

USING “AVATAR: THE LEGEND OF KORRA” ANIMATED MOVIE-BASED PROJECT TO IMPROVE LISTENING COMPREHENSION

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Abstract

As a pre-experiment, this study concentrates on measuring the effectiveness of “Avatar: The Legend of Korra” animated movie-based project to improve listening comprehension. The sample of this research is a group of eighth grade students of SMP Muhammadiyah 2 in School Year 2015/2016. Pretest and posttest are the instruments of the data collection. This research has fulfilled its purpose, that is to study the effectiveness of “Avatar: The Legend of Korra” animated movie-based project to improve listening comprehension of eighth grade students. It is proven that the effectiveness is strong by 1.41 of effect size, which means the fourth hypothesis is accepted. Treatment was given once for two-week long, including monitoring, project progress, and assessment (posttest). A 25% increase in score is found between pre-test (49.27) and post-test (65.37). This proved the “Avatar: The Legend of Korra” animated movie based project improved the students’ listening comprehension.

Keywords: *Animated Movie, Based Project, Listening*

BACKGROUND

The process of listening English needs models from the native speakers of English. As they are miles away, the way of reaching them is by utilizing the electronic media. Movie is one of a number of audio visual media that can be used for teaching students to listen. Regarding the materials, teachers should be selective in deciding which content of movie is appropriate and useful. The selected movie to use in this research is Avatar: The Legend of Korra. This animated movie is a popular among children around the world that tells a legend of Asian heroes. It is good in terms of the politeness or precision of language, clear pronunciation and natural speed of conversation in it. These features make this movie an educative source for English language learning, and there will be many listening activities or projects can be created from the movie.

According to the preliminary observation conducted by the researcher, spoken language comprehension is a part of language acquisition that had not been a

priority in the teaching and learning English in junior high school, particularly in SMP Muhammadiyah 2 Pontianak. Teachers rarely communicated in English, and they rarely played audios or videos of English to their students. Some lessons did not provide activities for listening comprehension. This situation is like what Field (2008: p.1) describes that “listening is undervalued. . .when there is a pressure on contact hours, it is often the listening session that is cut”. Students’ listening comprehension would be tested in the national examination, but the intensive study of listening was only given within the third year when the national examination was coming up. In other words, students were taught listening for national examination, not for communicative outcome as the intended learning objectives. As a result, their ability to listen to spoken English was poor.

Unlike traditional learning that is normally short-term, isolated, teacher-centered lessons, Project-based Learning “(PBL) allows teachers to work more

closely to the students and let them follow the learning process actively, engaged students doing high-quality, meaningful work and in many cases to rediscover the joy of learning alongside their students. This condition is important since the students have a good attitude in learning.” (Rita, Ikhsanudin, & Salam, 2016). In PBL, students explore, make judgments, interpret, and synthesize information in meaningful ways.

In a previous research entitled “Using Authentic and Selected Film for Teaching Listening and Speaking” conducted by Ardriyati (2010), the researcher found that movies or films are valuable classroom tools. Students were asked to conclude and re-tell the story they listened to in chain through the stages of teaching that include pre-viewing, viewing, and post-viewing activities. She concludes that “using an authentic and selected film in teaching listening and speaking can be motivated and attractive” and the integration of listening and speaking had helped the students to improve their spoken language skills both listening and speaking.

Puspasari, Ikhsanudin, & Rezeki mentions “animation video is media to support teaching listening that can be seen and heard. By using video, the teacher can get benefit of audio and visual supports at the same time. Video is important to teaching and learning process, especially in teaching foreign-language listening.” (2017).

For this reason, the researcher intends to conduct a pre-experimental research to find out the effectiveness of selected animated movie which is “Avatar: The Legend of Korra” based project to improve listening comprehension of Eighth Grade Students of SMP Muhammadiyah 2 in Academic Year of 2016/2017. The researcher will engage the students in pre-test and post-test and find out the effect size out of the scores. The researcher hopes that this research can be useful for future teaching and learning listening. Hopefully, the animated movie based projects can help students in their learning and improve their achievement.

