

Improving Pronunciation by Recording Monologue and Self-Assessment

Maria Dolores Arévalo Morales

Guided: Ms. Mariuxi Briones

Presented as Partial Fulfillment for the Degree of Magíster en Pedagogía de los Idiomas Nacionales y Extranjeros con Mención en la Enseñanza de Inglés. CES:

CES: RPC-SE-19- N°. 140-2020. Cohort 2021 - 2022. Author's email:

mariadolores.arevalo@casagrande.edu.ec Guayaquil, October 13th, 2023

Improving Pronunciation by Recording Monologues and Self-Assessment

In regular classes, several factors affect students' English language acquisition. On one side; where the teacher is the center of attention person, learners' isolation and dropout become strong when they want to interact using a second language (Conrad & Donaldson, 2004). On the other side, students' lack of interest in the subject. Besides, most students' problems are related to their speaking skills due to the limited vocabulary, and the lack of confidence in speaking because students were not adapted to talk in class. Furthermore, the fear of being assessed always causes stress to students, which is why Yan (2022) proposed letting students reflect on their practices by self-assessment.

When students have to practice a second language, motivation plays an important role during each session, it can be noticed when students do not feel engaged with the class.

Maybe it can be due to the last two educational years online because this problem was found in a day-to-day classroom. This is a difficult learning process and the acquisition of the language.

Ecuador has been making some changes to improve the English level of students in public and private schools. Furthermore, the culture and realities vary between areas and cities around the country (Paredes et al., 2018). It is necessary to innovate teaching with updated procedures. Try to work with significant learning, it is not an easy and immediate process but with constant training, students can feel comfortable speaking in class, improving their vocabulary, and gaining confidence in themselves.

Literature Review

This section reviews different theories and research conducted to improve speaking skills based on self-assessment.

Assessment

When learning in class, assessment is helpful when it includes appropriate evaluation methods (Sewagegn, 2019). According to the context of levels of education, as Stassen mentioned, it is a collection and analysis of information about the improvement of student learning and can facilitate the process through a variety of sources (Stassen, 2001).

Self- Assessment

According to Boud (1995), when self-assessment is introduced, it should ideally involve students in the quality of performance expected and then make judgments about the quality of the performance. Andrade and Du (2007) highlighted that self-assessment is a process of formative assessment during which students reflect on and evaluate the quality of their work and their learning, judge the degree to which they reflect explicitly stated goals or criteria, identify strengths and weaknesses in their work, and revise accordingly

The fear of some teachers applying this technique is the limitations. Self-assessment can be subjective since the students' evaluation of their work may not be sincere and sometimes over-evaluated. As Ashford and Tsui (1991) stated in their studies of self-assessment, this new way of improvement can be tedious to some students, it is a time-consuming activity and requires practice to apply it to obtain benefits. However, self-assessment provides students with the capacity to be aware of their weaknesses and strengths (Urrutia ,2022). Nevertheless, the gap between teacher and student's goal is the major challenge in this process. Students tend to perceive themselves as not good speakers or having poor performance, which leads to lack of confidence and negativism towards learning.

According to Jacobs and Farrell (2003), to stimulate communication it is necessary to focus on the role of the learner as a key component in the process and the teacher's role as a facilitator. Thus teachers must help and show students how to self-assess effectively (Rolheiser & Ross, 2001).

A four-stage model for teaching student self-assessment can be applied. First, involve students in defining the criteria that will be used to judge their performance. Second, teach students how to apply the criteria to their own work. Third, give students feedback on their self-assessment. Fourth, help students develop productive goals and action plans. (Rolheiser & Ross, 2001).

Another way to apply self-assessment is by using the rubric. The rubric is a tool for students which indicate one set of goals. This set of goals specifies the following: "I know where I am going", "I know where I am now", "I know how to get there; and, I know how to go beyond" (Fluckiger, 2010).

Monologue

According to The Council of Europe (2018), in the Production activities part, a sustained monologue belongs to three macro-functions where they can describe experiences focusing on descriptions or narratives. Also, they can put a case like debates; or give information. A sustained monologue based on describing experiences has descriptors at A1-B1 that reflect the communicative language used to express. For the scales Key Concepts are valuable for example: *Aspects described from simple everyday information and complexity of discourse*.

