

Action Research: The Efficiency of Adopting Voice Note Recording for MUET Speaking Activity

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ABSTRACT

The purpose of this study is to validate the efficiency of adopting a new approach in conducting speaking activity in MUET lesson by using audio-recording (voice note) function in Telegram application and the importance of Reflective Learning and Think Aloud Protocol for the students to reflect on the speaking activity. A total of 23 students from lower six (6 UM Bawah) and a MUET teacher were involved in this study. The focuses of this study are to create a platform for the students to practice speaking in English and to emphasis reflective learning among the students on their oral proficiency development. Reflective learning involves students thinking about what they have read, done or learned, relating the lesson at hand to their own lives and making meaning out of the material. In this case, the students underwent the stages of reflective learning by observing their own audio recording for Task A, a two-minute individual presentation for MUET speaking test. The students applied the Think Aloud Protocol (TAP) and wrote down their feelings, evaluation and prepared an action plan after listening to their own voice speaking in English. Second recordings were taken after the reflection session. This study shows that audio recording application is beneficial as it makes oral proficiency test more personalized. Besides, critical observation on own speech does help a person to improve in speaking activity.

Keywords

Action research; MUET; Speaking skills, Think Aloud Protocol, Reflective learning, Voice Note Recording

Introduction

Oral proficiency test in second language learning context is often regarded as yardstick of marketability of a graduate. This is because the result of the test indicates the communicative ability of a person and it helps in getting better job opportunities and career development. Thus, the main purpose of the speaking test is to assess whether the test taker's linguistic proficiency is adequate for a predetermined assignment (Jenkins & Parra, 2003). Oral proficiency test was chosen as the area of focus for this study for several reasons. There are 4 main skills tested in MUET paper. One of them is Speaking Test which attributes to 15% of the total marks. This test consists of two tasks, an individual task and a group discussion. This study is focused on students' oral proficiency for the two-minutes individual speaking task. The main issues in MUET speaking activity in school classroom is the lack of time for teacher to observe the level of proficiency for each and every student in the class as it is time consuming and not personalized. Students' presentation in the class is not only time consuming, but the performance is not recorded and cannot be reviewed to identify the specific grammatical mistakes and to seek for room of improvement for the students.

The main purpose of this study is to validate the efficiency of adopting a new approach in conducting speaking activity in MUET lesson by using audio-recording (voice note) function in Telegram application. In addition, the results of this investigation are hoped to highlight the importance of reflective learning and think aloud protocol among students to assist them to be more observant and critical on self-progress, particularly to be more confidence to speak in English.

This paper focuses on examining the efficiency of using audio recording for speaking activity and the use of Think aloud protocol by the students in reflecting their own performance in MUET Speaking Task A (individual presentation).

The research questions addressed are to examine:

1. the efficiency of using audio recording for speaking activity
2. the advantages of Reflections and Think Aloud Protocol in oral performance for the teacher and the students.

Literature Review

Reflective Learning

In general, reflective learning involves carefully structured and crafted approaches towards being reflective about one's learning process. Finlay (2008) in "*Reflecting the Reflection Practice*" cited that Dewey (1933) was among the first to identify reflection as a specialised form of thinking. He considered reflection to stem from doubt, hesitation and perplexity related to a directly experienced situation. Dewey also argued that reflective thinking moved people away from routine thinking towards reflective action (involving careful, critical consideration of taken-for granted knowledge). One of his important and enduring contributions was to identify two types of reflections: reflection-on-action (after-the-event thinking) and reflection-in-action (thinking while doing). This action research focuses on reflection after the speaking activity in which samples review, describe and evaluate their preparation process for speaking activity and oral performance in the voice note with a view to gaining insight to improve their speaking skills.

