamzoomrol, sociojamzoom and expoflip were carried out. The instrument was an observation sheet with a total of 40 items, the validity was obtained by experts, and Cronbach's alpha was used for reliability. The results showed that 81.3% of the students achieved the expected achievement and 18.8% the outstanding one. The conclusion was that the influence of tech-interactive strategies to strengthen competence in English is significant, this means that the application of the strategies contributed to the strengthening of competence.

Keywords: Techinteractive strategies, learning, competence.

Introduction

It has been known for a long time that the language considered as the lingua franca and the most used for globalized communication is English. For this reason, the present study addressed a language competence, whose importance lies in the fact that students of public institutions of Peruvian Regular Basic Education are willing to strengthen the communicative competence of English in order to be able to engage in conversations with different interlocutors in different contexts. In this way, be prepared and in accordance with this era of globalization. Likewise, sustainable development goal and goal 4 was considered, which mentions providing equal opportunities to achievable professional training, eliminating differences in wealth and gender, being able to participate in quality higher education.

In the international environment, various studies have indicated that learning this language allows us to access better opportunities in different areas; however, schools are not providing the necessary English classes and those that do are of poor quality (Cronquis & Fiszbein, 2017). In the same way, it was specified that students show certain complications when using the different morphosyntactic and lexical structures that were manifested in the communicative act, this prevents them from communicating using the English language and the causes that were presented are among them the deficient oral practice, the instruction of grammar is carried out inductively, Leaving aside the communicative and contextual approach, students are unaware of the reason for learning a second language; in addition, their development in class was not active (Beltrán, 2017). As can be seen, there are different reasons why the communicative competence of this language has not yet been strengthened in students.

Data from the English Proficiency Index revealed that, in general, Latin Americans have shown an improvement in

their level of English and this is due to the new measures that have been taking place in the field of education in recent times in which public schools are forced to teach this language. It should be noted that compared to other countries in the world, Latin America still has a low performance. In most Latin American countries, listening and speaking scores were higher than writing scores; however, Peru occupies the 58th position with a drop scoring with respect to oral expression (Oliveira & Bueno, 2019). Various studies indicated that students show complications in the progress and formation of oral skills in this language, presenting problems when communicating (Guerrero & Reyes, 2021). Therefore, it is necessary to apply techno-interactive strategies that help strengthen the oral skills required for the language.

On the other hand, it was shown that the teaching of this language with respect to communicative competence is not always effective since different Colombian students of levels A2 and B1 lack strategies when carrying out oral communication tasks in the classroom. Similarly, students had difficulties in finding the expressions, vocabulary, and grammatical structures necessary to convey a message in a pertinent way and with a communicative intention (Díaz & Gómez, 2020). During the different activities proposed, the students faced different communication challenges that led them to act strategically. Among the different publications on oral communication strategies, there is little recent research focused on the application of communication strategies (Keim & Delgar, 2019).

While it is true, there have been efforts to improve and strengthen the teaching of English in Peru, especially in the public sector, but these have been little supported and their continuity has not been favorable (García et al., 2019). Likewise, in the 2017-2018 balance sheet carried out by the National Council of Education on the implementation of the National Basic Education Curriculum, it is specified that there were no important changes and that no concrete decisions were made regarding the secondary level (Barr et al., 2018). On the other hand, in a study carried out it was found that Peruvian students have a low level of pronunciation of the English language, presented problems when issuing structured sentences according to the sonority of the words, presented interruptions or took a long time when speaking, did not have control of the volume of their voice according to the communicative situation, among others (Quintanilla et al., 2017). In addition, students graduated from public and private educational entities did not present a great difference with respect to the level of English since in both cases the students evidenced a pre-basic level of the language (León-Jiménez et al., 2018). It is important that some changes are established that help graduate students to have at least the basic mastery to communicate in this language.

Methodology

Study Sample and Data Collection

The data for the study were collected through a direct survey of the students and truthful information was obtained without the intervention of human bias, that is, the researcher had a neutral and objective position. The study design was quasi-experimental and longitudinal, since it was applied in two stages, where the independent variable had two sub-groups: experimental and control groups without intervention.

