



Use of Self-Assessment Facilitated by Mobile Devices to Improve Speaking in a High School

Program for Adults

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Self-Assessment Facilitated with Mobile Phones to Improve Speaking

Though this action research took place during the pandemic in 2020-2021, speaking has rarely been taught formally and students have been expected to acquire spoken English through communicative activities in class. It is even more difficult to grade spoken English during class time because of the amount of time it takes to individually assess students or because we have no record of speaking to reflect on afterwards when grading. Because of this, students do not like to speak English in class. Even worse, when the students are adults. This action research took place over six weeks in an adult program in a public technical school. The Ecuadorian program wants students to learn English and become more autonomous and this is important during pandemic classes so, teachers feel the necessity to implement successful activities to achieve these goals.

The main purpose of this action research is to improve speaking by guiding learners towards autonomy by using self-assessment with an easy-to-understand rubric, and increase their confidence in assessing their own work to improve their speaking ability while having fun learning English. Adult learners, as Malcom Knowles stated in his studies, do not learn the same way children do as they bring life experience and a positive attitude to learning. They are respectful and dynamic as they are ready to face changes due to their maturity. (Knowles, 1950).

Also, motivation is an important factor that help learners do improvements in any area they develop. There are some models of motivation instructors can use as a tool to engage their students in their classes (Yarborough & Fedesco, 2020)

Self-Assessment

Anyone who asks himself how am I doing or how should I do it better is learning self-assessment (Boud, 1995). Boud stated that the results learners get after evaluating themselves will lead them to take decisions to improve.

Alternative ways to apply self-assessment

Self-assessment is a tool that has the power to develop students' metacognition about what they are learning, although it should be done with initial guidance and the example of the teacher.

There are some strategies to enhance student's self-assessment. One example is the use of reflection activities where learners reflect about their learning and it can be done orally within the class by questioning their achievement and performance through explanations they do (Gehring, 2017).

Rubrics are very useful instruments to help learners check and measure their performance not only in the education field, but in any context of their life (Boud, 1995).

According to Hafner and Hafner (2003, p. 1509 as cited in Jonsson, & Svingby, 2007), there is a big confusion in how a rubric should be understood and used since for teachers and learning practitioners, it is just a tool to assess the outcomes of tasks in the educational context from kindergarten up to higher education. Jonsson and Svingby (2007) highlight the advantages of using a rubric in self-assessment due to the increased consistency of judgment when learners assess themselves in authentic tasks.

According to Boud (1995), knowing students' actual needs and setting goals to achieve them will allow learners to become more aware of their learning and they will improve the ability of assessing themselves. This is confirmed by Jimerson et al. (2019) who state that the using of data engage students to take control over their learning.

Benefits and Problems of Self-Assessment

Benefits

Self-assessment (SA), a type of formative assessment, helps students' learning evolve and it is often used as an alternative to the formative traditional assessment modes in which students may overestimate or underestimate their assessment (Babaii, Taghaddomi &

Pashmforoosh, 2015). The outcomes of applying this powerful tool have led children to gain significant control over their learning by establishing strategies to make improvements in the areas they need (Cram, 1995 as cited in Al-Sinani, 2008). In addition, as learners develop their autonomy, this fosters reaching their Zone of Proximal Development (ZPD) that Vygotsky (1978) referred as an area where a child can succeed and go beyond with the help and guidance of a more knowledgeable one.

Problems

One problem applying SA is that student assessments could differ from teachers' assessment if the criteria of the descriptors when assessing are not deeply socialized among both teachers and learners (Babaii et al., 2015). Another problem could be that students underestimate their proficiency compared to their teachers, thinking that they do not deserve a high grade and will prevent feeling embarrassed by being given a lower grade (Brown & Harris 2016 p. 323). On the other hand, some lower ability learners could overestimate their work because they are more lenient on themselves and less aware of their ability (Dunning, Heath & Suls, 2004)

Making Self-Assessment Effective

The effectiveness of applying SA in the classroom relies on making its use more explicit for student's learning (Wride, 2017). Boud (1995; p. 17) defined SA as a means to develop the students' learning skills, but not as a tool to give learners the freedom to assign grades by themselves nor to replace the role of the instructor.