Reflective learning is also understood as the process of learning through and from experience towards acquisition of new understanding and insights of self (Boud et al 1985; Boud and Fales, 1983; Mezirow, 1981, Jarvis, 1992). Schon (1987) in *Educating the Reflective Practitioner* stated that "I have come to feel that the only learning which significantly influences behaviour is self-discovered, self-appropriated learning." Thus, emphasised on the importance of reflection in the learning process. Reflective learning is part of the process of life-long learning as it involves examining the learning process and being self-aware while critically evaluating their own responses to practice situations. The point is to recapture the learning experience and mull them over critically in order to gain new understanding and so improve future practice (Finlay, 2008).

In education field, one of the commonly cited models to facilitate reflection is Gibbs' Reflective Cycle (1988) (see figure 1). It was built from Kolb's experimental learning cycle and proposes that the theories and practices are inter-related in a never-ending cycle. (Finlay, 2008). This model offers useful basic questions to help structure reflection e.g. "What happened?" "What were you thinking and feeling?" "What was good/bad about the experience?" (Gibbs, 1988).

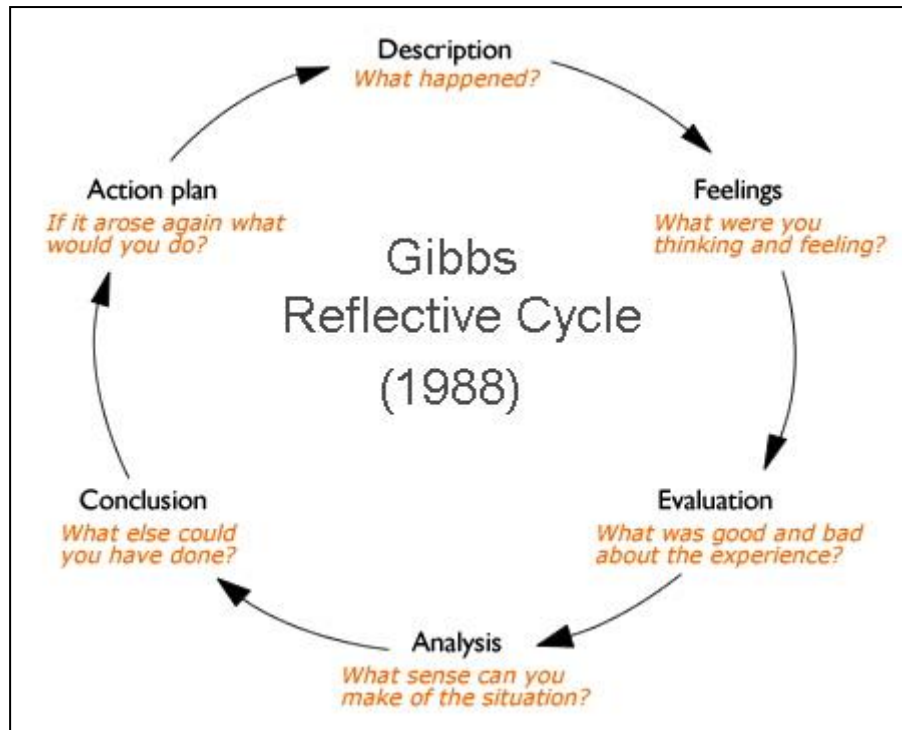


Figure 1: Gibbs Reflective Cycle.

Reflective learning is a process which allows students to think about what they have read, done, or learned, relating the lesson at hand to their own lives and making meaning out of the material. It's more than just memorizing some facts, formulas, or dates. There are several advantages of reflective learning for the student, which include:

- Accepting responsibility for your learning and, as a result, for your personal growth
- Becoming metacognitive, or aware of your internal thinking processes
- Becoming aware of your motives with your actions
- Seeing a link between the work you are putting into learning and what you are getting out of it

Verbal Protocol Analysis / Think Aloud Protocol

The data elicitation method in Think Aloud Protocol (TAP) is also known as ‘concurrent verbalization’, which means that subjects are asked to perform a task and to verbalize whatever crosses their mind during the task performance. (Jaaskelainen, 1999). While protocol was related to classical introspection, in which a person analyses and evaluates their thinking processes, think-aloud has been evolved into a more controlled method of eliciting data on cognitive process (Ericson & Simon, 1993). To study the cognitive process, TAP has the potential to reveal internal cognitive processes that a person goes through to make a decision, in which a person analyses their own thought process. Verbalization approach is based on assumption that subjects have “privilege access to their experiences” (Ericson & Simon, 1993) and their verbal reports are trustworthy.

