

Self – Assessment to Improve Speaking about Plans

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During the pandemic of Covid 19 in Ecuador, students have been studying in an online modality. It has interrupted their normal performance and development of the English language skills. Speaking has been the most affected skill since they have not been either in contact with each other to practice nor with their teacher. After two years, some of them have returned to school. They have presented a lot of difficulties to speak in English. In fact, they had to talk about their plans. They were asked to describe what they were going to do the following holiday. There were problems with their fluency as they hesitated very repeatedly. Moreover, they did not show a good control of intonation of questions. Learners used limited vocabulary and inappropriate grammar structures. The interactive communication was not adequate as they needed constant prompting and support.

As a proposal to solve the mentioned issues, this research aims to describe how self – assessment was used as a strategy to improve speaking about plans in the classroom. It was conducted with 10 participants who were enrolled in their second year of high school and were attending face-to-face classes. According to Ministerio de Educación (2016), they should hold the B1.1 level regarding the Common European Framework. However, their performance did not evidence such level.

Literature Review

This project was carried out to enhance speaking skills by the means of self-assessment. It also involved CLT (Communicative Language Teaching) principles when focusing on meaning and usage rather than grammatical structures. The research was also implemented to help improving spoken interaction.

Self-assessment

There have been extensive previous studies regarding self-assessment for several years. According to Harris and L. Brown (2018), self-assessment is a process which occurs inside students' brain. It means that it involves their thoughts, autonomy, motivation, ethics, and other brain processes. Panadero et al. (2015) explained that self-assessment implies multiple mechanisms and techniques which students apply to describe their activities and appraise the results or products.

Besides, Rolheiser and Ross (2013) pointed out that self-assessment is produced when students judge how well or badly they do their work. It means that they are able to define whether they need to improve or not, so that they can make decisions for success. Hearn and McMillan (2008) explained that it is the combination of three spiral and continuous components: self-monitoring, self-evaluation, and identification and implementation of correction.

Since self-assessment allows students to realize the effectivity of their performance, teachers can implement it for a variety of purposes. There are several ways to use self-assessment in the educational field. For instance, it can be used as an instrument for students to reflect on their learning outcomes. Gehringer (2017) explained that self-assessment implies students evaluating how their work meets the goals set for learning concepts and skills. Reflection helps students think about their learning and identify the areas in which they should correct and improve. Peyton (2017) stated that self-assessment research has been examined as a valuable tool for learners to judge their own performance and compare it with the teacher's. It is vital to indicate that self-assessment has the purpose of improving through valuable and timely feedback. Andrade (2019) remarked that "if there is not opportunity for adjustment or correction, self-assessment is almost pointless" (p.2).

Başak (2019) carried out a study whose objective was to determine whether there was a significant difference between students' self-assessment of speaking and their teachers' assessment. The findings of this research were that there were inconsistencies due to students' understimation of their speaking skills. The author consulted if there had been differences when learners watched TV, listened to English songs, or played video games, which concluded that there were better outcomes as practising those extra curricular activities outside the classroom.

In Ecuador, Romero (2020) presented a study on improving speaking through self-assessment, whose objective was determining the effects of this technique by using role play. The activities proposed were using Padlet with different contextualized situations in which students could create their dialogues. The results were positive since there was great acceptance of self-assessment strategies; students also felt motivated and became more independent on the use of technology and own learning.

This type of assessment also has its drawbacks. One of the weaknesses can be exemplified by Thawabieh (2017) who conducted a self-assessment study on 70 students of a university in Jordan, and identified three problems, such as that students felt that assessment is merely a teacher's responsibility; it is true that teachers assess students' work, but this research highlights the importance of assigning a coresponsibility in students as well. Another difficulty, in this case, fell on teachers since they were not yet ready to accept students' results. Indeed, a very common practice in schools is that students grade themselves with high marks to appraise their own work. Finally, the last issue was that learners were not trained enough to self-assess. In general, teachers do not usually provide enough opportunities to students to practice self-assessment and even worse, there is not a clear explanation of how to do it or its purpose. Anam and Masruria (2021) did some research focused on the students'

perception of self-assessment and how they implement it in the class, and they suggested that teachers should establish clearly defined learning objectives and specific examples of student work in agreement with students.

