Dalia Lissette Aguilar Vacacela

Dalia is an EFL teacher. Her research interests focus on improving pronunciation.

Maria Rossana Ramirez

Maria coordinates the graduation work of English teachers pursuing their Master’s degree. Her research interests address teacher training and reading.

Self-awareness Strategy Using Podcasting to Improve Tense and Lax Vowel Pronunciation Sounds in Beginner EFL-Adult Learners

1) Dalia Lissette Aguilar Vacacela, 2) Maria Rossana Ramirez Avila

1) Centro Ecuatoriano Norteamericano, Ecuador
2) Universidad Casa Grande, Ecuador

1) dalia.aguilar@casagrande.edu.ec
2) mramirez@casagrande.edu.ec

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Abstract

This action research study measured the effectiveness of a self-awareness strategy and podcasting to help beginners, EFL-adult learners, to pronounce tense-lax vowels in English accurately. The participants were 17 adult students with an A1.2 English level. The researchers implemented the innovation in a language school in a coastal city in Ecuador, South America. The results were using quantitative data gathered from a pre and post-test, divided into two parts, a scripted and extemporaneous one. The final scores produced a large effect size of 2.27 for tense vowels and 4.89 for lax vowels, indicating that most of the students were able to pronounce more than the 80% of tense and lax vowels accurately. These results demonstrated that the self-awareness strategy and the podcasting had a great impact on tense-lax vowels pronunciation in adults. Despite the favorable results, further and deeper research is necessary with a larger sample, time, and training.

Keyword: self-awareness; tense-lax vowels; podcasting; pronunciation
Introduction

Nowadays, teaching English speaking has supposed great importance. Many educational types of research have focused on spoken language skills (Tomlinson, 2013). English adult students establish themselves challenging objectives for personal and professional development. They need to speak fluently and accurately (Richards, 2006). However, most adult learners, who start learning English after high school, find pronunciation difficult regardless of the intelligence, level of education, gender, or knowledge of language structure (Gilakjani, Ahmadi, & Ahmadi, 2011).

In Ecuador, a graduation university requirement is to obtain a B1 level according to the Common European Framework (CEFR) (Consejo de Educación Superior, 2016, p. 20). Post-High-school students continue their English language studies to obtain their proficiency and degree. Besides, Ecuadorian learners have a poor English performance, ranking the country in the 65th place of 88 countries in Latin America with a low level, according to Education First (2018).

Moreover, in a private language school in a coastal city in Ecuador, adult beginner students also face pronunciation problems. Their difficulties depend on how well they use the language within the school studies. Teachers, including the researchers in this study, have encountered pronunciation issues in different aspects of segmental and supra-segmental features such as intonation, stress, vowels sound, and rhythm. However, throughout the formative assessments and the evaluations done during the content courses, most students do not overcome problems pronouncing segmental aspects like tense and lax vowels.

According to Woolfolk (2016), one factor that affects the pronunciation in adults is the absence of certain L2 (second language) sounds not developed in the L1 (mother tongue). Another factor is the lack of confidence due to the fear of making mistakes. The researchers proposed the implementation of a self-awareness strategy using Podcasting to provide a group of adult learners, in a private language school, the opportunity to overcome their pronunciation problems in segmental features such a tense and lax vowels sounds.

Second Language Acquisition (SLA) has been using self-awareness strategies and podcasting for several years. Podcasting has helped learners to develop pronunciation
due to its broad ways of being applied, such as individual and group activities in diverse topics (Ducate & Lomicka, 2009). Also, Kang (2016) conducted a study to find out the effect of strategy instruction, including self-awareness, and the use of podcasting on speaking and listening skills. The study demonstrated an improvement in students speaking skills after learners experiment with different guided podcast activities with topics chosen according to their likes. Likewise, Ingels (2011), in her dissertation, applied a self-monitoring strategy, an aspect of self-awareness, to improve students’ pronunciation. In the end, the investigation validated that learners can use this strategy to enhance specific pronunciation features.