However, Ericson and Simon argue that when elicited with care and appropriate instructions, think-aloud does not change the course or structure of thought processes, except for a slight down of the process. There are limitations to what kind of cognitive processes are accessible by thinking aloud. Only information that is actively processed in working memory can be verbalized, which means that unconscious processing is inaccessible. In the other hand, high cognitive load can also hinder verbalization by using up all the cognitive resources. As a result, it can only provide informative glimpses of cognitive processing, but it can never be a complete account (Jaaskelainen, 1999). Thus, to avoid this slowing down effect, a **retrospective verbal protocol** is applied in this study as the samples were asked to

write the reflection after the speaking activity has been carried out. The samples can replay the voice notes recorded in the Telegram and recapture the thinking process and feeling of pre, during and post the recording of the voice notes.

Methodology

This study is designed to investigate the use of audio recording application in evaluating an oral proficiency. A mixed method of qualitative and quantitative approach is employed in this research. The details of the methodology are explained in the research design and the research procedure.

Research Design

For the first research question, the research design of this study compares the conventional student oral presentation in classroom and recorded oral presentation in assessing spoken performance based on the format of MUET using both qualitative and quantitative approach. Total time for assessing the audio recording is calculated and compared to the conventional way. For research question two, the teacher and the students reflected their thoughts on the benefits and disadvantages of using the new method of voice note recording in teaching speaking.

The quantitative data from the score sheets for three recorded audios were triangulated with the qualitative data from the retrospective think aloud data / students' reflection on their progress.

The Testing Context

The testing context of the study is similar to Malaysian University English Test (MUET) Speaking Component. MUET is a compulsory entrance requirement for students who plan to continue their studies at degree level in public universities in Malaysia. This test comprises four papers, namely Listening, Speaking, Reading and Writing. Oral proficiency of the candidates is tested in Paper 2. The speaking test consists of two main tasks, Task A and B. The first task is an individual presentation for two minutes and followed by a group discussion among four candidates on an issue within 10 minutes. The candidates will be given two minutes for preparation prior their presentation or response for both tasks. In this study, the respondents only underwent one speaking test for individual performance (Task A). Task B is not chosen for voice note recording as it would difficult the teacher to identify the voices of four different students in a group discussion.

Sample of the Questions

The questions for the test are based on the current MUET format. The individual presentation in Task A is designed to test a candidate's ability to express his/her opinion based on a given stimulus or topic.

<p>Situation: There are many factors that contribute to effective teamwork.</p> <p>Task A</p> <p>In your opinion, good leadership is the key for effective teamwork. Give reasons.</p>
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Figure 2: Sample of Task A Question

Participants of the Study

Generally, there were 23 students and a MUET teacher involved in the study. All of the samples are Pre-University students (Lower Six) of a school in Skudai, Johor Bahru. Based from the students' SPM English 9111 results, they are from varied level of proficiency in English (B- to E). Five of the students are Malay, 4 Indian and the rest are Chinese. English is their second / third language as many of them only use mother tongue of Malay language, Tamil and Mandarin to communicate.

Data Collection and Research Instruments

Data for this study are collected from quantitative instruments is score sheets to compare the marks for the oral performance. Besides, qualitative instruments from retrospective verbal protocol interview and self-reflection were also employed for richer data collection.

Score Sheet

The teacher used the score sheet to record the students' performance. Three main categories in the score sheet is: Task Fulfilment, Language and Communication Ability. Each section contributes 20 marks to the overall marks for Task A. The total score/ maximum score for this speaking activity is 60 marks.