METHOD

This research is an experiment. Experiment is a type of quantitative research that aims to measure whether or not and how significant is the difference made in result of doing an activity or implementing some materials (Creswell, 2008:p.60). Therefore, this reserach is conducted to discover how strong is the use of Animated Movie Based Project (“Avatar: The Legend of Korra”) in affecting or improving students’ listening comprehension. Since this research is planned to be done to one class only and it has pre-test and post-test, the design of this experiment is one-group pretest-posttest design.

The design of the present pre-experimental describes that “O1” is the pre-test that is given before the teaching or the treatment. The purpose is to know the students’ mean score in listening. “X” is the treatment given, that is teaching listening using Animated Movie. “O2” is the post-test that given after having the treatment. Post-test to measure the students’ mean score of listening is using animated movie after the application of “X”.

The population of this research is the Year-8 students of SMP Muhammadiyah 2 Pontianak in Academic Year of 2016/2017. There is only 1 class of Year-8 which can be taken as sample of this research, consisting of 41 students.

The technique to collect the data is a measurement technique. It is to measure students’ listening comprehension using Animated Movie “Avatar the Legend of Korra”. The measurement is divided into pre-test and post-test. The form of the test is multiple choice that consists of 10 questions.

Discriminating power refers to the possibility of the item in a test to be answered correctly by students who have plenty of the individual capability that the item can measure and to be answered incorrectly by students who have insufficient of the individual capability that the same item can measure (Cohen, Manion, & Morrison , 2007: p.422). To obtain the index of discriminating power, the following formula is applied (Cohen, Manion, & Morrison , 2007: p.422-423):

Formula 1:

$$\frac{A - B}{\frac{1}{2}(N)}$$

Legends:

A: the number of correct scores from the high scoring group

B: the number of correct scores from the low scoring group

N: the total number of students in the two groups.

1.00 is the highest index of discriminating power. < 0.67 is undiscriminating that means the test is able to measure students' listening. > 0.67 is discriminating that means the test is unable to measure students' listening.

To state whether a test is appropriate to use or not, the test should neither be too easy nor too difficult. To figure it out, this formula is applied (Cohen, Manion, & Morrison, 2007: p.423):

Formula 2:

$$\frac{A}{N} \times 100$$

Legends:

A: the number of students who answered the item correctly

N: the total number of students who attempted the item

100 % is the highest index for difficulty level. > 67% is too easy and needs to revise. 33%-67% is moderately easy to difficult, it means the test is appropriate to use. < 33% is too difficult and the test needs to revise.

The formula applied to figure it out is KR-20. It is the following (Ary, Jacobs, Sorensen & Razavieh, 2010: p.245) :

Formula 3:

$$r_{xx} = \frac{K}{K-1} \left(\frac{S_x^2 - \sum pq}{S_x^2} \right)$$

Legends:

r_{xx} : reliability of the whole test

K : number of items in the test

S_x^2 : variance or squared standard deviation of the score

p : proportion of correct responses on a single item

q : proportion of incorrect responses on the same item

The following formula is applied to obtain S_x^2 (Ary, Jacobs, Sorensen & Razavieh, 2010: p.116):

Formula 4:

$$S_x^2 = \frac{\sum X^2 - \frac{(\sum X)^2}{N}}{N}$$

Legends:

S_x^2 : Variance or squared standard deviation

$\sum X^2$: Sum of the squares of each score (i.e., each score is first squared, and then these squares are summed)

$(\sum X)^2$: Sum of the scores squared (the scores are first summed, and then this total is squared)

N : Number of cases

This research uses mathematical procedures, called statistics to investigate strength of relationship between variables by comparing the tests scores, and "the interpretation of data tends to consists of comparing results with prior predictions and past research" (Creswell, 2008:56). To analyze the data of this research, descriptive analysis is applied. According to Ary, Jacobs, Sorensen & Razavieh (2010:91), descriptive statistic is a technique to analyze and to interpret quantitative information (numeral data) in such a way to become meaningful.

