Universidad Casa Grande

Facilitating Self-Regulation with Mobile Devices to Improve Oral

Interaction in Primary School Students

Karina Rodriguez Puga, Karina.rodriguez@casagrande.edu.ec

Guide: Karen Wigby, kwigby@gmail.com

Abstract

The purpose of this study was to determine the impact of self-regulation facilitated by mobile devices in learner's oral interaction. Self-regulation includes self-assessment plus an action plan. Participants were a group of 21 students from fourth grade who were between eight and nine years old, 11 males and 10 females. This mixed-method action research collected quantitative data with videos which were analyzed pre and post innovation with a rubric.   For qualitative data, a semi-structured interview and student reflections were used to know the student' s perspective of this innovation. Results showed that students' oral interaction improved with a large effect size of 1.86 and there was a significant improvement in the self- assessment as a result of the innovation. Of the three speaking sub skills studied, vocabulary, pronunciation, and interaction, interaction was the subskill with the most improvement. Interviews revealed that students' perspectives were positive towards the use of self-regulation and self –assessment. This study confirms that self-regulation with mobile devices improves students´ oral interaction. Findings will benefit EFL teachers who want to improve students 'oral interaction as well as those who want to have autonomous and independent learners.

Keywords: self-regulation, self-assessment, mobile devices, oral interaction

Resumen

El propósito de este estudio fue determinar el impacto de la facilitado por dispositivos móviles en la interacción oral del alumno. La autorregulación incluye la autoevaluación más un plan de acción. Los participantes fueron un grupo de 21 estudiantes de cuarto grado que tenían entre ocho y nueve años, 11 hombres y 10 mujeres. Esta investigación de método mixto recopiló datos cuantitativos con videos que se analizaron antes y después de la innovación con una rúbrica. Para los datos cualitativos, se utilizó una entrevista semiestructurada y las reflexiones de los estudiantes para conocer sus perspectivas sobre la innovación. Los resultados mostraron que la interacción oral de los estudiantes mejoró con un efecto de 1,86, de la misma forma mejoró la autoevaluación. De las tres sub-habilidades estudiadas, vocabulario, pronunciación e interacción, esta última tuvo la mayor mejora. Las entrevistas revelaron que las perspectivas de los estudiantes eran positivas hacia la autorregulación y la autoevaluación. Este estudio confirma que la autorregulación con dispositivos móviles mejora la interacción oral de los estudiantes. Los resultados beneficiarán a docentes de inglés como lengua extranjera que quieran mejorar la interacción oral de los estudiantes, así como a aquellos que quieran tener alumnos autónomos.

Palabras clave: autorregulación, autoevaluación, dispositivos móviles, interacción oral.

Facilitating Self-Regulation with Mobile Devices to Improve Oral Interaction

Koran (2015) mentioned that foreign language learning best occurs with interaction. Oral interaction is of great importance. However, there are students who have little opportunity to practice the language inside the classroom and no opportunity outside it. Besides that, oral interaction could be difficult to teach and assess. It could also be hard to monitor quality since students simultaneously follow prompts for dialogues. The activities for oral interaction are not meaningful and teachers cannot give feedback because of lack of time to reflect on performance during class.

According to Xu et al. (2017), it is impossible for teachers to give feedback to their students one by one, and in detail. On the contrary, they give feedback for the whole class, in general. As a result, interaction is not authentically being practiced and students struggle to maintain a simple dialogue. They want to use their mother tongue because their oral interaction skill is very limited. Brown (2000) mentioned that being a language teacher is a profession full of challenges. This is consistent with the fact that being an English teacher in a country like Ecuador is not an easy task. According to the Council of Europe (2018), the way in which public school students in Ecuador are learning is not clear, it includes large class sizes of up to 50 or 60 students, a lack of space, which impedes appropriate oral interaction assessment and it does not help teachers to give correct feedback.

This study took place in a private school in Ecuador. Private schools have more resources to work with students in the classrooms. Different students are assigned to teachers through the years, and there are students whose performance in the language class is excellent, they can read, write, understand and interact without any obstacle. On the other hand, there are those who cannot use the new language for oral interaction. These students can understand what the teacher says and can follow commands but they have a very limited or no oral interaction.

In the private school in Guayaquil, Ecuador where this study was implemented, the average number of students per classroom is 24 to 32 students. Fourth grade students have eight hours of Language Arts each week. According to the school, the group of students that were part of this study were at the Pre-A1 Cambridge starter level. Students did not like to talk in front of the class and they did not have oral interaction. They were afraid to speak in the classroom; they just kept silent or they wanted to use their mother tongue when they had the opportunity to interact using a foreign language.

Koran (2015) explained that oral interaction is a complex process. Many students do not like to talk in front of the class. Fear to speak in the classroom or outside it is a common feeling due to different social or psychological reasons. Therefore, it is necessary for language teachers to implement some natural strategies such as: role plays, group work, peer work and projects, among others, to avoid shyness and unwillingness to speak English. That is why the main task of a teacher is to provide students with real opportunities to interact.

Aregu (2013) conducted a study of the effects of self-regulation on oral production. He defined self-regulation as an active learning process that helps students to improve their speaking performance and to manage the behavior that could influence their learning. Self-regulation was defined by Schunk and Ertmer (2000) as a process in which students are oriented to personally activate their cognitions, behaviors, affects and personal goals. Self-assessment supported by mobile devices will help students improve oral interaction because students can reflect on the interaction, set goals and strategies for improving, self-regulation affects students 'motivation when learning since they get used to setting their own goals and they become more responsible about the activities they have to do. Self-regulation is the process that directs students to transform their mental skills and thoughts needed for the task given (Brown & Harris, 2014).

According to Reitmeier and Vrchota (2009), when students reviewed and self-

assessed their work using a scoring rubric, they were able to reflect accurately about the strengths and weaknesses of their presentations. The acquired skills in this reflective self-evaluation and documentation of their progress in oral communication helped students to develop their own academic goals. Another observable result in Reiter and Vrchota ´s study was that self-assessment helped students to go beyond the framework imposed by the rubric. This experience helped them to consider the task as part of their daily life. Students reflected on their answers, since they were able to see how excellent their exhibition was or what changes they had to make to achieve the objectives. On the other hand, technology helped students in Reiter's study to use language in a meaningful way. The analysis showed an improvement in oral interaction in the experimented group, this indicates the effectiveness of self-regulation.