Task Fulfilment (TF) is to identify the ability of the student to provide sufficient points, in-depth elaboration and mature treatment of the topic given. Secondly, the teacher assessed the Language aspects which include accuracy, grammar, structures, lexical choice, intonation & stress, vocabulary and etc. The third aspect is the students' Communication ability, which includes fluency, level of confidence, and etc. Table below shows the outlook of a score sheet.

Table 1. Example of score sheet

Candidate	Task Fulfilment (20)	Language (20)	Communication Ability (20)	Total marks (60)	Notes
A					
B					
C					
D					

Teacher's Reflection

Teacher wrote reflection on the comparison of conventional presentation in the classroom and assessing voice note for students' oral proficiency. The benefits and disadvantages of the new approach were observed though answering these questions:

1. What is your overall impression of the voice note you have just listened?
2. Did you find any of the students demonstrating the improvement? (Compare first and second voice note for the same student)?
3. Did you find voice note for speaking task is more convenient and personalized?

Students' Reflection

The students observed their feeling pre, during and post voice note recording, then wrote reflection though answering these questions:

1. What do you think of this activity?
2. How many times do you practice before sending the voice note?
3. What is your preparation for this two-minute audio recording activity?
4. Does this activity help you to improve your confidence to speak?
5. What is the strategy /plan for the next audio recording?
6. Did you find voice note for speaking task is more convenient and personalized?

Procedures

There are three main procedures in the study. First stage involved preparation for data collection such as briefing for the students on reflective learning and voice note recording using Telegram application. In stage 2, students were given the question and they worked in group to draft out answer and prepare for audio recording. The voice note task was given in the classroom and the students were instructed to send the voice note anytime once they are ready, in the evening from their home. In stage 3, the teacher and students write their reflections & retrospective think-aloud protocols and record the second voice note with another set of question (with the average level of difficulty). Figure 1 shows the stages of data collection.

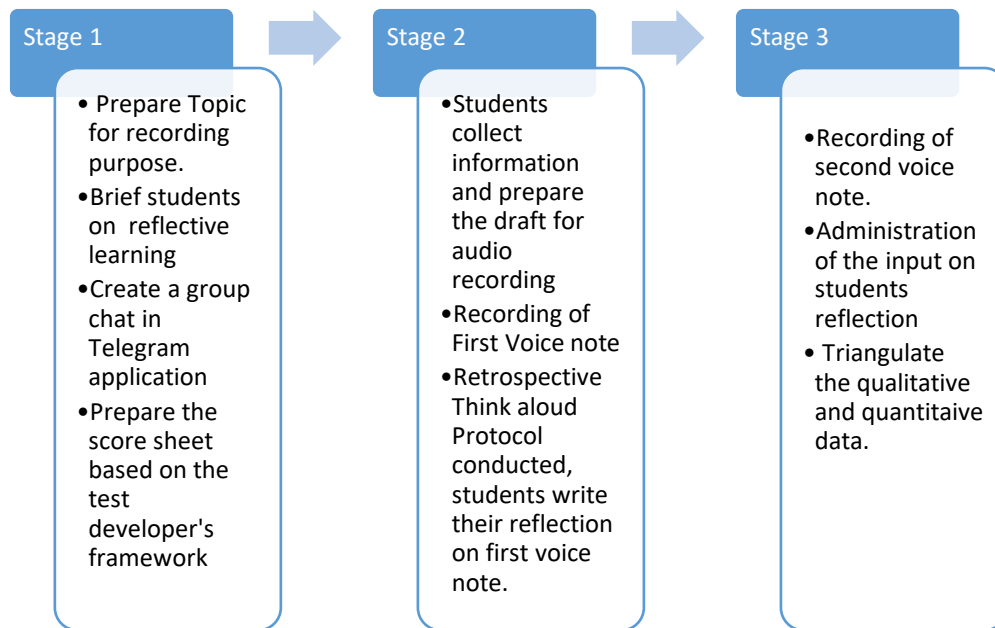


Figure 2: Stages of Data Collection Process

Data Analysis

The main data from quantitative approach is the score sheet. The marks on the score sheet was given by the teacher as she listened to the students' voice note. Besides, commentaries and reflection from the semi-structured questions in the questionnaire and the interview session were qualitatively studied to discover the benefits and drawback of the activity conducted.