The statistics used to process the data of this research is effect size. Ary, Jacobs, Sorensen & Razavieh (2010:136) state, "In experimental studies, effect size can be used to compare the direction and the relative strength of different independent variables (intervention) on the same dependent variable". To measure the effectiveness of Magoosh Comic to teach vocabulary, the following formula is applied (Ary, Jacobs, Sorensen & Razavieh, 2010: p.177) :

Formula 5:

$$d = \frac{\bar{D}}{S_D}$$

Legends:

d : effect size of mean difference

\bar{D} : mean difference

s_D : standard deviation of difference scores

The effect size calculation produce the index of effect size in different range and degree. The criteria of effect size : weak effect (10 – 0,20), modest effect (0,21 – 0,50), moderate effect (0,51 – 1,00), and strong effect (> 1,00).

Effect size formula built from smaller statistics, including student's individual score (X), mean of pre-test and post-test (\bar{X}_1, \bar{X}_2) and the standard deviation (s_d).

To compute the x of the effect size formula, the research use the following formula:

Formula 6:

$$X = \frac{R}{N} \times 100$$

Legends:

X : student's individual score

R : the correct answers

N : the total number of test items

100 : maximum score

To compute \bar{x} of the Effect Size formula, the following formula is applied (Ary, Jacobs, Sorensen & Razavieh, 2010:108):

Formula 7:

$$\bar{x} = \frac{\sum x}{N}$$

Legends:

\bar{x} : mean of pre-test and post-test

$\sum x$: the sum of pre-test and post-test scores

N : the total number of students who participated in the pre-test and post-test

To compute s_d of the effect size formula, the following formula is used (Ary, Jacobs, Sorensen & Razavieh, 2010: p.177):

Formula 8:

$$s_D = \sqrt{\frac{\sum D^2 - \frac{(\sum D)^2}{n}}{N - 1}}$$

Legends:

s_D : Standard deviation of the difference scores

$\sum D^2$: the sum of squared difference scores

$(\sum D)^2$: the squared sum of difference scores

n : the total number of students

The procedure of data analysis involves the following steps: (1) Calculating the students' test scores of pre-test and post-test, and putting them into frequency distribution table. (2) Measuring the mean score of pre-test and post-test and the difference of mean score. (3) Computing the standard deviation of difference scores by firstly calculating the difference score (D) and squared difference score (D^2). (4) Determining the value of effect size. (5) Interpreting and reporting the result.

FINDING AND DISCUSSION

Research Findings

This research is all about discovering the size of effect of the 'Avatar: The Legend of Korra' animated movie based project to teach listening comprehension to Eight Grade Students of SMP Muhammadiyah 2 in Academic Year 2016/2017. It includes data collection -- testing, conducting treatment, and testing-- and analysis. Prior to that, assuring quality of the test as research instrument will assure the quality of findings of this research.

There were 41 students present in the pretest and posttest. They made a significant difference in result as displayed in below frequency distribution table.

Table 1
Frequency Distribution of Pretest and Posttest Scores

Test	N	$\sum x$	$\frac{\sum X}{N}$
Pre-test	41	2020	$\bar{x}_1 = 49.27$
Post-test	41	2680	$\bar{x}_2 = 65.37$

The scores vary between 1 and 8 in pretest; 4 and 9 in posttest. The increase of score is obviously seen from the difference between mean of pretest: 49.27 and mean of posttest: 65.37.

Based on the previous data in Table 1 about the distribution of individual

scores in pretest and posttest, as well as the mean scores, it is found out the Scores Difference (D) and Mean Difference (\bar{D}) necessary for determining the Standar Deviation, then Effect Size.