Speaking Skills

Fluency and accuracy are the skills of speaking where the first refers to the ability to speak spontaneously and without many pauses. The latter is to construct grammatically correct ideas, phrases, or chunks (Derakhshan et al., 2015). For other authors like Bygate, speaking also involves interaction and production. Bygate defined production as the ability to speak without time limitations; and, interaction is produced when pairs negotiate the conversation (as cited in Derakhshan, et al., 2015). Burns and Joyce (as cited in Al-Eiadeh et al., 2016) shared similar points of view. They considered speaking involves interaction to construct meaning. This interaction means not only receiving and processing information but also producing it. Hence, students require extended, authentic, and meaningful practice (Celce-Murcia, 2001; Jacobs & Farrel, 2003).

Feedback

Based on Indahyanti and Mursidin (2017), the process of providing helpful information to the students about their skills related to their learning process is feedback. It is a significant part of learning because the ways that are taken by the students affect their motivation and interest during the process of learning. This study was based on CLT (Communicative Language Teaching) where good feedback has to be constructive and specific. Sisquiarco et al. (2018) remarked that feedback has different purposes; for instance, it provides suggestions about a student's learning process and thus helps them improve and achieve it.

Pronunciation

Dalton and Seidlhof (2001) determined pronunciation as the production of significant sound in two senses. First, because it is used as a code of a particular language, any language has its distinctive sound. In this sense, pronunciation is the production and reception. The second sense is that it is used to achieve the context of uses, this combines with other factors

that make communication possible. For this study, both senses give particular attention to communicative aspects.

Innovation

For this innovation Pre and post-activity were taken into account. Participants took a Cambridge Online diagnostic test which determined the level where participants were. This study was developed over 6 weeks. Each week had 2 synchronous and 2 class hours, which were planned in the lesson Plan (Appendix 1). A Unit Backward Design (UBD) model was used to plan classes. This model "plans with the end in mind" (Wiggins & McTighe, 2012, p.7).

When chronograms and information were given to the students it was necessary to document and record the process. Finally, the resources, tools, and teaching and learning activities were proposed as the means to fulfill the desired purpose (Wiggins & McTighe, 2012)

The desired transfer goal was that students learn vocabulary related to Inventions and Discoveries. Students practiced Grammar related to present and past passive voice including the use of "by". Students expressed organized ideas with understandable pronunciation. So that in the long run and on their own they will be able to describe their inventions or crafty hobbies with their author in a monologue including vocabulary words and learned grammar, with clear pronunciation.

All the activities were with a teaching-learning method including an increasing level of difficulty in each intervention. This means that students started with simple topics such as devices known by them to finish with the implementation of one created by them. Real situations are always needed because they have to keep in mind one essential question: "How can I use this knowledge in real life?"

The role of the student was to self-assess the activity based on the checklist, this exercise was repeated four times to see the improvements that students had. The teacher's role was to guide, explain, and implement the checklist and teach how to self-assess.

First, the uses of the checklist and self-assessment were explained and activities were developed in classes finishing with the teacher's feedback. The weekly classes included grammar, vocabulary, pronunciation, and oral production. In the pursuit of supporting students' confidence, a classroom platform was activated to contact the teacher if any help was necessary. They could share their records and rubrics via the platform to save information for future analysis.

During the four sessions, students would improve their recording methods and oral production by describing different tools or devices to finish with the one that they created. The checklist was used by students to self-assess their records. The recorded monologue was sent via classroom to the teacher and student's self-assessment checklist too. In each session, teacher and students' feedback was provided by asking three essential questions; How did I produce this monologue? What did I learn from this device? How am I going to improve the next record?

Research Methodology

The methodology of this Action research is an approach that proved to be practical with problem-solving emphasis (Cowie and Bell, 1999, p. 10). Action research is a flexible spiral process that allows action (change, improvement) and research (understanding, knowledge) to be achieved at the same time (Dick, 2002). To state the benefits of action research, teachers must be agents of change to engage students in their practice.

Finally, this study was considered action research because both teachers and students simultaneously researched and took action; that meant to investigate and solve the problem in the classroom speaking practices. For this study, quantitative and qualitative data was collected to look for any improvement in a student's speaking skills. Both types of data were chosen "to gain a better understanding of connections or contradictions between qualitative and quantitative data" (Shorten & Smith, 2017; p.74).

This study collected quantitative data from Checklists, Pre and Post-tests, and qualitative data from Learning logs and Surveys done before and after the implementation.