According to Ross and Rolheiser (2002), the relationship between evaluation and achievement is mediated by students' cognition in which three processes are involved. First, students are self-observers and they focus on specific aspects of their performance relevant to their subjective standards of success. Second, students are self-judgers and they establish if

their specific goals were met or not. Third, the self-reactions where they interpret the grade of achievement they got and express their satisfaction with the results of their actions.

According to Joo (2016), there are some conditions that need to be met to develop student's ability to self-assess oral performances, these include; task-related criteria, sufficient training and considerations of the learner's perception. Also, she stated that the use of technology provides students better opportunities to interact each other while giving feedback.

One aspect considered to make SA efficient is to familiarize rubric terminology with the learners as well as more familiar concepts such as "self-evaluation" and "self-appraisal." Students need to be explained the different purposes of SA including understanding of the content and having evidence of progress and skill development (Wride, 2017).

According to Joo (2016), students need to have a deep understanding of the assessment criteria to be able to self-assess correctly and they need to be trained through several practice sessions before they start applying it in class. This training with the constant practice will lead to an effective transfer as Guillot, et al., (2020) explain it in their article *Making Learning Stick*. Panadero et al. (2017) argued that rubrics might have negative effects on students when it limits their time to complete a task or it is counted as a final grade. It just increases their feeling of working under pressure, the authors said.

Adult's learning is different from children's since they are learners who already have an active role in society. Knowles (1977) affirmed in his studies that these learners are engaged in a process of dialogue, an active process of inquiry linked to some other positive, biological and physical factors such as experience, maturity and intrinsic motivation which is connected to their family and profession. Also, Cezarina and Barbieru (2019) argued that adulthood is seen as a period of maximum work and adaptation seeking and the motivation

adult learners have is connected to progress in society and get social success. Their high motivation increases performance, creativity and self-esteem.

Also, instructors have to be open to answer students' doubts providing opportunities to put in practice these skills. At the beginning it will take some in-class time until they become better at doing it.

Osromd (2011 as cited in Babai et al., 2015) posed a Learner-centered goal process to grasp the learning objectives and reach a satisfactory progress. Both teachers and students must be in continuous dialogue and learners should be informed of how their progress is perceived in relation to what they think about themselves (Hudges, 2011; Nicol & Macfarlane-Dick 2006).

Methodology

The aim of this action research is to investigate how the application of self-assessment facilitated with mobile devices improves the speaking production in adult students of a public high school. My purpose was also to help students become more autonomous learners who are able to look for learning strategies, who are confident and can make decisions and changes to reach their goals. I used two specific research questions.

Research question 1:

Does self- assessment improve spoken production?

Research question 2:

What is the perspective of the students of the innovation?

Participants

The participants in this project belonged to a Public PCEI (Personas con Escolaridad Inconclusa) High School. A PCEI is an institution which offers a special program for those people who are young adults over fifteen years old and who have not finished or even

started their secondary studies, and they are able to conclude one school year in just three and half months. There were 13 students in the class (6 women and 7 men) their ages ranged from 26 up to 45. They were enrolled in eighth year of basic education and all of them were parents with multiple responsibilities in their families.

The participants had a low English level. According to CEFR, they were Pre- A1 Starters which means that in spoken production they could produce short phrases about themselves, and give basic personal information such as name and family members. Their familiarity and management with technology was something they could not handle by themselves either due to lack of practice since they were just resuming their studies and they received their classes during the pandemic through documents, audios and text-messages sent through WhatsApp.

I sent an invitation to the class asking for volunteers to participate in the English-speaking project and I received the positive response from five women who at the very beginning showed a lot of interest, but after one week two of them deserted due to lack of time. Of the three final participants, one girl had a little English knowledge. The rest remembered just greetings such as good morning, hello and bye.

