The Efficacy of Bimodal Subtitling in Improving the Listening Comprehension of English as a Second Language (ESL) Learners

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Abstract— This study aimed to determine the efficacy of bimodal subtitling (English) in improving the listening comprehension of English as a Second Language (ESL) learners. Fifty Grade 10 students from San Jose City National High School were selected as participants in the experiment. A listening comprehension test was first administered to determine the current listening level of the respondents and the result served as the baseline data in assigning them to the control and experimental groups through match-pairing. Six video lessons about selected literature of the world were used as materials in the study. The control group watched the videos without subtitles while the experimental group received the bimodal subtitling treatment. After the viewing sessions, the respondents answered a sixty-item comprehension test about the materials viewed, and the data gathered were analyzed using descriptive and inferential statistics. Findings show that the experimental group outperformed the control group in terms of listening comprehension and the difference in their post-test scores was significant. Thus, the efficacy of bimodal subtitling in improving the listening comprehension of ESL learners was proven.

Keywords— Bimodal subtitling, efficacy, English as a Second Language (ESL), experimental study, listening comprehension.

I. INTRODUCTION

Listening comprehension plays a critical role in both communication and language acquisition. However, despite these crucial roles, in the area of Second Language Teaching, it has always been the most forgotten and least researched of the four macro-skills (Gomez Martinez, 2010; Yildiz, Parjanadze, & Albay, 2015). In line with this, listening comprehension is often a source of frustration for second and foreign language learners (Graham, as cited in Rokni & Ataee, 2014). Aside from language teaching, English teachers also have to make their students appreciate not just local literary pieces but the literature of the world as well. According to Westin (2016), multimodal aids such as film adaptations of canonical literature can be used to help students gain a literary appreciation and better understand literature.

In the advent of technology, the use of movies in the classroom has been widely employed and has greatly benefited the learners. However, the English accents and pronunciations used in films serve as barriers to the comprehension of the learners, particularly Filipinos who study English as a Second Language (ESL).
In the English classroom, when the teacher arrives with a projector or a bluetooth speaker, students get excited for they are sure that there will be a viewing activity for that day. However, when they start watching the material and find themselves listening to a native speaker of English without subtitles, their motivation and interest gradually decline. In his attempt to investigate English language learners’ problems in acquiring listening skills and its possible connection to the motivation of learners, Zarin (2013) concluded that native accents and pronunciations of English play a critical role in the listening skills acquisition process. Furthermore, these also affect students’ motivation to learn listening skills. To address such concern, Napikul, Cedar, & Roongrattanakool (2018) said that one of the ways to gain better listening performance is to provide the written form of the spoken language. That means auditory inputs should be accompanied by written verbal ones. In line with this, to take full advantage of English movies to improve listening comprehension, the use of subtitles has found its place in the English classrooms. “Captioned video is increasingly used in foreign language classes, most likely because of the recent accessibility of authentic videos which, if not already captioned, can be easily captioned by teachers and curriculum developers using software such as Adobe Premiere, iMovie, or ViewPoint” (Ebrahimi & Bazaee, 2016).

In the teaching of listening, the use of subtitles is not encouraged because, in a way, it defeats the purpose of listening by making the viewers read and depend on the subtitles. Consequently, Robin, as cited in Ghoneam, 2016 said that “teachers of English are sometimes in a dilemma whether they should show a movie with or without subtitles and above all, which way will benefit their students more in relation to listening comprehension.” Do existing studies pose different findings in terms of what subtitling treatment advances listening comprehension the most: standard subtitling, bimodal subtitling, or no subtitling? In the study conducted by Ebrahimi and Bazaee (2016), the students who received English subtitles outperformed those who watched the film without subtitles. On the other hand, in a similar investigation conducted by Basaran and Kose (2012), the students watched a video material under three conditions: English captions, Turkish captions, and no caption. The respondents performed similarly on the listening test in all three conditions.

These studies on the effect of subtitling on the listening comprehension of learners have been conducted mostly in countries where English is being taught and learned as a foreign language like Iran, Turkey, and Egypt to name a few. This is an important gap to fill because Filipinos, who are the participants in this study, learn English as a second language. Thus, this attempted to investigate the effects of bimodal subtitling on the listening comprehension of Filipino ESL learners.