The independent variable included the following strategies: Brainstorming incorporating Mentimeter technology; board games through the Genially tool: mind map using Canva; cooperative learning incorporating the Jamboard tool; comparison chart via Canva;

role-playing and sociodrama using Jamboard and zoom; and finally the strategy of oral presentations through the Flipgrid, considering six dimensions, 19 indicators and 40 items.

The population was made up of 96 students of the 3rd grade of secondary school of a public educational institution in Carabayllo, the sample was composed of 92 students, likewise the study addressed the convenience sampling of a non-probabilistic type. The unit of analysis was third-year high school students enrolled in the public institution selected for the research.

For the research, it was decided to determine the reliability of the instrument using Cronbach's alpha test, for

this, a pilot test was conducted with 20 students who had similar characteristics to the sample, in order to establish the reliability of the instrument. The value of Cronbach's Alpha to measure competence communicated orally in English was 0.917, which determines the high reliability of the instrument, which reaffirms the judges' criteria, making it an instrument with content validity and highly reliable.

Regarding the methods for data analysis, reliability was used from data from a pilot test of Cronbach's Alpha, to transform the collection scales to interpretation levels scales were used. The descriptive results, levels, frequencies and percentages. Data normality was performed with test statistician Kolmogorov Smirnov, and Mann Whitney's U statistic.

Results

We analyzed data from 96 students. Many of the students in both groups found themselves in the first level. However, after the development of the sessions where activities were carried out making use of tech-interactive strategies, such as: Mentilluvi, genigames, canvamap, coopejam, comparacnv, jamzoomrol, soicojamzoom and expoflip, which contributed to strengthening the communicative competence of the students, since it is found in the results after the test, that almost half of the students in the group to whom the strategy was not applied, they are in the first level and 65% in the process, on the other hand, most of the students in the group to which the strategy was applied, reached the expected level and others achieved it in outstanding.

Table 1

Descriptive analysis of the dependent variable

Cross Table Communicates orally in English*test

| Tests | | | | | | |
|--------------------------------|-------------------------|--------------|-------------------|-------------|--------------------|---------------|
| | | | Pre-experiment al | Pre-control | Post-experiment al | Post-contr ol |
| Communicates orally in English | Home | Recount | 30 | 53 | 0 | 21 |
| | | % within tes | 93,8% | 88,3% | 0,0% | 35,0% |
| | In process | Recount | 2 | 7 | 0 | 39 |
| | | % within tes | 6,3 % | 11,7% | 0,0% | 65,0% |
| | Expected achievement | Recount | 0 | 0 | 26 | 0 |
| | | % within tes | 0,0 % | 0,0% | 81,3% | 0,0% |
| | Outstanding achievement | Recount | 0 | 0 | 6 | 0 |
| | | | | | | |

| | | | | | |
|-------|--------------|----------|--------|--------|--------|
| | % within tes | 0,0 % | 0,0% | 18,8% | 0,0% |
| Total | Recount | 32 | 60 | 32 | 60 |
| | % within tes | 100,0% | 100,0% | 100,0% | 100,0% |

Table 2. *Descriptive analysis of the first dimension*

Cross-table Obtains information from oral texts*test

| | | | Test s | | | | Total |
|---|------------------------------------|-----------|--------------------------|---------------------|---------------------------|----------------------|------------|
| | | | Pre- experiment al | Pre- contr ol | Post- experiment al | Post- contr ol | |
| Obtains informatio n from oral texts | Home | Recount | 24 | 28 | 0 | 1 | 53 |
| | | % in test | 75,0% | 46,7% | 0,0% | 1,7% | 28,8% |
| | In process | Recount | 8 | 32 | 0 | 51 | 91 |
| | | % in test | 25,0% | 53,3% | 0,0% | 85,0% | 49,5% |
| | Expecte d achieve ment | Recount | 0 | 0 | 23 | 8 | 31 |
| | | % in test | 0,0% | 0,0% | 71,9% | 13,3% | 16,8% |
| | Outstand ing achievem ent | Recount | 0 | 0 | 9 | 0 | 9 |
| | | % in test | 0,0% | 0,0% | 28,1% | 0,0% | 4,9% |
| | Total | Recount | 32 | 60 | 32 | 60 | 184 |
| | | % in test | 100,0% | 100,0 % | 100,0% | 100,0 % | 100,0 % |

