

Effects of Multimedia Oral Communication Drills on Language Acquisition and Cognitive Performance in School-Age Children

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Abstract. This study aimed to determine the effects of the audio-video oral communication drills on the performance of Grade 4 learners in English in Pasibi-Bituag Elementary School during the school year 2019-2020. The experimental group performed significantly higher than the control group after being exposed to audio-video oral communication drills in English 4. School administrators should encourage elementary English teachers to explore, use variety of approaches, and provide challenging measures to enhance the communicative competence of learners to help them become proficient speakers of the second language (L₂) as it likewise helps them boost their confidence. The audio-video oral communication drills and other interactive mode of instruction should be employed to aid learners come up with better performance.

Keywords. oral communication drills, learner's performance, audio-visual

1 Introduction

To speak well does not necessitate that one acquires the native speaker accent. What is important is to neutralize the accent and pronounce the words properly placing importance on the articulation as well as the different linguistic features such as stress, intonation and juncture (Cortez and Castro 2016). It is, however, equally important for learners to note that the true purpose of communication is to enable individuals to freely speak their minds. It is only through speaking that messages could vividly get across to its receiver.

According to Goh and Burns (2012), in developing the learners' oral communication skills, teachers play a significant function in structuring learning experiences to support learners' speaking development in and outside the classroom, that is, by designing appropriate and interesting materials. Therefore, English teachers must come up with a teaching design coupled with materials or oral drills to address the pressing concern about prematurely developed speaking skills of learners in English.

It is an observable fact that many non-native speakers of the language usually encounter difficulty in expressing themselves in English since the said language remains to be a foreign language to them. Even though this "lingua franca" is spoken by close to 300 million people across the globe and it is about one tenth of the world's population, four million of which are Filipinos (Cabigon, 2015), the Philippines still needs to brush up the English language skills of its Filipino learners in order to reclaim the Philippine pride of being an English-speaking nation with the majority of its population having at least some degree of fluency in the language.

According to Valderama (2019), the proficiency in the language is one of the Philippine strengths, which has helped drive the economy and even made it the top voice outsourcing destinations in the world surpassing India in 2012. However, an alarming decline of Filipino learners' proficiency in English was evident in the results of various global and even local assessments. According to the European Chamber of Commerce, 75% of the Philippines annual 400 000 college graduates have sub-standards English skills.

Hopkins International Partners (2018) in their study a couple of years ago, revealed that the level of English Proficiency of college graduates in the country was lower than the target English Proficiency of high school students in Thailand and a similar study showed that the Filipino graduates English skills were lower than the target for cab drivers in Dubai with a proficiency score of 650, compared to the 631.4 proficiency score of Filipino college graduates.

Furthermore, the most recent research conducted by English Proficiency Education First also showed that the English Proficiency Index (EPI) of the Philippines declined sharply as it slides in ranking from 13th in 2016 to 14th in 2018 and further down to 20th in 2019 while the 2018 National Achievement Test (NAT) results showed that the performance of Grade 6 learners for three consecutive years, had a national average mean percentage score (MPS) that continued its downward trajectory at 37.44, the weakest performance in the history of the standardized test of the Department of Education, placing all the test-takers at the “low mastery” descriptive level of the department.

The deteriorating quality of English has become too obvious and alarming that even the Grade 4 learners of Pasibi-Bituag Elementary School (PBES) displayed a very poor performance in English as reflected in the school’s Philippine Informal Reading Inventory (PHIL-IRI) Pre- Oral Test result. Out of 60 tested learners, 58 was under frustration level, only 2 of them qualified to the instructional level, and none was identified in the independent level. The data disclosed 97% of Grade 4 learners in the school can read the passage aloud, but with substitution, repetition, omission, and mispronunciation errors.

Mizon (2019) stated that the English proficiency deterioration has been linked to numerous factors, including but not limited to, an over-all decline in Philippine education and the adoption of multi-lingual approach that causes learners’ language confusion, textbook deficiencies, inadequate trainings of teachers in the field and the withdrawal of learners from speaking activities, all leading to learners’ unsatisfactory performance in school.

The researcher was determined to serve the purpose of this study to help the Grade 4 learners of Pasibi-Bituag Elementary School perform better in the three learning areas where English is used as a medium of instruction and engagement. She, too, observed that there is really a need to develop their oral communication skills and self-esteem to ensure learners’ improved performance in school. A collection of audio-video oral communication drills was hereby proposed by the researcher to be used as an advanced approach to support oral communication learning. The integration of audio-video resources is viewed as a contemporary tool that could upgrade the level of English teaching which could better facilitate the desired learning outcomes. Also, this proposed material could not only be used to address the above-stated concern but is also hoped to set a lively atmosphere in the classroom.