Innovation

Training and Support

I started my innovation the last week of November 2020, and the first step I took was to help learners understand what a rubric is and how to use it to grade Cambridge speaking videos that I showed them the second day of the first week when we started working on the project. The lesson plan (Appendix A) was designed following the planning format created by Wiggins and McTighe (2005). It is called *Backward Designed* or *Understanding by Design*, and focuses to create a student-centered class by setting a goal

for students to reach at the end of the unit.

During the first week, learners watched some Pre-A1 Starters speaking test videos from Cambridge to become familiar with the rubric and process since they were students who had never been involved in an English project or something similar because they had quit school about 15 years ago. At the beginning, most of the explanations were given in Spanish and I guided each step concerning to how to score each component of the rubric.

Our meetings for the innovation were through Zoom, but before we met, they had attended the regular English class with the whole group through WhatsApp. First they studied the topic of the week's class then we met on Zoom where I focused on developing their speaking skills. I used peer dialogues, group conversations and self-assessment based on the topics we had in the worksheets provided by the Ministry of Education in Ecuador.

Gradual Release of Responsibility (GRR) was applied to provide learners the opportunity to be autonomous learners and get independence in the achievement of their learning goals through four stages, *Focused Instruction* (I do it, the teacher shows how to do the task), *Guided Instruction* (*We do it*, Teacher and students work together on the task), *Collaborative Learning* (You do it together, students work in peers or groups) and *Independent practice* (students do it by themselves) ; (Fisher & Frey, 2008).

After some practice together in self-assessment section during the first week, I encouraged them to meet together at a convenient time to make their videos. It was usually late at night when they sent me the videos they recorded by themselves via WhatsApp and sometimes via Zoom. In addition to recording the videos, they self-assessed their own work and gave a grade to each of the three components of the rubric: Vocabulary/Grammar, Pronunciation and Interaction. At the end of the rubric there were reflection questions that encouraged students to think over their progress and offer some strategies they could take

into consideration to improve their grades and English skills for the next video.

Implementation

We carried out this project for about five weeks. Their first video was considered as the Pre-test to know their speaking skill which was measured by their vocabulary/grammar, pronunciation and interaction. For the other four weeks they kept recording and self-assessing a video through WhatsApp or Zoom weekly. I also assessed their recordings and I could realize how well they were progressing as the teacher's results for the final number five video (Post-test) and number one video (Pre-test) were compared. The participants also reflected about their development and advancement each week. There were four questions on the self-assessment worksheet (Appendix B) that asked them to check how they were doing; What did I learn?, What is difficult? What seems to be easy? and What can I do to improve? This reflection also directed them to look for four strategies they had to choose from a list this rubric provided to make improvements.

The time spent in innovation classes were synchronous classes on WhatsApp and Zoom as well as asynchronous activities where they had the space to record their dialogues autonomously and collaborate in groups. Five hours a week were set aside for the Innovation classes and they broke down like this: One hour via WhatsApp to the whole group of thirteen students and additionally to the innovation group two hours via Zoom at a specific time (synchronous class) and two hours of autonomous work (asynchronous). One topic was taught the first day of each week via WhatsApp and the second day the innovation group met in a Zoom meeting where I extended the explanation of the topic already given the first day and added a little more complexity to foster their learning. The last day was programmed for autonomous work where they agreed on the time and the online tool, they would use to work on the assignment that was the creation of dialogues, pronunciation practice and learning lines for recording their videos. The total hours during

these five weeks was 25 hours.

Data Collection and Analysis

Research Question #1 – Speaking Rubric

To answer research question #1: Does self-assessment improve spoken production?