Many studies about feedback confirm that feedback helps learners to clarify ideas and encourages their work. Those who provide feedback could be a teacher, self, or a peer. Feedback is a very important concept in this study since it is focused on the task. Hattie and Timperley (2007) claimed that effective feedback answers questions related to students' weaknesses, progress, goals, and action plans. It relates to the implemented study since self-regulation through self-assessment facilitated by recordings on mobile devices, which help students reflect on their own mistakes, progress, goals and action plans.

People who are immersed in Ecuadorian education have the challenge to contribute to the development of second language learners´ oral interaction. To help students to communicate in English is a major requirement to take part in this globalized world. Several studies conducted by Universidad Casa Grande have been related to self-assessment and self-regulation as strategies to improve English skills. One of these studies was conducted in a public school. According to Vega (2019), whose study had the objective to measure the effect caused by self-regulation facilitated with mobile devices to improve students' oral

interaction, learners were guided to work on each task through self-regulation and self-evaluation and this resulted in a significant increase in students 'oral interaction. In the same way, it was possible to motivate students to continue interacting among themselves.

The school, where this research project took place, is not a bilingual school, but it has been recognized because of the good English teaching and professionalism through the years. The participants were students of 4th grade, the ages were between eight and nine.   Even though the language learning performance in the classroom was very good in general terms, the students' oral interaction was poor, they could not communicate or express their opinions. They could say single words or a few sentences, and they avoided answering very short questions to the teacher and interacting with the rest of students. Due to these factors and in this context it was necessary to implement the present study and investigate if students in fourth grade could improve their oral interaction through self-regulation.

This innovation used self-regulation facilitated by mobile devices through recording dialogues to guide students to self-assess and to make an action plan to improve oral interaction. The three proposed questions were: 1. What is the effect on oral interaction of using self-regulation facilitated by mobile devices in a fourth grade class? 2. To what extent did students' self-assessment improve? 3. What was the students' perspective of this innovation?

Brady et al. (2018) said that self-regulation is a mechanism to help students manage their attention, behavior and emotions when participating in different activities to succeed in achieving learning goals.

Literature Review

The goal of this action research was to improve students' oral interaction. This study focuses on exploring the advantages of using self-regulation to improve students' oral interaction. The topics that are important to explore in this section are the following: Oral interaction, as a key to reach communication (Tuan and Nhu, 2010); self-regulation which emphasizes the processes that will help students to have control over the functions that will help them reach their learning objectives (Vohs and Baumeister, 2004); mobile devices as digital sources to support their learning as well as their motivation (Demouy et al., 2016). Self-assessment is students' own evaluation of their work. Technology is an effective way to gather information (Li, 005).

Teaching and Assessing Speaking

According to Harmer (2014), there are important reasons to teach speaking such as to provide opportunities of meaningful practice and for feedback from teachers and others, as well as to activate the language elements that have been stored in the brain. Besides that, Harmer (2014) claimed that learners need to be engaged in good speaking activities, and that speaking activation must be part of the regular classroom lessons. It has to become part of the culture in the classroom.

According to Joughin (2010), speaking assessment includes a wide range of types such as interrogations, presentations, applications, and he explained that there are many reasons to assess speaking such as to know students' knowledge and-improvement. Harmer (2014) explained different ways to assess speaking such as: pair work, discussions about similarities and differences and role-plays among others. Ellis (2008) stated that speaking practice is important for language acquisition. He claimed that it gives students opportunities to use the language and to express their own meanings. Equally important, the Council of Europe (2018) specified that **"**vocabulary is a variety of words and expressions used" (p. 132)

and that vocabulary control concerns the user/learner's ability to choose an appropriate expression from their repertoire" (p. 134). On the other hand, they added that "pronunciation is clearly intelligible even if a foreign accent is sometimes evident and occasional mispronunciations occur" (p. 134).

Areena (2018) described interaction as an indispensable component in second language acquisition. Loewen (2020) expressed that the goal of interaction is to develop an implicit knowledge of the linguistic forms. This goal is focused on the use of all the language components to communicate effectively and master the speaking skill, which is the one of the most used skills of English language. Ellis (2008) stated the importance of output, which plays an important role in oral interaction. He also explained about the necessity that students have of opportunities to develop discourse skills, for example by steering conversation on to topics they are interested in.

Self-regulation

Schunk and Ertmer (2000) explained that self-regulation refers to self-generated feelings, thoughts and actions, social factors that are adapted to affect student's motivation. It also refers to the motive students have for learning and the methods they employ. Schunk and Ertmer (2000) also defined self- regulation as "the process whereby learners personally activate and sustain cognitions, affects, and behaviors that are systematically oriented toward the attainment of personal goals" (p. 631).

Brady et al. (2018) said that self-regulation is a mechanism to help students manage their attention, behavior and emotions when participating in different activities to succeed in achieving learning goals. According to the social cognitive theory, self-regulation has a strong impact on feelings, thoughts, motivation and action. People form their own beliefs about their capabilities and from there they draw their own goals or establish an action plan in order to achieve their goals (Bandura, 1991). Hattie and Timperley (2007) explained that self-

regulation is the way in which students control and direct their actions towards the goal they need to achieve. It also has a lot to do with the commitment, confidence, and self-discipline that students have when performing each of their tasks. Concepts that students have about success and failure and the ability students have to seek help play important roles.

Hattie and Timperley (2007) explained that the most effective way of teaching is giving students nonjudgmental feedback in order to improve their skills for self-regulation. He added that appropriate feedback would help students learn better not only with modeling from teachers but by practicing with others, and with the teacher's specific instructions which help them to achieve their own goals. This process will give students confidence to enhance their own learning.