Regarding the specific results of the first dimension, it was shown that the students of both groups presented difficulties in obtaining oral information in English, they did not understand the information they heard, much less could they identify specific activities that the characters in the audio performed. However, after the experimental activities and the development of thematic contents, the results of the post-test showed that a large percentage of

the students to whom the strategy was not applied were still in process and only a few of them at the expected level of achievement. On the other hand, a large part of the students in the group to whom the strategy was applied managed to understand the information they hear, identified specific activities, detailed activities that the characters carried out and asked questions in English.

Table 3. *Descriptive analysis of the second dimension*

| Cross-tab: Infers and interprets information from oral texts* | | | | | | | | |
|---|----------------------------|--------|--------|------------------|-------------|-------------------|--------------|-------|
| | | | | Tea | | | | Total |
| | | | | Pre-experimental | Pre-control | Post-experimental | Post-control | |
| Infers and interprets information from oral texts | Home fi | 32 | 60 | 0 | 58 | 150 | | |
| | %fi | 100,0% | 100,0% | 0,0% | 96,7% | 81,5% | | |
| | In process fi | 0 | 0 | 1 | 2 | 3 | | |
| | %fi | 0,0% | 0,0% | 3,1% | 3,3% | 1,6% | | |
| | Expected achievement fi | 0 | 0 | 25 | 0 | 25 | | |
| | %fi | 0,0% | 0,0% | 78,1% | 0,0% | 13,6% | | |
| | Outstanding achievement fi | 0 | 0 | 6 | 0 | 6 | | |
| | %fi | 0,0% | 0,0% | 18,8% | 0,0% | 3,3% | | |
| | Total fi | 32 | 60 | 32 | 60 | 184 | | |
| | %fi | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | | |

The results of the pre-test showed that both groups in their entirety were in the first level, after applying the strategies, the students of the group to which the strategy was applied for the most part, were able to distinguish routines of each person, recognized which routines are echo-friendly, identified previous expressions about routines, compared their routines, They deduced the content of the conversation and explained reasons.

Table 4. *Descriptive analysis of the third dimension*

| Cross board Adapt, organize, and develop ideas in a coherent and cohesive way* | | |
|--|-----|-------|
| | Tea | Total |

| | | | Pre- experimental | Pre- control | Post- experimental | Post- control | |
|---|------------------------------------|-----------|----------------------|-----------------|-----------------------|------------------|--|
| Adapt, organize, Home and develop ideas in a coherent way and cohesive | fi | 31 | 51 | 0 | 47 | 129 | |
| | | %fi 96,9% | 85,0% | 0,0% | 78,3% | 70,1% | |
| | In process | 1 | 9 | 6 | 13 | 29 | |
| | | %fi 3,1% | 15,0% | 18,8% | 21,7% | 15,8% | |
| | Expected achievem ent | 0 | 0 | 24 | 0 | 24 | |
| | | %fi 0,0% | 0,0% | 75,0% | 0,0% | 13,0% | |
| | Outstandi ng achieveme nt | 0 | 0 | 2 | 0 | 2 | |
| | | %fi 0,0% | 0,0% | 6,3% | 0,0% | 1,1% | |
| Total | fi | 32 | 60 | 32 | 60 | 184 | |
| | %fi | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% | |

The results after the test were applied showed that a large part of the students in both groups were at the beginning level. After the classes developed, a large part of the students in the experimental group were able to identify the information they heard from an interview, understood specific information when answering the questions and named activities in the simple tense.