Data was collected using WhatsApp videos. I collected five videos during the five weeks we spent in the innovation. The first and the last videos were the Pre-Test and Post-Test. After recording each video, the participants graded it using a speaking rubric. The rubric was an adapted Cambridge speaking rubric that covered three parameters of speaking ability; vocabulary and grammar, pronunciation and interaction (Appendix B). The rubric is valid because it is an adapted Cambridge rubric which is recognized internationally. This was a quantitative method in which the highest grade for each component was three and the lowest zero. To grade vocabulary and grammar, it was necessary to focus on *range*, *control*, *extent* and *cohesion* of the language used in the dialogue while in pronunciation the focal point fell on individual sounds, stress, and intonation. The last component measured students' interaction and the aspects involved were reception/ responding, support required, and fluency/promptness.

It was supposed for the participants to get a low grade in the first video, and as they continue working on the innovation they could proceed to the next step and improve their grade and so on their speaking ability.

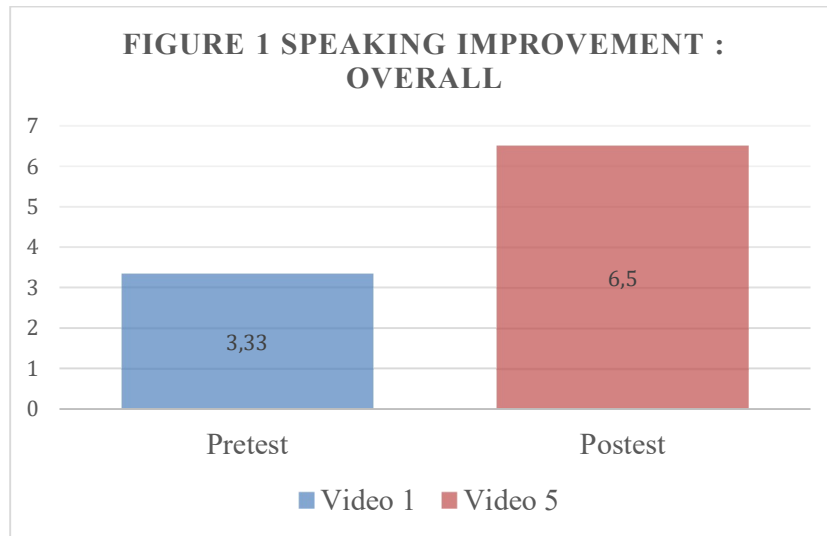
Interview

To answer research question number two: What is the perspective of the students of the innovation? Data was collected applying an interview at the end of recording and assessing the last video. There were five questions in this semi-structured interview that analyzed their perspective, outcomes, and feelings about the effectiveness or not of this

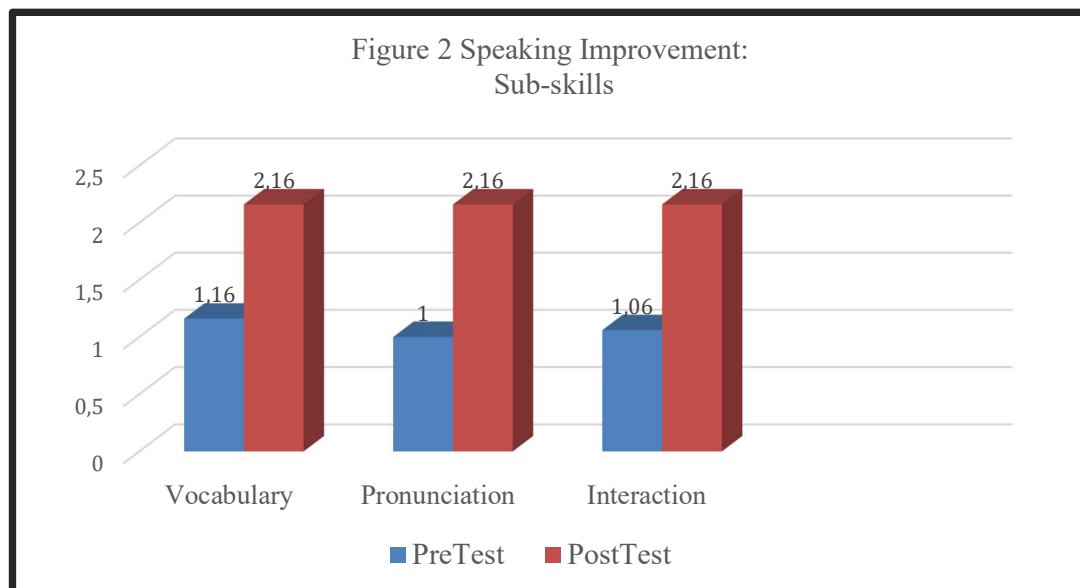
project. The responses I got from this interview were recorded via Zoom the last day of the project. I transcribed it to later compare how similar or different they were from each other (Appendix C). This interview was made in Spanish so students could explain their responses clearly and individually and I set a specific time to meet with each one. To analyze the data collected in this interview, it was necessary to categorize them into four elements. These were *challenges*, to know what they had to struggle with more during the innovation; *strategies*, to know what they did, changed or implemented to improve their learning during the innovation; *learning*, to realize what they learned during the five-week innovation; and finally, *like*, to know what they liked and enjoyed as they actively participated in this project.