II. METHODOLOGY

This study employed Quasi-Experimental with a Pre-Test and Post-Test design. Fifty Grade 10 students from San Jose City National High School for the S.Y. 2019-2020 served as the respondents in the experiment. The researcher utilized six short video lessons about world literary pieces as materials in the study. These videos were captioned through video editing software by the researcher himself. A sixty-item researcher-made comprehension test based on the videos was used for the pre-test, formative, and post-test.

The data gathered were analyzed using descriptive and inferential statistics such as frequency, percentage, and t-test.

III. RESULTS AND DISCUSSION

1. Listening Comprehension Level of the Respondents

Table 1. Listening Comprehension Level of the Respondents

| Listening Test Result | f | % |
|-----------------------|---|---|
| 19 - 27 (Advanced)    | 2 | 4.00 |
| 10 - 18 (Intermediate)| 40| 80.00|
| 0 - 9 (Novice)        | 8 | 16.00|
| Total                 | 50| 100.00|

Mean Listening Test Result: 12.94 (Intermediate)

Table 1 presents the listening comprehension level of the respondents. A twenty-seven-item listening test was administered to a total of 50 respondents. They obtained a mean of 12.94 which was verbally described as ‘intermediate.’ Out of this number of respondents, 40 or 80 percent were identified to be intermediate listeners, 8 or 16 percent of them were novice listeners and 2 or 4 percent of them were advanced listeners. This indicates that most of the respondents were intermediate listeners at the time the experiment was conducted.
It can be noted from the table that the majority (80%) of the respondents obtained scores ranging from 10-18 which was verbally described as 'intermediate.' This somehow reflected the reality in the English classrooms in the Philippines. Among the macro-skills, listening is usually neglected as it is not the focus of the curriculum and it does not receive the same attention given to reading, speaking, and writing.

According to Hamouda (2013), learners have serious problems in English listening comprehension due to the fact that schools pay more attention to English grammar, reading, and vocabulary. Listening and speaking skills are not important parts of many course books or curricula and teachers do not seem to pay attention to these skills while designing their lessons. Most teachers take it for granted and believe that it will develop naturally within the process of language learning.

Several researchers considered the proficiency level in selecting the respondents in their respective studies. Birules-Muntane and Soto-Faraco (2016); Rokni and Ataee (2014); Latifi et al. (2011); Hayati and Mohmedi (2011) and Selim (2010) selected learners who were intermediate listeners as their respondents. Whereas in this experiment, the majority of the respondents (80%) were listeners at the intermediate level.

2. Pre-Test Scores of the Respondents

2.1. Pre-test Scores of the Control Group

Table 2.1. Pre-Test Scores of the Control Group

| F%  | %   |
|-----|-----|
| 49 - 60 (Advanced) | 0 | 0.00 |
| 37 - 48 (Proficient) | 0 | 0.00 |
| 25 - 36 (Approaching Proficiency) | 1 | 4.00 |
| 13 - 24 (Developing) | 19 | 76.00 |
| 0 - 12 (Novice) | 5 | 20.00 |
| **Total** | **25** | **100.0** |

Mean pre-test performance: 16.20 (Developing)

Table 2.1 presents the pre-test scores of the respondents from the control group. The pre-test result showed that out of twenty-five respondents from the group, 19 or 76 percent were identified to be under the Developing level. Five or 20 percent were classified under the Novice level while 1 or 4 percent were categorized under the Approaching Proficiency level. The mean for the pre-test performance of the control group of this study was 16.20 which can be verbally described as Developing.

2.2. Pre-test Scores of the Experimental Group

Table 2.2. Pre-Test Scores of the Experimental Group

| F%  | %   |
|-----|-----|
| 49 - 60 (Advanced) | 0 | 0.00 |
| 37 - 48 (Proficient) | 0 | 0.00 |
| 25 - 36 (Approaching Proficiency) | 0 | 0.00 |
| 13 - 24 (Developing) | 20 | 80.00 |
| 0 - 12 (Novice) | 5 | 20.00 |
| **Total** | **25** | **100.0** |

Mean Pre-test Performance: 16.72 (Developing)

Table 2.2 presents the pre-test scores of the respondents from the experimental group. The pre-test result indicated that 20 or 80 percent of the respondents were classified under the Developing level while the remaining 5 or 20 percent of them were categorized under the level, Novice. The mean for the pre-test performance of the experimental group of this study was 16.72 which indicated that the general comprehension level of the experimental group was Developing. Furthermore, it can be noted from the table that both groups, control (19/25); experimental (20/25), obtained scores ranging from 13-24 out of 60 items. This can be verbally described as ‘Developing.’