Table 5. Descriptive analysis of the fourth dimension

Cross-table Uses nonverbal and paraverbal resources strategically*tes

| | | | | Tea | | | | Total |
|--|-------------------------|-----|-------|--------------------------|---------------------|---------------------------|----------------------|-------|
| | | | | Pre- experimenta l | Pre- contro l | Post- experimenta l | Post- contro l | |
| Uses nonverbal and paraverbal resources of Strategic form | Home | fi | 25 | 51 | 0 | 43 | 119 | |
| | | %fi | 78,1% | 85,0% | 0,0% | 71,7% | 64,7% | |
| | In process | fi | 7 | 9 | 11 | 17 | 44 | |
| | | %fi | 21,9% | 15,0% | 34,4% | 28,3% | 23,9% | |
| | Expecte d achieve | fi | 0 | 0 | 20 | 0 | 20 | |
| | | %fi | 0,0% | 0,0% | 62,5% | 0,0% | 31,3% | |

| | | | | | | |
|-----------|------|--------|-------|--------|--------|-------|
| | ment | | | | | |
| | %fi | 0,0% | 0,0% | 62,5% | 0,0% | 10,9% |
| Outstandi | fi | 0 | 0 | 1 | 0 | 1 |
| ng | | | | | | |
| achievem | | | | | | |
| ent | %fi | 0,0% | 0,0% | 3,1% | 0,0% | 0,5% |
| Total | fi | 32 | 60 | 32 | 60 | 184 |
| | %fi | 100,0% | 100,0 | 100,0% | 100,0% | 100,0 |
| | | | % | | | % |

The results of the control group proved that most of the students are at the beginning. After the experimental processes developed in the classroom, more than half of the students in the group to which the strategy was applied were at the expected level of achievement, this means that many of the students were able to express themselves using gestures and/or body movements, pronounced words correctly, achieved fluency and used an appropriate tone of voice when speaking.

Table 6. Descriptive analysis of the fifth dimension

Cross table Interact strategically with different interlocutors*

| | | | Te a | | | | Total |
|---|------------------------------------|-----|--------------------------|---------------------|---------------------------|----------------------|-------|
| | | | Pre- experiment al | Pre- contr ol | Post- experiment al | Post- contr ol | |
| Strategically interact with different Partners | Home | fi | 28 | 41 | 0 | 34 | 103 |
| | | %fi | 87,5% | 68,3% | 0,0% | 56,7% | 56,0% |
| | In process | fi | 4 | 19 | 2 | 26 | 51 |
| | | %fi | 12,5% | 31,7% | 6,3% | 43,3% | 27,7% |
| | Expecte d achieve ment | fi | 0 | 0 | 21 | 0 | 21 |
| | | %fi | 0,0% | 0,0% | 65,6% | 0,0% | 11,4% |
| | Outstand ing achievem ent | fi | 0 | 0 | 9 | 0 | 9 |
| | | %fi | 0,0% | 0,0% | 28,1% | 0,0% | 4,9% |
| Total | | fi | 32 | 60 | 32 | 60 | 184 |

| | | | | | |
|-----|-------|-------|--------|-------|-------|
| %fi | 100,0 | 100,0 | 100,0% | 100,0 | 100,0 |
| | % | % | | % | % |

It has been detected that a large part of both groups are at the first level, After the application of strategies, more than half of the students in the group to which the strategy was applied are at the expected level, which implies that they were able to express themselves coherently, took initiatives and were involved at the time of the elaboration of the dialogues.