Besides the fact that self-awareness strategies and podcasting tools have been applied in several studies to enhance students’ pronunciations. They have focused on general pronunciation developments instead of specific aspects such as tense and lax vowel sounds. This study clarifies some of the gaps in these aspects administered to adult EFL learners with an A1.2 level according to the Common European Framework (Council of Europe, 2018).

This investigation applied an action research method because it is cyclical and conducted in classrooms. The benefits are for both: teacher/researcher and students (Diaz-Maggioli, 2004). The development of the research study integrated the steps mentioned by Sagor (2000): selecting the focus, clarifying theories, identifying research questions, collecting data, analyzing data, reporting results, and taking informed action.

In the first step, the researchers detected problems of the pronunciation of tense and lax vowels and focused on improving that aspect. Thus, they implemented a repetitive self-awareness technique with the help of podcasting concepts and technology, to help learners overcome the before-mentioned problems that Spanish speakers faced during their learning. The objectives of the study were to measure the impact of a self-awareness technique while listening to self-made podcasts to improve tense and lax vowel recognition and pronunciation.

**Literature Review**

This section clarifies theories to continue with the steps of action research. In this regard, there is a debate between the acquisitions of the second language in adults. Some investigators think that adults found it very hard and complicated learning a new language due to uncertain factors. Others believe that they can acquire it quickly because of their high cognitive level,
logical analysis, self-assessment, and awareness abilities (Deng & Zou, 2016). Gilakjani, Ahmadi, and Ahmadi (2011) mentioned that age affects pronunciation acquisition, making adults having more problems than children (p. 78).

However, Woolfolk (2016) affirmed that the absence of certain L2 sounds not developed in the L1 affects an adult’s pronunciation. He explained that the neurons are responsible for general development in some areas of the brain. When humans are babies, these are pruned, so when a native language does not have certain sounds that the second has, adult learners, encounter difficulties with pronunciation development in a foreign language.

Lane (2010) mentioned that English vowels pronunciation, for example, is one feature that most of the learners around the world find difficult since this language has a large number of phonetic vowels. Two terms refer to the tension of the muscles inside the mouth required to produce the sounds narrowing the situation students struggle with the contrast of tense-lax vowels these. The tense vowels require more muscular tension to maintain the tongue farther from the center of the mouth as /iy/ in the word “leave.” In contrast, when the tongue moves toward a more central position in the mouth, the tension relaxes a little, producing the lax vowel /I/ as in the word “live.”

The minimal pair leave-live also exemplifies the particular situation of Spanish speakers. In this language /I/ and /i/ represent a single vowel /i/ like in the word “si”/si/. Another example is the vowel /u/ in “Luke,” which is tense and the vowel /u/ in “look,” which is lax. Both vowels in Spanish are identified only with the vowel /u/ as in the word “tu”/tu/. Therefore, Spanish adult students find it challenging to identify and pronounce these vowels because these two sounds are not inside their registers, and the muscles to pronounce them have not had a development. However, as Cenoz and Lecumberri stated, they can be improved and developed with discrimination through a clear perceptual model of the vowel and constant practice (as cited in Lane, 2010).

Another factor that affects the complete development of the speaking skills of a second language in adults is the lack of confidence. They fear to make mistakes opposite to children; they feel nervous and sometimes shy. Goodwin affirmed that in teaching pronunciation, there is a set of goals of instructions examined, namely: 1) to enable our learners to understand and be understood, 2) to build their confidence in
entering communicative situations, and 3) to enable them to monitor their speech based on input from the environment” (as cited in Nurani & Rosyada, 2015).

Due to the factors mentioned above, pronunciation lessons should have a neat plan to help learners overcome their problems. Educators need to implement a variety of activities and strategies in the learning process (Nurani & Rosyada, 2015, p. 109). Moreover, Nurani and Roysada stated that pronunciation is one of the essential learning aspects for increasing communication skills since a clear pronunciation gives the confidence that the speaker needs to express and communicate with others (p. 109).