2 Review of Related Literature

The consolidated related studies have relative significance to the present study. The main goal of the present study is to determine the effects of audio-video drills in oral communications of Grade 4 learners in English. These studies have common implications that giving the learners avenues to develop their oral communication skills is a great strategy.

In the study of Torio (2019), he emphasized the importance of using an interactive teaching approach for developing oral communication of learners. His study has a great influence on the present study since he specifically pointed out the effectiveness of using modern interactive approaches in teaching oral communication to develop the speaking skills of learners and this is closely related to the researcher’s current investigation which is primarily directed to determining the effects of audio-video drills in enhancing oral communication of Grade 4 learners in English. Also, it agrees with the present research because it is also focused on developing the oral communications through various techniques and opportunities that enable the learners to communicate effectively. The present study is similar to these studies for it was also conducted on the premise of improving the oral communication of learners. The researcher likewise made use of various audio-video drills from sources in the net to help improve the oral communication of the learners.

On the other hand, the studies of Cristobal and Lasaten (2018), Juan and Lasatin (2016) and Marcial (2016) dealt with students’ oral communication apprehension which is viewed as a hindering factor that impedes students’ good performance in the classroom. To overcome the fear and anxiety felt by students during speaking activities, they all encouraged teachers to come up with engaging and interesting oral communication activities to increase their self-confidence which would further result to a developed skills in speaking.

Likewise, the study of Mangulabnan (2016) focused on few interventions that could help teachers address the oral communication of learners. The enhancement of learner's oral communication must be through an activity-based teaching in which learners should be given tasks in pairs and in groups to develop both accuracy and fluency. One of the proposed interventions is the close monitoring of students' performance through varied assessments or a suitable instrument that could diagnose oral communication needs of learners.

The study of Resngit (2016) is closely related to the present study because both recognized the significance of employing multimedia in teaching core subjects. The researcher also used quasi-experimental research design and used Mean and Mean Percentage Score to compare the pre-test and post-test results of both control group and experimental group. The two studies however only differ in the subjects and locale of the study and the subject area concentration.

In the studies of Allah and Khan (2016) and Mudra (2016), they introduced methods such as Open Discussion Sessions (ODS) and Task-Based Language Teaching (TBTL) to help increase oral proficiency of students. In their studies, it was proven that by exposing students to real-world conversation, they can use English fluently. In ODS, a nature-like and relaxed learning environment was offered to cater the speaking needs of students where teachers acted only as facilitators rather than controllers. The entire sessions created a friendly encouraging learning setting which is void of worry of making mistakes. Hence, the relaxed learning mode and the natural non-native English-speaking ambiance pushed students to get actively engaged in English speaking process. On the other hand, TBLT offered learners with natural conversations that usually take place in learners' daily life. The Task-Based Language Teaching provided highly contextual tasks which were essentially based on learners' real experiences. The daily-life dialogues raised up the minds of learners to express their thoughts. The aforementioned investigations influenced the researcher to utilize relatable and technology-driven materials and adopt contemporary strategies suitable to learners' real social context. Classroom speaking activities depicting a real-life scenario must therefore be carefully and creatively design for it provides learners with positive gains.

Handayani (2016) in his study, emphasized the students' performance in oral presentation could become better if they possess interpersonal intelligence or the ability to build relationship, lead, organize, be a moderator, get sympathy to other pupils and others, and to interact effectively. Practicing in peer-group before doing the oral presentation in front of class could enhance students' oral proficiency. Learners who display high interpersonal intelligence tend to perform better in oral performances and could happily ask their friends to work together than those who have a low interpersonal intelligence who always seem reluctant in asking friends for collaboration.

3 Research Methodology

3.1 Research Design

This study used the quasi-experimental research. It is a research design where a comparison is made, as in an experiment, but no random assignment of participants to group occurs. The behavior of respondents is measured both before and after a treatment or condition is implemented. Quasi-experimental research "resembles" experimental research but is not true experimental research. Although the independent variable is manipulated, participants or the respondents are not randomly assigned to conditions or order of conditions (Cook and Campbell 2012). This method was employed to determine the effects of audio-video oral communication drills in teaching oral communication lessons to the two sections of heterogeneously grouped Grade 4 learners in Pasibi-Bituag Elementary School. The researcher decided to use the experimental research because it can provide a systematic and logical method for answering questions which is deemed necessary in this study.