Table 2
Difference of Scores and Mean Scores

N	$\sum D$	$\sum D^2$	\bar{x}_2	\bar{x}_1	\bar{D}
41	630	14,900	65.37	49.27	16.10

The result of previous calculation is used in order to work with standard deviation formula, as the following:

$$\begin{aligned}
 S_D &= \sqrt{\frac{\sum D^2 - \frac{(\sum D)^2}{n}}{N-1}} \\
 &= \sqrt{\frac{14,900 - \frac{(630)^2}{41}}{40-1}} \\
 &= \sqrt{\frac{5,219.50}{40}} \\
 &= \sqrt{130.5} \\
 &= 11.42
 \end{aligned}$$

This is the final calculation of effect size, resulting on the state of how effective the Avatar: the Legend of Korra movie based project is.

$$\begin{aligned}
 d &= \frac{\bar{D}}{S_D} \\
 &= \frac{16.10}{11.42} \\
 &= 1.41
 \end{aligned}$$

Based on the result of data computation, the effect size of using

“Avatar the Legend of Korra” Animated Movie Based project to improve students’ listening comprehension to the Year-8 students of SMP Muhammadiyah 2 Pontianak is 1.41. It is categorized as “strong”. The effect size of the treatment is 1.41, higher than the highest category of effect size that is 1.00. Therefore, the hypothesis that the effectiveness of Animated Movie to improve listening comprehension is accepted.

Discussion

The reasons behind the significant effect of the Avatar: the Legend of Korra Movie-based Project to improve students’ ability to listen is discussed in order to make sense of how it is possible and what the readers can learn from the findings.

Movie is believed to be one of the best alternatives of listening materials. There are some interesting points about why movie is the best. It is natural, efficient, communicative, entertaining and motivating. In the classroom setting, materials presented were usually inauthentic. Learners got used to listen the language spoken by their teachers with less natural speed, strange accent and pronunciation. Teachers sometimes could be slow and inaccurate in pronouncing words. On the other hand, Native speakers

most of the time do not speak slowly or particularly clearly. They have habitual patterns of simplification in speech which vary somewhat from individual to individual, and vary considerably between accent that make the language spoken more naturally. **This explains why the mean of students' pretest score is not very satisfying.** Students' everyday listening models were teachers who spoke English with a mixed accent and slower speed, while in the test language was spoken in the natural speed and accent of native speakers.

The *Avatar: the Legend of Korra* movie presents the models of language spoken authentically without the teacher inviting native speakers to the classroom. It was cheaper and easier. A teacher only needed technology, such as laptop, speaker, and projector. The activities created to accompany the listening activity could be very challenging and stimulating.

Besides, the movie shows the right way to be communicative, flexible, and less predictable, unlike the textbook had been telling them. Authentic materials as presented in the movie helped students to bridge the gap between the classroom and the outside world".

Apart from the content that students had to study, the movie allowed students to listen for pleasure. It helped students to love what they study. In so doing, the length of materials did not stress them. It created addictions to learn enjoyably instead. At the end, movie gave students motivation to continue learning outside the class.

However, listening lesson should develop students' knowledge of linguistics features. Listening comprehension allowed students to learn elements of grammatical structure and new vocabulary items in the body of communicative discourse. The context was generated through the visual cues and the respective roles of the participants, especially their facial expressions and gesture. These are only available in audio-visual listening materials, like a movie. There is plenty of visual reinforcement to the spoken text, and television and films are associated in the students' minds with pleasurable recreation. The present of visual materials

is of immense value in contextualizing and bringing to life the listening situation as well as in aiding comprehension of the language.

Therefore, the lesson was accompanied with tasks to help students learn best. As a general rule, listening exercises are most effective if they are constructed round a task. Besides listening for enjoyment, the type of the expected communicative outcome to assess students' listening comprehension in this research was listening and transferring information: spoken-to-written. This type of task was given in the form of project that allowed students to continue learning language by listening even after they left the class.