**Self-awareness Strategy**

Learning a language requires a wide range of strategies depending on the age, environment, culture, and goals since they have a significant benefit in students’ learning. This research study applied a self-awareness strategy to support students’ pronunciation. Steiner (2014) defined self-awareness as an inward evaluation, in which learners use self-reflection to compare and analyze their progress with the reality and the feedback of others. Also, she mentioned that the purpose of self-awareness is that students generate self-knowledge, evaluate, change, and improve their weaknesses. It seems like a competition with themselves, finding solutions to their problems and progress toward the expected goals. Without self-awareness skills, learners get frustrated, and it causes problems with their learning. They do not understand the problems, so they give up and fail, reiterated Steiner. Therefore, self-awareness is a suitable strategy to sustenance the improvement of adults’ pronunciation that will generate confidence and long last learning.

Moreover, Brown (2000) stated the seventh SLA principle about the importance of creating self-confidence in learners by using sequential techniques into the classes which scaffold students’ acquisition. Learners obtain the satisfaction of accomplishing a step while challenging themselves into the next one. Shi (2017) maintained that the constant use of learning strategies increases the confidence of learners and motivates them into the process. Also, the strategies support autonomous and independent learning, helping students to be responsible and take control of it. She stated, “Teachers are encouraged to choose appropriate teaching techniques and learning strategies for students and teach them how to understand learning strategies to enhance levels of self-directed learning” (p. 24).
Correspondingly, Richards (2006) mentioned the importance of communicative language teaching (CLT) to help learners acquire better a second language. He stated in assumptions of CLT 5 and 6 that discovering rules, reflecting, and analyzing help real learning; also, trial and error-correcting bust learners to use the language more accurately and fluently. So, a well-implemented strategy will help learners to overcome language problems.

Therefore, this study applied a self-awareness strategy to support the improvement of adults’ pronunciation based on CLT and SLA principles. As previously mentioned, adults face issues due to the influence of their mother tongue; hence, they might not become aware of the magnitude their pronunciation affects the communication with people; how difficult it is to others understand them. Thus, adults need several opportunities to listen to English models and notice how different their pronunciation might be (Yates & Zielinski, 2009). Yates and Zielinski are saying that awareness is imperative to enhance adults’ pronunciation. Consequently, this autonomous communicative strategy will benefit adults to progress in their communication development.

In order to support learners to be aware of their pronunciation, the researcher designed a Self-awareness Form, based on a compilation of strategies from different authors described in Ingels’ dissertation (2011). In her paper, she mentioned Peterson and Eckstein. Eckstein developed a taxonomy categorized into four stages of pronunciation, and Peterson developed a list of 12 strategies to improve the learner’s pronunciation. The researcher compiled these strategies into three stages to create a student-form as a self-awareness strategy:

(a) Input/practice: Formally practicing with sounds (pronouncing a difficult word over and over; repeating aloud after tapes); (b) Hypothesis forming; hypothesis testing: Analysing the sound system (forming and using hypotheses about pronunciation rules); and (c) Noticing/feedback: Self-evaluating (recording oneself to listen to one's pronunciation) (Ingels, 2011, p. 15).

Podcasting

The term “Podcasting” refers to post an mp3 audio file on the web that anyone can create using any record voice device. Also, many people around the world can download it into their audio devices to listen for entertaining or educational purposes. The podcast can be created under any offline and online conditions, with any record voice
device as the most used nowadays, mobile phones (Volker & O’Bryan, 2009).

Hasan and Hoon (2013), in their review of recent studies of Podcasting, mentioned the advantages of Podcasting in English language learning. They stated that podcasting helps learners to develop pronunciation and confidence. Students' attitudes toward English learning improves, reducing anxiety during speaking, and learning a new language.

Podcasting allows students to interact inside and outside the class. Schaezel and Low (2009) mentioned that besides pronunciation classes, teachers have to encourage students to practice outside the class with an assignment that structure that interaction. Moreover, Phillips (2017) concluded in his study about the podcast in education that it has helped in developing not only pronunciation and fluency features but additional skills like researching, social, and other language skills such as writing and listening. It also helps to motivate students and the use of technological tools. Philips mentioned in the abstract:

The surveys explored the students’ levels of acceptance and enjoyment of activities in which they had to produce their podcasts, as well as the perceived learning benefits. The discussion section describes a range of positive learning outcomes and highlights the pedagogical implications of using podcasts in class (2017, p. 158).