All of this is to know if self-assessment implementation improved students' oral production General Objective

What is the student's pronunciation improvement with recording monologue applying self-assessment? For this study, three research questions are presented:

- To what extent did the use of recording monologue improve oral production?
- To what extent did students' self-assessments improve?
- How was the students' perspective about their oral production after this implementation?

Context and Participants

This research was designed for 12 students in 7th grade in a private school in Guayaquil during the year 2022-2023. Their English level was A2 which was confirmed using a Cambridge placement online test. The researcher was focused more on the lowest-grade students to verify if the technological tools would increase their speaking skills. Due to their age sometimes, they felt ashamed for speaking out loud for that reason assessment was chosen.

Instruments

The instruments were:

Checklist and Rubric for self-assessment

For this process every student had a checklist. After they were explained, students used them for all the activities. The checklist evaluated 5 categories with; Yes, Sometimes, and, No yet answer. The checklist was adapted following the CEFR A2 level Standard that measures; Grammar/Vocabulary, Pronunciation, and Content. The rubric had the same categories as the checklist with the range of 5 to 1, with 5 being the highest grade and 1 being the lowest. This instrument has been adapted based on the Cambridge Rubric Flyers: A2 level.

Student's Interview

Participants answered qualitative open-ended questions using sources such as Google Forms and written notes to obtain the information before and after the process. This survey was based on their expectations of the project and after each intervention. The main questions about this are going to be in the part of the feedback: How did I produce this monologue? What did I learn from this device? How am I going to improve the next record?

All of the information collected by this instrument contributed to qualitative data analysis and provided a better view of learning strategies, process improvement, and challenges during each intervention.

YLE Proficiency Test

The YLE (Young Learners English) test was taken to grade speaking skills, as the main objective of this study. It was considered as pre and post-test. The exam was downloaded and modified according to the student's contents and then analyzed by the teacher. This test intended to obtain real grades of their improvement after the innovation.

Data Collection Analysis

In the pursuit of answering the three questions, quantitative data was collected and analyzed using the t test where the mean, median, and standard deviation were calculated through an Excel file.

The first research question looked for the improvement of the oral production through recording monologues, to answer this question pre and post-tests are going to be compared to calculate the mean and obtain the inferential statistics of the study.

The second question wanted to collect information about self-assessment, how this technique was used for the students, and how helpful it was. For these reasons, the students' and teachers' checklists were compared to determine if the students learned to self-assess or not.

The third question was about the student's perspective, emotions and expectations. The interview was about how the students felt before and after the innovation. To answer the research question about the student's perspective, the interview was done in two parts; before and after the implementation. The organization of the questionnaire was: What were some challenges faced during the process and if they consider that they have improved their pronunciation.

Ethical Considerations

The first step to start with this innovation was to send a letter asking for permission from the institution. Following Bryman and Bell's (2007) principles "Full consent should be obtained from the participants prior to the study" (p.67) As the students are children, a letter to parents for the approval and authorization to begin with the study was necessary. In addition, all of the recorded monologues were used for this innovation. Students' and parents' approval was necessary besides the pictures and names were anonymous. Fortunately, both consents were approved and the study could be completed successfully.

The most important part of this study was the honesty of the students because they were the principal beneficiaries. In each stage of the implementation, the academic coordinator and parents were involved because it represented extra work for the students.

Results

The results of the first question: *To what extent did the use of recording monologue improve oral production*? The data from the pre and post-test were analyzed and shown in Table 1; here the improvements in the oral production in monologues considered and compared teacher's rubric grades. This tool led them to improve their oral production.

Moreover, the *p*-value resulted in the 5%, which was less than 0.005; which demonstrated that those improvements were due to the innovation.

 Table 1

 Descriptive Statistics for monologue pre-test and post-test

	N Sample	Min	Max	Mean	SD	p-value
Pre-test	12	10.5	15	13.29	1.75	
Post-test	12	16	18	16.29	1.10	0.00

To answer the second question: To what extent did students' self-assessments improve? Table 2 compared the assessment done by the students and teachers, it considered the first and the final grade. It is noticeable that at the beginning students' grades were similar to the teacher (mean) at the end it was lower (15.92) which can indicate they are more rigorous with their assessment.