Similar to movie which is claimed to be authentic, Project-based Learning (PBL) in this research was designed in integration with real world issues and practices. Students explored information by listening to the movie, made judgments, interpreted, and synthesised information in meaningful report. (1) **Initial Activities:** Before project was given, teacher had already provided students with pre-test as well as lessons and exercises for warm-up. They included vocabulary building exercises and comprehension questions on the selected episode of "Avatar: The Legend of Korra". Later, in Group of 4 students were instructed to continue watching some different episodes and answered the following questions: 1. What expressions of complimenting and responding to complements are used in the movie? (Point: 40); 2. When are the expressions used? (Point: 35); 3. In which situation can you use those expressions? Give examples. (Point: 35). (2) **Whilst Project:** While students made efforts to accomplish the project as assigned, they were welcome to consultation sessions at anytime they required assistance and answers to their questions. Teacher monitored students' progress and guided them to work collaboratively and effectively. Students were required to submit their project result in two weeks. (4) **Follow-ups:** After students succeeded in completing the task, they were scored and gathered for a small discussion to

confirm the good jobs and demonstrate how they could do better. Students testified that they enjoyed the watching. They did not miss any compliments, but they simply picked every nice words and assumed them all as compliments. In fact, some are just descriptions of objects. Anyway, the explanation about when the expressions are used in the movie and real life were very accurate. This discussion also led to reflections where students were given the opportunity to express their feelings and thoughts about the project and how the teaching could be improved. It was an illuminating session for both students and teacher. Last but not least, students took the post-test.

The project-based Learning approach is an in-depth investigation of a real-world topic worthy of children's attention and effort. Project-based learning requires the production of authentic (oral and written) language from the learners. It allowed for skills integration that improve the learning input and outcome. Other two positive effect of Project-Based Learning are (1) it built collaborative and social learning environment (2) in a certain period of time long enough for students to learn deeper than they did at school. It is not just a way of learning, but a way of working together. Students worked in group of 4 to solve problems stated in questions. Project-based learning is long-term. A period of 2 weeks for the listening project ensured maximum effectiveness and solid assessment.

The Project-Based Learning motivated students, helped students meet standards and do well on tests that enable students to demonstrate in-depth knowledge and thinking skills and allowed teachers to teach in a more satisfying way. **This explains why students' did better in the posttest.** It then proves that the *Avatar: the Legend of Korra* Movie based Project has affected students' listening comprehension considerably by 1.41 of effect size.

CONCLUSION AND SUGGESTIONS

Conclusion

This research has fulfilled its purpose to study the effectiveness of

"Avatar: The Legend of Korra" animated movie based project to improve listening comprehension of Eighth Grade Students of SMP Muhammadiyah 2 in Academic Year of 2016/2017. It is proven that the effect size is strong by 1.41 of effect size, which means the fourth hypothesis is accepted.

Movie is considered a powerful source of listening activities. It gets more meaningful when it is combined with project. English speaking movie presents natural language, is efficient, communicative, entertaining and motivating. Similar to movie, Project-based Learning (PBL) is authentic, designed in integration with real world issues and practices. It allows for skills integration that improve both learning incomes and outcomes. Additionally, Project-based Learning builds collaborative and social learning environment within a certain period of time long enough for students to accumulate knowledge more than they gained at school. It motivates students, helps students meet standards and do well on tests that enable students to demonstrate in-depth knowledge and thinking skills and at the same time improves teaching.

Suggestions

A movie and project are a good combination for effective teaching and learning when teacher pays attention to the following tips: (1) Select movie that is age-appropriate, but not all family movie is the best. So teachers have to carefully choose in terms of the messages, role models, visual content, and language. Strong violence and sexual content and profanity are what to avoid. (2) Before assigning student for the project, give warm-ups because it can be their first time listening to native speakers or watching English speaking movie. (3) Keep the project intensive, while the movie is extensive. The instruction and questions should be clear, relevant and not too much in order not to stress them because the movie already has so much to listen. (4) State clear deadline and portion to accomplish on certain days during the project in order to monitor their progress

and give necessary guidance. (5) Guide students in their accomplishment of the project but never tell them the answer, even a little. Independent learning takes

time, that is why the project is long-term. It is to teach students to enjoy the process.

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