Speaking in EFL classrooms

Underwood (2017) declared that grammar is an area of communicative language teaching (CLT) and remarked the importance of researching it in high school contexts. Pronunciation is a component of speaking which consists of producing sounds. Pourhosein (2016) stated that "pronunciation is learnt by repeating sounds and correcting them when produced inaccurately" (p.2). Hunter and Tavakoli (2017) carried out a research on understanding of speech fluency, and found that fluency is used to represent 'mastery' of the language. It may be interpreted as how fast and clear a person can speak a language. Alizadeh (2016) defined vocabulary as "the knowledge of words and word meaning", not a simple order of words in alphabetical order. Going beyond, it can also be understood as how that word meaning is used to communicate when speaking and writing.

Communicative Language Teaching

The current research takes Communicative Language Teaching (CLT) principles to implement them in the classroom. Richards (2006) defined CLT as "a set of principles about the goals of language teaching, how learners learn a language, the kinds of classroom activities that best facilitate learning, and the roles of teachers and learners in the classroom". The classes during the innovation focused on enhancing the communicative competence through real-life dialogues in all the tasks.

Backwards Design

The creation of the lesson plan for this study was guided by the backwards design principles. (Appendix 1). McTighe and Wiggins (2011), claimed that it is a

method of designing curriculum in which the learning objectives are set before planning the teaching methodologies or choosing the assessment techiques. This process involves three stages: 1) identify the curriculum objectives and outcomes expected, 2) determine the indicators of performance and assessment methods, and 3) choose the teaching activities and strategies as well as the lesson resources. (Romero Villarroel, 2018)

Rubrics as a tool to assess speaking

The researcher applied rubrics for the current study as a tool to assess the learners' spoken interaction. The model adopted was that provided by Cambridge English KET A2 level (Appendix 2) whose elements of assessment were: Grammar and Vocabulary, Pronunciation, and Interactive Communication by spoken interaction (Cambridge, 2020).

Innovation

The study was applied to help learners improve their speaking skills using Gradual Release of Responsibility. Learners were provided a model, teacher's guidance, individual and peer practice. The implementation of the innovation project took place during pandemic in 2021, so students had just been allowed to return to face-to-face classes progressively. It means that each school should present a document called Plan Institutional de Continuidad Educativa (PICE), only if their students had been vaccinated, among other requirements from the Ministry of Education in order to receive a limited number of students. As a result, the school merged students from two classrooms of the same level into a single classroom. Unfortunately, there were only ten students attending that class.

During the first week, the participants were sent via WhatsApp a worksheet with a set of in-class and after-class activities to be worked during the four weeks. During the first two lessons of the first week, the students were presented the vocabulary related to

plans for future. The activity consisted of matching vocabulary to picture cards. There was a whole-class check afterwards. Then, individually, participants stated their favorite future plan, and all the ideas were written on the board to be ranked according to a voting process. Next, a model dialogue was provided for pairs to practice, the first checklist (Appendix 3) was presented and explained how to be used descriptor by descriptor as well the level of performance.

After the first practice, they were asked to self-assess. There was a whole-class discussion about self-assessment. They then commented their results and received group feedback. In addition, there was another model dialogue which was practiced with the teacher, and then self-assessed with the checklist. The last activity of that lesson was the assignment of a dialogue about their future plans for next holidays, which students sent through WhatsApp including the audio and the script.

The participants of the project were provided a checklist to self-assess, which included Grammar and Vocabulary, Pronunciation, and Interactive Communication descriptors. All of them were measured under levels of performance as "accomplished", "in progress", and "needs improvement" assigning from 3 to 1 point respectively.

For the second week, the teacher displayed a video to recall the verb to be structure. Then students were asked to read another model dialogue about plans for Christmas and complete it with appropriate grammar structure of 'be going to' in full and contracted forms, and received feedback from the teacher. After that, they completed some questions and answered them on their own. There was individual correction on the board. Next, for the other class, they were assigned to listen to a WhatsApp voice message consisting of a dialogue where they had to identify 'be going to' structures in affirmative, negative, and interrogative forms. Another assignment was

to produce a pair dialogue about their following day plans using appropriate structures, vocabulary learnt, and correct order with the respective self-assessment checklist.