However, Ducate and Lomicka (2009) found out in their research that there was not a significant improvement in student's pronunciation due to the short-term treatment and the lack of pronunciation practice in class. Nonetheless, the project created a positive reaction in students; they esteemed the feedback and the opportunity to make something different.

The constant creation of podcast creates in the learners, a purpose for being clear and communicative. Also, it gives confidence, helps to develop additional skills, and produces favorable circumstances to be aware of their learning.

As mentioned, the proper combination of strategies and tools, into a well-designed class, contribute to the correct development of English tense-lax vowel pronunciation acquisition. Also, it helps to reduce some first language interference problems like the ones encountered in Spanish speakers. This research helps to fill the gap of studies in this field. It focused on assisting EFL adult learners to be aware of their mistakes through the use of a repetitive self-awareness strategy with podcasting. Moreover, this allows students to overcome their articulation concerns independently.
Methodology

This investigation applied an action research method with an analysis of quantitative data. Chein, Cook, and Harding stated that action research conducts different processes: diagnostic, participant, empirical, and experimental (as cited in Tripp, 2005, p.1). Moreover, Díaz-Maggioli mentioned that “Action Research carried out in classrooms by teachers, has the potential to increase awareness about teaching and learning, and to enhance conditions in both areas” (2004, p. 60). Ravid (2011) highlighted that AR has become more rigorous lately.

For quantitative analysis, the researcher collected data through a pre and post-test. Each test had two parts, a scripted and an extemporaneous one. The test results used a rubric. This rubric permitted to obtain marks for the tense and lax vowel words. These data collected from this innovation were analyzed in the SPSS statistic program to answer the two research questions.

The third step in this process is to define the research questions. In this study, two research questions are:

1. To what extent can a self-awareness strategy using podcasing help beginners, EFL-adult learners, pronounce tense vowels in English accurately?
2. To what extent can a self-awareness strategy using podcasing help beginners, EFL-adult learners, pronounce lax vowels in English accurately?

Participants

This study was implemented in a private language school in a coastal city (Ecuador) with one group of students in one term, which lasted one month. The group included students with ages between 25 to 50 years old. The A1.2-level class had 17 participants. Students came from different parts of the city and social-economic and educational level. Eleven learners worked and had a professional goal; the other six were university students that needed to obtain a B2 level for graduation requirements or better opportunities for migration.

These beginner adult students were enrolled in the 6th level of English (A1.2 CEFR) from 18th levels (B2 CEFR), during the evening shift. In this language school, students had classes from Monday to
Thursday in the evening shift (18h00-20h00).

Classroom Procedures

This study aimed to help learners be aware of and improve their pronunciation in tense-lax vowels, through the use of self-awareness strategies and continuous podcasting. So, they could produce most of the tense-lax vowel sounds accurately in the spoken English language.

The term lasted four weeks and had 32 hours of class. Most of the classes were blended. There were individual, pair, and group practices in class; and online practices at home. Without affecting the language school program, this study dedicated twenty hours in the classroom and eight hours at students' homes, a total of 28 hours for this research.

As mentioned in the literature review, the researcher compiled strategies from Peterson and Eckstein (Ingels, 2011) into three stages to create the Self-awareness Form, which guided students to:

1. Self-evaluate their recordings by listening to their podcasts and selecting the mispronounced words.
2. Compare and contrast the sound system, using the knowledge learned in class to form hypotheses about the rules and classifying words into tense and lax sounds.
3. Practice with the original audio (native inputs), noticing the sounds and correcting themselves.
4. Receive feedback from their teacher and ask for help if needed.

During the class hours, the instructor-researcher trained, supported, and guided students throughout the application process of the innovation. Learners recorded continuous Podcasts and used the Self-awareness Form that helped them to identify their mispronounced words and classify them into tense and lax vowels. This form guided students to practice the proper pronunciation, improving, and exercising the muscle of their mouths to produce better-quality podcast audios. As well, the instructor provided continuous feedback, additional material, and phonics exercises to support the correct articulation of the vowel sounds.