Feedback

Hattie and Timperley (2007) explained about the achievements, advantages and disadvantages of the use of feedback. Success or failure in learning, depends a lot on the kind of feedback that is given and on the form of feedback. According to Hattie and Timperley (2007), feedback is the information given by an agent regarding performance. This type of information can be corrective or to clarify ideas. Hattie and Timperley (2007) defined feedback as "consequence of performance" (p. 81). They stated that the purpose of feedback is to reduce the error between the current performance, the knowledge, and the goal. Besides that, they mentioned some questions related to the way that is being followed, the goals, the progress that has been made, the next way to take, and what is needed to improve in order to give effective feedback.

Self-Assessment

Many studies indicate the importance of self-assessment to improve oral interaction and learning. Joo (2016) mentioned that students, who provide their own feedback, are the ones who can improve their oral interaction. If they have set goals and objectives they find

their weaknesses. According to the goals, they can make an action plan with the teacher´s

help and that will help them improve. Spiller (2012) wrote the power that teachers have in

evaluation should be changed to constructivist learning in which the active participation of

students and their ability to issue criteria plays an important role. Spiller (2012) added that

the best way to teach self-assessment is to explain to the students what is expected from

them. Teachers must create an environment that gives students confidence of being able to

issue an opinion about their own work and the confidence that the rest of the class will do it

in the same way. There must be practice in the development of self-assessment activities.

Joo (2016) concluded that "not only the product of assessment but also the process of

being involved in self-and peer-assessment practices can enhance L2 speaking ability" (p.

80). Self-assessment brings with it a series of conditions that will help students to improve

the speaking ability. Spiller (2012) expressed that self-assessment has the great advantage of

turning students into creators of their own learning; it has the capability to form responsible

and active students. Brown and Harris (2014) stated that self-evaluation should not be treated

as a formal evaluation. Students themselves could intentionally change the truth to preserve

their grades, or reputation, or they could add irrelevant criteria and the given information

could be considered not very solid.

Technology

Technology and English cannot be separated from each other because the English

language connects the world, brings opportunity for growth, and interacts with technology as

a media of connection to spread English around the world (Education First, 2020.

Technology has been of great help over the years and students know that they can use

technology to improve the development of their speaking skills, for example, recording

dialogs for reflecting on them afterwards. Students can self-assess, and technology works as a

motivating tool in classrooms. Students are continually exposed to it, and since they have the

opportunity of authentic learning and new forms of assessment, it promotes the development of interaction.

According to Pellerin (2012), a research study on mobile technologies, stated that providing students with authentic experiences in the use of the language and the use of technological tools, promotes self-assessment and it increases motivation in the use of the language. It also indicates that the use of technology allows students and teachers to explore the way in which any recorded material such as audios or videos can be used as assessment tools. Pellerin (2012) stated that the use of mobile devices in the classroom gives students an opportunity to have more authentic experiences with the use of language. This brings with it positive results in oral interaction since students use these mobile devices to practice language, in group activities or in pairs. This increases students' motivation and promotes self and peer evaluation. The use of mobile devices and mobile apps has a potential in EFL.

According to Mills et al. (2014), mobile phones and tablets are not only increasingly being adopted in several schools, but they have become very popular for outside class to complement inside class learning. These devices help students to learn, since they facilitate the process of learning, they are part of students' daily lives, so they are getting used to work with them. These devices offer a great opportunity for language learners to be exposed to the target language for longer periods of time after class when learners have little or no exposure to L2 learning.

Besides that, technology helps students to become more critical thinkers and problem solvers when they use online applications. Collaboration and networking support EFL in and outside classrooms. It helps students to interact. All these theories wrap up the benefits of self-regulation facilitated by mobile devices through recording dialogues to help students to self-assess and improve their oral interaction. Since the Pre-A1 students struggle to maintain a simple dialog, and they do not like to talk in front of the class, it was necessary to carry out

this action research.

Innovation

The general objective of the innovation was to improve students' oral interaction through the use of self- regulation facilitated by mobile devices. The following innovation took place in a private school in Guayaquil, Ecuador during November-December 2019, and January 2020. The innovation was conducted over four weeks, which is 30 teaching hours. The sample was composed of 21 pre- A1 students from fourth grade. This research project covered one regular learning unit and part of a second unit in which all four language skills were used. Students took the SILL, Strategy Inventory of Language Learning, to find out about the students' background and focus on an area of improvement. The SILL also introduced strategies that they could use to learn English.

Fifty percent of instructions and explanations of this innovation were in English but the other 50 percent was given in Spanish. They used mobile devices to make five video recorded dialogs and the Padlet site for self-assessment and reflection to make an action plan. During this innovation, students worked in pairs. They followed prompts and completed short dialogs based on units from their English text. Then they recorded themselves using mobile devices and sent them by Whatsapp . After that, videos were uploaded to the drive and the links of each video were posted by the teacher into Padlet, a free website to display information on any topic. In this case, it was used for the purpose of self-regulation that includes self-assessment.

During the first week, the students' English level was assessed and they were introduced to self-regulation. A simulation of the Cambridge speaking test for pre A1 was applied with an adapted version of the Cambridge speaking rubric. The results showed that students struggled to maintain a simple dialogue, they wanted to use their mother tongue, and they did not give complete answers to the questions. In general terms, students' oral

interaction in L2 was very limited. Then, students were introduced to self- regulation. The students watched videos and practiced using the rubric to assess oral interaction that included the subskills of vocabulary, pronunciation, and interaction. Students were first taught to use the rubric by assessing Cambridge Starters sample videos found on YouTube, and they practiced assessing speaking using the rubric. Students practiced with the rubric with sample videos from pre – A1 starters before recording video 1.

The participants, with the teacher's help, set strategies and elaborated their own improvement action plan including goals. The rubric was based on an adapted rubric (See Appendix A) from the Cambridge pre-A1 Starters speaking test. For the action plan, two questions were included on rubric worksheet. These two questions were "What do I want to improve?", and "What will I do to improve?" The first question was answered after making the self-assessment. Before self-assessment, the teacher trained students in the class about the correct use of vocabulary, pronunciation, and oral interaction.