On the last week of implementation, the teacher focused on pronunciation. The participants were presented a video about intonation in questions, which was explained in detail by the teacher. Then they were requested to hear him read a dialogue and to identify the intonation in all the questions. They had to draw a rising or falling arrow in the text. Next, the teacher asked them to prepare two questions about their plans. They asked him and practiced the intonation in the questions and received feedback. After that, they prepared other questions to practice in pairs and identify the intonation again. The final assignment was to prepare a dialogue in pairs about their plans for the next weekend respecting intonation, use of grammar structures and vocabulary learnt. They sent the dialogue with the audios and checklist to the teacher by WhatsApp. They were given individual feedback.

Research Methodology

This research was conducted following the guidelines of an action research. According to McNiff (2016), action research is defined as a special form of research in the real world. It involves taking action, explaining what has been done, the reasons, and what is expected with it. The implementation of this project included gathering quantitative and qualitative data to answer the following research questions: 1) "To what extent does the use of self-assessment improve speaking?", and 2) "What were students' limitations on self-assessment during the implementation?"

To obtain the quantitative data, the researcher applied pre and posttest that were graded using a rubric (Appendix 2). For the qualitative data, an online interview (Appendix 4) was carried out, on which students were asked open-ended questions to

obtain their appreciations and perspectives of the self-assessment project after its implementation.

Participants

This research took place in a public school in the northeast of the city of Guayaquil, Ecuador in a Covid 19 context during the last three weeks of December. The participants of the project were 10 students, from which six were males and four were females. The ages of the learners ranged from 15 to 17 years old. They were second year of high school students.

Instruments

As mentioned before, the instruments elaborated to collect the qualitative and quantitative information helped to answer the two research questions: 1) "To what extent does the use of self-assessment improve speaking?", and 2) "What were students' perspectives towards self-assessment during the implementation?". Both instruments were reviewed: the interview questions were proofread by a colleague while the rubric was checked by the Assessment professor of the master's program. The checklist was revised by the Instructional Design facilitator.

The first instrument used was the pre and posttest which was graded with a rubric, whose pattern used was adapted from the Cambridge KET A2 level for the speaking skills of students. This rubric implied some criteria, such as Grammar and Vocabulary, Pronunciation, and Interactive Communication on which 5 was the highest score while a 0 meant the lowest mark along with five possible bands to place students' performance. (See the rubric in Appendix 3). It served to assess the pre-test and the post-test. Ulker (2017) stated that the main purpose of rubrics is to assess performance.

The instrument to collect the qualitative information was an online interview through four open-ended questions whose aim was to gather the participants'

perspectives of the self-assessment process including the speaking activities and the training by the teacher. The questions were asked in L1 and L2 so that students felt more comfortable to answer confidently. They also sought their opinion about the quality of feedback provided as well as the usefulness of the checklist that they applied for the self-assessment.

Pre and post-test

The project intended students to describe future plans using 'be going to' in affirmative, negative, and interrogative forms as well as vocabulary related to plans, including expressions of surprise and interest. At the beginning of the implementation, the researcher applied a pre-test which consisted of having students prepare a recorded dialogue describing their plans for the next holidays using appropriate grammar structures and vocabulary related to the topic as well as good pronunciation and relevant interaction. The final or post-test was another recorded dialogue in which the participants had to talk about their plans for the next weekend meeting the same requirements as the pre-test.

Data Analysis

The checklist helped to answer the first question along with the rubrics as they were both compared for the pre and post-test in a Microsoft Excel spreadsheet using the Analytics Tool Pack. Furthermore, the data collected served to calculate the mean, median, and mode as well as the standard deviation. Finally, the paired sample *t*-test and the *p*-value were analyzed through inferential statistics.

The second research question was answered through the results of the students' viewpoints regarding self-assessment process and speaking activities. These answers are included in the student's learning log (Appendix 5).

Ethical Considerations

Action research must be conducted observing several ethics standards which protect the subjects of the study. Zeni (1998) assured that participants are considered to be free from risks when they are informed, so the researcher should always communicate the objective of the project as well as the activities and the instruments to collect the information. It means that they should give their consent. In the case of minors, their parents were sent a consent letter which had to be sent back with their signature indicating their agreement.