Results and Discussion

In this section, both research question one and two will be answered and discussed. Quantitative and qualitative data are triangulated to understand if the new approach for speaking activity (voice note recording) is applicable in the future speaking lessons, and the benefits of students' critical observation on self-development in improving communication ability. The report of the analysis was sequenced as how data was collected, which started from the score sheet and the reflection from the teacher, followed by the reflection from the students.

Research Question One: The efficiency of using audio recording for speaking activity

Based on the score sheets for voice note 1 and voice note 2, there are some improvements for the marks achieved, especially for communication ability. Overall, all of the 23 samples shown an upward trend for the marks scored in voice note 2 by two to four marks. Only five students were selected randomly to illustrate the discrepancy of the marks as majority of the students showed average the same improvement in scores. The students are label as in Table 2.

Table 2. Score Sheet for Voice Note 1 and Voice Note 2 of the 5 Students' Task A

Student	Voice Note 1				Voice Note 2				Different (+/-)
	TF	L	CA	TOTAL	TF	L	CA	TOTAL	
S1	14	10	10	34	15	11	10	36	+2
S2	13	11	10	34	13	12	12	37	+3
S3	14	10	9	33	13	12	10	36	+2
S4	12	10	10	32	13	11	12	35	+3
S5	15	11	11	37	15	13	12	40	+3

From Table 2, we can see that the average improvement for the selected 5 students is 2.6 marks. In general, the quantitative data from the score sheet shows that voice note practice and reflective learning do help in improving the students' oral proficiency. This result supported that audio recording is effective in improving students' marks in speaking activity

Research Question Two: The advantages of Reflections and Think Aloud Protocol in oral performance for the teacher and the students.

The Teacher's Reflection on adopting voice note for Task A speaking activity.

From a teacher's perspective, using voice note from the Telegram application save the time in the classroom because the conventional in-front-of class presentation is very time consuming. Besides, classroom presentation is not recorded, thus the progress and speech of the students cannot be reviewed / replayed to observe and comment on specific grammatical are. Voice note enable teacher to review and comment on every student's oral performance individually,

which made the assessment more personalized and holistic. In summarizing the quantitative data from the score sheet, the shaded areas in Table 3 denote the criteria the students have improved from the audio recording activity.

Table 3. Teacher’s Reflection on The Criteria Students Improved through Voice Note Practice.

Criterion	Descriptors	STUDENTS				
		S1	S2	S3	S4	S5
Accuracy	Grammar / Sentence structure	√	√	√	√	√
	Range of Vocabulary	√	√	√	√	√
	Cohesion	√	√	√	√	√
	The use of standard English	√	√	■	√	√
Phonology	Stress	■	√	√	√	√
	Rhythm	√	√	√	√	√
	Intonation	√	√	√	√	■
	Pronunciation	■	√	■	■	■
Fluency	Hesitation	■	√	■	√	√
	Repetition & False Start	√	√	√	√	√
	Cohesion & Coherence	√	√	√	√	√
	Paraphrasing	■	√	√	√	√
	Re-selecting words	√	√	■	√	■
Task Fulfilment	Novelty of idea	NA	NA	NA	NA	NA
	Elaboration of ideas	√	√	√	√	√
	Maturity in ideas	■	■	√	■	√
	Range of knowledge	√	√	√	√	√
	Depth of knowledge	■	■	■	√	√

Note: Ticked areas denote criteria that students have improved.

Table 3 shows majority of the students improved in all aspect of the assessment criteria in terms of accuracy, Phonology, Fluency and Task Fulfilment. However, the teacher’s noted that the novelty or originality of ideas is not included as the students were allowed to search the information from the webs and reference books while preparing for draft for speaking. In contrast, the real situation of a Malaysian University English Test (MUET), the candidates will only have two minutes time to draft out and brain storm the ideas. Thus, the ideas presented in the voice note might not be the original ideas by the students.