The creation of Podcasts had two types of recordings; the scripted and the extemporaneous audios. The scripted recordings referred to an audio recorded using a written text, taken from the institutional books, in which words with vowel sounds had underlines, where students had to read it paying attention to the pronunciation of the underlined words.
The purpose of these scripted practices was to help learners focus on specific confusing words that provoke mistakes. Also, they were aware of their immediate needs and evaluated themselves using the original audio.

The extemporaneous recordings referred to an open and more communicative podcast, in which students created their one-minute show on a given topic. In these practices, they had the opportunity to demonstrate their pronunciation skills and applied what they had learned. In the end, the teacher evaluated the students’ production and gave individual feedback to each one.

For recording, the podcast students used their mobile phones, a headset, and the free application called “Spreaker studio,” which allowed learners to create off and online recording using music and sound effects. Moreover, this app permitted students to create an account using institutional e-mails; search and listen to public podcasts; personalize the information with a logo, a phrase, among others. Likewise, they shared the recorded practices through the Google Classroom Online Platform, which was very convenient since the language school uses this.

The students recorded a total of five scripted podcasts, around two per week, using the self-awareness form. In the class, learners recorded the podcast; then, they listened to their audios and tried to identify their mispronounced words. Later, they classified the words according to the sound in tenses or lax vowels with the knowledge they acquired during the class. At home, they checked their work using the original audio. Finally, students corrected themselves, practicing several times before recording the final improved audio. The self-awareness form included a chart where students obtained a percentage of their progress and noticed their weaknesses in tenses and lax vowels.

Also, learners recorded two extemporaneous podcasts, one per week, using a formative assessment form, in which they brainstormed their ideas before recording their audios. The instructor evaluated the recordings using the form and the assessment rubric. After obtaining data of well-pronounced words with tense and lax vowels, the researcher provided students individual feedback. It is important to mention that all the forms had connections to the same pattern of the assessment rubric in order to raise whole awareness progress to students and the teacher.
Instruments and Variables

Step four of the action research states to collect data. For that purpose, this study had two variables. The independent variable was the self-awareness strategy that involved three stages compiled from Peterson and Eckstein mentioned before (as cited in Ingels, 2011). These stages were the basement to create the Self-awareness Form and the Test Tense-Lax assessment rubric. The dependent variables were the tense and the lax vowel pronunciation. Both were measured informally to receive feedback and formally to collect data for the innovation.

In order to answer the first and the second question, there were two tests used at the beginning of the term (Pre-Test) and the end of it (Post-Test). Both assessments were the same, and they had two parts, scripted and extemporaneous. These tests implemented the Tense-Lax Assessment Rubric. This rubric was connected with the second part of the Self-awareness Form in order to guide and help to reach the aim of this innovation.

The Tense-Lax Assessment Rubric focuses on the pronunciation of the words with tense-lax vowel sounds. In the rubric, there were two descriptors tense vowels and lax Vowels. Each descriptor had five scales from 1 to 5, defining the percentage of well-pronounced words. In which, 5 refers to more than 90% of well-pronounced words and 1 less than 60%. The sum of the scripted and the extemporaneous test gave a result of over 10 for each descriptor (tense and lax). These results gave the percentage of well-pronounced words to answers the two research questions.

This assessment rubric was designed based on the revised pronunciation rubric used for the study “Role of Pronunciation in Speaking Test Ratings,” conducted by Ma, Henrichsen, Cox, and Tanner (2018). However, the researcher modified this rubric during the piloting time for this research. The instruments and the project were tested with two previous groups in two previous terms with the same A1.2 level, shift, and similar range of ages. The first rubric created had an issue; it dismissed the result of some students that were not in the percentage of the scale since it did not evaluate a range of percentage of well-pronounced vowel words, whereas it had a specific percentage in each scale, e.g., scale 2= 80%. Also, it counted only the overall of well-pronounced vowel words, without specifying the problems with tense and lax vowel sounds.