After that, a full explanation about the unit topics to the entire class was given. During the application process, participants were introduced to the content of the unit through listening, reading, speaking and writing activities as well as pair work. They were provided with useful vocabulary, expressions and phrases, as well as sample communicative activities aimed at speaking. They recorded a total of five videos in class that they shared with the teacher by WhatsApp, the teacher uploaded these videos in the Google Drive. After that, the teacher posted the link of the videos on her Padlet account and gave students the link for the access to the Padlet account, so they could self-assess their work with the rubric from their own Padlet,

Students wrote two reflections on their progress, and recognized their weakness. Students were trained by the teacher to set their own goals based on their self-assessment and they were trained to reflect on the action plan to fulfill these goals successfully. At the end of

the unit, students produced their last video and self-assessed their performance. The teacher assessed video one and video five as well in order to determine the students' improvement in oral interaction.

Methodology

According to Shorten and Smith (2017), one of the research approaches is the mixed method, to collect and analyze quantitative and qualitative data about the same research work. This study used a mixed method incorporating qualitative and quantitative data analysis. According to Shorten and Smith (2017), mixed methods base their strengths on both qualitative and quantitative analysis to apply different methods and to answer research questions. This design was used to collect information and answer the research questions about this innovation in teaching and learning to improve students' oral skills using self-regulation.

The independent variable was self-regulation, and the dependent variable was oral interaction. This research answered the following specific questions:

1. To what extent did students' oral interaction improve?

2. To what extent did students' self-assessment improve?

3. What was the student´s perspective of this innovation?

The purpose of this study was to improve oral interaction, using self-regulation facilitated by mobile devices. To answer the first and second questions an adapted version of the Cambridge speaking rubric was used to measure students' progress in oral interaction. To answer the third question, the researcher used a semi-structured interview, field notes, students' action plans and reflections to report the students' perspectives.

Participants

The participants were 21 Pre-A1 students from fourth grade who were between eight and nine years old, 11 males and 10 females. Most of the participants had been learning the

language for approximately five years. This research project used an adapted Spanish version Rebecca Oxford's Strategy Inventory for Language Learners (Oxford, 2003) to establish the students' learning strategies and background regarding the learning purposes. This was a Spanish version of the strategy inventory for language learning (SILL) because of their English level.

Results showed that most of them considered their level of English as reasonable, and considered learning and communicating in English Language as very important. Their mother tongue is Spanish and some of them had travelled to English speaking countries but most of them felt anxious about speaking English in the classroom. Based on SILL results, the learning strategy students most used at the beginning of the study was to listen to music in English and to look for the meaning of words in dictionaries. Most of them added that they noticed when they were nervous or stressed when they were using English and that they tried to relax when they were afraid to use English.

 Most of the participants did not have their own cell phones but their parents had and most of them had access to a home computer. The teacher provided cellphones but they required constant guidance because they were not accustomed to use them. They were motivated by technology but they needed help. The teacher taught them to use the cell phones, the WhatsApp app and the Padlet correctly because they were not the devices students used at home or in school. They did not have WhatsApp accounts, and they had never seen the Padlet website.

Instruments

Research variables were stated as follows: Independent variable: Self-regulation assisted by mobile devices. Dependent variable: oral interaction as defined in Pre A1 Cambridge Analytical Scale. To answer the first research question, to what extent did students' oral interaction improve? a pre-test and post-test were used. Vocabulary,

pronunciation and conversation were measured as well as overall oral interaction. The post-test was the fifth recorded video, and both tests were graded by the oral interaction rubric adapted from the Cambridge pre-A1 Starters. The rubric also included a self-regulation plan guided by reflective questions.

Oral Interaction Rubric

For question number one, there was an adapted rubric (See Appendix A) from the Cambridge pre-A1 Starters speaking test, to analyze oral interaction improvement. The rubric is valid because it is an internationally used rubric that has been through rigorous testing. It was analyzed by a group of colleagues from the same research project, who verified it with respect to clarity of the grammar, vocabulary, pronunciation, interaction descriptors.   It was used in Spanish because of the students´ English level.

Three main aspects of oral interaction were considered Vocabulary which focused on the variety of words from the unit that students were able to use and the ability they had to answer in complete sentences. Pronunciation assessed the stress, individual sounds and the capability students' have to be understood as long as errors not interfere with comprehension. Interaction focused on students 'understanding and responding as well as using new words and ideas in dialogues. The same rubric was used by both the teacher to answer research question number one and by the students to self-assess and reflect on their progress through five recorded videos.

For question number two to know whether self-assessment results of the students improved, the students and the teacher´s pre and posttest results were compared. If the results showed that both, teacher's and students' means were closer at the end than at the beginning, there was an improvement indicating that the students understood how to use the rubric to self-assess.

Qualitative Document Analysis

Qualitative data was collected to answer the third question which was to know the students' perspective of this innovation.   Data included a semi structured interview, two reflections and the action plans completed after each video. For the interview, a representative sample of eight students from the class of 21 fourth graders was chosen based on diversity of success in improving oral interaction to guide better research in the future. The interviews were in Spanish and recorded and uploaded by the teacher into the Padlet site. Transcripts were made for the analysis. The process was conducted during class time once they finished video five. The interview was in Spanish (See Appendix B). The interview explored what was learned, how it was learned and the challenges students had. Codes were used to analyze the interview transcripts. Two The interview protocol follows: (See Appendix B)

- What did you learn from the innovation?

- What did you do to learn?

- What did you like from Padlet?

- What was the most difficult thing you had to do during the innovation?

Two reflections were written by students after videos 3 and 5. The reflections were also used to answer question three describing the participants' perspective of self-regulation and the use of mobile devices. The reflection was written in Spanish in a format of very short notes that students could write freely to help them to reflect during the interview. The reflections helped confirm about the motivation to learn that the students were experiencing through the innovation.

At the end of the rubric, there was a section with questions referring to an action plan guided by two questions focused on improvement. One question related to what students wanted to improve. The other question focused on how they planned to improve.

Validity and Reliability

Akib (2015) mentioned that to assure that a research has validity and reliability, there should be selected procedures of measurement. The validity of this study was obtained with the use of an adapted version of a well-known rubric from Cambridge. The adaptation of the rubric was piloted with colleagues and changes were made to clarify the validity and reliability of this study. This study is reliable since the rubric was clarified so that it measures the same speaking performance and you get the same score no matter the times it is graded.