As we can see from the table, shaded areas denote the criteria that the students are having problems with. From the audio records, teacher found that the main weakness of the students are pronunciation problems, mostly L1 influence and unclear pronunciation for unfamiliar words. For example, the samples with Chinese ethnicity has problem pronouncing the words with /t/ sound. While the Indian students tend to omit the /h/ sounds. E.g. the word “heart” mispronounced as “art”. Some of the students do have problems with tenses and structures with influenced by the mother tongue such as “Teamwork effective must to have good communication...” which was directly translated from Malay Language. Besides, lack of depth / maturity of ideas were the problems which hinder students from getting better scores in the speaking activity despite the chance to do research and prepare the text prior to recording.

Overall, the marks for speaking assessment of two voice notes showed some improvements. In addition, the more significant advantage of audio recording discovered that it actually helps to boost students’ confidence to speak in English. Other communication ability areas that the students have escalated include their level of confidence to speak, the organization of ideas and intonation. This result aligned with Richards’ (1990) statement that learners consequently often evaluate their success in language learning as well as the effectiveness of their communication ability on the basis of how well they feel they have improved in their spoken language proficiency. With a higher confidence level, students will be more comfortable delivering the messages and ideas in speaking activity.

In the teacher’s reflection, she mentioned that evaluating and accessing speaking is quite difficult as there is no specific suggested answer for every question. The teacher’s view is supported by Richards (1990). In his paper of Developing Classroom Speaking Activities from Theory to Practice, he admitted that talk interaction is perhaps the most difficult

skill to teach since interactional talk is a very complex as well as subtle phenomena that takes place under the control of unspoken rules.

In addition, the assessment for the marks and bands should be done on the spot during the presentation in the class, this also add the burden to the teacher. In such situation, the teacher tends to focus more on fluency than accuracy, in which accuracy may not be a priority as long as information is successfully communicated or understood. Hence, the chances for correcting the structures / pronunciation mistakes will be omitted in the classroom presentation activity. During the retrospective think aloud session, she noted that it was easier for her to pause and reflect or even replay the voice note to identify the specific pronunciation problems or grammatical errors.

Task A speaking activity falls into the category of “**Talk as performance**” according to Brown and Yule (1983) framework which require the students to transmit information, include all necessary textual knowledge. One of the characteristics of “talk as performance” is the focus on the form and accuracy. It is also often evaluated according to its effectiveness or impact on the listener. (Jones, 1994). Thus, with the help of voice note in the Telegram application, the teacher now can emphasis more on students’ language accuracy, rather than the conventional classroom presentation which focus on fluency.

The teacher’s reflection & TAPs can be summed up in the Table 4:

Table 4. Summary of the teacher’s reflection.

Advantage / Disadvantages	Conventional classroom presentation	Voice Note presentation
Save Time (in class)	X	√
Recorded & Able to review	X	√
Personalized Assessment	X	√
Exam-like situation	√	X

Table 4 shows the summary of the teacher’s retrospective think aloud protocols. Voice note helps the teacher to utilize the classroom time, as it helps to save time on individual presentation. Only drawback of using this approach is students are lack of chance of impromptu / real situation practice, in which they have to speak in front of a crowd and have the face-to-face situation as in a public speaking. Voice note helps teacher to make oral proficiency assessment more personalized and detailed as she has ample time to reflect and think aloud while accessing the oral performance. This is because it enables both teacher and students to review and find out the problematical areas of the students. Reflective learning & Think Aloud help students to be more critical about their feeling, evaluation and planning for better development in speaking / communication ability.

The Students’ Reflection on Adopting Voice Note for Task A Speaking Activity.