Results

The first research question # 1: Does self-assessment improve spoken production? is answered with the Pre- and Post- test videos recorded to reflect on and assess improvement in this skill. These videos were analyzed and graded using the teacher's rubric that measured their progress in the use of *vocabulary*, *pronunciation* and *interaction*. On the Pre-Test, the average for the three students was 3.33 out of a possible nine points. On the other hand, the Post-Test yielded a result of 6.5. Which means a percentage of 96% overall improvement or a mean difference of 3.17. This can be observed in Figure 1.



In Figure 2, we can observe the Pre and Post-Test outcomes of each sub-skill category which were graded over 3.0. These categories are vocabulary, pronunciation and interaction. Surprisingly the three sub-skills improved equally. They got improvement of 2.16 in contrast to the Pre-test where Vocabulary got 1.16, Pronunciation 1.00 and Interaction 1.06. In the Pre-test the lowest grade fell on pronunciation with 1.00 point over 3.0. Pronunciation was the skill that improved the most with a percentage of 86 %. This can be observed in figure 2. Pronunciation – 86% improvement.



Regarding question 2, the student's perspectives of the innovation, the results were positive. For example:

"I am very happy to have participated in this project"; "I knew nothing about English, but now I can ask some personal questions to someone in English" (S1).

"This was a great opportunity to learn English. Now, I can help my children in their English homework" (S2)

"Participating in this project let me realize that I am able to speak English if I set it as a goal and using self-assessment was awesome." (S3)

The analysis showed that participants made good improvement in the three sub-skills (*vocabulary, pronunciation and interaction*). When I asked them what they *learned*, students 1 and 2 recognized that their level of English was different if they compared what they knew when they started the innovation and what they are able to communicate now that they finished the project. *"I learned new vocabulary in English, I can now ask personal questions in English and I did not like English before because I did not understand it, now I like it."* (S 1) Student 2 affirmed, *"I learned new words to communicate with my kids. I knew almost nothing about the language, now I can ask my peers about their age and their hobbies. I learned to write sentences expressing what I am doing and keep a short conversation."* Student 3 stated, *"I learned to work in groups and also a lot of vocabulary and phrases I did not know before. I can now differentiate pictures using connectors. Asking and answering basic questions in simple present about everyday life."*

The good improvement was the result of trying new strategies that they implemented after reflecting each week, after they recorded and graded their videos. *"Paying attention in class was important to understand English and learn the new words"* (S1). Another student

also assured that asking questions in class when she did not understand something was relevant to learn this language (S2). Having a lot of practice in repeating the lines when they had to record videos was undoubtedly one strategy that helped the three participants to improve overall. Evidence of the hard work they did showed up when one of them sent me her lines in audios through WhatsApp to receive feedback from me (S1). *“I used Google translator to practice the pronunciation of new vocabulary words and also when I wanted to look up new words to create dialogues.”* Students 2 and 3 admitted. *“We practiced individually at the beginning and then we met online to record the videos”*; *“We changed some actions as we got feedback from the teacher, we decided to work in groups from the beginning and then practiced individually.”* the three students affirmed.