Table 7. *Descriptive analysis of the sixth dimension*

| Cross-table Reflect on and evaluate the form, content and context of the oral text | | | | | | | | |
|--|---------------------------|-----|--------|------------------|-------------|-------------------|--------------|--------|
| | | | | Tea | | | | Total |
| | | | | Pre-experimental | Pre-control | Post-experimental | Post-control | |
| Reflects on Home and evaluates the form, content and context of the oral text | In process | fi | 32 | 60 | 0 | 56 | 148 | |
| | | %fi | 100,0% | 100,0% | 0,0% | 93,3% | 80,4% | |
| | Expecte achievement | fi | 0 | 0 | 5 | 4 | 9 | |
| | | %fi | 0,0% | 0,0% | 15,6% | 6,7% | 4,9% | |
| | Outstand ing achievem ent | fi | 0 | 0 | 26 | 0 | 26 | |
| | | %fi | 0,0% | 0,0% | 81,3% | 0,0% | 14,1% | |
| | | fi | 0 | 0 | 1 | 0 | 1 | |
| | | %fi | 0,0% | 0,0% | 3,1% | 0,0% | 0,5% | |
| | Total | | fi | 32 | 60 | 32 | 60 | 184 |
| | | | %fi | 100,0% | 100,0% | 100,0% | 100,0% | 100,0% |

The results detected that all of both groups are in the first level. After the experimental processes developed in the classroom, a large part of the students in the group to which the strategy was applied are at the expected level, and 3.1% at the outstanding level, which means that the students were able to discriminate specific information from a conversation, explain the message of the audio, establish similarities and differences on a specific topic.

Hypothesis Testing

For the contracting of hypotheses, the mean comparison test was used, so if the assumption of normality was met in both groups, the Student's t-test was used, if this was not the case, the Mann-Whitney U test was used in case it did not meet the assumption of normality in one or both groups. Likewise, if the alternate hypothesis has a value less than 0.05, the data does not have a normal distribution behavior, but if the value is higher, it indicates that its behavior is normal distribution.

Normality test

Table 8. Data normality test

Normality tests

| | | Kolmogorov-Smirnov ^a | | | Result | Test a use |
|--|-------------------|---------------------------------|----|-------|------------|------------|
| Tea | | Statistical | Gl | Gis. | | |
| Communicates orally in English | Pre-experimental | 0.105 | 32 | 0.011 | Not normal | U for Mann |
| | Pre-control | 0.104 | 60 | 0.017 | Not normal | Whitney |
| | Post-experimental | 0.133 | 32 | 0.015 | Not normal | U for Mann |
| | Post-control | 0.112 | 60 | 0.049 | Not normal | Whitney |
| Obtains information from Oral texts | Pre-experimental | 0.110 | 32 | 0.021 | Not normal | U for Mann |
| | Pre-control | 0.122 | 60 | 0.057 | Not normal | Whitney |
| | Post-experimental | 0.202 | 32 | 0.002 | Not normal | U for Mann |
| | Post-control | 0.139 | 60 | 0.006 | Not normal | Whitney |
| Infer and interpret Oral Text Information | Pre-experimental | 0.176 | 32 | 0.013 | Not normal | U for Mann |
| | Pre-control | 0.165 | 60 | 0.000 | Not normal | Whitney |
| | Post-experimental | 0.135 | 32 | 0.015 | Not normal | U for Mann |
| | Post-control | 0.193 | 60 | 0.000 | Not normal | Whitney |
| Adapt, organize and develops ideas in a coherent way and | Pre-experimental | 0.217 | 32 | 0.001 | Not normal | U for Mann |

| | | | | | | |
|--|-------------------|-------|-------|------------|------------|------------|
| Pre-control Whitney | 0.142 | 60 | 0.004 | Not normal | | |
| Cohesive | Post-experimental | 0.183 | 32 | 0.008 | Not normal | U for Mann |
| | Post-control | 0.175 | 60 | 0.000 | Not normal | Whitney |
| Uses non-resources | Pre-experimental | 0.156 | 32 | 0.045 | Not normal | U for Mann |
| verbal and paraverbal form | | | | | | |
| Pre-control Whitney | 0.235 | 60 | 0.000 | Not normal | | |
| Strategic | Post-experimental | 0.244 | 32 | 0.000 | Not normal | U for Mann |
| | Post-control | 0.242 | 60 | 0.000 | Not normal | Whitney |
| Interacts | Pre-experimental | 0.120 | 32 | 0.020 | Not normal | U for Mann |
| strategically with Different interlocutors | Pre-control | 0.094 | 60 | 0.012 | Not normal | Whitney |
| | Post-experimental | 0.147 | 32 | 0.017 | Not normal | U for Mann |
| | Post-control | 0.124 | 60 | 0.013 | Not normal | Whitney |
| | Pre-experimental | 0.158 | 32 | 0.042 | Not normal | U for Mann |
| Reflect on and evaluate the form, content and context of the oral text | Pre-control | 0.231 | 60 | 0.000 | Not normal | Whitney |
| | Post-experimental | 0.227 | 32 | 0.000 | Not normal | U for Mann |
| | Post-control | 0.313 | 60 | 0.000 | Not normal | Whitney |