3.2 Sources of Data

This study included the two classes handled by the researcher composed of eighty-three (83) Grade 4 learners at Pasibi-Bituag Elementary School, Urbiztondo District II, Schools Division Office I Pangasinan. The primary sources are the pre-test and post-test results of the two groups. The evaluation results were utilized to determine the effectiveness of the proposed audio-video drills in English 4. The aligned lessons or topics in oral communication found in the English 4 Curriculum Guide are the second source of data.

3.3 Statistical Treatment of Data

The Mean Scores and Mean Percentage Scores (MPS) were used to obtain the needed data that further described the learners' performance in the test. T-test for dependent samples with correlated means was also used. This study

employed the Statistical Procedure for Social Sciences (SPSS) Program in processing, interpreting, and determining the desired statistical measures as it addressed all the questions in the study.

4 Presentation, Analysis, and Interpretation of Data

4.1 Significance of the Difference in the Performance of the Control and Experimental Group in the Pre-Test

Table 1 shows that the respondents registered their mean difference of 1.288. This further shows that the t- computed value of 1.414 is less than the critical value which is 1.75. The recorded data reveals that based on the finding, there is no significant difference in the performance of the two groups in the pre-test. This means that the two groups have same or equal performances during the pre-test. The null hypothesis is therefore accepted using the p values since its significant value which is 0.238 is greater than p critical value < 0.05.

Table 1. Test of Significance of the Difference in the Performance of the Control and Experimental Groups in the Pre-test, N=83

Group	Mean	Mean Difference	t-computed	Significant Value (p value)	Decision
Control Group	7.05	1.288	1.414	0.238	Ho is accepted
Experimental Group	8.33				

Critical value for t is 1.75, significant at $p < 0.05$

The reflected data has likewise proven the importance of administering assessment to determine learners' level of performance in class. The findings of this study corroborate with the findings of Torio (2019) and Mangulabnan (2016) that there is really a need to conduct evaluation using a suitable assessment tool in oral communication to monitor learners' performance and progress in the area.

4.2 Significance of the Difference in the Performance of the Control and Experimental Groups in the Post-Test

Table 2. Test of Significance of the Difference in the Performance of the Control and Experimental Groups in the Post-test, N=83

Group	Mean	Mean Difference	t-computed	Significant Value (p value)	Decision
Control Group	14.55	2.429	5.398	0.023	Ho is rejected
Experimental Group	16.97				

Critical value for t is 2.734, significant at $p < 0.05$

Table 2 shows the test of significance of the difference in the post-test performance of the control and experimental group in oral communication in English. It could be gleaned from the table that the control group obtained a mean score of 14.55. On the other hand, the experimental group obtained a mean of 16.97. Meanwhile, the mean difference of the two groups is 2.429. The t- computed value of 5.398 is relatively greater than the critical value of 2.734 which led to the rejection of the null hypothesis that there is no significant difference in the performance of the two groups in the post-test. The p value of 0.023 which is less than 0.05 supports the conclusion to reject the null hypothesis (H_0). An improvement in the performance of the control group is highly evident, but improvement is significantly greater in experimental group.

Based on the results, it could be concluded that the improved performance in oral communication of the Grade 4 learners in English is associated to their exposure to different oral communication drills. The integration of interactive media somehow made the lessons more engaging and the learner's exposure to audio-video drills helped them achieve the Department of Education prescribed mastery level of 75%.

4.3 Significance of the Difference in the Performance of the Control Group in the Pre-Test and Post-Test

Table 3 shows that the pre-test and post-test of the control group indicated an improvement on their level of performance in Oral communication in English. It can be observed that there is an increase in the mean of the control group with a mean difference of 7.50. Hence, it may be inferred that there is a significant difference in the performance between the pre-test and post-test.

It is also reflected in the table that the computed t-value is 14.238 which is greater than 1.645 critical value. Thus, the null hypothesis that there is no significant difference in the performance of the control group in the pre-test and post-test is therefore rejected.