Minimum Descriptive Statistics

For question one, data obtained from the pre and post-test was entered into an Excel sheet. It was transferred to SPSS program to know about the descriptive statistics: minimum, media, maximum, and standard deviation. Then the researcher used the quantitative results to describe the effect of the innovation on oral interaction. Cohen´s d was calculated to know the effect size of the innovation.

Ethical Considerations

In order to implement this study in a private school in Guayaquil, it was first necessary to send a letter to the authorities asking for permission. The letter included a description of the innovation that was going to be carried out. Meetings were held in the director's office where the researcher was asked to avoid posting students' videos in public sites. The mobile devices had to be provided by the teacher. Besides that, an authorization letter from parents was taken into consideration. Before starting the innovation, the researcher received a consent letter from the institution authorizing the innovation with the students. The entire project was carried out during class hours without any inconveniences. The videos recorded by the students were used for self-assessment.

Results

In relation to what extent self-regulation facilitated by recordings made on mobile devices improved student's oral interaction the results indicate that students benefited with the application of self-regulation with mobile to enrich their oral interaction.

Research Question #1 Did oral interaction improve?

This research study collected quantitative results from a pre and a post-test that were analyzed compared and tabulated to answer research question one.   Table 1: Pre - post Test analysis shows the teacher's means, standard deviation, minimum and maximum and the effect size, which are to determine students' oral interaction improvement. An effect size of 0.20 is considered small, 0.50 medium, and 0.80 is considered large (Thalheimer & Cook, 2002). Results, showed a large effect size for the global oral interactions of 1.86 which means oral interaction improved as a result of the innovation.

Table 1

Overall improvement:

	N	Mean	Std. Deviation	Effect size
Pre-test	21	6.38	1.32	1.86
Post-test	21	8.42	0.81	

Figure 1 reports the results for the three speaking sub skills: vocabulary, pronunciation, and interaction which were graded over three. All presented an improvement, however, interaction was the subskill with the highest average improvement.

Figure 1. Oral interaction improvement: subskills

Speaking improvement sub-skills

Vocabulary   pronounciation   interaction

2.41   2.88   2.29   2.88   1.52   2.76
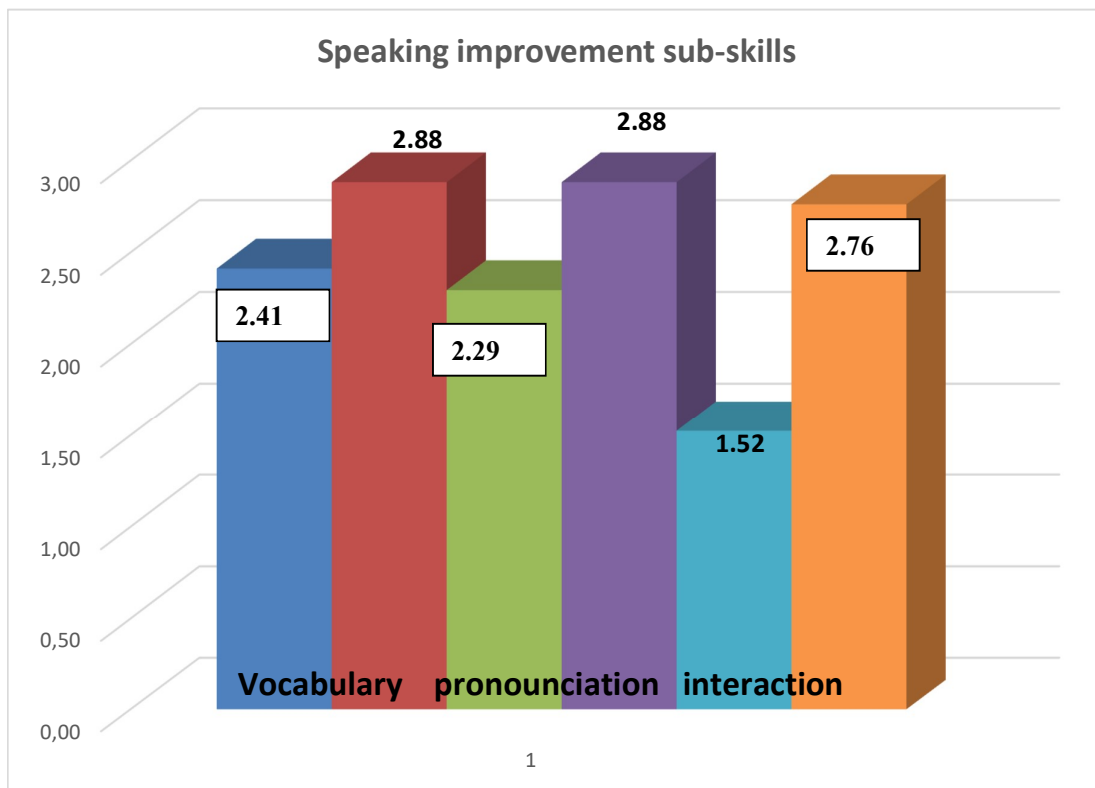
Research Question #2 Did self-assessment improve?

To answer question two, to what extent did students' self-assessment improve, the means of the teacher and of the students' self-assessment of oral interaction for videos 1 and 5 were compared at the beginning and at the end of the innovation to see if the students had become more reliable raters. Figure 2 shows that at the beginning the students graded themselves 0.28 points higher than the teacher, but lower than the teacher did at the end by 0.14, meaning the participants became more accurate in self-assessing video five.

The results showed a small variation between the teacher and students' grades from Video 1 to Video 5. On the first video the student scores were higher by 0.28, but lower than the teacher on Video 5 with a difference of 0.14 points. This means that the students interpreted the rubric in a similar way as the teacher. According to the results, students understood how to use self-assessment more effectively. It demonstrated a significant

improvement in the self- assessment.