Table 9. Mann-Whitney U Comparison Test for Independent Samples

| Dimension | Test | Indicator | Results |
|-----------|------|-------------------|---------|
| | | U de Mann-Whitney | 613.00 |

| | | | |
|--------------------------------|-----|-------------------|--------|
| communicates orally in English | Pre | Z | -1.641 |
| | | Sig. (bilateral) | 0.252 |
| | | U de Mann-Whitney | 0.000 |
| | Pos | Z | -7.874 |
| | | Sig. (bilateral) | 0.000 |

The data showed that there is no significance of the tech-interactive strategies in the dependent variable between both groups, which means that both groups, before starting the fieldwork, there are similar measures. However, there was a significant difference in the tech-interactive strategies between both groups after the strategy was applied, with relevance from an advantage point of view to the experimental group. This due to the application of the strategies, in the case of mentilluvi and genigames, led the students to use the relevant vocabulary about phrases and expressions in English, the use of canvamap made it easier for them to organize the information, the use of learning coopejam, jamzoomrol and soicojamzoom, made them able to express themselves orally using phrases and expressions

In their daily lives in English, actively participating, the Comparacnv strategy helped them to compare the information by identifying differences according to the context, and in the case of Expoflip it helped them to speak the language using an appropriate tone of voice, as well as to improve their pronunciation and fluency. In this virtue, it was concluded based on the observed significance of the posttest (bilateral asymptotic Sig.) that the value is less than 0.05, and in this way the H_0 is rejected, accepting the alternate.

The influence of tech-interactive strategies in strengthening the obtaining of information from oral texts in secondary school students in Lima -2023, is significant.

H_0 : The influence of tech-interactive strategies in strengthening the obtaining of information from oral texts in secondary school students in Lima - 2023, is not significant.

Table 10

Mann-Whitney U Comparison Test for Independent Samples

| Dimension | Test | Indicator | Results |
|---------------------------------------|------|-------------------|---------|
| Obtaining information from oral texts | Pre | U de Mann-Whitney | 554.00 |
| | | Z | -1.67 |
| | | Sig. (bilateral) | 0.085 |
| | Pos | U de Mann-Whitney | 1.000 |
| | | Z | -7.894 |
| | | Sig. (bilateral) | 0.000 |

It was evident that there is no significance of tech-interactive strategies in strengthening this first dimension between both groups. This means that both groups presented similar information regarding the dimension. However, significant differences have been detected after the application of tech-interactive strategies such as:

MentiLluvi, Genigames and Jamzoomrol, since they allowed students to perceive the information clearly from the oral texts they hear in English, recognize the characteristics of everyday and relevant vocabulary in English and identify the context, recognizing and detailing

activities that you hear from a conversation. In this regard, it was concluded based on the observed significance of the post-test (bilateral asymptotic Sig.) that the value is less than 0.05, and in this way the H_0 is rejected, accepting the alternate that confirms the significance of the strategy addressed in the strengthening of the dimension.

Second specific hypothesis

The influence of tech-interactive strategies in strengthening the inference and interpretation of information from oral texts in secondary school students in Lima -2023, is significant.

Ho: The influence of tech-interactive strategies in strengthening the inference and interpretation of information from oral texts in high school students in Lima -2023, is not significant.