Since the majority of the respondents of this study were intermediate listeners, which means that they were almost identical in terms of listening proficiency level, it is justifiable that the pre-test performance of the control and experimental groups were both verbally described as ‘Developing.’
3. Difference between the Pre-test Scores of the Control and Experimental Groups

Table 3. Difference Between the Pre-test Scores of Control and Experimental Groups

| Control | Experimental | t value | p-value | Verbal Description |
|---------|--------------|---------|---------|--------------------|
| Mean 16.20 | Mean 16.72 | 0.413 | 0.683 | Not Significant |

*Significant at .05 level

Table 3 presents the pre-test scores of the control and experimental groups. The mean score of the control group was 16.20 while the mean score of the experimental group was 16.72. These scores were verbally described as ‘Developing.’

As it can be observed, there was no significant difference between the performance of the control and experimental groups on the pre-test [p=0.683 (hence>.05)]. Clearly, both groups performed unsatisfactorily on the pre-test. One factor that may be associated with this result was the similarity in the pre-existing subject knowledge of the respondents with regards to the contents of the featured materials. Another one was the similarity in their level of readiness towards the target skill. This proved that the two groups were homogeneous and had a similar background from the beginning of the study. These findings may also be attributed to the match-pairing method which was used in assigning the respondents of the two groups. It was based on the respondents’ listening proficiency levels prior to the experiment. Therefore, the Ho1 (There is no significant difference between the pre-test scores of the control and experimental groups.) was accepted.

4. Post-test Scores of the Respondents

4.1. Post-test Scores of the Control Group

Table 4.1. Post-Test Scores of the Control Group

| Level | f | % |
|-------|---|---|
| 49 - 60 (Advanced) | 1 | 4.00 |
| 37 - 48 (Proficient) | 4 | 16.00 |
| 25 - 36 (Approaching Proficiency) | 13 | 52.00 |
| 13 - 24 (Developing) | 7 | 28.00 |
| 0 - 12 (Novice) | 0 | 0.00 |
| **Total** | **25** | **100.00** |

Mean Post-test Performance: 31 (Approaching Proficiency)

Table 4.1 presents the post-test scores of the control group. From the result, it can be seen that more than half of the group, 13 or 52 percent, was classified under the Approaching Proficiency level. Seven or 28 percent were under the Developing level, 4 or 16 percent were categorized under the Proficient level, and 1 or 4 percent were considered under the Advanced level. The mean post-test performance of the control group was 31 with a verbal description of Approaching Proficiency.

The control group which watched the featured video materials without subtitles generally produced respondents under the Approaching Proficiency level.

4.2. Post-test Scores of the Experimental Group

Table 4.2. Post-Test Scores of the Experimental Group

| Level | f | % |
|-------|---|---|
| 49 - 60 (Advanced) | 1 | 4.00 |
| 37 - 48 (Proficient) | 12 | 48.00 |
| 25 - 36 (Approaching Proficiency) | 11 | 44.00 |
| 13 - 24 (Developing) | 1 | 4.00 |
| 0 - 12 (Novice) | 0 | 0.00 |
| **Total** | **25** | **100.00** |

Mean Post-test Performance: 36.28 (Approaching Proficiency)

Table 4.2 presents the post-test scores of the experimental group. From the result, it can be seen that 12 or 48 percent of the respondents were classified under the Proficient level while 11 or 44 percent of them were categorized under the Approaching Proficiency level. 1 or 4 percent of the group was identified under the Advanced level while another 1 or 4 percent under the Developing level. The mean post-test performance of the control group was 36.28 with a verbal description of Approaching Proficiency.

The experimental group which watched the featured video materials with bimodal subtitles produced more respondents who are under the Proficient level compared to the control group.
5. Difference between the Post-test Scores of Control and Experimental Groups

Table 5. Difference between the Post-test Scores of Control and Experimental Groups

|        | Control | Experimental | t value | p-value | Verbal Description |
|--------|---------|--------------|---------|---------|--------------------|
| Mean   | 31.00   | 36.28        | 2.474   | 0.021   | Significant        |

Table 5 presents the difference between the post-test scores of the control and experimental groups. The paired sample t-test indicated that both the control and experimental groups performed significantly better in the post-test than the pre-test. The researcher conducted further analysis to see if one of the groups improved significantly better than the other.