 Table 2

 Descriptive Statistics for assessment pre and post-test compared with teacher and student

 Pre-test Pre-test						Post- test			
 Min	Max	M	SD	p-value	Min	Max	M	SD	p-

										value
Teache r	10.5	15	13.25	1.69	0.00	15	18	16.42	0.95	0.00
Student	8	16	13	2.25	0.00	14	17	15.92	1.38	0.00

table 3 shows the skill's grades in the students' monologue, which compares scores of pre and post-test with the checklist and the rubric. The construct of the rubric evaluated were: Grammar, Vocabulary, Pronunciation, and Production Content. The improvement of their Speaking Skills are noticeable. The grades had increased for more than (0.50) in each construct regarding to p-value (0.00) it can be inferred that was due to the practices of recording monologues.

 Table 3

 Descriptive Statistics in every construct

	N	Pre-test Mean	Post-test Mean	P-Value
Grammar	12	3.08	3.63	0.00
Vocabulary	12	3.00	4.50	0.00
Production				
Content	12	3.33	4.33	0.00
Pronunciation	12	3.25	3.92	0.00

Finally, to answer the third question: How did students improve in oral production after this implementation? For this question, an interview was made with the students at the beginning and the end of this study. The questions were based on the rubrics, checklists, feedback, and teacher's notes. Eight students were chosen randomly, the interview was made

in Spanish and English for better comprehension, they felt free to answer it in Spanish or English.

Question N1; Before the intervention *What do you hope for this intervention?*When doing this questionnaire, hesitation was noticed, some students mentioned that they felt afraid of speaking English for the mispronunciation or public corrections. They wanted to lose the fear and have more confidence at the speaking time. One student stated (S2) "I feel afraid of speaking in front of my partners, I want to have more confidence when speaking in public".

Question N2; Before the Intervention; *How do you feel with this intervention?* Most of the students answered that they felt nervous and anxious about the results, most of them were incredulous but accepted the challenge. One student stated "I do not think it would help us, we have learned English for more than 5 years and I do not know how to speak in public"

Question N3. Before the Intervention: What are you going to do to complete this process? The students' answer to these questions was to be responsible for their duties and be honest about the process, do their best, and learn how to improve their oral production. The teacher requires students to research devices, watch interviews, and listen to podcasts, to learn how to express themselves. One student's answer was (S1) "I promise to comply with all the teacher's instructions and try to do my best".

Question N1 After the Intervention; *How did you feel with the intervention?*All the students felt happy because they practiced with something new, they mentioned that at the beginning, they were afraid of the new technique and it seemed difficult, but in the end, they understood the method and it was easy to complete, as they did self-assessment and had private feedback, they felt the confidence of correct their mistakes. "At the beginning, I felt nervous and hesitated a lot about the intervention, I thought that it would be more homework

and even more difficult to use the checklist and rubrics, but as the practices were constant, then it was easier".

Question N2 After the Intervention; What did you like about this intervention? The students agreed with the freedom they have about choosing the device to explain, and at the end to create a new one. They mentioned that they use their imagination like a game, and are always learning new expressions and vocabulary. To record themselves and then listen to it was great because. Most of them stated that (S1) "It was a grateful process, I really enjoyed it when we had to create a new device and explain it. (S3) "With the rubric I could self-assess and correct the mistake"

Question N3 after the Intervention; What were some challenges faced in this process? As this was a completely new process for all of them, even for the teacher, the time was the first challenge. For students to learn how to use the rubric and the checklist, was the major challenge. Finally, working at the same time with the other subjects was time-consuming. Also, they expressed that they sometimes felt overwhelmed by the process due to not progressing and had the same grade as the previous rubric, though they had practiced or prepared more. (S4) "The principal challenge was to learn how to use the rubric and checklist, the other was to record the exact time not always we could record 1 minute; when I calculated my grade sometime I felt disappointed of it"

Question N4 after the Intervention; Would you use self-assessment in future oral production activities? After the implementation, the changes were evident. Students felt more comfortable applying this technique, for instance some of the students wanted to use this technique in other extra activities or subjects. So most of them despite facing some challenges agreed that they enjoyed the process and most of them gained confidence in self-assessing. (S6)"I would use this method in the future, it helped me to gain confidence on my oral production, with the use of the rubric I learnt how to assess my work in a better way and

correctly" (S.11) "I would like to use this technique when I have dissertations or oral lessons, this helped me to know my weaknesses".

Discussion

The findings obtained after the implementation of recording monologues using self-assessment to improve oral production were positive. A group of 12 students from a private school in Guayaquil city was chosen to work with self-assessment.