The audios were analyzed and compiled not only by the researchers of this study but also with the help of another researcher-instructor to validate the
instruments and the effectiveness of this innovation, after collecting data in the piloting time. The results of both evaluations done by both researchers were pretty similar, the total number obtained from the well-pronounced words varied only in units, but the range of percentages was the same.

To implement the self-awareness strategy previously mentioned, students self-evaluated their five scripted podcasts done during the term with the instructor’s support. Learners used the progress chart included in the self-awareness form, connected to the Tense-Lax Assessment Rubric. The instructor-researcher evaluated the two extemporaneous podcasts, also during the term. First, the data obtained from the audios were gathered and organized in the Formative Assessment form. Then, the researcher analyzed the results and gave continuously verbal feedback to students.

Data Collection and Analysis

The fifth step in this action research is analyzing data explained in this section. The researcher in this study collected the data from the pre and post-test. Each test gave two results a scripted and an extemporaneous. Each result was over 5, according to the Tense-Lax Assessment Rubric. The sum of these results gave a total of over 10. This score used Table 1 below in order to obtain a conclusion for this research.

<table>
<thead>
<tr>
<th>Scale range</th>
<th>Percentage of well-pronounced words with tense-lax vowel sounds.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-4</td>
<td>0.69%</td>
</tr>
<tr>
<td>5-6</td>
<td>70-79%</td>
</tr>
<tr>
<td>7-8</td>
<td>80-89%</td>
</tr>
<tr>
<td>9-10</td>
<td>90-100%</td>
</tr>
</tbody>
</table>
A total of four scores was over 10—two for the tense vowels descriptor corresponding to the pre and post-test. And two for the lax vowels one. All this information was organized in an Excel spreadsheet and then inserted into the SPSS (Statistical Package for the Social Sciences) software. This program analyzed the four scores, showing descriptive statistic results such as the mean, minimum, maximum scores, and the standard deviation. A paired t-test was to show the probability that this study did not happen by chance. Finally, the effect size was using an online calculator to check if the instruments and the innovation affected the students’ tense-lax vowel pronunciation improvement.

Findings

In this section, the results are complying with the six-step of the action research according to each research question.

Question 1: To what extent can a self-awareness strategy using podcasting help beginners, EFL-adult learners, pronounce tense vowels in English accurately?

The results obtained from the Tense-Lax Assessment Rubric for the pre and post-test are in Table 2. These results only focused on tense vowels. The difference in the mean shows a total of 4.058, giving a great increment between the pre and the post-test. The p-value also had a result of 0.000 for this study to rely on this total, which a p<0.005 expresses that it did not happen by chance. Therefore, the improvement was significant due to innovation.

Also, there was a value of the standard deviation and the effect size shown. Cohen’s $d$ value =2.774 indicates a large effect size that demonstrates a great difference between the pre and post-test. The researchers compared the result according to the table of interpretation for different effect sizes (Cohen, 1988). The minimum scores for the pre and post-test are from 2 to 4, and the maximum scores from 7 to 10, showing a grand difference.
Table 2: Results from Pre and Post Tense-vowels Test

<table>
<thead>
<tr>
<th>Tests</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Cohen’s d</th>
<th>p value &lt; 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tense-vowels Pre-test</td>
<td>17</td>
<td>4.470</td>
<td>1.375</td>
<td>2</td>
<td>7</td>
<td>2.774</td>
<td>0.000</td>
</tr>
<tr>
<td>Tense-vowels Post-test</td>
<td>17</td>
<td>8.529</td>
<td>1.546</td>
<td>4</td>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. N=Sample. M=Mean. SD=Standard Deviation.

Question 2: To what extent can a self-awareness strategy using Podcasting help beginners, EFL-adult learners, pronounce lax vowels in English accurately?

The results obtained from the Tense-Lax Assessment Rubric for the pre and post-test are in Table 3. This time the results only focused on the lax vowels. The difference in the mean shows a total of 4.941, giving a great increment between the pre and the post-test. The p-value was also calculated with a result of 0.000 demonstrating that this study did not happen by chance. The improvement was significant due to innovation.