Table 11

Mann-Whitney U Comparison Test for Independent Samples

| Dimension | Test | Indicator | Results |
|---|------|-------------------|---------|
| Infers and interprets information from oral texts | Pre | U de Mann-Whitney | 593.500 |
| | | Z | -3.072 |
| | | Sig. (bilateral) | 0.052 |
| | Pos | U de Mann-Whitney | 0.000 |
| | | Z | -7.953 |
| | | Sig. (bilateral) | 0.000 |

It was evident that there is no significance of tech-interactive strategies in strengthening the second dimension in both groups. This means that both groups were similar before starting the fieldwork. However, after applying the Expoflip and Mentilluvi strategies, it was observed that the students perceive the information clearly from the oral texts they hear in English, relate them to previous knowledge about phrases and expressions in English and interpret the oral texts they hear in English, distinguishing between the routines that each person performs. as well as identifying phrases or expressions and deducing the content of the conversation. In this regard, it was concluded based on the observed significance of the post-test (bilateral asymptotic Sig.) that the value is less than 0.05, and in this way the H_0 is rejected, accepting the alternative that confirms the significance of the strategy addressed in the strengthening of the aforementioned dimension.

Third specific hypothesis

The influence of tech-interactive strategies in strengthening the adequacy, organization and development of ideas in a coherent and cohesive way in secondary school students in Lima -2023, is significant.

Ho: The influence of tech-interactive strategies on strengthening the adequacy, organization, and development of ideas in a coherent and cohesive way in high school students in Lima -2023, is not significant.

Table 12

Mann-Whitney U Comparison Test for Independent Samples

| Dimension | Test | Indicator | Results |
|---|------|-------------------|---------|
| Adapt, organize, and develop ideas in a coherent and cohesive way | Pre | U de Mann-Whitney | 805.500 |
| | | Z | -1.291 |
| | | Sig. (bilateral) | 0.197 |
| | Pos | U de Mann-Whitney | 0.000 |
| | | Z | -7.936 |
| | | Sig. (bilateral) | 0.000 |

It was evident that there is no significance of tech-interactive strategies in strengthening the third dimension in both groups. On the other hand, there was a significant difference in the tech-interactive strategies between both groups after the strategy was applied. This is because the application of the strategies: Canvemap and Expoflip helped the students, in addition to perceiving the information clearly from the oral texts they hear in English, to identify the context and use the relevant vocabulary about phrases and expressions in English when asking for information about activities in the present simple tense and naming them. In this regard, it was concluded based on the observed significance of the post-test (bilateral asymptotic Sig.) that the value is less than 0.05, and in this way the H_0 is rejected, accepting the alternate that confirms the significance of the strategy addressed.

The influence of tech-interactive strategies in strengthening the use of nonverbal and paraverbal resources strategically in high school students in Lima -2023, is significant.

H_0 : The influence of tech-interactive strategies in strengthening the use of nonverbal and paraverbal resources strategically in high school students in Lima -2023, is not significant.

Table 13

Mann-Whitney U Comparison Test for Independent Samples

| Dimension | Test | Indicator | Results |
|--|------|-------------------|---------|
| Use nonverbal and Pre paraverbal resources strategically | | U de Mann-Whitney | 881.000 |
| | | Z | -0.663 |
| | | Sig. (bilateral) | 0.508 |
| | Pos | U de Mann-Whitney | 0.000 |
| | | Z | -7.936 |
| | | Sig. (bilateral) | 0.000 |

It was evident that there is no significance of tech-interactive strategies in strengthening the fourth dimension in both groups. On the other hand, there was a significant difference in tech-interactive strategies between the two groups. This was due to the use of the Mentilluvi and Sociojamzoom strategies, which helped students remember the grammatical rules about the simple present when elaborating their dialogues and manage to speak in English using gestures and/or body movements when expressing themselves. In this regard, it was concluded based on the observed significance of the post-test (bilateral asymptotic Sig.) that the value is less than 0.05, and in this way the H_0 is rejected, accepting the alternative that confirms the significance of the strategy addressed in the strengthening of the aforementioned dimension.