Table 3. Test of Significance of the Difference in the Performance of the Control Group in the Pre-Test and Post-Test, N=44

Control Group	Mean	Mean Difference	Computed t-value	Significant Value	Decision
Pre-Test	7.05	7.50	14.238	0.0001	Ho is rejected
Post-Test	14.55				

Critical value for t is 1.645, significant at $p < 0.05$

4.4 Significance of the Difference in the Performance of the Experimental Group in the Pre-Test and Post-Test

Table 4 shows that the results of the pre-test and post-test of the experimental group also showed improvement in the learners' performance as exposed to audio-video oral communication drills. It can be gleaned from the same table that the experimental group obtained a mean difference of 8.641. Hence, it can be inferred that the experimental group showed significant difference between the pre-test and post-test scores. This reflects that there was a significant improvement in the performance of this group in their oral communication skills after they were exposed to audio-video oral communication drills. The group's mean percentage score of 84.87 is also above the prescribed 75% mastery level standard set by the Department of Education.

It can be deduced that the null hypothesis which states that there is no significant difference in the performance of the Grade 4 learners in the oral communication skills in English prior and after their exposure to audio-video drills in the pre-test and post-test is hereby rejected.

The results clearly reflect the noted advantages of using interactive ways to empower learners and get them engaged in varied oral communication activities. Based on the data, the integration of technology as a contributory factor to learners' academic success truly paved the way for their high level of performance as shown in the post-test results.

Table 4. Test of Significance of the Difference in the Performance of the Experimental Groups in the Pre-Test and Post-Test, N = 39

Control Group	Mean	Mean Difference	Computed t-value	Significant Value	Decision
Pre-Test	8.33	8.641	18.99	0.0001	Ho is rejected
Post-Test	16.97				

Critical value for t is 1.645, significant at $p < 0.05$

It is a fact that during the actual process, the pronunciation and intonation lessons presented in an animated way aroused the learners' interest. The idea of using audio-video drills and other highly technological mode of instruction could help improve the oral communication of Grade 4 learners in English. The employed drills also played a significant role in developing the learners' confidence in using the language and in reducing the tension to the minimum. Their exposure to audio-video oral communication drills provided them a native-like environment for enhancing speaking abilities.

5 Conclusion and Recommendation

The control and experimental groups have same level of performance in the pre-test. There is no significant difference in the performance of the control group and the experimental group in the pre-test. The level of performance of the experimental group is higher than the control group based on the post-test results. There is a significant difference in the performance of the control and experimental group in the post-test as both groups were exposed to: (control) traditional oral communication instructions and (experimental) the advance and interactive audio-video oral communication drills. here is a significant difference in the performance of each of the two groups in the pre-test and post-test. Experimental group, after the treatment, performed better and with confidence. The control group performed with minor improvement, but with slight hesitation.

Teachers should conduct regular evaluation on oral communication to the Grade 4 learners using suitable assessment instrument. Elementary teachers should be encouraged to employ audio-video drills and other interactive mode of instruction to help improve the oral communications of learners in English 4. Audio-video drills should be used by teachers and learners in their English lessons as well as in Filipino and Mother-Tongue disciplines. Teachers should explore, use varieties of approaches, and provide remedial measures and challenging oral communication activities suitable to learners' needs to enhance their speaking skills and help them boost their confidence. Similar studies should be conducted focused on other learning areas.

References

- Allah, AS D., Khan, MI. (2016) The Impact of Open Discussion Session on Enhancing the Oral Communicative Abilities of Saudi english Language Majors at Buraydah Community College, Canadian Center of Science and Education, English Language Teaching Vol. 9, No. 6: 2016
- Cabigon, M. (2015) State of English in PH: Should we be concerned? Philippine Daily Inquirer, November 14, 2015
- Cristobal, J.A., Lasaten, R.C. (2018) Oral Communication Apprehension and Academic Performance of Grade 7 Students, Asia Pacific Journal
- Goh, C.C. M., Burns, A. (2012) Teaching Speaking: A Holistic Approach, New York: Cambridge
- Handayani, S. (2016) Interpersonal Intelligence in Enhancing Oral Presentation Proficiency for the Indonesian Students: Multiple Intelligence Approach in Education Field, Journal of Psychological and Educational Research
- Mangulabnan, CH. (2016) Assessment of English Oral Communication of Freshman College Students at Nueva Ecija University of Science and Technology in Terms of the Different Variables, International Journal of Social Science and Humanities Research
- Resngit, D S. (2016) Multimedial Instructional Material in Teaching Applied Chemistry for STE Grade 9 Students, Unpublished Master's Thesis, San Carlos College, San Carlos City, Pangasinan
- Torio, JB M.(2019) Effectiveness of Interactive Teaching Approaches in Oral Communication in Grade 6 English at Abanon Central School, Unpublished Master's Thesis, San Carlos College, San Carlos City, Pangasinan
- Valderama, T.C. (2019) Pinoys' English Proficiency Declines Sharply, Manila Times, November 18, 2019