Moreover, the researchers also showed the value of the standard deviation and the effect size. Cohen’s d value =4.896 indicates a large effect size that demonstrates a great difference between the pre and post-test. This result was according to the table of interpretation for different effect size (Cohen, 1988). Also, the minimum scores for the pre and post-test are from 2 to 4, and the maximum scores from 4 to 9, showing a significant difference.
Table 3: Results from Pre and Post lax-vowels Test

<table>
<thead>
<tr>
<th>Tests</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Cohen’s d</th>
<th>p value &lt; 0.05</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lax-vowels</td>
<td>17</td>
<td>2.765</td>
<td>0.664</td>
<td>2</td>
<td>4</td>
<td>4.896</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Note. N=Sample. M=Mean. SD=Standard Deviation.

Discussions

The benefits of applying action research were twofold. The teacher-researcher improved her research skills and deepen on the knowledge of this important feature of pronunciation. Being involved in the process helps the teacher-researcher to develop the observation skills of students’ difficulties during this process and how, as time passes, they overcame them.

The results demonstrated that the application of the steps of action research had a great effect on the focus of the study: improvement of student’s tense-lax vowel pronunciation. The self-awareness strategy conducted students through a self-reflection process of comparing, analysing, and self-correcting their progress, as was mentioned by Steiner (2014). The continuous practice using the Self-awareness Form helped learners to discriminate sounds and had a clear model of the vowels, as was stated by Cenoz and Lecumberri (as cited in Lane, 2010).

As mentioned, Kang (2016) and Ingel's (2011) investigation validated that the self-awareness strategy and the use of podcasting enhance speaking skills and specific pronunciation features. Even though they focused on different pronunciation aspects, this study also validated the improvement of another speaking feature, such as tense and lax vowel sounds. These results also differ from Ducate and Lomicka (2009), who did not report significant improvement in pronunciation but a positive reaction in students.

During the process, the teacher-researcher noticed that clear samples, lesson, and feedback helped learners soften some problems with common mistakes with lax vowels such as up/ʌp/, tip/tɪp/, but/bʌt/, hut/hʌt/, live/lɪv/, and study/stʌdɪ; also with tense vowels as first/fɜːst/, keep/kɪp/,
field /fild/, and lifestyle /laɪf, staɪl/. In this regard, action research was effective in identifying students’ difficulties and reduce them.

The tense vowels were easier to catch for the participants, the teaching of some rules for tense vowels like the silent e in “lake”/leɪk/ or “cake”/keɪk/, helped them to identify most of the correct pronunciation of words. The post-test results in table 3 shows higher scores and a bigger mean of 8.529 compared to 7.706 from the lax vowels post-test. Twelve from seventeen students obtained scores from 9 to 10, corresponding to 90% of well-pronounced tense vowels according to Table 1.

The participants in this research struggled more with lax vowels due to the fact that these sounds differ from Spanish, as mentioned before by Woolfolk (2016). The sounds may sound similar but the formation of them with the movement of the tongue and lips plus the projection of the air are peculiar for Spanish speakers. Muscles do not have a development, and training takes time. First, they needed to discriminate the sound through listening, in order to record it into their neurons. Then, they needed to train the movement of their lips and tongue to mime the sound. The pre-test for lax vowels showed a maximum score of 4 since students faced to new sounds not registered in their memories. Although there was a significant improvement according to the post-test score with a median of 7.706 in contrast with the 2.765, only four students from 11 obtained scores from 9 to 10 with the 90% of well-pronounced lax vowels.

Podcasting can improve learners' develop pronunciation and confidence (Hasan & Hoon, 2013). In this action research, participant’s active role promoted by a self-awareness strategy matched the purpose stated by Steiner (2014): generated self-knowledge through self-assessment, which made students change and improve their weaknesses in these specific vowels (tense and lax). Thus, not only the use of podcasting but self-assessing students’ work with the use of the rubric and their constant practice resulted in a significant effect size: 2.74 for tense vowels and 4.896 for lax vowels.