Another important feature to take into account when carrying out a study is the participants' decision. The author consulted the experimental group whether they wanted to be part of the resarch or not, so everyone gave their consent with a unanimous "yes" as well as the consent from their parents to participate. It is important to emphasize that they were informed that no penalty would happen or no points would be reduced in case of refusing to participate. In addition, the school authorities were informed about the project implementation.

Moreover, it is necessary to consider what Govil (2013) declared in terms of anonimity and privacy:

The participants have the right to maintain privacy. If the information obtained from the subject require confidentially it should be maintained at any cost. Even if the researcher has to mention raw scores in the publication, even then confidentially and anonymity should be maintained. (p. 19)

Results

To answer the first research question: "To what extent does the use of self-assessment improve speaking?", the researcher used a rubric to illustrate the differences between the pre and post-test.

Table 1

	PRE-TEST			POST - TE			
	N	M	SD	M	SD	MD	<i>p</i> value < 0.05
Total	10	11.4	1.58	13.2	1.81	1.80	0.002

Descriptive statistics of Speaking Pre-test and Post-test

1.58

Note: N = Sample. M = Mean. SD = Standard Deviation. MD = Mean Difference

Table 1 displays the global values of the pre-test and post-test. The mean difference (N=10) is 1.80, which evidences an increase in the scores of the post-test. The values of the standard deviation in both the pre-test and post-test mean that the scores are closely approximate to the mean of the test. The p value with an alpha of 5% is less than 0.05. This indicates that there was an evident improvement on the participants' speaking performance due to the innovation. Furthermore, the difference between means in the pre-test and post-test is statistically significant and there is a meaningful result in the educational field.

Table 2 Descriptive statistics of Theoretical Constructs

		PRE - TEST		POST - TEST			
Construct	N	M	SD	M	SD	MD	<i>p</i> value < 0.05
Grammar and Vocabulary	10	3	1.25	4.2	1.23	1.20	0.003
Pronunciation	10	3.7	0.48	4	0.82	0.30	0.041
Interactive							
Communication	10	4.7	0.48	5	0	0.30	0.041

Table 2 shows the values for each descriptor of the speaking rubrics in the pretest and post-test. It can be observed that all the descriptors increased, which means a general improvement in the participants' performance. The result of the standard deviation signifies that for all variables, the scores were not farther away from each other than 0. The p value with an alpha of 5% for the three constructs means that the

correlation between the variables is statistically relevant. It is observed that the highest improvement was in Grammar and Vocabulary due to the several practices of the structures and application of vocabulary related to the topic which took place in class.

On the other hand, for the second research question: "What were students' perspectives towards self-assessment during the implementation?" an online interview was conducted. The participants provided their opinions and perspectives of the implementation of the project. The following are some extracts from the question about self-assessment in which the participants mentioned its benefits. As an example, a student highlighted this:

"This kind of evaluation helped me a lot since I could observe my drawbacks, such as vocabulary and grammar mistakes. I consider self-assessment allowed me to correct myself because I used to make the same mistakes, and that helped me to develop my ideas about future plans in a better way." (S. 1)

In terms of the usefulness of this work, another participant mentioned this:

"Before the implementation of the project, I felt too nervous because I did not know much vocabulary or which grammar structure to use for describing plans." (S. 2)

"The checklist helped me a lot after each task since I could revise my abilities with a classmate and practice. We did not know if it was correct, but thanks to that, we were able to organize our ideas much better. The descriptor of grammar reminded me of the structures for plans." (S. 4)

In addition, the participants expressed their opinion regarding the training received from their teacher. These are some extracts which support these perspectives:

"Apart from the clear explanations which the teacher gave in terms of using the checklist, he taught us a lot about the grammar rules at the moment of speaking about future plans in English." (S. 5)

"The training provided by the teacher helped me to get rid of my fear to speak in public and improve my pronunciation." (S. 7)

"Before the training on using the checklist, I did not understand how the instrument itself was useful" (S. 9)

Discussion

The objective of this research was to improve students' speaking skills through the use of self-assessment. The first research question: "To what extent does the use of self-assessment improve speaking?" was answered through results of the pre and posttest, which indicate that the implementation of the project had positive outcomes just as Romero (2020) reported in his study who also implemented self-assessment for speaking. Additionally, Başak (2019), who conducted a study on self-assessment of students' speaking skills, also used rubrics to collect information. The result of his work were positive in terms of the students' performance because it shows an increase in all the descriptors used by the participants, as occurred with the students of the author of the current study.