To answer research question number one, about assessment, Sewagegn, (2019) stated that implementing assessment in students would have positive results when the given tools are correct. This statement was evidenced in the implementation, with the use of rubrics, checklists, and learning logs. One thing that would be added to this conclusion is that motivation plays an important role in students' improvement.

To answer research question number two about self-assessment, Andrade and Du (2007) highlighted that it is a process where students can reflect on the work, revise it, and identify its strengths and weaknesses. To agree with this theory, the use of this strategy allowed students to gain confidence in their work and helped them to reflect and score it honestly, giving the end the positive result that was to achieve the improvement of oral production.

The results obtained in question number three, the students interviewed agreed that now they feel more motivated and this work gave them the confidence to start a conversation in English or to expose it aloud. Sisquiarco et al. (2018) remarked that teacher's feedback would contribute to or frustrate students' learning process. That is vitally important to learn and train how to give it constructively. It was noticeable in this process because feedback was essential for students' motivation.

Conclusions

This intervention was a Master's degree project that intended to improve the oral production of a group of 12 students. When the intervention ended, the researcher compared and contrasted the results with previous studies done about the same topic that had concluded positively and helped students to enhance their competencies with grammar, vocabulary, oral production, and content.

The improvement of the student's oral production by using self-assessment and recording monologue was satisfactory. Besides this was a new process students adapted fast. They improved their oral production by creating and recording monologues describing different devices to finish with one created by themselves.

This intervention gave students the confidence to assess their work, accept positive feedback and accept when they need improvement. Students feel more confident when they have control of their knowledge and are afraid of grades or being assessed. This can be due to teachers' centered classes only. It is normal that in educational life they are going to be assessed all the time. Practicing self-assessment in day-to-day classes, students gain confidence to grade their work without judgment and improve their learning process.

Students reinforced their reflection and analysis skills allowing them to make their practice more meaningful and being motivated to participate It decreased the difficulty of expressing words or sentences.

The strategy used in this project was self-assessment. Even though at the beginning students' expectations were low in the long path they learnt how to use a Rubric and a Checklist to score their work. Demonstrating in every stage a meaningful improvement. Furthermore, the use of interviews allowed students to express their emotions and feelings about every feedback received by themselves and the teacher. Despite that, some of the

students had problems recording themselves for the noise or other distractions, as they expressed in the interview, they felt motivated to complete this process.

Even though the limited time for this innovation, it was demonstrated that this helped students improve their learning process and oral production. In conclusion, implementing recording monologues with self-assessment had an improvement in students' oral production and allowed them to gain confidence.

Limitations

This new implementation was really useful not only for the students but also for the teacher because it helped students to gain confidence and the teacher to assess better and give assertive feedback to the students.

In the long path of this intervention, one of the major limitations was the time, despite that this process was time-consuming for the teacher and the students too. The amount of time that took to teach them how to assess correctly, and the uses of the checklist and rubric were short.

Another limitation was to find the correct techniques to teach students how to use all the sources. In the beginning, they felt frustrated because they did not know the uses. The period of the intervention; was only 6 weeks. It represented a big problem because to start with a new process like this, it is recommended to have previous studies about the group, you need to know their strengths and weaknesses related to the language. Analyze their scores and behavior during classes, to choose the appropriate activities. It would be better to have more time but the school chronogram and curriculum had to be completed and finished on time.

The last limitation was the traditional way of teaching; which is teacher-centered mode. Most of the students did not feel comfortable with leading the class and the teacher only guided them.

Recommendations

Some recommendations considered by the researcher are: First, to have enough time to analyze and study the group to have stronger conclusions. It is better to start with students you have worked with before. Second, noticing the students' effort in learning how to self—assess, the use of checklists and rubrics is necessary to share the results with them. It is beneficial for them to notice their improvement after the innovation. Third, as this process was successful, it would be recommended to share it with other colleagues. It is necessary to mention that it would be beneficial not only for English classes but also for others.