Conclusions, Limitations, and Recommendations

Based on the results and the discussion, the implementation of this action research benefited both the teacher/researcher and the students (Diaz-Maggioni, 2004). For the teacher/researcher: Reflections done during the process help to improve the delivery of the lessons and made the researcher more
critical on students’ immediate needs to work on them.

Students were aware of their mistakes due to the sample models given, their self-evaluation process, the constant support and feedback from their teacher. Moreover, the adaptation of the instruments from the self-awareness strategy and the help of continuous podcasting provided confidence in the adults, also gave opportunities to explore their creativity and enjoy while learning.

The results showed an increment in their tense and lax vowel pronunciation. In the Pre-test, none of the students obtained scores more than 7 for tense vowels and 4 for lax vowels. This states, according to Table 1 and the mean in Tables 2 and 3, that students pronounced less than 69% tense and lax vowels correctly. In contrast to the post-test, in which there were better results, having a bigger media with a range from 80 to 89% of well-pronounced tense and lax vowels. Participants were able to pronounce better tense than lax vowels due to their first language register. Most of the students pronounced correctly 90% of the tense vowel in contrast to lax ones, where only 4 participants from 17 pronounced 90% correctly; nevertheless, 11 students obtained results from 80-89% of good pronunciation in lax vowels, also giving a considerable outcome.

Lastly, this action research hosted two of the four reasons provided by Sagor (2000): professionalize teaching and meet the needs of an increasingly diverse student body. The researcher is now sharing the experience to motivate other teachers and keep improving education.

Limitations

This study faced some limitations, such as technology and time. Besides, the institution had a high percentage of students that used mobile phones; some of them did not have headsets or smartphone-compatible with the “Google classroom” platform or the “Spreaker” application. In those cases, the researcher provided headsets in the classroom; and requested students to share mobile phones among them. Nevertheless, this issue was time-consuming, since learners needed to wait for their turn. Sometimes students did not have time to complete the practice during the class and they must finish at home.

Moreover, the use of a mobile phone, a podcasting application, and an online platform was a limitation for learners over 30 years old. They needed more time for training and adapting to the use of the app and the process of creating online accounts.
Also, most of the students should learn how to speak when using a microphone. They had to speak slowly and clearly into a proper distance to avoid undesired noise and to improve the quality of the recordings.

Also, sometimes, there was no internet connection available, although the institution provided, most of the time, a free, reliable Wi-Fi connection to students. In those situations, learners uploaded the recordings at home. It caused a delay with the feedback.

In terms of time, the regular course program plus the project was sometimes overwhelming to students and caused difficulties finishing the program and having more practice for the project. However, participants and the teacher handled time to finish all the practices — the engagement in the project motivated most of the participants to make an effort.

Recommendations

For further studies, the next researchers should increment the time of the implementation. Adult learners need more time to acquire new sounds and to exercise some muscles of the mouth, which did not develop during childhood due to the nature of the first language. Also, the acquisition of phonetic rules, exceptions, and concepts confused while producing sounds. The more exposure to the language during the practices, the more benefits they would obtain from this strategy.

Furthermore, to avoid unreliable results, the sample should be greater. There is always a percentage of students that have personal issues during the process, and for different reasons, they cannot be determined or disciplined. It hinders the generalization of the results.

During the implementation, learners faced other issues in pronunciation, such as stress, pauses, and intonation. These interrupted communication and made to lose interest, especially when recording a podcast for an audience is involved. It is recommended for further studies to work at the same time some techniques to help learners soften this problem to reach better outcomes.

Something additional for future researches is how the scripted and the extemporaneous recordings affect the pronunciation of the vowel. It seemed during the evaluation process that most of the students performing better the pronunciation when they had to create their podcast, than when they just read one already created. However, some expressions, vocabulary, stress, and intonation were acquired while participants were exposed to
continuous recordings, and were used later into their podcasts.

Finally, listening continuously to a podcast, short lectures, and conversations help students not only to identify sounds but also to improve their listening skills. During the regular course evaluations, students obtained better grades in final listening tests, showing that this kind of practice has holistic benefits.

References