Figure 2. Improvement in Self-Assessment: Comparison between the mean of students and teacher´s grade
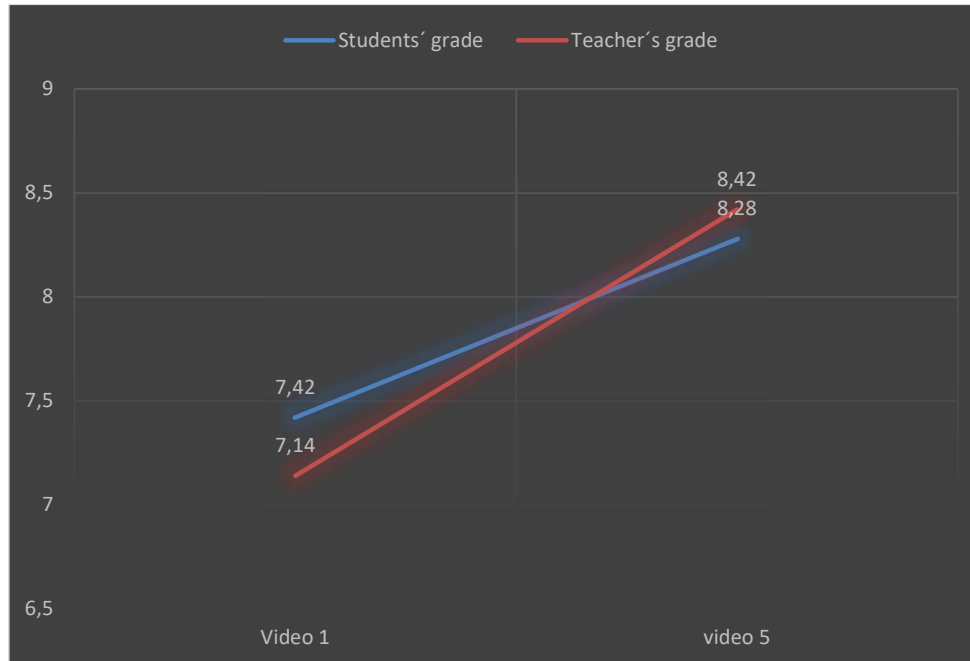
Research Question #3. What was the participant perspective of this innovation?

This question required a qualitative approach. To answer this question, the researcher conducted individual interviews and they also wrote two reflections on their progress. There were eight students for the interviews, who were chosen based on diversity of success in improving oral interaction. They were interviewed in Spanish, because of their English level. Students answered the following questions to understand their perspective of the innovation.

1. What did you learn from this process? In this question, the students emphasized that they learned to speak English better and that they learned to use new phrases from the unit during the innovation. Student (1) "I learned new things that I didn't know before." [Aprendí cosas nuevas que no sabía antes]. Student (3) "I learned to concentrate by myself, I learned to learn and I learn other things that were in the activity." [Aprendí a concentrarme

por mí mismo, aprendí a aprender].

2. What did you do to learn?

This question focuses on how the content was learned. It also reflects the strategies students used to learn during the innovation. Most of the students said they were motivated with self- regulation to study the grammar, the vocabulary and the new phrases from the unit, so they could use them in the dialogues. Therefore, it is clearly observable the desire students had to improve the three subskills in the action plan. There were some strategies that reflected from the SILL such as: Memorization, which was one of the strategies selected in the action plan, and writing which was also another strategy selected in their action plan.

Students said they wrote phrases and words from the dialogues to remember. Student (8) "I wrote the dialogue first on a sheet of paper." [Primero yo escribía el dialogo en una hoja]. Student (7) "I learned how to memorize more." [Aprendí como memorizar más cosas]. Student (6) "I also studied the vocabulary and grammar on my way to school, in the school bus, so I could use them." [Yo también me estudiaba el vocabulario y la gramática en mi camino a la escuela, en el expreso].

3. What did you like about the training process? They said, they liked to see themselves in the videos, they also said that self-evaluating and recording their own videos with mobile devices was the best part. One student said he liked commenting on his own work on the platform. Student (6) said, "I liked to evaluate my own videos with the rubric." [Me agradó evaluar mis propios videos con la rúbrica]. Student (2) said, "I liked to watch my partners' videos." [Me agradó ver los mejores videos de mis compañeros]. Student (4) "I liked showing that I am good in English." [Me agradó demostrar que si soy buena en Ingles]. Student (7) "I liked the innovation because it helped me to see my own mistakes and to see if what I was doing was right or wrong." [Me agradó la innovación porque me ayudo a ver mis propios errores y a ver si lo que hacía estaba bien o mal].

4. Which was the most difficult activity from the whole process? Participants recognized that there was a difficult part in the process. Student (1) said, "It was difficult for me, the dialogue five, it was very long and I had to read it." [Fue difícil para mí el dialogo cinco era muy largo, tuve que leer].

According to what students expressed, they enjoyed being part of this innovation and benefited from self-regulating, thus improving their oral skills. Students who normally did not interact much in class before the innovation, they wanted to record the video two and three times to have a better performance.

Discussion

Qualitative and quantitative data showed that self-regulation through mobile devices helped the learners to improve their oral interaction. Brady et al. (2018) said that self-regulation is a mechanism to help students manage their attention, behavior and emotions when participating in different activities to succeed in achieving learning goals. Results to answer the first research question to know to what extent students' oral interaction improved show that students improved their oral skills with a large overall effect size of 1.86 which means that results were statistically significant. These results presented a significant improvement especially in interaction with 81% improvement. Vocabulary and pronunciation also showed improvement comparing pre and post results. The teacher's pre and post-test started with a mean of 6.38 and went up to reach 8.42. Finally, the range between pre and post-test showed an overall improvement of 2.04 points or 32%.

Lessard-Clouston (2018) stated that, "students learn to correct themselves as they notice aspects of their English speech that need improvement" (p. 29). The students had the opportunity to watch their videos and self-evaluate while observing the rubric and that helped them see their weaknesses and strengths in the use of the language and helped them to find different strategies to improve their performance in each task. This is in line with Armijos

(2020) who explained that self-regulation helps students to improve their oral interaction as well as their strategies to become autonomous and self-efficient learners.

For question number two, to know to what extent students' self-assessment improved, the results showed a small variation between the teacher and students' grades from Video 1 to Video 5. On the first video, the student scores were higher by 0.28, but lower than the teacher on Video 5 with a difference of 0.14 points. This means that the students interpreted the rubric in a similar way as the teacher perhaps because of successful pre-innovation training in self-assessment.