There were some challenges the students faced during the five weeks we worked on the innovation. One of these difficulties was setting a specific time to develop the asynchronous activities related to recording the videos. *“Sometimes when I had time to meet online one of my peers did not,”* (S1). *“I had to do all the housework and ask my husband to stay with the children, so they cannot interrupt me,”* (S2). One participant also commented that finding enough time to complete all the activities at home to be free to meet in the group was something she had to struggle with (S3). Another challenge the three participants agreed on was that pronunciation was a hard skill to develop since all the words are pronounced and written differently. *“There are some words that are difficult to pronounce and they took more time to pronounce them correctly,”* S1 said. Whereas S2 said that she felt insecure at the beginning of the innovation, but she did a lot of practice, worked hard and improved. *“Now, I feel more confident to speak in English,”* she continued.

Regarding to what they liked about working in the project, the three participants agreed that they had a lot of fun recording the videos. *“We laughed a lot when we watched the camera and pretended we had a common conversation in English.”* (S2) *“It was fun to*

look at myself talking in English in the video;” (S3) “The first video we did was full of errors especially in pronunciation and it was satisfactory to observe how I improved in the last video, I liked that a lot.” (S1) declared.

Furthermore, they felt good applying self-assessment in their videos. Some comments about self-assessment were, *“We could grade ourselves, and that was the first time I could see my progress and what I needed to improve more.” (S2). “I had to be sincere and give myself a grade according to what I watched in the video” (S1), “Self-assessment can be used, not just in English, but in any other aspect of my life, I enjoyed assessing myself;” (S3) commented.*

The results show there was an overall improvement in all aspects of the rubric and answered research question number one; Did self-assessment help improve speaking? Yes, self-assessment helped improved speaking. Pronunciation improved the most, vocabulary and interaction also improved.

What was the students’ perspectives? Students enjoyed working in this project, the three participants provided positive comments in the interview I conducted with them after the project ended. They were all happy with the progress they did during the innovation.

Discussion

Research question number one wanted to know if the use of self-assessment helped students improved their speaking ability. Students recorded five videos in total and all of them were assessed with the rubric. The results from the Pre-Test and Post-Test displayed a mean difference of 3.17 which signifies a positive improvement. This good outcome was possible due to the continuous practice and training in self-assessing during the Zoom sessions with the participants during the first week. Practice and training are necessary for transfer. If students are aware of what they are learning, the possibility for transfer and understanding increase highly (Guillot, Wibgy, Owen & Parker, 2020). In addition, the

rubric helped set goals contributing to their progress. This is supported by Jimerson, Cho, Scroggins, Balial and Robinson (2019), who argued that “student-involved data use” (SIDU) encourages students to be aware of their own learning by planning and setting goals. However, when students are not correctly trained in how to self-assess they tend to be too general regarding to their assessment (Harris & Brown, 2018). Harris and Brown cited an example of how students tend to be global when they do not receive enough training; students who had said they were not good at English because of struggling with certain aspects such as grammar, spelling or writing for example, showed they were good at memorizing the lines of their favorite English songs or were voracious readers which demonstrated that they just focused on one aspect of the domain and applied as a whole. During the innovation process the students self-assessed their speaking videos from week to week and they could see their progress.