The new approach of also allows students to prepare for speaking on their own pace, and make them to be more observant and critical on self-development. This is one of the students’ reflection / retrospective think aloud protocol. (Refer Appendix 1 for more excerpts)

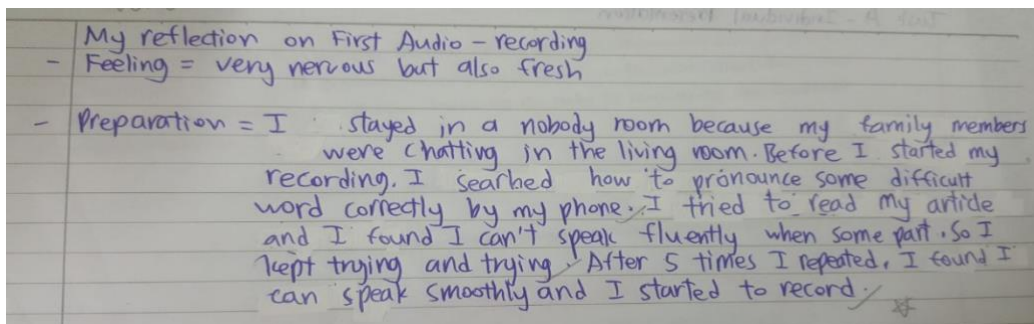


Figure 4. Example from student excerpts

From the reflection written / TAPs by the students, teacher noted that they actually have put a lot of effort for the voice note recording. Majority of the students practiced 3-4 times before sending the audio recording, and some took 2 hours to practice for the two-minute speaking task. One of the students felt awkward to send her voice note to the group and preferred sending it directly to the teacher. The reason for asking students to send their audio to the group is to create a classroom-like presentation, so the friends in the class may take part in listening virtually.

Summary of Findings & Conclusion

This study aims to create a platform for the students to practice and enhance their speaking skills by using voice note in telegram application. This is because teacher faced the problem of limitation of classroom time for individual presentation. Furthermore, assessment on the students' oral performance usually done in the classroom is not comprehensive and not personalized. Direct comment on mistakes in the class, in front of other students may emotionally affect the students' feeling and make them feel embarrassed to present in the next classes. Using audio recording, the students sent their voice note to the class group in Telegram application, and teacher will response by providing the marks and band in the group, and personally message the students on serious grammatical error / other concerns on the speaking activity.

Bannert & Mengelkamp (2007) stated that think aloud when prompted has positive correlation with students' learning. Thus, the teacher incorporated the reflective learning and think aloud skill so that students make use of the recordings to observe and review on their own performance, then set new strategies and plan for better result /band.

Limitations and Future Studies

Notwithstanding the implications of the study, the recent study had several limitations for future studies to redress. It should be remembered that the assessment of the marks in the score sheet on the item "Task Fulfilment" is not given as the real test context as the students were allowed to prepare the text beforehand and treated as practice in the classroom. The real context in the MUET test only allows 2 minutes' preparation time for the candidates to draft the responses for speaking activity.

The limitation of audio recording is the disability to view the students' facial expression during the speaking practice. As we know, facial expression, eye contact and gestures also play important roles in evaluation of an oral performance (May, 2011). Thus, audio recording / voice note should be upgraded to video recording in future research so that the teacher will be able to view and assess speaking holistically.

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Appendix 1

Examples from student's excerpt



Ref: _____
Date: _____

My Reflection on First Audio-recording

1. I think this activity is interesting, it can help me to improve my confidence. ✓
2. I prepared the essay from google and I read the essay follow the paper before sending audio-recording and I practice it within 10 times. ✓
3. I think this activity can help me improve my pronunciation and make me more confident. ✓
4. I suggest teacher can do this activity again because it can help me a lot. ✓

My Reflection on First Audio - Recording

- 1) Feeling :- Actually, I feel felt awkward to send my voice note in group chat. Because I'm afraid if anyone teases the way I talk. I prefer would be comfortable if I send teacher in private message.
- 2) Preparation:- I search the information for my speech easily. But I find some words hard to pronance. So I think I do ^{practiced} more than 5 voice note before send to teacher. Before I practice it around 2 hours to make my speech prepe perfectly. ✓*