Regarding the second research question: "What were students' perspectives towards self-assessment during the implementation?" which consulted the participants' thoughts about the self-assessment technique as well as the benefits of a checklist was answered through an interview. Anam and Masruria (2021) conducted a research and collected the information through the same instrument as the researcher of the present work. The results presented were mostly positive in terms of the student's perspectives towards self-assessment; same as the current implementation. However, their study showed few students who believed self-assessment was not helpful enough to them. These participants argumented that they did not trust their self-assessment or that sometimes the teacher understimated them.

Conclusions

Prior to the execution of the innovative project, students struggled when speaking about future plans since they did not manage a good vocabulary or appropriate grammar structures. For that reason, the objective of this research was to improve their speaking skills through self-assessment.

The implementation of this project resulted in positive outcomes. For instance, the first question in terms of using self-assessment for improving speaking skills results reported an increase in the students' performance to describe future plans orally. The use of rubrics by the teacher helped to reduce time for feedback as well as for scoring the participants' tasks.

Despite the pandemic due to Covid 19, the completion and acceptance of the project was also positive as supported in the interview's perspectives. Parents and students were never reluctant to participate and fulfill all the requirements to carry out this work and permitted to confirm the efficacy of self-assessment as a teaching strategy.

Finally, students were able not only to improve their speaking skills, but there was a better motivation to learn the language as they stated it in the interview. They considered also the importance of revising their own performance.

Limitations

The application of the project was effective. However, it is important to highlight the challenges that the researcher had to undergo; for example, the experimental group size was small as there were only 10 participants out of more than 30 students enrolled in the course who evidently missed classes for pandemic reasons.

Another difficulty was the time which the participants took to deliver the tasks.

A few of them forgot to send the audios on time while others sent the audios but missed the checklist. It made the teacher take longer to obtain the results.

Finally, the interview did not take place at school since the participants only stayed in the institution for their lessons. Consequently, a Google Forms was elaborated with the interview, so students received a link to fill it out at home.

Recommendations

Here are some ideas which will help them to overcome the challenges stated before:

- 1) If the class size is too small, it is advisable to consider merging classes of the same school level.
- 2) To avoid delay in the delivery of results, it is recommendable to provide time in class to accomplish the tasks even though they are not completed, at least the students would not carry too much to do as homework.
- 3) Technological tools were very good allies when implementing the project since in a pandemic context, students used their mobile phones to record their speaking activities and send them to the teacher.

References

- Alizadeh, I. (2016). Vocabulary teaching techniques: a review of common practices.

 *International Journal of Research in English Education, 1(1), 22-30. Retrieved from https://ijreeonline.com/article-1-25-en.pdf
- Anam, S., & Masruria, W. W. (2021). Exploring self-assessment of speaking skills by EFL high school students. *Linguistic, English Education and Art (LEEA) Journal*, 4(2), 387-400. https://doi.org/10.31539/leea.v4i2.2285
- Andrade, H. L. (2019). A Critical Review of Research on Student Self-Assessment.

 Frontiers in education, 4(87), 1-13. https://doi.org/10.3389/feduc.2019.00087
- Başak, H. (2019). *Self-assessment of students' speaking skills*. (Master's thesis, Middle East Technical University). Retrieved from https://open.metu.edu.tr/bitstream/handle/11511/27983/index.pdf
- Cambridge. (2020). *Cambridge English*. Retrieved from https://www.cambridgeenglish.org/images/504505-a2-key-handbook-2020.pdf
- Gehringer, E. (2017, June). Self-assessment to improve learning and evaluation paper presented at 2017 ASEE annual conference & exposition. Retrieved from https://peer.asee.org/self-assessment-to-improve-learning-and-evaluation
- Govil, P. (2013). Ethical considerations in educational research. *International Journal* of Advancement in Education and Social Sciences, 1(2), 17-22. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.889.7927&rep=rep1&type=pdf
- Harris, L. R., & L. Brown, G. T. (2018). *Using self-assessment to improve student learning*. New York: Routledge.