According to Joo (2016), there is a great impact when students generate their own feedback since this procedure causes a growing interest oriented to the objectives of teaching. Students realized their own strengths and weaknesses and became more autonomous after training in self-assessing with rubric. The training program was effective because the students could self-assess accurately before the innovation began even though they were only in fourth grade.   From video three it was observable how they carried out the task of recording the videos more independently and it was observable that the students used the rubric with more effectiveness. Learners assumed more responsibility for the recording and self-evaluation of the videos.

For question number three to know the students' perspective of the innovation, students revealed they liked being part of this innovation. Students felt motivated to study and practice more outside their classroom. They also were responsible with the deadlines for each task. Kormos and Csizer (2014) found that there is a great motivational influence on autonomous learning and self-regulation. Motivation is necessary for students to improve their second language acquisition since there are students who face anxiety when speaking and receiving feedback from teachers. According to the results, self-regulation with mobile devices encouraged students to improve since they self-assessed their tasks, they were

conscious about their weaknesses in the language, they proposed an action plan to improve and this motivated them to write their own dialogues, record their own videos and comment on the Padlet site. Students had self-control and directed their actions towards the goal they needed to achieve.

According to Xu et al. (2017), mobile devices and applications help students to gain more confidence. Participants mentioned that when they arrived home or at school, they practiced vocabulary, pronunciation and reviewed the grammar to be able to use them in future dialogues. Students also watched their classmates' videos that were better to improve their mistakes. According to Rolheiser and Ross (2013) self-evaluation causes in students an effect that makes them believe in their abilities, which helps teachers and students to reach their objectives. Self-evaluation motivates the students to invest this personal resources in learning tasks.

Conclusion

To conclude, the results demonstrated that the implementation of self-regulation with the use of mobile devices was significant for improvement of students' oral interaction. The results of pre and post-tests showed a large and positive effect size for the overall oral interaction.   The results also showed that all the subskills vocabulary, pronunciation and interaction had a significant improvement, but interaction improved the most.

The participants' perceptions of the innovation were positive. They felt motivated to continue learning. By using self-assessment, they became aware of their mistakes and weaknesses and it helped them to set their own goals. Successful self-assessment was an imperative tool to promote self-regulation. Self-assessment helped students develop their capacity to evaluate their own performance by using criteria. All this process was essential for learners to set up their own goals and avoid repeating mistakes. Self-regulation through mobile devices increased participants´ motivation to carry out their tasks and record their

videos in the best way.

The researcher noted that the students overcame the fears they had at the beginning when speaking in public. The use of an adapted rubric was of great help for students' self-assessment and it helped them to develop their oral skills after following an action plan to achieve their personal learning goals. The process included training and continuous feedback with the use of the rubric.

Students were motivated to continue working with self- regulation and the mobile devices. Students wanted to continue recording more videos, many of them wanted to have more opportunities than were done in class. Some of them said they were nervous, so they needed to record the video again. It was not necessary to practice at home or redo the dialogues; they just needed to relax, to do the exercise in order to improve their dialogues or their performance. Motivation spread to students' homes and representatives since they expressed their satisfaction with the type of work through e-mails sent to the teacher.

Limitations

It is very important to list the limitations of this study that could be of great help for future research. The sample was small with only 21 students. The innovation lasted only seven weeks and there were simultaneous academic activities such as month evaluations and educational fairs that limited time. There was lack of devices such as tablets at school and the lack of permission from parents to bring devices to school. Most students had devices at home, but parents did not like the idea of bringing the devices to school to avoid damage or loss. It was necessary for the researcher to find and provide ten devices to help students to record the videos, which was not an easy task. It was hard for the students to record with only ten devices and time consuming. Lack of an appropriate internet connection did not favor the teacher and the students to upload the videos, make comments or enter in the Padlet site. There was excessive noise around and sometimes it was difficult to record the videos clearly

within the classroom.

Recommendations

To improve the present action study, the researcher has the following recommendations. The study could last the complete school year. It may open more possibilities for a better self-regulation and self-assessment training. It would be better to work with students from fifth grade on because at that age, students are faster to handle mobile devices and they are more familiar with technology. Another suggestion for schools is to facilitate the use of technology and devices inside each classroom to motivate students´ learning process.

It would be advisable to use other months to implement the innovation, not at the end of the school year since these months are full of social activities and many students in private schools travel to other countries. The researcher suggests involving parents since the beginning of the study, so that they will become familiar with the innovation and it would be easier for the researcher to ask for students' permissions to bring mobile devices to school.

Self-regulation training could be included as part of students subjects in EFL. The process could create more independent and autonomous students from school.

References

Akib, E. (2015). The validity and reliability of assessment for learning (AfL). *Education Journal*, 4(2), 64-68. doi: 10.11648/j.edu.20150402.13

Aregu, B. (2013). Enhancing self-regulated learning in teaching spoken communication: does it affects speaking efficacy and performance? *Electronic Journal of Foreign Language Teaching*, 10(1),   96-109.Retreived from http://e-flt.nus.edu.sg/v10n12013/aregu.pdf

Areena, A. (2018, June 18). Understanding the complex process of oral communication. *International   Journal of Language and Literature*, 6(1), 123-128. doi:10.15640/ijll. v6n1a17

Armijos, D. (2020). *Facilitating Self-Regulation with Mobile Devices to Improve Oral Interaction in Elementary School Students* (Master's Thesis, Universidad Casa Grande, Guayaquil, Ecuador). Retrieved from: http://dspace.casagrande.edu.ec:8080/handle/ucasagrande/1890

Bandura, A. (1991). Social cognitive theory of self-regulation. Organizational Behavior and Human Decision Processes. *ScienceDirect,   50*(2), 248-287. doi:10.1016/0749-5978(91)90022-L

Brady, M., Johnson, E., Meek, J., Herzog, B., & Clohessy, A. (2018). Developing a SchoolBased   Multitiered Model for Self-Regulation. *Intervention in School and Clinic*, 53(5), 300-307. doi:10.1177/1053451217736862

Brown, D. H. (2000). *Teaching by Principles: An Interactive Approach to Language Pedagogy*. New York. NY: Pearson Education.