Practicing and working hard were undoubtedly two of the main strategies they applied which led to their success. As the saying goes the more you practice, the better you become, and it was truly proved in the grades they got in their final video assessed. One of the reasons they reached that improvement is because of the engagement they had with the language. Yarborough and Fedesco (2020) explained in their article that humans feel engaged in any activity if is connected to personal satisfaction and success (ARCS model of Instructional Design). In this innovation the participants had some motives to learn English including the desire to help their children in their English assignments. They were also motivated by seeing their own progress. Reflecting after each video they self-assessed helped them to realize what they needed to improve and they set strategies to work on a better pronunciation such as sending audios to the teacher to receive timely feedback before recording their videos. In addition, they also used Google Translator to check how a word or phrase is pronounced and consequently they did a lot of practice in repeating their lines.

Having fun in recording their dialogues while setting their own schedule was also a remarkable reason that encouraged them to do better. These creative strategies, paying attention during Zoom sessions and asking questions if they had any doubts were significant to achieve positive results.

Also, I realize that the adult approach to learning is different from teenagers or young learners. According to Knowles (1913), an American professor who developed the theory of andragogy which means teaching to adults, he affirmed in his studies that adult learners tend to be voluntary, self-directed and independent whereas children and teenagers require more directed guidance. Another characteristic is that adults bring life experience to learning that children do not have. Also, their maturity and readiness to learn allows them to connect their development of tasks to real life and they are able to apply the knowledge acquired immediately. Finally, adults are usually self-motivated to face new changes and challenges in the educational field as most of them are already parents and their desire to be a guide, a help, a good role- model or to reach a goal for their self-satisfaction encourages them to overcome difficulties due to their strong intrinsic motivation.

According to research question number two regarding to the student's perspective to the innovation, the qualitative data collected showed that they implemented new and creative strategies as the use of technology mainly due to the pandemic situation of COVID-19. Undoubtedly, they were overwhelmed at the beginning because of the use of online tools that were new for them as was the Zoom platform that needed to be downloaded.

On the other hand, they soon became excited when it was time to set the Zoom meeting by themselves to record the videos and practice. They had fun while talking to each other without the supervision of the teacher and that gave self-confidence to express what they thought and correct and encourage each other while working together.

In the interview I conducted at the end of the project I perceived how glad they were to be part of this innovation and they all looked happy, interested and eager to continue learning the language. They had gained more confidence in their speaking abilities and changed their negative ideas about English.

Conclusion

In conclusion, self-assessment can improve speaking. It promoted the English improvement because the rubric helped students understand the purpose of self-assessment and to reach the final aim led to learning.

Guided practice helped them to become more autonomous and they started organizing their time to work on their tasks which led to improvement and confidence. In addition, they received feedback from me after each video was recorded and I was always available for any requirement and help.

The participants were motivated and they found this learning meaningful and the friendship they developed sharing the same interest in the language made a real connection which was enjoyable for all of them.

Some of the recommendations to apply this innovation to a complete class of either children or adults could be to spend more time on giving feedback on the students' first self-assessment would help since understanding the rubric is a relevant issue, they need to understand deeply in order to assess correctly. Also, the use of real student speaking examples as well the use of Cambridge videos about this skill are undoubtedly helpful.

Organizing students by groups and assigning them responsibilities and providing clear instructions and constant feedback ensure student's comprehension. The use of technology is a resource teachers need to apply and this can include the use of WhatsApp, Zoom and Google Drive due to their free accessibility. When working outside the

classroom these tools provide the opportunity for students to work by themselves in different places at the same time and they just need good internet connection.

In a whole class, I would need to limit the personalized attention and feedback I gave each one during the whole innovation process. I could use Google drive to make comments on the group presentation so they can check it anytime and anywhere. In addition to this, I would introduce the use of peer feedback and through continuous explanations and practice they implement it and so teachers do not have to spend too much time in providing feedback constantly when a class is too numerous.

Finally, I would recommend this project to be done for a longer period of time and with a larger sample of participants to have more generalized results.

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APPENDIX A

Unit Plan

Available upon request.

Appendix B

Rubric

Available upon request.

Appendix C

Interview Questions

Available upon request.