- Hearn, J., & McMillan, J. H. (2008). Student self-assessment: the key to stronger student motivation and higher achievement. *Educational Horizons*, 87(1), 40-49. Retrieved from https://eric.ed.gov/?id=EJ815370
- Hunter, A.-M., & Tavakoli, P. (2017). Is fluency being 'neglected' in the classroom?

 Teacher understanding of fluency and related classroom practices. *Language Teaching Resource*, 22(3), 330-349. https://doi.org/10.1177/1362168817708462
- McNiff, J. (2016). Writing up your action resarch project. New York: Routledge.

 Retrieved from https://www.routledge.com/Writing-Up-Your-Action-Research-Project/McNiff/p/book/9781138828322#
- McTighe, J., & Wiggins, G. (2011). The understanding by design. Guide to creating high-quality units. Alexandria: ASCD. Retrieved from https://www.ascd.org/books/the-understanding-by-design-guide-to-creating-high-quality-units?variant=109107
- Ministerio de Educación. (2016). [*Currículo. Lengua Extranjera*.] Retrieved from https://educacion.gob.ec/curriculo-lengua-extranjera/
- Panadero, E., Brown, G. T., & Jan-Willem, S. (2015, 12). The future of self-assessment: a review of known, unknown and potential directions. *Educational Psychology**Review, 28, 803-830. https://doi.org/10.1007/s10648-015-9350-2
- Peyton, C. (2017). Students' perception of the self-assessment process in high school physical education. (Master's thesis, Illinois State University). Retrieved from https://ir.library.illinoisstate.edu/cgi/viewcontent.cgi?article=1771&context=etd #:~:text=Significant%20themes%20emerging%20from%20this,communication %20between%20student%20and%20teacher.
- Pourhosein, G. (2018). English pronunciation instruction: a literature review.

 *International Journal of Research in English Education, 1. Retrieved from

- https://www.researchgate.net/publication/325381974_English_Pronunciation_In struction_A_Literature_Review
- Richards, J. C. (2006). Communicative Language Teaching Today. New York:

 Cambridge University Press. Retrieved from

 https://www.professorjackrichards.com/wp-content/uploads/RichardsCommunicative-Language.pdf
- Rolheiser, C., & Ross, J. A. (2013). Student self-evaluation: what research says and what practice shows. Retrieved from http://csimmonds.pbworks.com/w/file/fetch/118283790/Student%20Self%20Ev aluation%20What%20Research%20Says%20and%20What%20Practice%20Shows.pdf
- Romero Villarroel, W. O. (2018). *Backwards design model in English microcurriculum*planning. (Thesis of Master's in English Language Teaching, Universidad

 Técnica de Ambato). Retrieved from

 http://repositorio.uta.edu.ec/bitstream/123456789/28241/1/Romero%20%20Wil

 ber.pdf
- Romero, G. C. (2020). *Improving speaking through self-assessment of role-play*facilitated by Padlet. (Master's thesis, Universidad Casa Grande, Guayaquil).

 Retrieved from http://dspace.casagrande.edu.ec:8080/handle/ucasagrande/2328
- Thawabieh, A. M. (2017). A comparison between students' self-assessment and teachers' assessment. *Journal of Curriculum and Teaching*, 6(1), 14-20. https://doi.org/10.5430/jct.v6n1p14
- Ulker, V. (2017). The design and use of speaking assessment rubrics. *Journal of Education and Practice*, 8(32), 135-141. Retrieved from https://core.ac.uk/download/pdf/234641197.pdf

- Underwood, P. R. (2017). Challenges and change: integrating grammar teaching with communicative work in senior high school EFL classes. *SAGE Open*, 1-15. https://doi.org/10.1177/2158244017722185
- Zeni, J. (1998). A guide to ethical issues and action research. *Educational Action Research*, 6(1), 9-19. https://doi.org/10.1080/09650799800200053

Appendix 1

Lesson Plan: Backwards design of the innovation

Research topic:

Available upon request.

Appendix 2

Rubrics for assessment of speaking skills performance

Available upon request.

Appendix 3

Checklist for students' self-assessment

Available upon request.

Appendix 4

Interview Protocol

Available upon request.

Appendix 5

Student's learning log

Available upon request.

Appendix 6

My e-portfolio

Available upon request.