As Table 5 revealed, the result of a t-test which was used to compare the difference between the two groups' performance on the post-test indicated that the mean score of the experimental group (36.28) was significantly higher than the mean score of the control group (31.00), t=2.474, p=0.021.

In other words, it can be concluded that the bimodal subtitling treatment had an effect on boosting the listening comprehension of the respondents. This suggested that the respondents who watched bimodally subtitled video materials had improved their listening comprehension significantly better than the ones who had watched the video materials without subtitles. Therefore, the Ho2 (There is no significant difference between the post-test scores of the control and experimental groups.) was rejected.

The post-test results of this study paralleled with the findings of Wagner (2010). He conducted a study to compare the performance of two groups of learners on an ESL listening test. He found out that the video text (experimental) group scored higher than the audio-only (control) group on the overall post-test on listening comprehension, and this difference was statistically significant. Yiping (2016), in his investigation on the effects of English movies on English listening, supported these findings. Movies with subtitles are found to be beneficial to learners for they are able to understand the very fast speed of language speaking in the movie with the help of subtitles. Furthermore, Sydorenko (2010) reported that when listening materials are supported with visuals and/or captions, they help foreign language learners to improve their listening comprehension. Vanderplank as cited in Rokni and Atae (2014) supported this claim by saying that one way of helping EFL learners to comprehend authentic video programs while maintaining a target language learning environment is by adding English text subtitles to English videos.

IV. CONCLUSIONS AND RECOMMENDATIONS

Based on the findings, it was concluded that most of the respondents were intermediate listeners at the time the experiment was conducted. The pre-test performance of the control and experimental groups indicated that the two groups were generally in the Developing level in terms of comprehension and there was no significant difference between their performance.

After watching the featured video materials, the control and experimental groups performed significantly better compared with their pre-test performance. Both groups moved from the Developing level to the Approaching Proficiency level. Comparing the mean scores of the two groups in the post-test, it was found out that the difference was statistically significant. The experimental group outperformed the control group in terms of listening comprehension.

Between the pre-test and post-test of the control group, there was a significant difference. This result validated the efficacy of video materials as multimodal aid in the English classroom. Comparing the mean scores of the experimental group in the pre-test and post-test, it clearly showed a significant difference in the comprehension of the respondents. This means that bimodal subtitling has a great level of efficacy in improving the listening comprehension of the learners.

In light of the above findings and conclusions, the researcher recommends that: (a.) future researchers may consider the proficiency levels of the respondents as a variable in order to further evaluate the efficacy of bimodal subtitling in improving students’ listening comprehension. (b.) English language teachers may administer listening sessions to expose learners to auditory inputs wherein native speakers of the language are the ones speaking. Listening laboratories may also be established for the learners to regularly practice and enhance their listening skills. (c.) future researchers may consider the results of the formative assessment conducted right after the viewing sessions. The scores of the
respondents from the formative tests may also be compared to their scores on the post-test. This is to check if there is any difference between their performance on the two assessments or if the difference is significant or not. (d.) future researchers may investigate the long-term effects of bimodal subtitling on students’ listening comprehension. Investigating the recall success rate after a long-time lapse may be a good topic for further investigation. (e.) future researcher/s may use full-length movie adaptations to find out whether the length of the video material affects the efficacy of bimodal subtitles in improving the listening comprehension of the students. (f.) future researchers may replicate the study with different kinds of video materials. Further researches may employ different videos of different contents like news reports, documentaries, dramas, academic lectures, or even science fiction. The authenticity of the video materials in terms of language use (spelling, grammar, syntax, etc.) may be given premium consideration as well. (g.) language teachers may consider the benefits of using subtitles when teaching listening skills through watching videos. When using videos as instructional materials, they may manually put bimodal subtitles on it using software or applications available on the internet. It is suggested that when the teaching goal is the enhancement of listening comprehension, subtitled videos can give great help to ESL learners. (h.) curriculum designers, program developers, and educators may incorporate English subtitled educational programs into the English language and literary curriculum. (i.) to avoid further errors that may affect the accuracy of the results, the experiment may be conducted under a strict timeline of test administration. This is to make sure that the retention of the material viewed and listened to will not be affected by time. It is suggested that the experiment will be conducted within a week as much as possible.

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