Brown, G., & Harris, L. (2014). The future of self-assessment as a classroom practice: reframing self-assessment as a core competency. *Frontline Learning Research*, 2 (1), 22-30. https://doi.org/10.14786/flr.v2i1.24

Council of Europe. (2018). *Common European Framework of Reference for Languages:*

    Learning, Teaching, Assessment Companion Volume with New Descriptors.

    Retrieved from https://bit.ly/2HogLCH

Demouy, V., Jones, A., Kan, Q., Kukulska-Hulme, A., & Eardley, A. (2016). Why and How

    Do Distance Learners Use Mobile Devices for Language Learning? *The EuroCALL*

    Review, *24*(1), 10-24. doi: https://doi.org/10.4995/eurocall.2016.5663.

Education First. (2020). *EF English Proficiency Index*. Retrieved from

    https://www.ef.com/wwen/epi/

Ellis, R. (2008). *The Study of Second Language Acquisition*. Oxford: Oxford University

    Press.

Harmer, J. (2014). *How to Teach English* (10th ed.). Harlow: Longman.

Hattie, J., & Timperley, H. (2007). The Power of Feedback. Review of Educational Research,

    77(1), 81–112. https://doi.org/10.3102/003465430298487

Joo, S. H. (2016). Self- and peer assessment of speaking. *Applied Linguistics and Teaching*

    English to Speakers of Other Languages, 16(2), 68-83. Teachers College, Columbia

    University, NY. 1-   16. doi: 10.7916/D8FN2D1S

Joughin, G. (2010). *A short guide to oral assessment*. Leeds Met Press in association with

    University of Wollongong.

Koran, S. (2015). The role of teachers in developing learners' speaking skill. In *6th   the*

    international visible conference on educational studies and applied linguistics:

    book of proceedings (pp. 400-416).

Kormos, J., & Csizer, K. (2014). The interaction of motivation, self-regulatory strategies, and

    autonomous learning behavior in different learner groups. *Tesol Quarterly, 48*(2),

    275-   299. Retrieved from https://onlinelibrary.wiley.com/doi/full/10.1002/tesq.129

Lessard-Clouston, M. (2018). Second Language Acquisition Applied to English Language

Teaching. Retrieved from https://bit.ly/2Jg6DNK

Wang, L. (2005). *The Advantages of Using Technology in Second Language Education: Technology Integration in Foreign Language Teaching Demonstrates the Shift from a Behavioral to a Constructivist Learning Approach*. *T.H.E. Journal, 32*, 38.

Loewen, S. (2020). *Introduction to instructed second language acquisition*. Routledge.

Mills, L. A., Knezek, G., & Khaddage, F. (2014). Information seeking, information sharing, and   going mobile: Three bridges to informal learning. *Computers in Human Behavior, 32*, 324-334. doi: 10.1016/j.chb.2013.08.008

Oxford, R. L. (2003. The strategies inventory for language learning (SILL). Version 7.0 (ESL/EFL), Retrieved from https://richarddpetty.files.wordpress.com/2010/03/sillenglish.pdf

Pellerin, M. (2012). Mobile technologies put Language learning into young second language learners' hands. *In L. Bradley & S. Thouësny (Eds.), CALL: Using, Learning, Knowing, Gothenburg, Sweden.* Dublin: EUROCALL. Retrieved from Institute of Education Sciences: https://bit.ly/2HfIuos

Reitmeier, C. A., & Vrchota, D. A. (2009). Self-assessment of oral communication presentations in food science and nutrition. *Journal of Food Science Education*, *8*(4), 88-92. Retrieved from https://onlinelibrary.wiley.com/doi/full/10.1111/j.1541-4329.2009.00080.x

Rolheiser, C., & Ross, J. (2013, Septiembre 05). Student Self-Evaluation: What Research Says and What Practice Shows. Plain Talk about Kids, 1-21. Covington, Louisiana: SELF-REGULATION IMPROVING SPEAKING 31 Center for Development and Learning. Retrieved from www.cdl.org/resorucelibrary/articles/self-eval.php

Schunk, D. H., & Ertmer, P. A. (2000). Self-Regulation and Academic Learning: SelfEfficacy Enhancing Interventions. Academic Press, 631-649.   doi:10.1016/B978-

012109890-2/50048- 2

Shorten, A. & Smith, J. (2017). Mixed methods research: Expanding the evidence base, *BMJ Journals*, 20(3), 74-75, doi: 10.1136/eb-2017-102699

Spiller, D. (2012). Assessment matters: Self-assessment and peer- assessment. Teaching Development. New Zealand: Teaching Development / Wahanga Whakapakari Ako. Retrieved from https://kennslumidstod.hi.is/wp-SELF-REGULATION TO IMPROVE ORAL INTERACTION 48 content/uploads/2016/03/assessment-matters-self-assessment-and-peerassessment.pdf

Thalheimer, W., & Cook, S. (2002). *How to calculate effect sizes from published research: A simplified methodology. A Work-Learning.*

Tuan, L. T., & Nhu, N. T. K. (2010). Theoretical review on oral interaction in EFL classrooms. *Studies in literature and language*, *1*(4), 29-48. Doi https://www.researchgate.net/publication/50934042

Vega, M. (2019). *Facilitating Self-regulation with Mobile Devices to Improve Speaking Skills in Elementary School Students in Ecuador*. (Master's Thesis, Universidad Casa Grande, Guayaquil, Ecuador). Retrieved from: http://dspace.casagrande.edu.ec:8080/handle/ucasagrande/1890

Vohs, K. D., & Baumeister, R. F. (2004). Understanding self-regulation. *Handbook of self-regulation* doi: http://dx.doi.org/10.3968/n

Xu, Q., Dong, X., & Jiang, L. (2017, June). EFL Learners' Perceptions of Mobile-Assisted Feedback   on Oral Production. *TESOL   Quarterly, 51*(2), 408-417. doi:10.1002/tesq.335

Appendix A

Unit Background Design. Lesson Plan

Available upon request.

Appendix B

Rubric

Available upon request.

Appendix C

Final Interview

Available upon request.