References

- Al-Eiadeh, A., Al.Sobh, M., Al-Zoubi, S., Al-Khasawneh, F. (2016). Improving English language speaking skills of Ajloun National university students. *International Journal of English and Education*, 5(3), 181-195.

 https://www.researchgate.net/publication/306079718 Improving English Language

 Speaking_Skills_of_Ajloun_National_University_Students
- Andrade, H. & Du, Y. (2007). Student responses to criteria-referenced self-Assessment. *Assessment and Evaluation in Higher Education*, 32(2), 159-181. https://doi.org/10.1080/02602930600801928
- Ashford, S., & Tsui, A.(1991). Self-regulation for managerial effectiveness: The Role of Active Feedback Seeking. *Academy of Management Journal*, 34, 251-280. https://doi.org/10.2307/256442
- Boud, D. (1995). Enhancing learning through self-assessment, 4(65). London, New York.

 https://www.researchgate.net/publication/239969990_Enhancing_Learning_Through_Self-Assessment
- Bell, E. & Bryman, A. (2007). The ethics of management research: an exploratory content analysis. *British Journal of Management*. 18. 63 77. doi: 10.1111/j.1467-8551.2006.00487.x
- Cowie, B., & Bell, B. (1999). A model of formative assessment in science education.

 *Assessment in Education, 6, 101-116.

 http://dx.doi.org/10.1080/09695949993026
- Celce-Murcia, M. (2001). *Teaching English as a second language or foreign language* (2nd. Ed.). New York: Newbury House.

- Council of Europe.(2018). Common European framework of reference for languages.

 Teaching, Assessment Companion Volume with Descriptors, Spoken Production.

 https://rm.coe.int/16802fc1bf
- Conrad, R., & Donaldson, J. (2004). Engaging the Online Learner: Activities and resources for creative instruction. San Francisco, California.
- Dalton, C. & Seidlhofer, B. (2001). *Language Teaching Pronunciation*. Oxford University Press.
- Derakhshan, A., Tahery, F., & Mirarab, N. (2015). Helping adults and young learners to communicate in speaking classes with confidence. *Mediterranean Journal of Social Science*, 6(2), 520-525. doi: 10.5901/mjss.2015.v6n2p520
- Dick, B. (2002). Action research: action and research. Lismore, Australia.
- Indahyanti, R., & Mursidin, M. (2017). Student to self-feedback in improving students' speaking ability. *Jurnal Pendidikan Bjahasa Dan Satra Inggris*, 6(1). doi:10.26618/ejpbi.v6i1.931
- Jacobs, G., & Farrell, T. (2003). Understanding and implementing the CLT (Communicative Language Teaching) paradigm. *RELC Journal*, 35(5), 5-30. doi: https://doi.org/10.1177/003368820303400102
- Fluckiger, J. (2010). Single point rubric: A tool for responsible student self-assessment.

 https://digitalcommons.unomaha.edu/cgi/viewcontent.cgi?article=1004&context=tedf
 acpub
- Urrutia, D. (2022). Facilitating Self-regulation with Mobile Devices to Improve Oral Interaction in a Public School in Ecuador. Universidad Casa Grande. http://dspace.casagrande.edu.ec:8080/handle/ucasagrande/3312
- Paredes, R., Henríquez, E., Zurita, R., Pinos, V., Apolinario, O., & Campoverde, M. (2018). *New Curriculum in Ecuador. Ulink*, 4–74. Miami, Florida

- https://www.researchgate.net/publication/339513642_NEW_CURRICULUM_IN_EC_UADOR
- Rolheiser, C. & Ross, J. (2001). Student self-evaluation: What research says and what practice shows. *Plain talk about kids*, 43, 57.
- Sisquiarco, A., Sánchez Rojas, S., & Abad, J. V. (2018). *Influence of strategies-based feedback in students' oral performance*. HOW, 25(1), 93-113. https://doi.org/10.19183/how.25.1.402.
- Sewagegn, A. (2019). A Study on the assessment methods and experiences of teachers at an Ethiopian university. *International Journal of Instruction*, 12(2), 605 622. doi: 10.29333/iji.2019.12238a
- Stassen, M. (2001). *Program-based review and assessment: Tools and techniques for program improvement*. Amherst, MA: University of Massachusetts.
- Shorten, A., & Smith, J. (2017). Mixed methods research: Expanding the evidence base. *Evidence Based Nursing*, 20(3), 74-75. doi: 10.1136/eb-2017-102699
- Wiggins, G. & McTighe. J. (2012). *Understanding by design framework*. Alexandria, VA:

 ASCD
- Yan, Zi. (2022). Student Self-Assessment as a Process for Learning. Routledge. New York.

	Appendix 1	
	Lesson Plan	
Available upon request.		
	Appendix 2	
	Checklist	
Available upon request.		
	Appendix 3	
	Transcripts of interviews	
Available upon request.		
	Appendix 4	
	Grades	
Available upon request.		
	Appendix 5	
	E-portfolio link	
Available upon request.		