The influence of tech-interactive strategies in strengthening strategic interaction with different interlocutors in secondary school students in Lima -2023 is significant

Ho: The influence of tech-interactive strategies in strengthening strategic interaction with different interlocutors in secondary school students in Lima -2023 is not significant.

Table 14

Mann-Whitney U Comparison Test for Independent Samples

| Dimension | Test | Indicator | Results |
|--|------|-------------------|---------|
| Interacts strategically with Different interlocutors | Pre | U de Mann-Whitney | 871,00 |
| | | Z | -0.735 |
| | | Sig. (bilateral) | 0.463 |
| | Pos | U de Mann-Whitney | 0.000 |
| | | Z | -7.895 |
| | | Sig. (bilateral) | 0.000 |

It was evident that there is no significance of tech-interactive strategies in strengthening the fifth dimension in both groups. On the other hand, there was a significant difference in the tech-interactive strategies in both groups after the strategy was applied. This was due to the application of the Jamzoomrol and Coopejam Learning strategies that helped students understand the information they want to express in English, making use of everyday phrases and expressions, actively participating, getting involved in the elaboration of their dialogues and respecting others. In this regard, it was concluded based on the observed significance of the post-test (bilateral asymptotic Sig.) that the value is less than 0.05, and in this way the H_0 is rejected, accepting the alternative that confirms the significance of the strategy addressed in the strengthening of the aforementioned dimension.

The influence of tech-interactive strategies in strengthening reflection and evaluation of the form, content, and context of oral text in secondary school students in Lima -2023, is significant.

Ho: The influence of tech-interactive strategies in strengthening reflection and evaluation of the form, content, and context of oral text in secondary school students in Lima -2023, is not significant.

Table 15

Mann-Whitney U Comparison Test for Independent Samples

| Dimension | Test | Indicator | Results |
|---|------|-------------------|---------|
| Reflects on and evaluates the form, content, and context of the text oral | Pre | U de Mann-Whitney | 759.500 |
| | | Z | -1.679 |
| | | Sig. (bilateral) | 0.093 |
| | Pos | U de Mann-Whitney | 0.000 |
| | | Z | -8.023 |
| | | Sig. (bilateral) | 0.000 |

It was evident that there is no significance of tech-interactive strategies in strengthening the sixth dimension in both groups. On the other hand, there was a significant difference in the tech-interactive strategies in both groups after the strategy was applied. This was due to the fact that the application of the Jamzoomrol, Comparacanv and Expoflip strategies helped students to identify the main ideas of the oral texts they hear in English, organize and sequence the information, as well as to compare the information by identifying the differences according to the context, establishing similarities or differences on a specific topic. In this regard, it was concluded based on the observed significance of the post-test (bilateral asymptotic Sig.) that the value is less than 0.05, and in this way the Ho is rejected, accepting the alternative that confirms the significance of the strategy addressed in the strengthening of the aforementioned dimension.

Conclusion

In the study, the influence of tech-interactive strategies to strengthen competence in English was significant, with a p-value of significance is less than 0.05, which means that the application of the strategies contributed to the strengthening of competence. The influence of tech-interactive strategies in strengthening the obtaining of information from oral texts is significant, since the significance value is less than 0.05, which means that the application of the strategies contributed to the strengthening of this dimension. Likewise, the influence of tech-interactive strategies in strengthening the inference and interpretation of information from oral texts is significant, since the significance value is less than 0.05, which means that the application of the strategies contributed to the strengthening of this dimension. The influence of tech-interactive strategies on the strengthening of the adequacy, organization and development of ideas in a coherent and cohesive way is significant, since the value of significance is less than 0.05, which means that the application of the strategies contributed to the strengthening of this dimension.

In the study, the tech-interactive strategy in strengthening the use of non-verbal and paraverbal resources in a strategic way is significant, since the significance value is less than 0.05, which means that the application of the strategies contributed to the strengthening of this dimension. At the level of strengthening of strategic interaction, different interlocutors were found is significant, since the value of significance is less than 0.05, which means that the application of the strategies contributed to the strengthening of this dimension.

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